# KARL MARX FREDERICK ENGELS Collected Works Volume 37 Marx

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#### KARL MARX

#### CAPITAL

## A CRITIQUE OF POLITICAL ECONOMY

Volume III

#### BOOK III

THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

Ι

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#### THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

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Volume 37 of the *Collected Works* of Marx and Engels contains Volume III of *Capital*, and Preface and Supplement to *Capital*, Volume Three, by Engels.

Volume III deals with the process of capitalist production as a whole.

The present English edition follows the first German edition of 1894 edited by Engels. Errors and misprints found in the first German edition have been corrected. Figures and other data have been checked and set right where necessary. Quotations from different sources have been ascertained; those from English and American authors were checked with the original publications and given according to the 1894 German edition. Quotations in French, Latin and Greek are given in English translation. Bibliographical footnotes are based on Marx's excerpts and preparatory material.

The author's footnotes are marked by superior numbers with a round bracket, as distinct from editors' notes marked merely by numbers and footnotes indicated by index letters. Engels' insertions and footnotes are, as a rule, marked by his initials and placed into double oblique lines.

Foreign words and expressions are italicised and retained in the form used in the original with translation in the footnote where necessary. English words and expressions used by Marx and Engels are set in small caps, longer passages are placed in asterisks.

The volume was compiled and the preface, notes and indexes written by Tatyana Andrushchenko and Izora Kazmina; Mikhail Ternovsky took part in editing the volume (Russian Independent Institute of Social and National Problems).

The present English edition is based on the 1958 publication of *Capital* by the Foreign Languages Publishing House, Moscow, in which extensive use was made of the English translation by Ernest Untermann printed by Charles H. Kerr & Co., Chicago, 1909.

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# KARL MARX

### CAPITAL

#### A CRITIQUE OF POLITICAL ECONOMY

VOLUME III

#### BOOK THREE

THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

Edited by Frederick Engels

# Das Kapital.

# Kritik der politischen Oekonomie.

Von

#### Karl Marx.

Dritter Band, erster Theil.

#### Bach III:

Der Gosammtprocess der kapitalistischen Produktion. Kapitel I bis XXVIII.

Herausgegeben von Friedrich Engels.

Das Becht der Uebersetzung ist vorbehalten.

La spefgy Flergery

Hamburg Verlag von Otto Meissner. 1894.

Title page of the first German edition of Vol. III, I, of Capital

#### Frederick Engels

#### PREFACE

At last I have the privilege of making public this third book of Marx's main work, the conclusion of the theoretical part.<sup>1</sup> When I published the second volume, in 1885, I thought that except for a few, certainly very important, sections the third volume would probably offer only technical difficulties. This was indeed the case. But I had no idea at the time that these sections, the most important parts of the entire work, would give me as much trouble as they did, just as I did not anticipate the other obstacles, which were to retard completion of the work to such an extent.

Next and most important of all, it was my eve weakness which for years restricted my writing time to a minimum, and which, even now, permits me to write by artificial light only in exceptional cases. Furthermore, there were other pressing labours which could not be turned down, such as new editions and translations of Marx's and my own earlier works, hence reviews, prefaces, and supplements, often impossible without fresh study, etc. Above all, there was the English edition of the first volume of this work, for whose text I am ultimately responsible and which consequently consumed much of my time.<sup>2</sup> Whoever has in any way followed the colossal growth of international socialist literature during the last ten years, particularly the great number of translations of Marx's and my own earlier works, will agree with me that I have been lucky that the number of languages in which I could be of help to the translators, and therefore could not refuse in all conscience to review their work, is very limited. But the growth of literature was merely indicative of a corresponding growth of the international working-class movement itself. And this imposed

new obligations upon me. From the first days of our public activity it was Marx and I who shouldered the main burden of the work as gobetweens for the national movements of socialists and workers in the various countries. This work expanded in proportion to the expansion of the movement as a whole. Up to the time of his death, Marx had borne the brunt of the burden in this as well. But after his death the ever-increasing bulk of work had to be done by myself alone. Since then it has become the rule for the various national workers' parties to establish direct contacts, and this is fortunately ever more the case. Yet requests for my assistance are still far more frequent than I would wish in view of my theoretical work. But if a man has been active in the movement for more than fifty years, as I have been, he regards the work connected with it as a bounden duty that brooks no delay. In our eventful time, just as in the 16th century, pure theorists on social affairs are found only on the side of reaction and for this reason these gentlemen are not even theorists in the full sense of the word, but simply apologists of reaction.

In view of the fact that I live in London my party contacts are limited to correspondence in winter, while in summer they are largely personal. This fact, and the necessity of following the movement in a steadily growing number of countries and a still more rapidly growing number of press organs, have compelled me to reserve matters which permit no interruption for completion during the winter months, and primarily the first three months of the year. When a man is past seventy his Meynert's association fibres of the brain function with a certain annoying prudence. He no longer surmounts interruptions in difficult theoretical problems as easily and quickly as before. It came about therefore that the work of one winter, if it was not completed, had to be largely begun anew the following winter. This was the case with the most difficult fifth part.

As the reader will observe from the following, the work of editing the third volume was essentially different from that of editing the second. In the case of the third volume there was nothing to go by outside a first extremely incomplete draft. The beginnings of the various parts were, as a rule, pretty carefully done and even stylistically polished. But the farther one went, the more sketchy and incomplete was the analysis, the more excursions it contained into arising sideissues whose proper place in the argument was left for later decision, and the longer and more complex the sentences, in which thoughts

#### Preface

were recorded *in statu nascendi.*<sup>a</sup> In some places handwriting and presentation betrayed all too clearly the outbreak and gradual progress of the attacks of ill health, caused by overwork, which at the outset rendered the author's work increasingly difficult and finally compelled him periodically to stop work altogether. And no wonder. Between 1863 and 1867, Marx not only completed the first draft of the two last volumes of *Capital* and prepared the first volume for the printer, but also performed the enormous work connected with the founding and expansion of the International Workingmen's Association. As a result, already in 1864 and 1865 ominous signs of ill health appeared which prevented Marx from personally putting the finishing touches to the second and third volumes.

I began my work by dictating into readable copy the entire manuscript, which was often hard to decipher even for me. This alone required considerable time. It was only then that I could start on the actual editing. I limited this to the essential. I tried my best to preserve the character of the first draft wherever it was sufficiently clear. I did not even eliminate repetitions, wherever they, as was Marx's custom, viewed the subject from another standpoint or at least expressed the same thought in different words. Wherever my alterations or additions exceeded the bounds of editing, or where I had to apply Marx's factual material to independent conclusions of my own, if even as faithful as possible to the spirit of Marx, I have enclosed the entire passage in brackets and affixed my initials. Some of my footnotes are not enclosed in brackets; but wherever I have initialled them I am responsible for the entire note.

As is only to be expected in a first draft, there are numerous allusions in the manuscript to points which were to have been expanded upon later, without these promises always having been kept. I have left them, because they reveal the author's intentions relative to future elaboration.

Now as to details.

As regards the first part, the main manuscript was serviceable only with substantial limitations. The entire mathematical calculation of the relation between the rate of surplus value and the rate of profit (which makes up our Chapter III) is introduced in the very beginning, while the subject treated in our Chapter I is considered later and as the occasion arises. Two attempts at revising, each of them

a at the moment of formation

#### Frederick Engels

eight pages in folio, were useful here. But even these did not possess the desired continuity throughout. They furnished the substance for what is now Chapter I. Chapter II is taken from the main manuscript. There was a series of uncompleted mathematical calculations for Chapter III, as well as a whole, almost complete, notebook dating from the seventies, which presents the relation of the rate of surplus value to the rate of profit in the form of equations. My friend Samuel Moore, who has also translated the greater portion of the first volume into English, undertook to edit this notebook for me, a work for which he was far better equipped, being an old Cambridge mathematician. It was from his summary, with occasional use of the main manuscript, that I then compiled Chapter III. Nothing but the title was available for Chapter IV. But since its subject-matter, the influence of turnover on the rate of profit, is of vital importance, I have written it myself, for which reason the whole chapter has been placed in brackets. It developed in the course of this work that the formula for the rate of profit given in Chapter III required modification to be generally valid. Beginning with Chapter V, the main manuscript is the sole source for the remainder of the part, although many transpositions and supplements were also essential.

As for the following three parts, aside from stylistic editing I was able to follow the original manuscript almost throughout. A few passages dealing mostly with the influence of turnover had to be brought into agreement with Chapter IV, which I had inserted, and are likewise placed in brackets<sup>a</sup> and marked by my initials.

The greatest difficulty was presented by Part V which dealt with the most complicated subject in the entire volume. And it was just at this point that Marx was overtaken by one of the above-mentioned serious attacks of illness. Here, then, was no finished draft, not even a scheme whose outlines might have been filled out, but only the beginning of an elaboration — often just a disorderly mass of notes, comments and extracts. I tried at first to complete this part, as I had done to a certain extent with the first one, by filling in the gaps and expanding upon passages that were only indicated, so that it would at least approximately contain everything the author had intended. I tried this no less than three times, but failed in every attempt, and the time lost in this is one of the chief causes that held up this volume. At last I realised that I was on the wrong track. I should have had to

<sup>&</sup>lt;sup>a</sup> In this volume they are replaced by two oblique lines.

#### Preface

go through the entire voluminous literature in this field, and would in the end have produced something that would nevertheless not have been a book by Marx. I had no other choice but to more or less cut the Gordian knot by confining myself to as orderly an arrangement of available matter as possible, and to making only the most indispensable additions. And so it was that I succeeded in completing the principal labours for this part in the spring of 1893.

As for the various chapters, chapters XXI to XXIV were, in the main, complete. Chapters XXV and XXVI required a sifting of the references and an interpolation of material found elsewhere. Chapters XXVII and XXIX could be taken almost completely from the original manuscript, but Chapter XXVIII had to be re-arranged in places. The real difficulty, however, began with Chapter XXX. From here on it was not only a matter of properly arranging the references. but of putting the train of thought into proper order, interrupted as it was at every point by intervening clauses and deviations, etc., and resumed elsewhere, often just casually. Thus, Chapter XXX was put together by means of transpositions and excisions which were utilised. however, in other places. Chapter XXXI, again, possessed greater continuity. But then follows a long section in the manuscript, entitled "The Confusion", containing nothing but extracts from parliamentary reports on the crises of 1847 and 1857, in which are compiled statements of twenty-three businessmen and economists, largely on money and capital, gold drain, over-speculation, etc., and supplied here and there with short facetious comments. Practically all the then current views concerning the relation of money to capital are represented therein, either in the answers or in the questions, and it was the "confusion" revealed in identifying money and capital in the money market that Marx meant to treat with criticism and sarcasm. After many attempts I convinced myself that this chapter could not be put into shape. Its material, particularly that supplied with Marx's comments, was used wherever I found an opportune place for it.

Next, in tolerable order, comes what I placed in Chapter XXXII. But this is immediately followed by a new batch of extracts from parliamentary reports on every conceivable thing pertinent to this part, intermingled with the author's comments. Toward the end these extracts and comments are focussed more and more on the movement of monetary metals and on exchange rates, and close with all kinds of miscellaneous remarks. On the other hand, the "Precapitalist" chapter (Chap. XXXVI) was quite complete.

#### **Frederick Engels**

Of all this material beginning with the "Confusion", save that which had been previously inserted, I made up chapters XXXIII to XXXV. This could not, of course, be done without considerable interpolations on my part for the sake of continuity. Unless they are merely formal in nature, the interpolations are expressly indicated as belonging to me. In this way I have finally succeeded in working into the text *all* the author's relevant statements. Nothing has been left out but a small portion of the extracts, which either repeated what had already been said, or touched on points which the manuscript did not treat any further.

The part on ground rent was much more fully treated, although by no means properly arranged, if only for the fact that Marx found it necessary to recapitulate the plan of the entire part in Chapter XLIII (the last portion of the part on rent in the manuscript). This was all the more desirable, since the manuscript opens with Chapter XXXVII, followed by chapters XLV to XLVII, and only thereafter chapters XXXVIII to XLIV. The tables for the differential rent II involved the greatest amount of work and so did the discovery that the third case of this class of rent had not at all been analysed in Chapter XLIII, where it belonged.

In the seventies Marx engaged in entirely new special studies for this part on ground rent. For years he had studied the Russian originals of statistical reports inevitable after the "reform" of 1861 in Russia and other publications on landownership, had taken extracts from these originals, placed at his disposal in admirably complete form by his Russian friends, and had intended to use them for a new version of this part. Owing to the variety of forms both of landownership and of exploitation of agricultural producers in Russia, this country was to play the same role in the part dealing with ground rent that England played in Book I in connection with industrial wage labour.<sup>3</sup> He was unfortunately denied the opportunity of carrying out this plan.

Lastly, the seventh part was available complete, but only as a first draft, whose endlessly involved periods had first to be dissected to be made printable. There exists only the beginning of the final chapter. It was to treat of the three major classes of developed capitalist society — the landowners, capitalists and wage labourers — corresponding to the three great forms of revenue, ground rent, profit and wages, and the class struggle, an inevitable concomitant of their existence, as the actual consequence of the capitalist period.<sup>4</sup> Marx used to leave such concluding summaries until the final editing, just before going to press, when the latest historical developments furnished him with unfailing regularity with proofs of the most laudable timeliness for his theoretical propositions.

Citations and proofs illustrating his statements are, as in the second volume, considerably less numerous than in the first. Quotations from Book I refer to pages in the 2nd and 3rd editions. Wherever the manuscript refers to theoretical statements of earlier economists, the name alone is given as a rule, and the quotations were to be added during the final editing. Of course, I had to leave this as it was. There are only four parliamentary reports, but these are abundantly used. They are the following:

1) Reports from Committees (of the Lower House), Volume VIII, Commercial Distress, Volume II, Part I, 1847-48. Minutes of Evidence.—Quoted as Commercial Distress, 1847-48.

2) Secret Committee of the House of Lords on Commercial Distress 1847. Report printed in 1848. Evidence printed in 1857 (because considered too compromising in 1848).—Quoted as C. D. 1848/57.<sup>5</sup>

3) Report: Bank Acts, 1857.— Ditto, 1858.— Reports of the Committee of the Lower House on the Effect of the Bank Acts of 1844 and 1845. With evidence.— Quoted as: B. A. (also as B. C.) 1857 or 1858.<sup>6</sup>

I am going to start on the fourth volume — the history of the theory of surplus value — as soon as it is in any way possible.<sup>7</sup>

In the preface to the second volume of *Capital* I had to square accounts with the gentlemen who raised a hue and cry at the time because they fancied to have discovered "in Rodbertus the secret source and a superior predecessor of Marx". I offered them an opportunity to show "what the economics of a Rodbertus can accomplish"; I defied them to show "how an equal average rate of profit can and must come about, not only without a violation of the law of value, but rather on the very basis of it".<sup>a</sup> These same gentlemen who for either subjective or objective, but as a rule anything but scientific reasons were then lionising the brave Rodbertus as an economic star of the first magnitude, have without exception failed to furnish an answer.

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, p. 23.

However, other people have thought it worth their while to occupy themselves with the problem.

In his critique of the second volume (Conrads Jahrbücher, XI, 5, 1885, S. 452-65), Professor W. Lexis took up the question, although he did not care to offer a direct solution.<sup>a</sup> He says:

"The solution of the contradiction" (between the Ricardo-Marxian law of value and an equal average rate of profit) "is impossible if the various classes of commodities are considered *individually* and if their value is to be equal to their exchange value, and the latter equal or proportional to their price."

According to him, the solution is only possible if

"we cease measuring the value of individual commodities according to labour, and consider only the production of commodities *as a whole* and their distribution among the aggregate classes of capitalists and workers.... The working class receives but a certain portion of the total product,... the other portion, which falls to the share of the capitalist class, represents the surplus product in Marxian sense, and accordingly ... the surplus value. Then the members of the capitalist class divide this total surplus value among themselves *not* in accordance with the number of workers employed by them, but in proportion to the capital invested by each, the land also being accounted for as capital value."

The Marxian ideal values determined by units of labour incorporated in the commodities do not correspond to prices but may be

"regarded as points of departure of a shift which leads to the actual prices. The latter depend on the fact that equal sums of capital demand equal profits."

For this reason some capitalists will secure prices higher than the ideal values for their commodities, and others will secure lower prices.

"But since the losses and gains of surplus value balance one another within the capitalist class, the total amount of the surplus value is the same as it would be if all prices were proportional to the ideal values."

It is evident that the problem has not in any way been solved here, but has, though somewhat loosely and shallowly, been on the whole correctly *formulated*. And this is, indeed, more than we could have expected from a man who, like the above author, takes a certain pride in being a "vulgar economist". It is really surprising when compared with the handiwork of other vulgar economists, which we shall later discuss. Lexis' vulgar economy is, anyhow, in a class of its own. He says that capital gains *might*, at any rate, be derived in the way indicated by Marx, but that nothing *compels* one to accept this view.

<sup>&</sup>lt;sup>a</sup> W. Lexis, "Die Marx'sche Kapitaltheorie".

On the contrary. Vulgar economy, he says, has at least a more plausible explanation, namely:

"The capitalist sellers, such as the producer of raw materials, the manufacturer, the wholesale dealer, and the retail dealer, all make a gain on their transactions by selling at a price higher than the purchase price, thus adding a certain percentage to the price they themselves pay for the commodity. The worker alone is unable to obtain a similar additional value for his commodity; he is compelled by reason of his unfavourable condition vis-à-vis the capitalist to sell his labour at the price it costs him, that is to say, for the essential means of his subsistence.... Thus, these additions to prices retain their full impact with regard to the buying wage-worker, and cause the transfer of a part of the value of the total product to the capitalist class."

One need not strain his thinking powers to see that this explanation for the profits of capital, as advanced by "vulgar economy", amounts in practice to the same thing as the Marxian theory of surplus value; that the workers are in just the same "unfavourable condition" according to Lexis as according to Marx; that they are just as much the victims of swindle because every non-worker can sell commodities above price, while the worker cannot do so; and that it is just as easy to build up an at least equally plausible vulgar socialism on the basis of this theory, as that built in England on the foundation of Jevons's and Menger's theory of use value and marginal utility.<sup>8</sup> I even suspect that if Mr. George Bernard Shaw had been familiar with this theory of profit, he would have likely fallen to with both hands, discarding Jevons and Karl Menger, to build anew the Fabian church of the future <sup>9</sup> upon this rock.

In reality, however, this theory is merely a paraphrase of the Marxian. What defravs all the price additions? It is the workers' "total product". And this is due to the fact that the commodity "labour", or, as Marx has it, labour power, has to be sold below its price. For if it is a common property of all commodities to be sold at a price higher than their cost of production, with labour being the sole exception since it is always sold at the cost of production, then labour is simply sold below the price that rules in this world of vulgar economy. Hence the resultant extra profit accruing to the capitalist, or capitalist class, arises, and can only arise, in the last analysis, from the fact that the worker, after reproducing the equivalent for the price of his labour power, must produce an additional product for which he is not paid — i. e., a surplus product, a product of unpaid labour, or surplus value. Lexis is an extremely cautious man in the choice of his terms. He does not say anywhere outright that the above is his own conception. But if it is, it is plain as day that we are not dealing with one of those ordinary vulgar economists, of whom he says himself that every one of them is "at best only a hopeless idiot" in Marx's eyes, but with a Marxist disguised as a vulgar economist. Whether this disguise has occurred consciously or unconsciously is a psychological question which does not interest us at this point. Whoever would care to investigate this, might also probe how a man as shrewd as Lexis undoubtedly is, could at one time defend such nonsense as bimetallism.<sup>10</sup>

The first to really attempt an answer to the question was Dr. Conrad Schmidt in his pamphlet entitled Die Durchschnittsprofitrate auf Grundlage des Marx'schen Werthgesetzes, Stuttgart, Dietz, 1889. Schmidt seeks to reconcile the details of the formation of market prices with both the law of value and with the average rate of profit. The industrial capitalist receives in his product, first, an equivalent of the capital he has advanced, and, second, a surplus product for which he has paid nothing. But to obtain a surplus product he must advance capital to production. That is, he must apply a certain quantity of objectified labour to be able to appropriate this surplus product. For the capitalist, therefore, the capital he advances represents the guantity of objectified labour socially necessary for him to obtain this surplus product. This applies to every industrial capitalist. Now, since products are mutually exchanged, according to the law of value, in proportion to the labour socially necessary for their production, and since, as far as the capitalist is concerned, the labour necessary for the manufacture of the surplus product happens to be past labour accumulated in his capital, it follows that surplus products are exchanged in proportion to the sums of capital required for their production, and not in proportion to the labour actually incorporated in them. Hence the share of each unit of capital is equal to the sum of all produced surplus values divided by the sum of the capitals expended in production. Accordingly, equal sums of capital yield equal profits in equal time spans, and this is accomplished by adding the cost price of the surplus product so calculated, i. e., the average profit, to the cost price of the paid product and by selling both the paid and unpaid product at this increased price. The average rate of profit takes shape in spite of average commodity prices being determined, as Schmidt holds, by the law of value.

The construction is extremely ingenious. It is completely patterned after the Hegelian model, but like the majority of Hegelian constructions it is not correct. Surplus product or paid product, makes no difference. If the law of value is also to be *directly* valid for the average

#### Preface

prices, both of them must be sold at prices proportionate to the socially necessary labour required and expended in producing them. The law of value is aimed from the first against the idea derived from the capitalist mode of thought that accumulated labour of the past, which comprises capital, is not merely a certain sum of finished value, but that, because a factor in production and the formation of profit, it also produces value and is hence a source of more value than it has itself; it establishes that living labour alone possesses this faculty. It is well known that capitalists expect equal profits proportionate to their capitals and regard their advances of capital as a sort of cost price of their profits. But if Schmidt utilises this conception as a means of reconciling prices based on the average rate of profit with the law of value, he repudiates the law of value itself by attributing to it as one of its co-determinative factors a conception with which the law is wholly at variance.

Either accumulated labour creates value the same as living labour. In that case the law of value does not apply.

Or, it does not create value. In that case Schmidt's demonstration is incompatible with the law of value.

Schmidt strayed into this bypath when quite close to the solution, because he believed that he needed nothing short of a mathematical formula to demonstrate the conformance of the average price of every individual commodity with the law of value. But while on the wrong track in this instance, in the immediate proximity of the goal, the rest of his booklet is evidence of the understanding with which he drew further conclusions from the first two volumes of *Capital*. His is the honour of independently finding the correct explanation developed by Marx in the third part of the third volume for the hitherto inexplicable sinking tendency of the rate of profit, and, similarly, of explaining the derivation of commercial profit out of industrial surplus value, and of making a great number of observations concerning interest and ground rent, in which he anticipates ideas developed by Marx in the fourth and fifth parts of the third volume.

In a subsequent article (*Neue Zeit*, 1892-93, Nos. 3 and 4), Schmidt takes a different tack in his effort to solve the problem.<sup>a</sup> He contends that it is competition which produces the average rate of profit by causing the transfer of capital from branches of production with under-average profit to branches with above-average profit. It is not a

<sup>&</sup>lt;sup>a</sup> C. Schmidt, "Die Durchschnittsprofitrate und das Marx'sche Werthgesetz".

revelation that competition is the great equaliser of profits. But now Schmidt tries to prove that this levelling of profits is identical with a reduction of the selling price of commodities in excess supply to a magnitude of value which society can pay for them according to the law of value. Marx's analyses in the book itself are ample evidence why this way, too, could not lead to the goal.

After Schmidt P. Fireman tackled the problem (Conrads Jahrbücher, dritte Folge, III, 1891, S. 793).ª I shall not go into his remarks on other aspects of the Marxian analysis. They rest upon the false assumption that Marx wishes to define where he only investigates, and that in general one might expect fixed, cut-to-measure, once and for all applicable definitions in Marx's works. It is self-evident that where things and their interrelations are conceived, not as fixed, but as changing, their mental images, the ideas, are likewise subject to change and transformation; and they are not encapsulated in rigid definitions, but are developed in their historical or logical process of formation. This makes clear, of course, why in the beginning of his first book Marx proceeds from the simple production of commodities as the historical premise, ultimately to arrive from this basis to capital-why he proceeds from the simple commodity instead of a logically and historically secondary form - from an already capitalistically modified commodity. To be sure, Fireman positively fails to see this. These and other side-issues, which could give rise to still other diverse objections, are better left by the wayside, while we go on forthwith to the gist of the matter.<sup>b</sup> While theory teaches Fireman that at a given rate of surplus value the latter is proportional to the labour power employed, he learns from experience that at a given average rate of profit, profit is proportional to the total capital employed. He explains this by saying that profit is merely a conventional phenomenon (which means in his language that it belongs to a definite social formation with which it stands and falls). Its existence is simply tied up with capital. The latter, provided it is strong enough to secure a profit for itself, is compelled by competition also to secure for itself a rate of profit equal for all sums of capital. Capitalist production is simply impossible without an equal rate of profit. Given this mode of production, the quantity of profit for the individual capitalist can, at

<sup>&</sup>lt;sup>a</sup> P. Fireman, "Kritik der Marx'schen Werttheorie".-<sup>b</sup> See also F. Engels, Supplement to *Capital*, Volume Three, 1. Law of Value and Rate of Profit (this volume, pp. 876-94).

a certain rate of profit, depend only on the magnitude of his capital. On the other hand, profit consists of surplus value, of unpaid labour. But how is surplus value, whose magnitude hinges upon the degree of labour exploitation, transformed into profit, whose magnitude depends upon the amount of the capital employed?

"Simply by selling commodities above their value in all branches of production in which the ratio between ... constant and variable capital is greatest; but this also implies that commodities are sold below their value in those branches of production in which the ratio between constant and variable capital = c:v is smallest, and that commodities are sold at their true value only in branches in which the ratio of c:v represents a certain mean figure.... Is this discrepancy between individual prices and their respective values a refutation of the value principle? By no means. For since the prices of some commodities rise above their value as much as the prices of others fall below it, the total sum of prices remains equal to the total sum of values ... in the end this incongruity disappears." This incongruity is a "disturbance"; "however, in the exact sciences it is not customary to regard a predictable disturbance as a refutation of a law".

On comparing the relevant passages in Chapter IX with the above, it will be seen that Fireman has indeed placed his finger on the salient point. But the undeservedly cool reception of his able article shows how many interconnecting links would still be needed even after this discovery to enable Fireman to work out a full and comprehensive solution. Although many were interested in this problem, they were all still fearful of getting their fingers burnt. And this is explained not only by the incomplete form in which Fireman left his discovery, but also by the undeniable faultiness of both his conception of the Marxian analysis and of his own general critique of the latter, based as it was on his misconception.

Whenever there is a chance of making a fool of himself over some difficult matter, Herr Professor Julius Wolf, of Zurich, never fails to do so. He tells us (*Conrads Jahrbücher*, dritte Folge, II, S. 352 and following)<sup>a</sup> that the entire problem is resolved in relative surplus value. The production of relative surplus value rests on the increase of constant capital vis-à-vis variable capital.

"A plus in constant capital presupposes a plus in the productive power of the labourers. Since this plus in productive power (by way of lowering the worker's cost of living) produces a plus in surplus value, a direct relation is established between the increasing surplus value and the increasing share of constant capital in total capital. A plus in constant capital indicates a plus in the productive power of labour. With variable capital remaining the same and constant capital increasing, surplus value must therefore, in accordance with Marx, increase as well. This was the problem presented to us."

<sup>&</sup>lt;sup>a</sup> J. Wolf, "Das Rätsel der Durchschnittsprofitrate bei Marx".

True, Marx says the very opposite in a hundred places in the first book; true, the assertion that, according to Marx, when variable capital shrinks, relative surplus value increases in proportion to the increase in constant capital, is so astounding that it puts to shame all parliamentary declamation; true, Herr Julius Wolf demonstrates in his every line that he does not in the least understand, be it relatively or absolutely, the concepts of relative or absolute surplus value; to be sure he says himself that

"at first glance one seems really to be in a nest of incongruities",

which, by the way, is the only true statement in his entire article. But what does all that matter? Herr Julius Wolf is so proud of his brilliant discovery that he cannot refrain from bestowing posthumous praise on Marx for it and from extolling his own fathomless nonsense as a

"new proof of the keen and far-sighted way his" (Marx's) "system of criticism of capitalist economy is set forth".

But now comes the choicest bit of all. Herr Wolf says:

"Ricardo has likewise claimed that an equal investment of capital yielded equal surplus value (profit), just as the same expenditure of labour created the same surplus value (as regards its quantity). And the question now was how the one agreed with the other. But Marx has refused to accept this way of putting the problem. *He has proved beyond a doubt (in the third volume)* that the second statement was not necessarily a consequence of the law of value, that it even contradicted his law of value and should therefore ... be forthwith repudiated."

And thereupon Wolf probes who of us two, Marx or I, had made a mistake. It does not occur to him, naturally, that it is he who is groping in the dark.

I should offend my readers and fail to see the humour of the situation if I were to waste a single word on this choice morsel. I shall only add that his audacity in using the opportunity to report the ostensible gossip among professors that Conrad Schmidt's above-named work was "directly inspired by Engels" matches the audacity with which he dared to say at one time what "Marx has proved beyond a doubt in the third volume". Herr Julius Wolf! It may be customary in the world in which you live and strive for the man who publicly poses a problem to others to acquaint his close friends on the sly with its solution. I am quite prepared to believe that you are capable of this sort of thing. But that a man need not stoop to such shabby tricks in my world is proved by the present preface.

No sooner had Marx died than Mr. Achille Loria hastened to publish an article about him in the Nuova Antologia (April 1883).ª To begin with, a biography brimming with misinformation, followed by a critique of public, political and literary work. He falsifies Marx's materialist conception of history and distorts it with an assurance that bespeaks a great purpose. And this purpose was eventually carried out. In 1886, the same Mr. Loria published a book, La teoria economica della constituzione politica, in which he announced to his astounded contemporaries that Marx's conception of history, so completely and purposefully misrepresented by him in 1883, was his own discovery. To be sure, the Marxian theory is reduced in this book to a rather philistine level, and the historical illustrations and proofs abound in blunders which would never be tolerated in a fourth-form boy. But what does that matter? The discovery that political conditions and events are everywhere invariably explained by corresponding economic conditions was, as is herewith demonstrated, not made by Marx in 1845, but by Mr. Loria in 1886. At least he has happily convinced his countrymen of this, and, after his book appeared in French,<sup>b</sup> also some Frenchmen, and can now pose in Italy as the author of a new epoch-making theory of history until the Italian socialists find time to strip the *illustre* Loria of his stolen peacock feathers.

But this is just a sample of Mr. Loria's style. He assures us that all Marx's theories rest on conscious sophistry (un consaputo sofisma); that Marx did not stop at paralogisms even when he knew them to be paralogisms (sapendoli tali), etc. And after thus impressing the necessary upon his readers with a series of similar contemptible insinuations, so that they should regard Marx as an unprincipled upstart à la Loria who achieves his little effects by the same wretched humbug as our professor from Padua, he reveals an important secret to them, and thereby takes us back to the rate of profit.

Mr. Loria says: According to Marx, the amount of surplus value (which Mr. Loria here identifies with profit) produced in a capitalist industrial establishment should depend on the variable capital employed in it, since constant capital does not yield profit. But this is contrary to fact. For in practice profit does not depend on variable, but on total capital. And Marx himself recognises this (Buch I, Kap. XI<sup>11</sup>) and admits that on the surface facts appear to contradict his

<sup>&</sup>lt;sup>a</sup> A. Loria, "Karl Marx". - <sup>b</sup> A. Loria, Les Bases économiques de la constitution soziale, Paris, 1893.

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theory. But how does he get around this contradiction? He refers his readers to an as yet unpublished subsequent volume. Loria has already told *his* readers about this volume that he did not believe Marx had ever entertained the thought of writing it, and now exclaims triumphantly:

"I have not been wrong in contending that this second volume, which Marx always flings at his adversaries without it ever appearing, might very well have been a shrewd expedient applied by Marx whenever scientific arguments failed him (*un ingegnoso spediente ideato dal Marx a sostituzione degli argomenti scientifici*)."

And whosoever is not convinced after this that Marx stands in the same class of scientific swindlers as *l'illustre* Loria, is past all redemption.

We have at least learned this much: According to Mr. Loria, the Marxian theory of surplus value is absolutely incompatible with the existence of a general equal rate of profit. Then, there appeared the second volume and therewith my public challenge precisely on this very point.<sup>a</sup> If Mr. Loria had been one of us diffident Germans, he would have experienced a certain degree of embarrassment. But he is a cocky southerner, coming from a hot climate, where, as he can testify, cool nerve is a natural requirement. The question of the rate of profit has been publicly put. Mr. Loria has publicly declared it insoluble. And for this very reason he is now going to outdo himself by publicly solving it.

This miracle is accomplished in *Conrads Jahrbücher*, neue Folge, Buch XX, S. 272 and following, in an article dealing with Conrad Schmidt's already cited pamphlet.<sup>b</sup> After Loria learned from Schmidt how commercial profit was made, he suddenly saw daylight.

"Since determining value by means of labour time is to the advantage of those capitalists who invest a greater portion of their capital in wages, the unproductive" (read commercial) "capital can derive a higher interest" (read profit) "from these privileged capitalists and thus bring about an equalisation between the individual industrial capitalists... For instance, if each of the industrial capitalists A, B, C uses 100 working days and 0, 100, 200 constant capital respectively in production, and if the wages for 100 working days amount to 50 working days, then each receives a surplus value of 50 working days, and the rate of profit is 100% for the first, 33.3% for the second, and 20% for the third capitalist. But if a fourth capitalist D accumulates an unproductive capital of 300, which claims an interest" (profit) "equal in value to 40 working days from A, and an interest of 20 working days from B, then the rate of profit of capitalists A and B

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, p. 23. - <sup>b</sup> A. Loria, Die Durchschnittsprofitrate auf Grundlage des Marx'schen Wertgesetzes.

will sink to 20%, just as that of C, while D with his capital of 300 receives profit of 60, or a rate of profit of 20%, the same as the other capitalists."

With such astonishing dexterity, l'illustre Loria solves by sleight of hand the question which he had declared insoluble ten years previously. Unfortunately, he did not let us into the secret wherefrom the "unproductive capital" obtained the power to squeeze out of the industrialists their extra profit in excess of the average rate of profit. and to retain it in its own pocket, just as the landlord pockets the tenant's surplus profit as ground rent. Indeed, according to him it would be the merchants who would raise a tribute analogous to ground rent from the industrialists, and would thereby bring about an average rate of profit. Commercial capital is indeed a very essential factor in producing the general rate of profit, as nearly everybody knows. But only a literary adventurer who in his heart sneezes at political economy, can venture the assertion that it has the magic power to absorb all surplus value in excess of the general rate of profit even before this general rate has taken shape, and to convert it into ground rent for itself without, moreover, even having need to do with any real estate. No less astonishing is the assertion that commercial capital manages to discover the particular industrialists, whose surplus value just covers the average rate of profit, and that it considers it a privilege to mitigate the lot of these luckless victims of the Marxian law of value to a certain extent by selling their products gratis for them, without asking as much as a commission for it. What a mountebank one must be to imagine that Marx had need to resort to such miserable tricks!

But it is not until we compare him with his northern competitors, for instance with Herr Julius Wolf, who was not born yesterday either, that l'illustre Loria shines in his full glory. What a yelping pup Herr Wolf appears even in his big volume on Sozialismus und kapitalistische Gesellschaftsordnung, alongside the Italian! How awkward, I am almost tempted to say modest, he appears beside the noble audacity of the maestro who takes it for granted that Marx, neither more nor less than other people, was as much a conscious sophist, paralogist, humbug and mountebank as Mr. Loria himself—that Marx took in the public with the promise of rounding out his theory in a subsequent volume whenever he was in a difficult position, knowing full well that he neither could nor ever would write it. Boundless nerve coupled with a flair for slipping like an eel through impossible situations, a heroic contempt for pummellings received, hasty plagiarism of other people's accomplishments, importunate and fanfaronading advertising, spreading his fame by means of a chorus of friends—who can equal him in all this?

Italy is the land of classicism. Ever since the great era when the dawn of modern times rose there, it has produced magnificent characters of unequalled classic perfection, from Dante to Garibaldi. But the period of its degradation and foreign domination also bequeathed it classic character-masks, among them two particularly clear-cut types, that of Sganarelle and Dulcamara. The classic unity of both is embodied in our *illustre* Loria.

In conclusion I must take my readers across the Atlantic. Dr. (Med.) George C. Stiebeling, of New York, has also found a solution to the problem, and a very simple one. So simple, indeed, that no one either here, or there, took him seriously. This aroused his ire, and he complained bitterly about the injustice of it in an endless stream of pamphlets and newspaper articles appearing on both sides of the great water. He was told in the *Neue Zeit*<sup>a</sup> that his entire solution rested on a mathematical error. But this could scarcely disturb him. Marx had also made mathematical errors, and was yet right in many things. Let us then take a look at Dr. Stiebeling's solution.

"I take two factories working with equal capitals for an equal length of time, but with a different ratio of constant and variable capitals. I make the total capital (c + v) = y, and the difference in the ratio of the constant and variable capital = x. For factory I, y = c + v, for factory II, y = (c - x) + (v + x). Therefore the rate of surplus value for factory  $I = \frac{s}{v}$ , and for factory  $II = \frac{s}{v+x}$ . Profit (p) is what I call the total surplus value (s) by which the total capital y, or c + v, is augmented in the given time; thus, p = s. Hence, the rate of profit for factory  $I = \frac{p}{y}$ , or  $\frac{s}{c+v}$ , and for factory II it is also  $\frac{p}{y}$ , or  $\frac{s}{(c-x)+(v+x)}$ , i. e. it is also  $= \frac{s}{c+v}$ . The... problem thus resolves itself in such a way that, on the basis of the law of value, with equal capital and equal time, but unequal quantities of living labour, a change in the rate of surplus value causes the equalisation of an average rate of profit" (G. C. Stiebeling, *Das Werthgesetz und die Profitrate*, New York, John Heinrich).

However pretty and revealing the above calculation may be, we are compelled to ask Dr. Stiebeling *one* question: How does he know that the sum of surplus value produced by factory I is exactly equal to the sum of the surplus value produced by factory II? He states explic-

<sup>&</sup>lt;sup>a</sup> [A. Luxenberg,] "Bemerkung zu dem Aufsatze des Herrn Stiebeling", Die Neue Zeit, No. 3, 1887, S. 123-27.

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itly that c, v, y and x, that is, all the other factors in the calculation, are the same for both factories, but makes no mention of s. It does not by any means follow from the fact that he designated both of the above-mentioned quantities of surplus value algebraically with s. Rather, it is just the thing that has to be proved, since Mr. Stiebeling without further ado also identifies profit p with the surplus value. Now there are just two possible alternatives. Either the two s's are equal, both factories produce equal quantities of surplus value, and therefore also equal quantities of profit, since both capitals are equal. In that case Mr. Stiebeling has from the start taken for granted what he was really called upon to prove. Or, one factory produces more surplus value than the other, in which case his entire calculation tumbles about his ears.

Mr. Stiebeling spared neither pains nor money to build mountains of calculations upon this mathematical error, and to exhibit them to the public. I can assure him, for his own peace of mind, that they are nearly all equally wrong, and that in the exceptional cases when this is not so, they prove something entirely different from what he set out to prove. He proves, for instance, by comparing U.S. census figures for 1870 and 1880 that the rate of profit has actually fallen, but interprets it wrongly and assumes that Marx's theory of a constantly stable rate of profit should be corrected on the basis of experience. Yet it follows from the third part of the present third book that this Marxian "stable rate of profit" is purely a figment of Mr. Stiebeling's imagination, and that the tendency for the rate of profit to fall is due to circumstances which are just the reverse of those indicated by Dr. Stiebeling. No doubt Dr. Stiebeling has the best intentions, but when a man wants to deal with scientific questions he should above all learn to read the works he wishes to use just as the author had written them, and above all without reading anything into them that they do not contain.

The outcome of the entire investigation shows again with reference to this question as well that it is the Marxian school alone which has accomplished something. If Fireman and Conrad Schmidt read this third book, each one, for his part, may well be satisfied with his own work.

London, October 4, 1894

Fr. Engels

#### BOOK III

#### THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

I

#### Part I

#### THE CONVERSION OF SURPLUS VALUE INTO PROFIT AND OF THE RATE OF SURPLUS VALUE INTO THE RATE OF PROFIT

#### Chapter I

#### COST PRICE AND PROFIT

In Book I we analysed the phenomena which constitute the capitalist process of production as such, as the immediate production process, with no regard for any of the secondary effects of outside influences. But this immediate process of production does not exhaust the life span of capital. It is supplemented in the actual world by the process of circulation, which was the object of study in Book II. In the latter, namely in Part III, which treated the process of circulation as a medium for the social process of reproduction, it developed that the capitalist process of production taken as a whole represents a synthesis of the processes of production and circulation. Considering what this third book treats, it cannot confine itself to general reflection relative to this synthesis. On the contrary, it must locate and describe the concrete forms which grow out of the movements of capital as a whole. In their actual movement capitals confront each other in such concrete shape, for which the form of capital in the immediate process of production, just as its form in the process of circulation, appear only as special instances. The various forms of capital, as evolved in this book, thus approach step by step the form which they assume on the surface of society, in the action of different capitals upon one another, competition, and in the ordinary consciousness of the in agents of production themselves.

The value of every commodity (C) produced in the capitalist way is represented in the formula: C = c + v + s. If we subtract surplus
value s from this value of the product there remains a bare equivalent or a substitute value in goods, for the capital value c + v expended in the elements of production.

For example, if the production of a certain article requires a capital outlay of £500, of which £20 are for the wear and tear of means of labour, £380 for the materials of production, and £100 for labour power, and if the rate of surplus value is 100%, then the value of the product =  $400_c + 100_v + 100_s = £600$ .

After deducting the surplus value of  $\pounds 100$ , there remains a commodity value of  $\pounds 500$  which only replaces the expended capital of  $\pounds 500$ . This portion of the value of the commodity, which replaces the price of the consumed means of production and labour power, only replaces what the commodity costs the capitalist himself. For him it, therefore, represents the cost price of the commodity.

What the commodity costs the capitalist and its actual production cost are two quite different magnitudes. The portion of the commodity value making up the surplus value does not cost the capitalist anything simply because it costs the labourer unpaid labour. Yet, on the basis of capitalist production, after the labourer enters the production process he himself constitutes an ingredient of operating productive capital, which belongs to the capitalist. Therefore, the capitalist is the actual producer of the commodity. For this reason the cost price of the commodity necessarily appears to the capitalist as the actual cost of the commodity. If we take k to be the cost price, the formula C = c + v + s turns into the formula C = k + s, that is, the commodity value = cost price + surplus value.

The grouping of the various value portions of a commodity which only replace the value of the capital expended in its production under the head of cost price expresses, on the one hand, the specific character of capitalist production. The capitalist cost of the commodity is measured by the expenditure of *capital*, while the actual cost of the commodity is measured by the expenditure of *labour*. Thus, the capitalist cost price of the commodity differs in quantity from its value, or its actual cost price. It is smaller than the value of the commodity, because, with C = k + s, it is evident that k = C - s. On the other hand, the cost price of a commodity is by no means simply a category which exists only in capitalist bookkeeping. The individualisation of this portion of value is continually manifest in practice in the actual production of the commodity, because it has ever to be reconverted from its commodity form by way of the process of circulation into the

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First page of Marx's manuscript of the third volume of Capital, marked by Engels as "Ms. I"

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A page of Vol. III of *Capital*, copied by a secretary, with alterations by Engels. The insertion at the top of the page is by Engels (Reduced) form of productive capital, so that the cost price of the commodity always must repurchase the elements of production consumed in its manufacture.

The category of cost price, on the other hand, has nothing to do with the formation of commodity value, or with the process of selfexpansion of capital. When I know that of the value of a commodity worth  $\pounds 600$ ,  $\frac{5}{6}$ , or  $\pounds 500$ , represent no more than an equivalent of the capital of  $\pounds 500$  consumed in its production and that it can therefore suffice only to repurchase the material elements of this capital, I know nothing as yet either of the way in which these  $\frac{5}{6}$  of the value of the commodity, which represent its cost price, are produced, or about the way in which the last sixth, which constitutes its surplus value, was produced. The investigation will show, however, that in capitalist economics the cost price assumes the false appearance of a category of value production itself.

To return to our example. Suppose the value produced by one labourer during an average social working day is represented by a money sum of 6s. = 6M. Then the advanced capital of  $\pounds 500 = 400_c + 100_v$  represents a value produced in  $1,666\frac{2}{3}$  ten-hour working days, of which  $1,333\frac{1}{3}$  working days are crystallised in the value of the means of production =  $400_c$ , and  $333\frac{1}{3}$  working days are crystallised in the value of labour power =  $100_v$ . Having assumed a rate of surplus value of 1000%, the production of the commodity to be newly formed entails a labour expenditure =  $100_v + 100_s = 666\frac{2}{3}$  ten-hour working days.

We know, then (see Buch I, Kap. VII, S.  $201/193^{a}$ ) that the value of the newly created product of £600 is composed of 1) the reappearing value of the constant capital of £400 expended for means of production, and 2) a newly produced value of £200. The cost price of the commodity = £500 comprises the reappearing  $400_{c}$  and one-half of the newly produced value of £200 (=  $100_{v}$ ), that is, two elements of the commodity value which are of entirely different origin.

Owing to the purposive nature of the labour expended during  $666\frac{2}{3}$  ten-hour working days, the value of the consumed means of production amounting to  $\pounds 400$  is transferred from these means of production to the product. This previously existing value thus reap-

<sup>&</sup>lt;sup>a</sup> English edition: Ch. IX (see present edition, Vol. 35, pp. 221-22).

pears as a component part of the value of the product, but is not created in the process of production of *this* commodity. It exists as a component of the value of the commodity only because it previously existed as an element of the advanced capital. The expended constant capital is therefore replaced by that portion of the value of the commodity which this capital itself adds to that value. This element of the cost price, therefore, has a double meaning. On the one hand, it goes into the cost price of the commodity, because it is part of the commodity value which replaces consumed capital. And on the other hand, it forms an element of the commodity value only because it is the value of expended capital or because the means of production cost so and so much.

It is quite the reverse in the case of the other element of the cost price. The  $666\frac{2}{3}$  working days expended in the production of the commodity create a new value of £200. One portion of this new value merely replaces the advanced variable capital of £100, or the price of the labour power employed. But this advanced capital value does not in any way go into the creation of the new value. So far as the advance of capital is concerned, labour power counts as a *value*. But in the process of production it acts as the *creator of value*. The place of the value of the labour power that obtains within the advanced capital is taken in the actually *functioning* productive capital by living value-creating labour power itself.

The difference between these various elements of the commodity value, which together make up the cost price, leaps to the eye whenever a change takes place in the size of the value of either the expended constant, or the expended variable, part of the capital. Let the price of the same means of production, or of the constant part of capital, rise from  $f_{400}$  to  $f_{600}$ , or, conversely, let it fall to  $f_{200}$ . In the first case it is not only the cost price of the commodity which rises from  $f_{1,500}$  to  $600_{c} + 100_{v} = f_{1,700}$ , but also the value of the commodity which rises from  $f_{1}600$  to  $600_{c} + 100_{v} + 100_{s} = f_{1}800$ . In the second case, it is not only the cost price which falls from  $\pounds500$  to  $200_{c} + 100_{v} = £300$ , but also the value of the commodity which falls from  $f_{c}600$  to  $200_{c} + 100_{v} + 100_{s} = f_{c}400$ . Since the expended constant capital transfers its own value to the product, the value of the product rises or falls with the absolute magnitude of that capital value, other conditions remaining equal. Assume, on the other hand, that, other circumstances remaining unchanged, the price of the same amount of labour power rises from  $f_{100}$  to  $f_{150}$ , or, conversely, that it falls from £100 to £50. In the first case, the cost price rises from  $f_{2,500}$  to  $400_{c} + 150_{v} = f_{2,550}$ , and falls in the second case from  $f_{2,500}$ to  $400_c + 50_v = f_1450$ . But in either case the commodity value remains unchanged =  $f_{1,600}$ ; one time it is  $400_{c} + 150_{v} + 50_{s}$ , and the other time,  $400_{c} + 50_{y} + 150_{s}$ . The advanced variable capital does not add its own value to the product. The place of its value is taken in the product rather by a new value created by labour. Therefore, a change in the absolute magnitude of the variable capital, so far as it expresses merely a change in the price of labour power, does not in the least alter the absolute magnitude of the commodity value, because it does not alter anything in the absolute magnitude of the new value created by living labour power. Such a change rather affects only the relative proportion of the two component parts of the new value, of which one forms surplus value and the other makes good the variable capital and therefore passes into the cost price of the commodity.

The two elements of the cost price, in the present case  $400_c + 100_v$ , have only this in common that they are both parts of the commodity value that replace advanced capital.

But this true state of affairs necessarily appears reversed from the standpoint of capitalist production.

The capitalist mode of production differs from the mode of production based on slavery, among other things, by the fact that in it the value, and accordingly the price, of labour power appears as the value, or price, of labour itself, or as wages (Buch I, Kap. XVII<sup>a</sup>). The variable part of the advanced capital, therefore, appears as capital expended in wages, as a capital value which pays for the value, and accordingly the price, of all the labour expended in production. Let us assume, for instance, that an average ten-hour social working day is incorporated in a sum of money amounting to 6 shillings. In that case the advance of a variable capital of  $f_{100}$  represents the monev expression of a value produced in  $333\frac{1}{3}$  ten-hour working days. But this value, representing purchased labour power in the capital advanced, does not, however, form a part of the actually functioning capital. Its place in the process of production is taken by living labour power. If, as in our illustration, the degree of exploitation of the latter is 100%, then it is expended during  $666\frac{2}{3}$  ten-hour working days, and thereby adds to the product a new value of  $f_{200}$ . But in the capi-

<sup>&</sup>lt;sup>a</sup> English edition: Ch. XIX (see present edition, Vol. 35, p. 535-42).

tal advanced the variable capital of £100 figures as capital invested in wages, or as the price of labour performed during  $666\frac{2}{3}$  ten-hour days. The sum of £100 divided by  $666\frac{2}{3}$  gives us 3 shillings as the price of a ten-hour working day, which is equal in value to the product of five hours' labour.

Now, if we compare the capital advanced on the one hand with the commodity value on the other, we find:

- I. Capital advanced  $\pounds 500 = \pounds 400$  of capital expended in means of production (price of means of production) +  $\pounds 100$  of capital expended in labour (price of 666  $\frac{2}{3}$  working days, or wages for same).
- II. Value of commodities  $\pounds 600 = \pounds 500$  representing the cost price ( $\pounds 400$  price of expended means of production +  $\pounds 100$  price of expended  $666\frac{2}{3}$  working days) +  $\pounds 100$  surplus value.

In this formula, the portion of capital invested in labour differs from that invested in means of production, such as cotton or coal, only by serving as payment for a materially different element of production, but not by any means because it serves a functionally different purpose in the process of creating commodity value, and thereby also in the process of the self-expansion of capital. The price of the means of production reappears in the cost price of the commodities, just as it figured in the capital advanced, and it does so because these means of production have been purposively consumed. The price, or wages, for the  $666\frac{2}{3}$  working days consumed in the production of these commodities likewise reappears in the cost price of the commodities just as it has figured in the capital advanced, and also because this amount of labour has been purposively expended. We see only finished and existing values—the portions of the value of the advanced capital which go into the making of the value of the product --but not the element creating new values. The distinction between constant and variable capital has disappeared. The entire cost price of  $f_{1,500}$  now has the double meaning that, first, it is that portion of the commodity value of £600 which replaces the capital of £500 expended in the production of the commodity; and that, secondly, this component of the commodity value exists only because it existed previously as the cost price of the elements of production employed, namely means of production and labour, i. e., as advanced capital. The capital value reappears as the cost price of a commodity because, and in so far as, it has been expended as a capital value.

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The fact that the various components of the value of the advanced capital have been expended for materially different elements of production, namely for means of labour, raw materials, auxiliary materials, and labour, requires only that the cost price of the commodity must buy back these materially different elements of production. So far as the formation of the cost price is concerned, however, only one distinction is appreciable, namely that between fixed and circulating capital. In our example we have set down  $f_{20}$  for wear and tear of means of labour  $(400_c = f_{20})$  for depreciation of means of labour +  $f_{.380}$  for materials of production). Before the production process the value of these means of labour was, say,  $f_{1,200}$ . After the commodities have been produced it exists in two forms, the  $f_{20}$  as part of the value of the commodity, and 1,200-20, or  $f_{1,180}$ , as the remaining value of the means of labour which, as before, are in the possession of the capitalist; in other words, as an element of his productive, not of his commodity capital. Materials of production and wages, as distinct from means of labour, are entirely consumed in the production of the commodity and thus their entire value goes into that of the produced commodity. We have seen how these various components of the advanced capital assume the forms of fixed and circulating capital in relation to the turnover.<sup>a</sup>

Accordingly, the capital advanced =  $\pounds 1,680$ : fixed capital =  $\pounds 1,200$  plus circulating capital =  $\pounds 480$  (=  $\pounds 380$  in materials of production plus  $\pounds 100$  in wages).

But the cost price of the commodity only =  $\pounds 500$  ( $\pounds 20$  for the wear and tear of the fixed capital, and  $\pounds 480$  for circulating capital).

This difference between the cost price of the commodity and the capital advanced merely proves, however, that the cost price of the commodity is formed exclusively by the capital actually consumed in its production.

Means of labour valued at  $\pounds 1,200$  are employed in producing the commodity, but only  $\pounds 20$  of this advanced capital value are lost in production. Thus, the employed fixed capital goes only partially into the cost price of the commodity, because it is only partially consumed in its production. The employed circulating capital goes entirely into the cost price of the commodity, because it is entirely consumed in its production. But does not this only prove that the consumed portions of the fixed and circulating capital pass uniformly, *pro rata* to the mag-

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, pp. 159-84.

nitude of their values, into the cost price of the commodity and that this component of the value of the commodity originates solely with the capital expended in its production? If this were not so, it would be inexplicable why the advanced fixed capital of  $\pounds 1,200$  should not, aside from the  $\pounds 20$  which it loses in the production process, also contribute the other  $\pounds 1,180$  which it does not lose.

This difference between fixed and circulating capital with reference to the calculation of the cost price, therefore, only confirms the seeming origination of the cost price from the expended capital value, or the price paid by the capitalist himself for the expended elements of production, including labour. On the other hand, so far as the formation of value is concerned, the variable portion of capital invested in labour power is here emphatically identified under the head of circulating capital with constant capital (that part of capital which consists of materials of production), and this completes the mystification of the self-expansion process of capital.<sup>1</sup>

So far we have considered just one element of the value of commodities, namely the cost price. We must now turn also to the other component of the value of commodities, namely the excess over the cost price, or the surplus value. In the first place, then, surplus value is the excess value of a commodity over and above its cost price. But since the cost price equals the value of the consumed capital, into whose material elements it is continually reconverted, this excess value is an accretion in the value of the capital expended in the production of the commodity and returning by way of its circulation.

We have already seen earlier that, though s, the surplus value, springs merely from a change in the value of the variable capital v and is, therefore, originally but an increment of variable capital, after the process of production is over it nevertheless also forms a value increment of c + v, the expended total capital. The formula c + (v + s), which indicates that s is produced through the conversion of a definite capital value v advanced for labour power into a fluctuating magnitude, i. e., of a constant magnitude into a variable one, may also be represented as (c + v) + s. Before production took place we had a capital of £500. After production

<sup>1)</sup> In Book I (Kap. VII, 3, S. 216/206 ff.)<sup>a</sup> we have given the example of N. W. Senior to show what confusion this may create in the mind of the economist.

<sup>&</sup>lt;sup>a</sup> English edition: Ch. IX, 3 (present edition, Vol. 35, p. 233).

is completed we have the capital of £500 plus a value increment of £100.<sup>2)</sup>

However, surplus value forms an increment not only of the portion of the advanced capital which goes into the self-expansion process, but also of the portion which does not go into it. In other words, it is an accretion not only to the consumed capital made good out of the cost price of the commodity, but to all the capital invested in production. Before the production process we had a capital valued at  $f_{1,680}$ , namely  $f_{1,200}$  of fixed capital invested in means of labour, only  $\pounds 20$  of which go into the value of the commodity for wear and tear, plus f,480 of circulating capital in materials of production and wages. After the production process we have  $f_{1,180}$  as the constituent element of the value of the productive capital plus a commodity capital of  $f_{.600}$ . By adding these two sums of value we find that the capitalist now has a value of  $f_{1,780}$ . After deducting his advanced total capital of  $f_{1,680}$  there remains a value increment of  $f_{100}$ . The  $f_{100}$  of surplus value thus form as much of a value increment in relation to the invested  $f_{1,680}$  as to its fraction of  $f_{500}$  expended during production.

It is now clear to the capitalist that this increment of value springs from the productive processes undertaken with the capital, that it therefore springs from the capital itself, because it is there after the production process, while it is not there before it. As for the capital consumed in production, the surplus value seems to spring equally from all its different elements of value consisting of means of production and labour. For all these elements contribute equally to the formation of the cost price. All of them add their values, obtaining as advanced capital, to the value of the product, and are not differentiated as constant and variable magnitudes of value. This becomes obvious if we assume for a moment that all the expended capital consisted either exclusively of wages, or exclusively of the value of

<sup>2)</sup> "From what has gone before, we know that surplus value is purely the result of a variation in the value of v, of that portion of the capital which is transformed into labour power; consequently,  $v + s = \Delta v$  (or v plus an increment of v). But the fact that it is v alone that varies, and the conditions of that variation, are obscured by the circumstance that in consequence of the increase in the variable component of the capital, there is also an increase in the sum total of the advanced capital. It was originally  $\pounds 500$ , and becomes  $\pounds 590$ " (Buch I, Kap. VII, 1, S. 203/195).<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> English edition: Ch. IX, 1 (ibid., p. 221).

the means of production. In the first case, we should then have the commodity value of  $500_v + 100_s$  instead of the commodity value of  $400_{\circ} + 100_{\circ} + 100_{\circ}$ . The capital of  $\cancel{5}500$  laid out in wages represents the value of all the labour expended in the production of the commodity value of  $f_{.600}$ , and for just this reason forms the cost price of the entire product. But the formation of this cost price, whereby the value of the expended capital is reproduced as a constituent part of the value of the product, is the only process in the formation of this commodity value that is known to us. We do not know how its surplus value portion of  $f_1100$  is formed. The same is true in the second case, in which the commodity value =  $500_{c} + 100_{c}$ . We know in both cases that surplus value is derived from a given value, because this value was advanced in the form of productive capital, be it in the form of labour or of means of production. On the other hand, this advanced capital value cannot form surplus value for the reason that it has been expended and therefore constitutes the cost price of the commodity. Precisely because it forms the cost price of the commodity, it does not form any surplus value, but merely an equivalent, a value replacing the expended capital. So far, therefore, as it forms surplus value, it does so not in its specific capacity as expended, but rather as advanced, and hence utilised, capital. For this reason, the surplus value arises as much out of the portion of the advanced capital which goes into the cost price of the commodity as out of the portion which does not. In short, it arises equally out of the fixed and the circulating components of the utilised capital. The aggregate capital serves materially as the creator of products, the means of labour as well as the materials of production, and the labour. The total capital materially enters into the actual labour process, even though only a portion of it enters the process of self-expansion. This is, perhaps, the very reason why it contributes only in part to the formation of the cost price, but totally to the formation of surplus value. However that may be, the outcome is that surplus value springs simultaneously from all portions of the invested capital. This deduction may be substantially abbreviated, by saying pointedly and concisely in the words of Malthus:

"The capitalist ... expects an equal profit upon all the parts of the capital which he advances."  $^{\mathbf{3}_{\mathrm{3}}}$ 

In its assumed capacity of offspring of the aggregate advanced

<sup>&</sup>lt;sup>3)</sup> Malthus, Principles of Political Economy, 2nd ed., London, 1836, p. 268.

capital, surplus value takes the converted form of *profit*. Hence, a certain value is capital when it is invested with a view to producing profit,<sup>4</sup>) or, there is profit because a certain value was employed as capital. Suppose profit is p. Then the formula C = c + v + s = k + sturns into the formula C = k + p, or the value of a commodity = cost price + profit.

The profit, such as it is represented here, is thus the same as surplus value, only in a mystified form that is nonetheless a necessary outgrowth of the capitalist mode of production. The genesis of the mutation of values that occurs in the course of the production process must be transferred from the variable portion of the capital to the total capital, because there is no apparent distinction between constant and variable capital in the assumed formation of the cost price. Because at one pole the price of labour power assumes the converted form of wages, surplus value appears at the opposite pole in the converted form of profit.

We have seen that the cost price of a commodity is smaller than its value. Since C = k + s, it follows that k = C - s. The formula C = k + s reduces itself to C = k, or commodity value = commodity cost price only if s = 0, a case which never occurs on the basis of capitalist production, although peculiar market conditions may reduce the selling price of commodities to the level of, or even below, their cost price.

Hence, if a commodity is sold at its value, a profit is realised which is equal to the excess of its value over its cost price, and therefore equal to the entire surplus value incorporated in the value of the commodity. But the capitalist may sell a commodity at a profit even when he sells it below its value. So long as its selling price is higher than its cost price, though it may be lower than its value, a portion of the surplus value incorporated in it is always realised, thus always yielding a profit. In our illustration the value of the commodity is  $\pounds 600$ , and the cost price  $\pounds 500$ . If the commodity is sold at  $\pounds 510$ , 520, 530, 560 or 590, it is sold respectively  $\pounds 90$ , 80, 70, 40, or 10 below its value. Yet a profit of  $\pounds 10$ , 20, 30, 60, or 90 respectively is realised in its sale. There is obviously an indefinite number of selling prices possible between the value of a commodity and its cost price. The greater the surplus-value element of the value of a commodity, the greater the practical range of these intermediate prices.

<sup>&</sup>lt;sup>4</sup>) "CAPITAL IS THAT WHICH IS EXPENDED WITH A VIEW TO PROFIT." Malthus, *Definitions in Political Economy*, London, 1827, p. 86.

This explains more than just the everyday phenomena of competition, such as certain cases of UNDERSELLING,<sup>a</sup> abnormally low commodity prices in certain lines of industry,<sup>5</sup>) etc. The fundamental law of capitalist competition, which political economy had not hitherto grasped, the law which regulates the general rate of profit and the socalled prices of production determined by it, rests, as we shall later see, on this difference between the value and the cost price of commodities, and on the resulting possibility of selling a commodity at a profit under its value.

The minimal limit of the selling price of a commodity is its cost price. If it is sold under its cost price, the expended constituent elements of productive capital cannot be fully replaced out of the selling price. If this process continues, the value of the advanced capital disappears. From this point of view alone, the capitalist is inclined to regard the cost price as the true inner value of the commodity, because it is the price required for the bare conservation of his capital. But there is also this, that the cost price of a commodity is the purchase price paid by the capitalist himself for its production, therefore the purchase price determined by the production process itself. For this reason, the excess value, or the surplus value, realised in the sale of a commodity appears to the capitalist as an excess of its selling price over its value, instead of an excess of its value over its cost price, so that accordingly the surplus value incorporated in a commodity is not realised through its sale, but springs out of the sale itself. We have given this illusion closer consideration in Book I (Kap. IV, 2) ("Contradictions in the General Formula of Capital"), but revert here for a moment to the form in which it was reaffirmed by Torrens, among others, as an advance of political economy beyond Ricardo.

"The natural price, consisting of the cost of production, or, in other words, of the capital expended in raising or fabricating commodities, cannot include the profit.... The farmer, we will suppose, expends one hundred quarters of corn in cultivating his fields, and obtains in return one hundred and twenty quarters. In this case, twenty quarters, being the excess of produce above expenditure, constitute the farmer's profit; but it would be absurd to call this excess, or profit, a part of the expenditure.... The

<sup>5)</sup> Cf. Buch I, Kap. XVIII, S. 571/561 ff.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent. - <sup>b</sup> English edition: Ch. XX, (see present edition, Vol. 35, pp. 542-50). - <sup>c</sup> English edition: Ch. V, (see present edition, Vol. 35, pp. 166-77).

master manufacturer expends a certain quantity of raw material, of tools and implements of trade, and of subsistence for labour, and obtains in return a quantity of finished work. This finished work must possess a higher exchangeable value than the materials, tools, and subsistence, by the advance of which it was obtained."

Torrens concludes therefrom that the excess of the selling price over the cost price, or profit, is derived from the fact that the consumers,

"either by immediate or CIRCUITOUS<sup>a</sup> barter give some greater portion of all the ingredients of capital than their production costs".<sup>6)</sup>

Indeed, the excess over a given magnitude cannot form a part of this magnitude, and therefore the profit, the excess value of a commodity over the capitalist's expenditures, cannot form a part of these expenditures. Hence, if no other element than the value advance of the capitalist enters into the formation of the value of a commodity, it is inexplicable how more value should come out of production than went into it, for something cannot come out of nothing. But Torrens only evades this creation out of nothing by transferring it from the sphere of commodity production to that of commodity circulation. Profit cannot come out of production, says Torrens, for otherwise it would already be contained in the cost of production, and there would not be a surplus over this cost. Profit cannot come out of the exchange of commodities, replies Ramsay,<sup>b</sup> unless it already existed before this exchange. The sum of the value of the exchanged products is evidently not altered in the exchange of these products, whose sum of value it is. It is the same before and after the exchange. It should be noted here that Malthus refers expressly to the authority of Torrens,<sup>7</sup>) although he himself has a different explanation for the sale of commodities above their value, or rather has no explanation at all, since all arguments of this sort never, in effect, fail to be reduced to the same thing as the once-famed negative weight of phlogiston.<sup>12</sup>

In a social order dominated by capitalist production even the noncapitalist producer is gripped by capitalist conceptions. Balzac, who

<sup>7</sup>) Malthus, Definitions in Political Economy, London, 1853, pp. 70, 71.

<sup>&</sup>lt;sup>6</sup>) R. Torrens, An Essay on the Production of Wealth, London, 1821, pp. 51-53, and 349.

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent. - <sup>b</sup> G. Ramsay, *An Essay on the Distribution of Wealth*, Edinburgh, London, 1836, pp. 183-84.

is generally remarkable for his profound grasp of reality, aptly describes in his last novel, *Les Paysans*, how a petty peasant performs many small tasks gratuitously for his usurer, whose goodwill he is eager to retain, and how he fancies that he does not give the latter something for nothing because his own labour does not cost him any cash outlay. As for the usurer, he thus fells two dogs with one stone. He saves the cash outlay for wages and enmeshes the peasant, who is gradually ruined by depriving his own field of labour, deeper and deeper in the spider-web of usury.

The thoughtless conception that the cost price of a commodity constitutes its actual value, and that surplus value springs from selling the product above its value, so that commodities would be sold at their value if their selling price were to equal their cost price, i.e., if it were to equal the price of the consumed means of production plus wages, has been heralded to the world as a newly discovered secret of socialism by Proudhon with his customary quasi-scientific chicanery. Indeed, this reduction of the value of commodities to their cost price is the basis of his People's Bank.<sup>13</sup> It was earlier shown that the various constituent elements of the value of a product may be represented in proportional parts of the product itself. For instance (Buch I, Kap. VII, 2, S. 211/203<sup>a</sup>), if the value of 20 lbs of varn is 30 shillings namely 24 shillings of means of production, 3 shillings of labour power, and 3 shillings of surplus value - then this surplus value may be represented as  $\frac{1}{10}$  of the product = 2 lbs of yarn. Should these 20 lbs of yarn now be sold at their cost price, at 27 shillings, then the purchaser receives 2 lbs of varn for nothing, or the article is sold  $\frac{1}{10}$  below its value. But the labourer has, as before, performed his surplus labour, only this time for the purchaser of the yarn instead of the capitalist yarn producer. It would be altogether wrong to assume that if all commodities were sold at their cost price, the result would really be the same as if they had all been sold above their cost price, but at their value. For even if the value of the labour power, the length of the working day, and the degree of exploitation of labour were the same everywhere, the quantities of surplus value contained in the values of the various kinds of commodities would be unequal, depending on the different organic composition of the capitals advanced for their production.<sup>8</sup>

<sup>8)</sup> "The masses of value and of surplus value produced by different capitals—the

<sup>&</sup>lt;sup>a</sup> English edition: Ch. IX, 2 (see present edition, Vol. 35, p. 230).

## Chapter II

#### THE RATE OF PROFIT

The general formula of capital is M - C - M'. In other words, a sum of value is thrown into circulation to extract a larger sum out of it. The process which produces this larger sum is capitalist production. The process that realises it is circulation of capital. The capitalist does not produce a commodity for its own sake, nor for the sake of its use value, or his personal consumption. The product in which the capitalist is really interested is not the palpable product itself, but the excess value of the product over the value of the capital consumed by it. The capitalist advances the total capital without regard to the different roles played by its components in the production of surplus value. He advances all these components uniformly, not just to reproduce the advanced capital, but rather to produce value in excess of it. The only way in which he can convert the value of his advanced variable capital into a greater value is by exchanging it for living labour and exploiting living labour. But he cannot exploit this labour unless he makes a simultaneous advance of the conditions for performing this labour, namely means of labour and subjects of labour, machinery and raw materials, i. e., unless he converts a certain amount of value in his possession into the form of conditions of production; for he is a capitalist and can undertake the process of exploiting labour only because, being the owner of the conditions of labour, he confronts the labourer as the owner of only labour power.<sup>b</sup> As already shown in the first book, c it is precisely the fact that nonworkers own the means of production which turns labourers into wage workers and nonworkers into capitalists.

The capitalist does not care whether it is considered that he advances constant capital to make a profit out of his variable capital, or that he advances variable capital to enhance the value of the constant capital; that he invests money in wages to raise the value of his machinery and raw materials, or that he invests money in machinery and raw materials to be able to exploit labour. Although it is only the var-

value of labour power being given and its degree of exploitation being equal — vary directly as the amounts of the variable constituents of these capitals, i. e., as their constituents transformed into living labour power" (Buch I, Kap. IX, S. 312/303).<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> English edition: Ch. XI (ibid., p. 311). - <sup>b</sup> Cf. Economic Manuscript of 1861-63 (present edition, Vol. 33, pp. 78-79). - <sup>c</sup> Ibid., Vol. 35, p. 179.

riable portion of capital which creates surplus value, it does so only if the other portions, the conditions of production, are likewise advanced. Seeing that the capitalist can exploit labour only by advancing constant capital and that he can turn his constant capital to good account only by advancing variable capital, he lumps them all together in his imagination, and much more so since the actual rate of his gain is not determined by its proportion to the variable, but to the total capital, not by the rate of surplus value, but by the rate of profit. And the latter, as we shall see, may remain the same and yet express different rates of surplus value.<sup>a</sup>

The costs of the product include all the elements of its value paid by the capitalist or for which he has thrown an equivalent into production. These costs must be made good to preserve the capital or to reproduce it in its original magnitude.

The value contained in a commodity is equal to the labour time expended in its production, and the sum of this labour consists of paid and unpaid portions. But for the capitalist the costs of the commodity consist only of that portion of the labour objectified in it for which he has paid. The surplus labour contained in the commodity costs the capitalist nothing, although, like the paid portion, it costs the labourer his labour, and although it creates value and enters into the commodity as a value-creating element quite like paid labour. The capitalist's profit is derived from the fact that he has something to sell for which he has paid nothing. The surplus value, or profit, consists precisely in the excess value of a commodity over its cost price, i.e., the excess of the total labour embodied in the commodity over the paid labour embodied in it. The surplus value, whatever its origin, is thus a surplus over the advanced total capital. The proportion of this surplus to the total capital is therefore expressed by the fraction  $\frac{s}{C}$ , in which C stands for total capital. We thus obtain the rate of prof-

 $\frac{s}{c} = \frac{s}{c+v}$ , as distinct from the rate of surplus value  $\frac{s}{v}$ .

The rate of surplus value measured against the variable capital is called rate of surplus value. The rate of surplus value measured against the total capital is called rate of profit. These are two different measurements of the same entity, and owing to the difference of the two standards of measurement they express different proportions or relations of this entity.

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 79-80.

The transformation of surplus value into profit must be deduced from the transformation of the rate of surplus value into the rate of profit, not vice versa. And in fact it was rate of profit which was the historical point of departure. Surplus value and rate of surplus value are, relatively, the invisible and unknown essence that wants investigating, while rate of profit and therefore the appearance of surplus value in the form of profit are revealed on the surface of the phenomenon.

So far as the individual capitalist is concerned, it is evident that he is only interested in the relation of the surplus value, or the excess value at which he sells his commodities, to the total capital advanced for the production of the commodities, while the specific relationship and inner connection of this surplus with the various components of capital fail to interest him, and it is, moreover, rather in his interests to draw the veil over this specific relationship and this intrinsic connection.

Although the excess value of a commodity over its cost price is shaped in the immediate process of production, it is realised only in the process of circulation, and appears all the more readily to have arisen from the process of circulation, since in reality, under competition, in the actual market, it depends on market conditions whether or not and to what extent this surplus is realised. There is no need to waste words at this point about the fact that if a commodity is sold above or below its value, there is merely another kind of division of surplus value, and that this different division, this changed proportion in which various persons share in the surplus value, does not in any way alter either the magnitude or the nature of that surplus value. It is not alone the metamorphoses discussed by us in Book II that take place in the process of circulation; they fall in with actual competition, the sale and purchase of commodities above or below their value, so that the surplus value realised by the individual capitalist depends as much on the sharpness of his business wits as on the direct exploitation of labour.<sup>a</sup>

In the process of circulation the time of circulation comes to exert its influence alongside the working time, thereby limiting the amount of surplus value realisable within a given time span. Still other elements derived from circulation intrude decisively into the actual production process. The actual process of production and the process of

<sup>&</sup>lt;sup>a</sup> Ibid., p. 75.

circulation intertwine and intermingle continually, and thereby invariably adulterate their typical distinctive features. The production of surplus value, and of value in general, receives new definition in the process of circulation, as previously shown. Capital passes through the circuit of its metamorphoses. Finally, stepping beyond its inner organic life, so to say, it enters into relations with outer life, into relations in which it is not capital and labour which confront one another, but capital and capital in one case, and individuals, again simply as buyers and sellers, in the other. The time of circulation and working time cross paths and thus both seem to determine the surplus value. The original form in which capital and wage labour confront one another is disguised through the intervention of relationships seemingly independent of it. Surplus value itself does not appear as the product of the appropriation of labour time, but as an excess of the selling price of commodities over their cost price, the latter thus being easily represented as their actual value (valeur intrinsèque), while profit appears as an excess of the selling price of commodities over their immanent value.<sup>a</sup>

True, the nature of surplus value impresses itself constantly upon the consciousness of the capitalist during the direct process of production, as his greed for the labour time of others, etc., has revealed in our analysis of surplus value. But: 1) The direct process of production is only a fleeting stage which continually merges with the process of circulation, just as the latter merges with the former, so that in the process of production, the more or less clearly dawning notion of the source of the gain made in it, i.e., the inkling of the nature of surplus value, stands at best as a factor equally valid as the idea that the realised surplus originates in a movement that is independent of the production process, that it arises in circulation, and that it belongs to capital irrespective of the latter's relation to labour. Even such modern economists as Ramsay, Malthus, Senior, Torrens, etc., identify these phenomena of circulation directly as proofs that capital in its bare material existence, independent of its social relation to labour which makes capital of it, is, as it were, an independent source of surplus value alongside labour and independent of labour.  $^{14}$ —2) Under the item of expenses, which embrace wages as well as the price of raw materials, wear and tear of machinery, etc., the extortion of unpaid labour figures only as a saving in paying for

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 72-73.

an article which is included in expenses, only as a smaller payment for a certain quantity of labour, similar to the saving when raw materials are bought more cheaply, or the depreciation of machinery decreases. In this way the extortion of surplus labour loses its specific character. Its specific relationship to surplus value is obscured. This is greatly furthered and facilitated, as shown in Book I (Abschn. VI),<sup>a</sup> by representing the value of labour power in the form of wages.

The relationships of capital are obscured by the fact that all parts of capital appear equally as the source of excess value (profit).

The way in which surplus value is transformed into the form of profit by means of the rate of profit is, however, a further development of the inversion of subject and object that takes place already in the process of production. In the latter, we have seen, the subjective productive forces of labour appear as productive forces of capital.<sup>b</sup> On the one hand, the value, or the past labour, which dominates living labour, is incarnated in the capitalist. On the other hand, the labourer appears as bare material labour power, as a commodity. Even in the simple relations of production this inverted relationship necessarily produces certain correspondingly inverted conceptions, a transposed consciousness which is further developed by the metamorphoses and modifications of the actual circulation process.

It is altogether erroneous, as a study of the Ricardian school shows, to try to identify the laws of the rate of profit with the laws of the rate of surplus value, or vice versa.<sup>c</sup> The capitalist naturally does not see the difference between them. In the formula  $\frac{s}{C}$  the surplus value is measured by the value of the total capital advanced for its production, of which a part was totally consumed in this production and a part was merely employed in it. In fact, the formula  $\frac{s}{C}$  expresses the degree of self-expansion of the total capital advanced, or, taken in conformity with inner conceptual connections and the nature of surplus value, it indicates the ratio of the advanced total capital.

In itself, the magnitude of value of total capital has no inner relationship to the magnitude of surplus value, at least not directly. So far as its material elements are concerned, the total capital minus the variable capital, that is, the constant capital, consists of the material

<sup>&</sup>lt;sup>a</sup> English edition: Part VI (see present edition, Vol. 35, pp. 535-42). - <sup>b</sup> Ibid., pp. 338-39. - <sup>c</sup> Ibid., Vol. 32, pp. 60-72.

requisites — the means of labour and materials of labour — needed to materialise labour. It is necessary to have a certain quantity of means and materials of labour for a specific quantity of labour to materialise in commodities and thereby to produce value. A definite technical relation depending on the special nature of the labour added is established between the quantity of labour and the quantity of means of production to which this living labour is to be added. Hence there is also to that extent a definite relation between the quantity of surplus value, or surplus labour, and the quantity of means of production. For instance, if the labour necessary for the production of the wage amounts to a daily 6 hours, the labourer must work 12 hours to do 6 hours of surplus labour, or produce a surplus value of 100%. He uses up twice as much of the means of production in 12 hours as he does in 6. Yet this is no reason for the surplus value added by him in 6 hours to be directly related to the value of the means of production used up in those 6, or in 12 hours. This value is here altogether immaterial; it is only a matter of the technically required quantity. It does not matter whether the raw materials or means of labour are cheap or dear. as long as they have the required use value and are available in technically prescribed proportion to the living labour to be absorbed. If I know that x lbs of cotton are consumed in an hour of spinning and that they cost a shillings, then, of course, I also know that 12 hours' spinning consumes 12x lbs of cotton = 12a shillings, and can then calculate the proportion of the surplus value to the value of the 12 as well as to that of the 6. But the relation of living labour to the value of means of production obtains here only to the extent that a shillings serve as a name for x lbs of cotton; because a definite quantity of cotton has a definite price, and therefore, conversely, a definite price may also serve as an index for a definite quantity of cotton, so long as the price of cotton does not change. If I know that the labourer must work 12 hours for me to appropriate 6 hours of surplus labour, that therefore I must have a 12-hour supply of cotton ready for use, and if I know the price of this quantity of cotton needed for 12 hours. then I have an indirect relation between the price of cotton (as an index of the required quantity) and the surplus value. But, conversely, I can never conclude the quantity of the raw material that may be consumed in, say, one hour, and not 6, of spinning from the price of the raw material. There is, then, no necessary inner relation between the value of the constant capital, nor, therefore, between the value of the total capital (= c + v) and the surplus value.

If the rate of surplus value is known and its magnitude given, the rate of profit expresses nothing but what it actually is, namely a different way of measuring surplus value, its measurement according to the value of the total capital instead of the value of the portion of capital from which surplus value directly originates by way of its exchange for labour. But in reality (i.e., in the world of phenomena) the matter is reversed. Surplus value is given, but given as an excess of the selling price of the commodity over its cost price; and it remains a mystery where this excess originated — from the exploitation of labour in the process of production, or from outwitting the purchaser in the process of circulation, or from both. What is also given is the proportion of this excess to the value of the total capital, or the rate of profit. The calculation of this excess of the selling price over the cost price in relation to the value of the advanced total capital is very important and natural, because in effect it yields the ratio in which total capital has been expanded, i.e., the degree of its self-expansion. If we proceed from this rate of profit, we cannot therefore conclude the specific relations between the surplus and the portion of capital invested in wages. We shall see in a subsequent chapter what amusing somersaults Malthus makes when he tries in this way to get at the secret of the surplus value and of its specific relation to the variable part of the capital.<sup>15</sup> What the rate of profit actually shows is rather a uniform relation of the excess to equal portions of the capital, which, from this point of view, does not show any inner difference at all, unless it be between the fixed and circulating capital. And it shows this difference, too, only because the excess is calculated in two ways; namely, first, as a simple magnitude - as excess over the cost price. In this, its initial, form, the entire circulating capital goes into the cost price, while of the fixed capital only the wear and tear goes into it. Second, the relation of this excess in value to the total value of the advanced capital. In this case, the value of the total fixed capital enters into the calculation, quite the same as the circulating capital. Therefore, the circulating capital goes in both times in the same way, while the fixed capital goes in differently the first time, and in the same way as circulating capital the second time. Under the circumstances the difference between fixed and circulating capital is the only one which obtrudes itself.

If, as Hegel would put it, the excess therefore re-reflects itself in itself out of the rate of profit, or, put differently, the excess is more closely characterised by the rate of profit, it appears as an excess produced by capital above its own value over a year, or in a given period of circulation.

Although the rate of profit thus differs numerically from the rate of surplus value, while surplus value and profit are actually the same thing and numerically equal, profit is nevertheless a converted form of surplus value, a form in which its origin and the secret of its existence are obscured and extinguished. In effect, profit is the form in which surplus value presents itself to the view, and must initially be stripped by analysis to disclose the latter. In surplus value, the relation between capital and labour is laid bare; in the relation of capital to profit, i.e., of capital to surplus value that appears on the one hand as an excess over the cost price of commodities realised in the process of circulation and, on the other, as an excess more closely determined by its relation to the total capital, the capital appears as a relation to itself, a relation in which it, as the original sum of value, is distinguished from a new value which it generated. One is conscious that capital generates this new value by its movement in the processes of production and circulation. But the way in which this occurs is cloaked in mystery and appears to originate from hidden qualities inherent in capital itself.<sup>a</sup>

The further we follow the process of the self-expansion of capital, the more mysterious the relations of capital will become, and the less the secret of its internal organism will be revealed.

In this part, the rate of profit is numerically different from the rate of surplus value; while profit and surplus value are treated as having the same numerical magnitude but only a different form. In the next part we shall see how the alienation goes further, and how profit represents a magnitude differing also numerically from surplus value.

## Chapter III

#### THE RELATION OF THE RATE OF PROFIT TO THE RATE OF SURPLUS VALUE

Here, as at the close of the preceding chapter, and generally in this entire first part, we presume the amount of profit falling to a given capital to be equal to the total amount of surplus value produced by

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 70-71.

means of this capital during a certain period of circulation. We thus leave aside for the present the fact that, on the one hand, this surplus value may be broken up into various subforms, such as interest on capital, ground rent, taxes, etc., and that, on the other, it is not, as a rule, identical with profit as appropriated by virtue of a general average rate of profit, which will be discussed in the second part.

So far as the quantity of profit is assumed to be equal to that of surplus value, its magnitude, and that of the rate of profit, is determined by ratios of simple figures given or ascertainable in every individual case. The analysis, therefore, first is carried on purely in the mathematical field.

We retain the designations used in Books I and II. Total capital C consists of constant capital c and variable capital v, and produces a surplus value s. The ratio of this surplus value to the advanced variable capital, or  $\frac{s}{v}$ , is called the rate of surplus value and designated s'. Therefore  $\frac{s}{v} = s'$ , and consequently s = s'v. If this surplus value is related to the total capital instead of the variable capital, it is called profit, p, and the ratio of the surplus value s to the total capital C, or  $\frac{s}{C}$ , is called the rate of profit, p'. Accordingly,

$$\mathbf{p}' = \frac{\mathbf{s}}{\mathbf{C}} = \frac{\mathbf{s}}{\mathbf{c} + \mathbf{v}}.$$

Now, substituting for s its equivalent s'v, we find

$$\mathbf{p'} = \mathbf{s'}\frac{\mathbf{v}}{\mathbf{C}} = \mathbf{s'}\frac{\mathbf{v}}{\mathbf{c} + \mathbf{v}}$$

which equation may also be expressed by the proportion

$$\mathbf{p}':\mathbf{s}'=\mathbf{v}:\mathbf{C};$$

the rate of profit is related to the rate of surplus value as the variable capital is to the total capital.

It follows from this proportion that the rate of profit, p', is always smaller than s', the rate of surplus value, because v, the variable capital, is always smaller than C, the sum of v + c, or the variable plus the constant capital; the only, practically impossible case excepted, in which v = C, that is, no constant capital at all, no means of production, but only wages are advanced by the capitalist.

However, our analysis also considers a number of other factors which have a determining influence on the magnitude of c, v, and s, and must therefore be briefly examined. First, the value of money. We may assume this to be constant throughout.

Second, the *turnover*. We shall leave this factor entirely out of consideration for the present, since its influence on the rate of profit will be treated specially in a later chapter. //Here we anticipate just one point, that the formula  $p' = s' \frac{v}{C}$  is strictly correct only for *one* period of turnover of the variable capital. But we may correct it for an annual turnover by substituting for the simple rate of surplus value, s', the annual rate of surplus value, s'n. In this, n is the number of turnovers of the variable capital within one year. (Cf. Book II, Chapter XVI, 1.) — F. E.//<sup>a</sup>

Third, due consideration must be given to productivity of labour, whose influence on the rate of surplus value has been thoroughly discussed in Book I (Abschn. IV).<sup>b</sup> Productivity of labour may also exert a direct influence on the rate of profit, at least of an individual capital, if, as has been demonstrated in Book I (Kap. X, S. 323/314),<sup>c</sup> this individual capital operates with a higher than the average social productivity and produces commodities at a lower value than their average social value, thereby realising an extra profit. However, this case will not be considered for the present, since in this part of the work we also proceed from the premiss that commodities are produced under normal social conditions and are sold at their values. Hence, we assume in each case that the productivity of labour remains constant. In effect, the value composition of a capital invested in a branch of industry, that is, a certain proportion between the variable and constant capital, always expresses a definite degree of labour productivity. As soon, therefore, as this proportion is altered by means other than a mere change in the value of the material elements of the constant capital, or a change in wages, the productivity of labour must likewise undergo a corresponding change, and we shall often enough see, for this reason, that changes in the factors c, v, and s also imply changes in the productivity of labour.

The same applies to the three remaining factors — the *length of the* working day, intensity of labour, and wages. Their influence on the quantity and rate of surplus value has been exhaustively discussed in Book I.<sup>d</sup> It will be understood, therefore, that notwithstanding the assump-

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36. - <sup>b</sup> English edition: Part IV (ibid., Vol. 35). - <sup>c</sup> English edition: Ch. XII (ibid., pp. 321-24). - <sup>d</sup> Ibid., pp. 519-31.

tion, which we make for the sake of simplicity, that these three factors remain constant, the changes that occur in v and s may nevertheless imply changes in the magnitude of these, their determining elements. In this respect we must briefly recall that the wage influences the quantity of surplus value and the rate of surplus value in inverse proportion to the length of the working day and the intensity of labour; that an increase in wages reduces the surplus value, while a lengthening of the working day and an increase in the intensity of labour add to it.

Suppose a capital of 100 produces a surplus value of 20 employing 20 labourers working a 10-hour day for a total weekly wage of 20. Then we have:

$$80_{\rm c} + 20_{\rm v} + 20_{\rm s}$$
; s' = 100%, p' = 20%.

Now the working day is lengthened to 15 hours without raising the wages. The total value produced by the 20 labourers will thereby increase from 40 to 60 (10:15 = 40:60). Since v, the wages paid to the labourers, remains the same, the surplus value rises from 20 to 40, and we have:

$$80_{c} + 20_{v} + 40_{s}$$
; s' = 200%, p' = 40%.

If, conversely, the ten-hour working day remains unchanged, while wages fall from 20 to 12, the total value product amounts to 40 as before, but is differently distributed; v falls to 12, leaving a remainder of 28 for s. Then we have:

 $80_{c} + 12_{v} + 28_{s}; s' = 233\frac{1}{3} \ 0_{0}, p' = \frac{28}{92} = 30\frac{10}{23} \ 0_{0}.$ 

Hence, we see that a prolonged working day (or a corresponding increase in the intensity of labour) and a fall in wages both increase the amount, and thus the rate, of surplus value. Conversely, a rise in wages, other things being equal, would lower the rate of surplus value. Hence, if v rises through a rise in wages, it does not express a greater, but only a dearer quantity of labour, in which case s' and p' do not rise, but fall.

This indicates that changes in the working day, intensity of labour and wages cannot take place without a simultaneous change in v and s and their ratio, and therefore also p', which is the ratio of s to the total capital c + v. And it is also evident that changes in the ratio of s to v also imply corresponding changes in at least one of the three above-mentioned labour conditions.

Precisely this reveals the specific organic relationship of variable

capital to the movement of the total capital and to its self-expansion, and also its difference from constant capital. So far as generation of value is concerned, the constant capital is important only for the value it has. And it is immaterial to the generation of value whether a constant capital of £1,500 represents 1,500 tons of iron at, say, £1, or 500 tons of iron at £3. The quantity of actual material, in which the value of the constant capital is incorporated, is altogether irrelevant to the formation of value and the rate of profit, which varies inversely to this value no matter what the ratio of the increase or decrease of the value of constant capital to the mass of material use value which it represents.

It is different with variable capital. It is not the value it has, not the labour objectified in it, that matter at this point, but this value as a mere index of the total labour that it sets in motion and which is not expressed in it — the total labour, whose difference from the labour expressed in the value of the variable capital, hence the paid labour, i. e., that portion of the total labour which produces surplus value, is all the greater, the less labour is contained in that variable capital itself. Suppose, a 10-hour working day is equal to ten shillings = ten marks. If the labour necessary to replace the wages, and thus the variable capital = 5 hours = 5 shillings, then the surplus labour = 5 hours and the surplus value = 5 shillings. Should the necessary labour = 4 hours = 4 shillings, then the surplus labour = 6 hours and the surplus value = 6 shillings.

Hence, as soon as the value of the variable capital ceases to be an index of the quantity of labour set in motion by it, and, moreover, the measure of this index is altered, the rate of surplus value will change in the opposite direction and inversely.

Let us now go on to apply the above-mentioned equation of the rate of profit,  $p' = s' \frac{v}{C}$ , to the various possible cases. We shall successively change the value of the individual factors of  $s' \frac{v}{C}$  and determine the effect of these changes on the rate of profit. In this way we shall obtain different series of cases, which we may regard either as successive altered conditions of operation for one and the same capital, or as different capitals existing side by side and introduced for the sake of comparison, taken, as it were, from different branches of industry or different countries. In cases, therefore, where the conception of some of our examples as successive conditions for one and the same capital appears to be forced or impracticable, this objection falls

away the moment they are regarded as comparisons of independent capitals.

Hence, we now separate the product s' $\frac{v}{C}$  into its two factors s' and  $\frac{v}{C}$ . At first we shall treat s' as constant and analyse the effect of the possible variations of  $\frac{v}{C}$ . After that we shall treat the fraction  $\frac{v}{C}$  as constant and let s' pass through its possible variations. Finally we shall treat all factors as variable magnitudes and thereby exhaust all the cases from which laws concerning the rate of profit may be derived.

1. S' CONSTANT, 
$$\frac{v}{C}$$
 VARIABLE

This case, which embraces a number of subordinate cases, may be covered by a general formula. Take two capitals, C and C<sub>1</sub>, with their respective variable components, v and v<sub>1</sub>, with a common rate of surplus value s', and rates of profit p' and p'<sub>1</sub>. Then:

$$p' = s' \frac{v}{C}; p'_1 = s' \frac{v_1}{C_1}$$

Now let us make a proportion of C and C<sub>1</sub>, and of v and v<sub>1</sub>. For instance, let the value of the fraction  $\frac{C_1}{C} = E$ , and that of  $\frac{v_1}{v} = e$ . Then C<sub>1</sub> = EC, and v<sub>1</sub> = ev. Substituting in the above equation these values for p'<sub>1</sub>, C<sub>1</sub> and v<sub>1</sub>, we obtain

$$\mathbf{p'}_1 = \mathbf{s'} \frac{\mathbf{ev}}{\mathbf{EC}}$$
.

Again, we may derive a second formula from the above two equations by transforming them into the proportion:

$$\mathbf{p}':\mathbf{p'}_1 = \mathbf{s}'\frac{\mathbf{v}}{\mathbf{C}}:\mathbf{s}'\frac{\mathbf{v}_1}{\mathbf{C}_1} = \frac{\mathbf{v}}{\mathbf{C}}:\frac{\mathbf{v}_1}{\mathbf{C}_1}.$$

Since the value of a fraction is not changed if we multiply or divide its numerator and denominator by the same number, we may reduce  $\frac{v}{C}$  and  $\frac{v_1}{C_1}$  to percentages, that is, we may make C and C<sub>1</sub> both = 100. Then we have  $\frac{v}{C} = \frac{v}{100}$  and  $\frac{v_1}{C_1} = \frac{v_1}{100}$ , and may then drop the denominators in the above proportion, obtaining:

$$p': p'_1 = v: v_1, or:$$

Taking any two capitals operating with the same rate of surplus value, the rates of profit are to each other as the variable portions of the capitals calculated as percentages of their respective total capitals.

These two formulas embrace all the possible variations of  $\frac{v}{C}$ .

One more remark before we analyse these various cases singly. Since C is the sum of c and v, of the constant and variable capitals, and since the rates of surplus value, as of profit, are usually expressed in percentages, it is convenient to assume that the sum of c + v is also equal to 100, i. e., to express c and v in percentages. For the determination of the rate of profit, if not of the amount, it is immaterial whether we say that a capital of 15,000, of which 12,000 is constant and 3,000 is variable, produces a surplus value of 3,000, or whether we reduce this capital to percentages.

5,000 C = 
$$12,000_{c} + 3,000_{v} (+3,000_{s})$$
  
100 C =  $80_{c} + 20_{v} (+20_{s})$ .

In either case the rate of surplus value s' = 100%, and the rate of profit = 20%.

The same is true when we compare two capitals, say, the foregoing capital with another, such as

$$12,000 C = 10,800_{c} + 1,200_{v} (+1,200_{s})$$
$$100 C = 90_{c} + 10_{v} (+10_{s})$$

in both of which s' = 100%, p' = 10%, and in which the comparison with the foregoing capital is clearer in percentage form.

On the other hand, if it is a matter of changes taking place in one and the same capital, the form of percentages is rarely to be used, because it almost always obscures these changes. If a capital expressed in the form of percentages:

$$80_{c} + 20_{v} + 20_{s}$$

assumes the form of percentages:

1

$$90_{c} + 10_{v} + 10_{s}$$

we cannot tell whether the changed composition in percentages,  $90_c + 10_v$ , is due to an absolute decrease of v or an absolute increase of c, or to both. We would need the absolute magnitudes in figures to ascertain this. In the analysis of the following individual cases of variation, however, everything depends on how these changes have come about; whether  $80_c + 20_v$  changed into  $90_c + 10_v$  through an increase of the constant capital without any change in the variable capital, for instance through  $12,000_c + 3,000_v$  changing into  $27,000_c + 3,000_v$  (corresponding to a percentage of  $90_c + 10_v$ ); or whether they took this form through a reduction of the variable capital, with the constant capital remaining unchanged, that is, through a change into  $12,000_c + 1,333\frac{1}{3}_v$  (also corresponding to a percentage of  $90_c + 10_v$ ); or, lastly, whether both of the terms changed into  $13,500_c + 1,500_v$  (corresponding once more to a percentage of  $90_c + 10_v$ ). But it is precisely these cases which we shall have to successively analyse, and in so doing dispense with the convenient form of percentages, or at least employ these only as a secondary alternative.

### 1) s' and C constant, v variable

If v changes in magnitude, C can remain unaltered only if c, the other component of C, that is, the constant capital, changes by the same amount as v, but in the opposite direction. If C originally =  $80_c + 20_v = 100$ , and if v is then reduced to 10, then C can = 100 only if c is increased to 90;  $90_c + 10_v = 100$ . Generally speaking, if v is transformed into  $v \pm d$ , into v increased or decreased by d, then c must be transformed into  $c \mp d$ , into c varying by the same amount, but in the opposite direction, so that the conditions of the present case are satisfied.

Similarly, if the rate of surplus value s' remains the same, while the variable capital v changes, the amount of surplus value s must change, since s = s'v, and since one of the factors of s'v, namely v, is given another value.

The assumptions of the present case produce, alongside the original equation,

$$\mathbf{p}' = \mathbf{s}' \frac{\mathbf{v}}{\mathbf{C}} \,,$$

still another equation through the variation of v:

$$\mathbf{p'}_1 = \mathbf{s'} \frac{\mathbf{v}_1}{\mathbf{C}} \,,$$

in which v has become  $v_1$  and  $p'_1$ , the resultant changed rate of profit, is to be found.

It is determined by the following proportion:

$$\mathbf{p}':\mathbf{p}'_1 = \mathbf{s}'\frac{\mathbf{v}}{\mathbf{C}}:\mathbf{s}'\frac{\mathbf{v}_1}{\mathbf{C}}, = \mathbf{v}:\mathbf{v}_1$$

Or: with the rate of surplus value and total capital remaining the

same, the original rate of profit is to the new rate of profit produced by a change in the variable capital as the original variable capital is to the changed variable capital.

If the original capital was, as above:

- I.  $15,000 \text{ C} = 12,000_{c} + 3,000_{v} (+3,000_{s})$ , and if it is now:
- II. 15,000 C =  $13,000_c + 2,000_v$  (+2,000<sub>s</sub>), then C = 15,000 and s' = 100% in either case, and the rate of profit of I, 20%, is to that of II,  $13\frac{1}{3}$ %, as the variable capital of I, 3,000, is to that of II, 2,000, i. e., 20% :  $13\frac{1}{3}$ % = 3,000 : 2,000.

Now, the variable capital may either rise or fall. Let us first take an example in which it rises. Let a certain capital be originally constituted and employed as follows:

I. 
$$100_{c} + 20_{v} + 10_{s}$$
; C = 120, s' = 50%, p' =  $8\frac{1}{3}$ %

Now let the variable capital rise to 30. In that case, according to our assumption, the constant capital must fall from 100 to 90 so that total capital remains unchanged at 120. The rate of surplus value remaining constant at 50%, the surplus value produced will then rise from 10 to 15. We shall then have:

II. 
$$90_{c} + 30_{v} + 15_{s}$$
; C = 120, s' = 50%, p' =  $12\frac{1}{2}$ %

Let us first proceed from the assumption that wages remain unchanged. Then the other factors of the rate of surplus value, i.e., the working day and the intensity of labour, must also remain unchanged. In that event the rise of v (from 20 to 30) can signify only that another half as many labourers are employed. Then the total value produced also rises one-half, from 30 to 45, and is distributed, just as before,  $\frac{2}{3}$  for wages and  $\frac{1}{3}$  for surplus value. But at the same time, with the increase in the number of labourers, the constant capital, the value of the means of production, has fallen from 100 to 90. We have, then, a case of decreasing productivity of labour combined with a simultaneous shrinkage of constant capital. Is such a case economically possible?

In agriculture and the extractive industries, in which a decrease in labour productivity and, therefore, an increase in the number of employed labourers is quite comprehensible, this process is — on the basis and within the scope of capitalist production — attended by an increase, instead of a decrease, of constant capital. Even if the above fall of c were due merely to a fall in prices, an individual capital would be able to accomplish the transition from I to II only under very exceptional circumstances. But in the case of two independent capitals invested in different countries, or in different branches of agriculture or extractive industry, it would be nothing out of the ordinary if in one of the cases more labourers (and therefore more variable capital) were employed and worked with less valuable or scantier means of production than in the other case.

But let us drop the assumption that the wage remains the same, and let us explain the rise of the variable capital from 20 to 30 through a rise of wages by one-half. Then we shall have an entirely different case. The same number of labourers — say, 20 — continue to work with the same or only slightly reduced means of production. If the working day remains unchanged — say, 10 hours — then the total value produced also remains unchanged. It was and remains = 30. But all of this 30 is now required to make good the advanced variable capital of 30; the surplus value would disappear. We have assumed, however, that the rate of surplus value should remain constant, that is, the same as in I, at 50%. This is possible only if the working day is prolonged by one-half, to 15 hours. Then the 20 labourers would produce a total value of 45 in 15 hours, and all conditions would be satisfied:

II. 
$$90_{c} + 30_{v} + 15_{s}$$
; C = 120, s' = 50%, p' =  $12\frac{1}{2}$ %.

In this case, the 20 labourers do not require any more means of labour, tools, machines, etc., than in case I. Only the raw materials or auxiliary materials would have to be increased by one-half. In the event of a fall in the prices of these materials, the transition from I to II might be more possible economically, even for an individual capital in keeping with our assumption. And the capitalist would be somewhat compensated by increased profits for any loss incurred through the depreciation of his constant capital.

Now let us assume that the variable capital falls, instead of rising. Then we have but to reverse our example, taking II as the original capital, and passing from II to I.

II.  $90_{c} + 30_{v} + 15_{s}$  then changes into

I.  $100_c + 20_v + 10_s$ , and it is evident that this transposition does not in the least alter any of the conditions regulating the respective rates of profit and their mutual relation.

If v falls from 30 to 20 because  $\frac{1}{3}$  fewer labourers are employed with the growing constant capital, then we have before us the normal case of modern industry, namely, an increasing productivity of

labour, and the operation of a larger quantity of means of production by fewer labourers. That this movement is necessarily connected with a simultaneous drop in the rate of profit will be developed in the third part of this book.

If, on the other hand, v falls from 30 to 20, because the same number of labourers is employed at lower wages, the total value produced would, with the working day unchanged, as before =  $30_v + 15_s = 45$ . Since v fell to 20, the surplus value would rise to 25, the rate of surplus value from 50% to 125%, which would be contrary to our assumption. To comply with the conditions of our case, the surplus value, with its rate at 50%, must rather fall to 10, and the total value produced must, therefore, fall from 45 to 30, and this is possible only if the working day is reduced by  $\frac{1}{3}$ . Then, as before, we have:

$$100_{\rm c} + 20_{\rm v} + 10_{\rm s}$$
; s' = 50%, p' =  $8\frac{1}{3}$ %.

It need hardly be said that this reduction of the working time, in the case of a fall in wages, would not occur in practice. But that is immaterial. The rate of profit is a function of several variable magnitudes, and if we wish to know how these variables influence the rate of profit, we must analyse the individual effect of each in turn, regardless of whether such an isolated effect is economically practicable with one and the same capital.

## 2) s' constant, v variable, C changes through the variation of v

This case differs from the preceding one only in degree. Instead of decreasing or increasing by as much as v increases or decreases, c remains constant. Under present-day conditions in the major industries and agriculture the variable capital is only a relatively small part of the total capital. For this reason, its increase or decrease, so far as either is due to changes in the variable capital, are likewise relatively small. Let us again proceed with a capital:

I.  $100_{c} + 20_{v} + 10_{s}$ ; C = 120, s' = 50%, p' =  $8\frac{1}{3}$ %,

which would then change, say, into:

II.  $100_{c} + 30_{v} + 15_{s}$ ; C = 130, s' = 50%, p' =  $11\frac{7}{13}$ %.

The opposite case, in which the variable capital decreases, would again be illustrated by the reverse transition from II to I.

The economic conditions would be essentially the same as in

the preceding case, and therefore they need not be discussed again. The transition from I to II implies a decrease in the productivity of labour by one-half; for II the utilisation of  $100_c$  requires an increase of labour by one-half over that of I. This case may occur in agriculture.<sup>9</sup>

But while the total capital remains constant in the preceding case, owing to the conversion of constant into variable capital, or vice versa, there is in this case a tie-up of additional capital if the variable capital increases, and a release of previously employed capital if the variable capital decreases.

3) s' and v constant, c and therefore C variable

In this case the equation changes from:

$$p' = s' \frac{v}{C}$$
 into  $p'_1 = s' \frac{v}{C_1}$ 

and after reducing the same factors on both sides, we have:

$$p'_{1}: p' = C: C_{1};$$

with the same rate of surplus value and equal variable capitals, the rates of profit are inversely proportional to the total capitals.

Should we, for example, have three capitals, or three different conditions of the same capital:

I.  $80_{c} + 20_{v} + 20_{s}$ ; C = 100, s' = 100%, p' = 20%;

II.  $100_{c} + 20_{v} + 20_{s}$ ; C = 120, s' = 100%, p' =  $16\frac{2}{3}\%$ ;

III.  $60_{c} + 20_{v} + 20_{s}$ ; C = 80, s' = 100%, p' = 25%.

Then we obtain the proportions:

 $20\%: 16\frac{2}{3}\% = 120: 100$  and 20%: 25% = 80: 100.

The previously given general formula for variations of  $\frac{v}{C}$  with a constant s' was:

$$\mathbf{p'}_1 = \mathbf{s'} \frac{\mathbf{ev}}{\mathbf{EC}}$$
; now it becomes:  $\mathbf{p'}_1 = \mathbf{s'} \frac{\mathbf{v}}{\mathbf{EC}}$ ,

since v does not change, the factor  $e = -\frac{1}{v}$  becomes = 1.

Since s'v = s, the quantity of surplus value, and since both s' and v remain constant, it follows that s, too, is not affected by

<sup>9)</sup> The manuscript has the following note at this point: "Investigate later in what manner this case is connected with ground rent." [F, E]

any variation of C. The amount of surplus value is the same after the change as it was before it.

If c were to fall to zero, p' would = s', i.e., the rate of profit would equal the rate of surplus value.

The alteration of c may be due either to a mere change in the value of the material elements of constant capital, or to a change in the technical composition of the total capital, that is, a change in the productivity of labour in the given branch of industry. In the latter case, the productivity of social labour mounting due to the development of industry and agriculture on a large scale would bring about a transition (in the above illustration) in the sequence from III to I and from I to II. A quantity of labour which is paid with 20 and produces a value of 40 would first utilise means of labour to a value of 60; if productivity mounted and the value remained the same, the used up means of labour would rise first to 80, and then to 100. An inversion of this sequence would imply a decrease in productivity. The same quantity of labour would put a smaller quantity of means of production into motion and the operation would be curtailed, as may occur in agriculture, mining, etc.

A saving in constant capital increases the rate of profit on the one hand, and, on the other, sets free capital, for which reason it is of importance to the capitalist. We shall make a closer study of this, and likewise of the influence of a change in the prices of the elements of constant capital, particularly of raw materials, at a later point.<sup>a</sup>

It is again evident here that a variation of the constant capital equally affects the rate of profit, regardless of whether this variation is due to an increase or decrease of the material elements of c, or merely to a change in their value.

# 4) s' constant, v, c, and C all variable

In this case, the general formula for the changed rate of profit, given at the outset, remains in force:

$$\mathbf{p'}_1 = \mathbf{s'} \frac{\mathbf{ev}}{\mathbf{EC}} \,.$$

<sup>&</sup>lt;sup>a</sup> See this volume, chapters V and VI.
It follows from this that with the rate of surplus value remaining the same:

a) The rate of profit falls if E is greater than e, that is, if the constant capital is augmented to such an extent that the total capital grows at a faster rate than the variable capital. If a capital of  $80_c + 20_v + 20_s$  changes into  $170_c + 30_v + 30_s$  then s' remains = 100%, but  $\frac{v}{C}$  falls from  $\frac{20}{100}$  to  $\frac{30}{200}$ , in spite of the fact that both v and C have grown, and the rate of profit falls correspondingly from 20% to 15%.

b) The rate of profit remains unchanged only if e = E, that is, if the fraction  $\frac{v}{C}$  retains the same value in spite of a seeming change, i.e., if its numerator and denominator are multiplied or divided by the same factor. The capitals  $80_c + 20_v + 20_s$  and  $160_c + 40_v + 40_s$  obviously have the same rate of profit of 20%, because s' remains = 100% and  $\frac{v}{C} = \frac{20}{100} = \frac{40}{200}$  represents the same value in both examples.

c) The rate of profit rises when e is greater than E, that is, when the variable capital grows at a faster rate than the total capital. If  $80_c + 20_v + 20_s$  turns into  $120_c + 40_v + 40_s$ , the rate of profit rises from 20% to 25%, because with an unchanged s'  $\frac{v}{C} = \frac{20}{100}$  rises to  $\frac{40}{160}$ , or from 1/5 to 1/4.

If the changes of v and C are in the same direction, we may view this change of magnitude as though, to a certain extent, both of them varied in the same proportion, so that  $\frac{v}{C}$  remained unchanged up to that point. Beyond this point, only one of them would vary, and we shall have thereby reduced this complicated case to one of the preceding simpler ones.

Should, for instance,  $80_c + 20_v + 20_s$  become  $100_c + 30_v + 30_s$ , then the proportion of v to c, and also to C, remains the same in this variation up to:  $100_c + 25_v + 25_s$ . Up to that point, therefore, the rate of profit likewise remains unchanged. We may then take  $100_c + 25_v + 25_s$  as our point of departure; we find that v increased by 5 to become  $30_v$ , so that C rose from 125 to 130, thus giving us the second case, that of the simple variation of v and the consequent variation of C. The rate of profit, which was originally 20%, rises through this addition of  $5_v$  to  $23^1/_{13}\%$ , provided the rate of surplus value remains the same.

The same reduction to a simpler case can also take place if

v and C change their magnitudes in opposite directions. For instance, let us again start with  $80_c + 20_v + 20_s$ , and let this become:  $110_c + 10_v + 10_s$ . In that case, with the change going as far as  $40_c + 10_v + 10_s$ , the rate of profit would remain the same 20%. By adding  $70_c$  to this intermediate form, it will drop to 81/3%. Thus, we have again reduced the case to an instance of change of one variable, namely of c.

Simultaneous variation of v, c, and C, does not, therefore, offer any new aspects and in the final analysis leads back to a case in which only one factor is a variable.

Even the sole remaining case has actually been exhausted, namely that in which v and C remain numerically the same, while their material elements undergo a change of value, so that v stands for a changed quantity of labour put in motion and c for a changed quantity of means of production put in motion.

In  $80_c + 20_v + 20_s$ , let  $20_v$  originally represent the wages of 20 labourers working 10 hours daily. Then let the wages of each rise from 1 to 1<sup>1</sup>/4. In that case the  $20_v$  will pay only 16 labourers instead of 20. But if 20 labourers produce a value of 40 in 200 working hours, 16 labourers working 10 hours daily will in 160 working hours produce a value of only 32. After deducting  $20_v$  for wages, only 12 of the 32 would then remain for surplus value. The rate of surplus value would have fallen from 100% to 60%. But since we have assumed the rate of surplus value to be constant, the working day would have to be prolonged by one-quarter, from 10 to  $12^{1/2}$  hours. If 20 labourers working 10 hours daily = 200 working hours produce a value of  $40^a$  then 16 labourers working  $12^{1/2}$  hours daily = 200 hours will produce the same value, and the capital of  $80_c + 20_v$  would as before yield the same surplus value of 20.

Conversely, if wages were to fall to such an extent that  $20_v$  would represent the wages of 30 labourers, then s' would remain constant only if the working day were reduced from 10 to  $6^2/_3$  hours. For  $20 \times 10 = 30 \times 6^2/_3 = 200$  working hours.

We have already in the main discussed to what extent c may in these divergent examples remain unchanged in terms of value expressed in money and yet represent different quantities of means of production changed in accordance with changing conditions. In its pure form this case would be possible only by way of an exception.

<sup>&</sup>lt;sup>a</sup> In Marx's manuscript: 80.

As for a change in the value of the elements of c which increases or decreases their mass but leaves the sum of the value of c unchanged, it does not affect either the rate of profit or the rate of surplus value, so long as it does not lead to a change in the magnitude of v.

We have herewith exhausted all the possible cases of variation of v, c, and C in our equation. We have seen that the rate of profit may fall, remain unchanged, or rise, while the rate of surplus value remains the same, with the least change in the proportion of v to c, or to C, being sufficient to change the rate of profit as well.

We have seen, furthermore, that in variations of v there is a certain limit everywhere beyond which it is economically impossible for s' to remain constant. Since every one-sided variation of c must also reach a certain limit where v can no longer remain unchanged, we find that there are limits for every possible variation of  $\frac{v}{C}$ , beyond which s' must likewise become variable. In the variations of s' which we shall now discuss, this interaction of the different variables of our equation will stand out still clearer.

#### II. S' VARIABLE

We obtain a general formula for the rates of profit with different rates of surplus value, no matter whether  $\frac{v}{C}$  remains constant or not, by converting the equation:

 $p'=s'\frac{v}{C}$ 

into

$$\mathbf{p'}_1 = \mathbf{s'}_1 \frac{\mathbf{v}_1}{\mathbf{C}_1},$$

in which  $p'_{1}$ ,  $s'_{1}$ ,  $v_{1}$  and  $C_{1}$  denote the changed values of p', s', v and C. Then we have:

$$\mathbf{p}':\mathbf{p'}_1=\mathbf{s}'\frac{\mathbf{v}}{\mathbf{C}}:\mathbf{s'}_1\frac{\mathbf{v}_1}{\mathbf{C}_1},$$

and hence:

$$\mathbf{p'}_1 = \frac{\mathbf{s'}_1}{\mathbf{s'}} \times \frac{\mathbf{v}_1}{\mathbf{v}} \times \frac{\mathbf{C}}{\mathbf{C}_t} \times \mathbf{p'}.$$

1) s' variable,  $\frac{v}{C}$  constant

In this case we have the equations:

$$p'=s'\frac{v}{C}\,;\;p'_1=s'_1\frac{v}{C},\;$$

in both of which  $\frac{v}{C}$  is equal. Therefore:

$$p': p'_1 = s': s'_1$$

The rates of profit of two capitals of the same composition are to each other as the two corresponding rates of surplus value. Since in the fraction  $\frac{v}{C}$  it is not a question of the absolute magnitudes of v and C, but only of their ratio, this applies to all capitals of equal composition whatever their absolute magnitude.

$$\begin{array}{l} 80_{\rm c}+20_{\rm v}+20_{\rm s}; \ {\rm C}=100, \ {\rm s}'=100\%, \ {\rm p}'=20\%\\ 160_{\rm c}+40_{\rm v}+20_{\rm s}; \ {\rm C}=200, \ {\rm s}'=50\%, \ {\rm p}'=10\%\\ 100\%:50\%=20\%:10\%. \end{array}$$

If the absolute magnitudes of v and C are the same in both cases, the rates of profit are moreover also related to one another as the amounts of surplus value:

$$p': p'_1 = s'v: s'_1v = s: s_1.$$

For instance:

$$80_{c} + 20_{v} + 20_{s}; s' = 100\%, p' = 20\%$$
  

$$80_{c} + 20_{v} + 10_{s}; s' = 50\%, p' = 10\%$$
  

$$20\% : 10\% = 100 \times 20 : 50 \times 20 = 20_{s} : 10_{s};$$

It is now clear that with capitals of equal absolute or percentage composition the rate of surplus value can differ only if either the wages, or the length of the working day, or the intensity of labour, differ. In the following three cases:

I. 
$$80_{c} + 20_{v} + 10_{s}$$
;  $s' = 50\%$ ,  $p' = 10\%$   
II.  $80_{c} + 20_{v} + 20_{s}$ ;  $s' = 100\%$ ,  $p' = 20\%$   
III.  $80_{c} + 20_{v} + 40_{s}$ ;  $s' = 200\%$ ,  $p' = 40\%$ 

the total value produced in I is 30  $(20_v + 10_s)$ ; in II it is 40; in III it is 60. This may come about in three different ways.

First, if the wages are different, and  $20_v$  stands for a different number of labourers in every individual case. Suppose capital I employs 15 labourers 10 hours daily at a wage of  $\pounds 1^{-\frac{1}{3}}$ , who produce a value

of £30, of which £20 replace the wages and £10 are surplus value. If wages fall to £1, then 20 labourers may be employed for 10 hours; they will produce a value of £40, of which £20 will replace the wages and £20 will be surplus value. Should wages fall still more, to  $\pounds^2/_3$ , thirty labourers may be employed for 10 hours. They will produce a value of £60, of which £20 will be deducted for wages and £40 will represent surplus value.

This case—a constant composition of capital in per cent, a constant working day and constant intensity of labour, and the rate of surplus value varying because of variation in wages—is the only one in which Ricardo's assumption is correct:

\*"Profit would be high or low, exactly in proportion as wages were low or high" \* (Principles, Ch. I, Sect. III, p. 18 of the Works of D. Ricardo, ed. by MacCulloch, 1852).

Or second, if the intensity of labour varies. In that case, say, 20 labourers working 10 hours daily with the same means of labour produce 30 pieces of a certain commodity in I, 40 in II, and 60 in III, of which every piece, aside from the value of the means of production incorporated in it, represents a new value of  $\pounds 1$ . Since every 20 pieces =  $\pounds 20$  make good the wages, there remain 10 pieces =  $\pounds 10$  for surplus value in I, 20 pieces =  $\pounds 20$  in II, and 40 pieces =  $\pounds 40$  in III.

Or third, the working day differs in length. If 20 labourers work with the same intensity for 9 hours in I, 12 hours in II, and 18 hours in III, their total products, 30:40:60 vary as 9:12:18. And since wages = 20 in every case, 10, 20, and 40 respectively again remain as surplus value.

A rise or fall in wages, therefore, influences the rate of surplus value inversely, and a rise or fall in the intensity of labour, and a lengthening or shortening of the working day, act the same way on the rate of surplus value and thereby, with  $\frac{v}{C}$  constant, on the rate of profit.

#### 2) s' and v variable, C constant

The following proportion applies in this case:

$$\mathbf{p}':\mathbf{p}'_{1}=\mathbf{s}'\frac{\mathbf{v}}{\mathbf{C}}:\mathbf{s}'_{1}\frac{\mathbf{v}_{1}}{\mathbf{C}}=\mathbf{s}'\mathbf{v}:\mathbf{s}'_{1}\mathbf{v}_{1}=\mathbf{s}:\mathbf{s}_{1}.$$

The rates of profit are related to one another as the respective amounts of surplus value.

Changes in the rate of surplus value with the variable capital remaining constant meant a change in the magnitude and distribution of the produced value. A simultaneous variation of v and s' also always implies a different distribution, but not always a change in the magnitude of the produced value. Three cases are possible:

a) Variation of v and s' takes place in opposite directions, but by the same amount; for instance:

$$80_{c} + 20_{v} + 10_{s}$$
; s' = 50%, p' = 10%  
 $90_{c} + 10_{v} + 20_{s}$ ; s' = 20%, p' = 20%.

The produced value is equal in both cases, hence also the quantity of labour performed;  $20_v + 10_s = 10_v + 20_s = 30$ . The only difference is that in the first case 20 is paid out for wages and 10 remains as surplus value, while in the second case wages are only 10 and surplus value is therefore 20. This is the only case in which the number of labourers, the intensity of labour, and the length of the working day remain unchanged, while v and s' vary simultaneously.

b) Variation of s' and v also takes place in opposite directions, but not by the same amount. In that case the variation of either v or s' outweighs the other.

I. 
$$80_{c} + 20_{v} + 20_{s}$$
;  $s' = 100\%$ ,  $p' = 20\%$   
II.  $72_{c} + 28_{v} + 20_{s}$ ;  $s' = 71^{3}/r\%$ ,  $p' = 20\%$   
III.  $84_{c} + 16_{v} + 20_{s}$ ;  $s' = 125\%$ ,  $p' = 20\%$ .

Capital I pays for produced value amounting to 40 with  $20_v$ , II a value of 48 with  $28_v$ , and III a value of 36 with  $16_v$ . Both the produced value and the wages have changed. But a change in the produced value means a change in the amount of labour performed, hence a change either in the number of labourers, the hours of labour, the intensity of labour, or in more than one of these.

c) Variation of s' and v takes place in the same direction. In that case the one intensifies the effect of the other.

$$90_{c} + 10_{v} + 10_{s}$$
; s' = 100%, p' = 10%  
 $80_{c} + 20_{v} + 30_{s}$ ; s' = 150%, p' = 30%  
 $92_{c} + 8_{v} + 6_{s}$ ; s' = 75%, p' = 6%.

Here too the three values produced are different, namely 20, 50, and 14. And this difference in the magnitude of the respective quantities of labour reduces itself once more to a difference in the number of labourers, the hours of labour, and the intensity of labour, or several or all of these factors.

## 3) s', v and C variable

This case offers no new aspects and is solved by the general formula given under II, in which s' is variable.

The effect of a change in the magnitude of the rate of surplus value on the rate of profit hence yields the following cases:

1) p' increases or decreases in the same proportion as s' if  $\frac{v}{C}$  remains constant.

$$\begin{array}{l} 80_{\rm c} + 20_{\rm v} + 20_{\rm s}; \ {\rm s}' = 100\%, \ {\rm p}' = 20\%\\ 80_{\rm c} + 20_{\rm v} + 10_{\rm s}; \ {\rm s}' = 50\%, \ {\rm p}' = 10\%\\ 100\% : 50\% = 20\% : 10\%. \end{array}$$

2) p' rises or falls at a faster rate than s' if  $\frac{v}{C}$  moves in the same direction as s', that is, if it increases or decreases when s' increases or decreases.

$$\begin{array}{l} 80_{\rm c} + 20_{\rm v} + 10_{\rm s}; \ {\rm s}' = 50\%, \ {\rm p}' = 10\% \\ 70_{\rm c} + 30_{\rm v} + 20_{\rm s}; \ {\rm s}' = 662\%, \ {\rm s}', \ {\rm p}' = 20\% \\ 50\% : 662\%, \ {\rm s}', \ {\rm s}' = 0\% \\ \cdot 20\% \end{array}$$

3) p' rises or falls at a slower rate than s' if  $\frac{v}{C}$  changes inversely to s', but at a slower rate.

$$\begin{array}{l} 80_{\rm c}+20_{\rm v}+10_{\rm s}; \ {\rm s}'=50\%, \ {\rm p}'=10\%\\ 90_{\rm c}+10_{\rm v}+15_{\rm s}; \ {\rm s}'=150\%, \ {\rm p}'=15\%\\ 50\%:150\%>10\%:15\%. \end{array}$$

4) p' rises while s' falls, or falls while s' rises if  $\frac{v}{C}$  changes inversely to, and at a faster rate than, s'.

$$80_{c} + 20_{v} + 20_{s}$$
; s' = 100%, p' = 20%  
 $90_{c} + 10_{v} + 15_{s}$ ; s' = 150%, p' = 15%.

s' has risen from 100% to 150%, p' has fallen from 20% to 15%. 5) Finally, p' remains constant whereas s' rises or falls, while  $\frac{v}{C}$  changes inversely to, but in exactly the same proportion as, s'.

It is only this last case which still requires some explanation. We have observed earlier in the variations of  $\frac{v}{C}$  that one and the same rate of surplus value may be expressed in very much different rates of profit. Now we see that one and the same rate of profit may be based on very much different rates of surplus value. But while any change in

the proportion of v to C is sufficient to produce a difference in the rate of profit so long as s' is constant, a change in the magnitude of s' must lead to a corresponding inverse change of  $\frac{v}{C}$  in order that the rate of profit remain the same. In the case of one and the same capital, or in that of two capitals in one and the same country this is possible but in exceptional cases. Assume, for example, that we have a capital of

$$80_{\rm c} + 20_{\rm v} + 20_{\rm s}$$
; C = 100, s' = 100%, p' = 20%

and let us suppose that wages fall to such an extent that the same number of labourers is obtainable for  $16_v$  instead of  $20_v$ . Then, other things being equal, and  $4_v$  being released, we shall have:

$$80_{c} + 16_{v} + 24_{s}$$
; C = 96, s' = 150%, p' = 25%.

In order that p' may now = 20% as before, the total capital would have to increase to 120, the constant capital therefore rising to 104:

 $104_{s} + 16_{y} + 24_{s}$ ; C = 120, s' = 150%, p' = 20%.

This would only be possible if the fall in wages were attended simultaneously by a change in the productivity of labour which required such a change in the composition of capital. Or, if the value in money of the constant capital increased from 80 to 104. In short, it would require an accidental coincidence of conditions such as occurs in exceptional cases. In fact, a variation of s' that does not call for the simultaneous variation of v, and thus of  $\frac{v}{C}$  is conceivable only under very definite conditions, namely in such branches of industry in which only fixed capital and labour are employed, while the materials of labour are supplied by Nature.

But this is not so when the rates of profit of two different countries are compared. For in that case the same rate of profit is, in effect, based largely on different rates of surplus value.

It follows from all these five cases, therefore, that a rising rate of profit may correspond to a falling or rising rate of surplus value, a falling rate of profit to a rising or falling rate of surplus value, and a constant rate of profit to a rising or falling rate of surplus value. And we have seen in I that a rising, falling, or constant rate of profit may also accord with a constant rate of surplus value.

The rate of profit, therefore, depends on two main factors-the

rate of surplus value and the value composition of capital. The effects of these two factors may be briefly summed up as follows, by giving the composition in per cent, for it is immaterial which of the two portions of the capital causes the variation:

The rates of profit of two different capitals, or of one and the same capital in two successive different conditions,

are equal

1) if the per cent composition of the capitals is the same and their rates of surplus value are equal;

2) if their per cent composition is not the same, and the rates of surplus value are unequal, provided the products of the rates of surplus value by the percentages of the variable portions of capitals (s' by v) are the same, i. e., if the *masses* of surplus value (s = s'v) calculated in per cent of the total capital are equal; in other words, if the factors s' and v are inversely proportional to one another in both cases.

They are unequal

1) if the per cent composition is equal and the rates of surplus value are unequal, in which case they are related as the rates of surplus value;

2) if the rates of surplus value are the same and the per cent composition is unequal, in which case they are related as the variable portions of the capitals;

3) if the rates of surplus value are unequal and the per cent composition not the same, in which case they are related as the products s'v, i. e., as the quantities of surplus value calculated in per cent of the total capital.<sup>10</sup>)

# Chapter IV

## THE EFFECT OF THE TURNOVER ON THE RATE OF PROFIT

//The effect of the turnover on the production of surplus value, and

<sup>10)</sup> The manuscript contains also very detailed calculations of the difference between the rate of surplus value and the rate of profit (s' - p'), which has very interesting peculiarities, and whose movement indicates where the two rates draw apart or approach one another. These movements may also be represented by curves. I am not reproducing this material because it is of less importance to the immediate purposes of this work, and because it is enough here to call attention to this fact for readers who wish to pursue this point further. -F. E. consequently of profit, has been discussed in Book II.<sup>a</sup> Briefly summarised it signifies that owing to the time span required for turnover, not all the capital can be employed all at once in production; some of the capital always lies idle, either in the form of money capital, of raw material supplies, of finished but still unsold commodity capital, or of outstanding claims; that the capital in active production, i. e., in the production and appropriation of surplus value, is always short by this amount, and that the produced and appropriated surplus value is always curtailed to the same extent. The shorter the period of turnover, the smaller this idle portion of capital as compared with the whole, and the larger, therefore, the appropriated surplus value, provided other conditions remain the same.

It has already been shown in detail in Book II how the quantity of produced surplus value is augmented by reductions in the period of turnover, or of one of its two sections, in the time of production and the time of circulation.<sup>b</sup> But since the rate of profit only expresses the relation of the produced quantity of surplus value to the total capital employed in its production, it is evident that any such reduction increases the rate of profit. Whatever has been said earlier in Part II of Book II in regard to surplus value, applies equally to profit and the rate of profit and needs no repetition here. We wish only to stress a few of the principal points.

The chief means of reducing the time of production is higher labour productivity, which is commonly called industrial progress. If this does not involve a simultaneous considerable increase in the outlay of total capital resulting from the installation of expensive machinery, etc., and thus a reduction of the rate of profit, which is calculated on the total capital, this rate must rise. And this is decidedly true in the case of many of the latest improvements in metallurgy and in the chemical industry. The recently discovered methods of producing iron and steel, such as the processes of Bessemer, Siemens, Gilchrist-Thomas, etc., cut to a minimum at relatively small costs the formerly arduous processes. The making of alizarin, a red dye-stuff extracted from coal-tar, requires but a few weeks, and this by means of already existing coal-tar dye-producing installations, to yield the same results which formerly required years. It took a year for the madder to mature, and it was customary to let the roots grow a few years more before they were processed.

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, pp. 293-98. - <sup>b</sup> Ibid., chapters XIII and XIV.

The chief means of reducing the time of circulation is improved communications. The last fifty years have brought about a revolution in this field, comparable only with the industrial revolution of the latter half of the 18th century. On land the macadamised road has been displaced by the railway, on sea the slow and irregular sailing vessel has been pushed into the background by the rapid and regular steamboat line, and the entire globe is being girdled by telegraph wires. The Suez Canal has fully opened East Asia and Australia to steamer traffic. The time of circulation of a shipment of commodities to East Asia, at least twelve months in 1847 (cf. Buch II, S. 235<sup>a</sup>), has now been reduced to almost as many weeks. The two large centres of the crises of 1825-57, America and India, have been brought from 70 to 90% nearer to the European industrial countries by this revolution in transport, and have thereby lost a good deal of their explosive nature. The period of turnover of the total world commerce has been reduced to the same extent, and the efficacy of the capital involved in it has been more than doubled or trebled. It goes without saying that this has not been without effect on the rate of profit.

To single out the effect of the turnover of total capital on the rate of profit we must assume all other conditions of two capitals to be compared as equal. Aside from the rate of surplus value and the working day it is also notably the per cent composition which we must assume to be the same. Now let us take a capital A composed of  $80_c + 20_v = 100$  C, which makes two turnovers yearly at a rate of surplus value of 100%. The annual product is then:

 $160_c + 40_v + 40_s$ . However, to determine the rate of profit we do not calculate the  $40_s$  on the turned-over capital value of 200, but on the advanced capital of 100, and thus obtain p' = 40%.

Now let us compare this with a capital  $\mathbf{B} = 160_c + 40_v = 200$  C, which has the same rate of surplus value of 100%, but which is turned over only once a year. The annual product of this capital is, therefore, the same as that of A:

 $160_{\rm c} + 40_{\rm v} + 40_{\rm s}$ . But this time the  $40_{\rm s}$  are to be calculated on an advance of capital amounting to 200, which yields a rate of profit of only 20%, or one-half that of A.

We find, then, that for capitals with an equal per cent composition, with equal rates of surplus value and equal working days, the rates of profit of the two capitals are related inversely as their periods of

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 251-52.

turnover. If either the composition, the rates of surplus value, the working day, or the wages, are unequal in the two compared cases, this would naturally produce further differences in the rates of profit; but these are independent of the turnover and, for this reason, do not concern us at this point. They have already been discussed in Chapter III.

The direct effect of a reduced period of turnover on the production of surplus value, and consequently of profit, consists of an increased efficiency imparted thereby to the variable portion of capital, as shown in Book II, Chapter XVI, "The Turnover of Variable Capital". This chapter demonstrated that a variable capital of 500 turned over ten times a year produces as much surplus value in this time as a variable capital of 5,000 with the same rate of surplus value and the same wages, turned over just once a year.

Take capital I, consisting of 10,000 fixed capital whose annual depreciation is 10% = 1,000, of 500 circulating constant and 500 variable capital. Let the variable capital turn over ten times per year at a 100% rate of surplus value. For the sake of simplicity we assume in all the following examples that the circulating constant capital is turned over in the same time as the variable, which is generally the case in practice. Then the product of one such period of turnover will be:

 $100_{c}$  (depreciation) +  $500_{c}$  +  $500_{v}$  +  $500_{s}$  = 1,600

and the product of one entire year, with ten such turnovers, will be

1,000<sub>c</sub> (depreciation) + 5,000<sub>c</sub> + 5,000<sub>v</sub> + 5,000<sub>s</sub> = 16,000,  
C = 11,000, s = 5,000, p' = 
$$\frac{5,000}{11,000} = 45\frac{5}{11}$$
%.

Now let us take capital II: 9,000 fixed capital, 1,000 annual wear and tear, 1,000 circulating constant capital, 1,000 variable capital, 100% rate of surplus value, 5 turnovers of variable capital per year. Then the product of each of the turnovers of the variable capital will be:

 $200_{c}$  (depreciation) + 1,000<sub>c</sub> + 1,000<sub>v</sub> + 1,000<sub>s</sub> = 3,200,

and the total annual product after five turnovers:

1,000<sub>c</sub> (depreciation) + 5,000<sub>c</sub> + 5,000<sub>v</sub> + 5,000<sub>s</sub> = 16,000,  
C = 11,000, s = 5,000, p' = 
$$\frac{5,000}{11,000}$$
 =  $45\frac{5}{11}$ %.

Further, take capital III with no fixed capital, 6,000 circulating constant capital and 5,000 variable capital. Let there be one turnover

per year at a 100% rate of surplus value. Then the total annual product is:

$$6,000_{\rm c} + 5,000_{\rm v} + 5,000_{\rm s} = 16,000,$$
  
C = 11,000, s = 5,000, p' =  $\frac{5,000}{11,000} = 45\frac{5}{11}$ %.

In all the three cases we therefore have the same annual quantity of surplus value = 5,000, and, since the total capital is likewise equal in all three cases, namely = 11,000, also the same rate of profit of  $45\frac{5}{11}$ %.

But should capital I have only 5 instead of 10 turnovers of its variable part per year, the result would be different. The product of one turnover would then be:

 $200_{\rm c}$  (depreciation) +  $500_{\rm c}$  +  $500_{\rm v}$  +  $500_{\rm s}$  = 1,700.

And the annual product:

$$1,000_{c} \text{ (depreciation)} + 2,500_{c} + 2,500_{v} + 2,500_{s} = 8,500, \\ C = 11,000, \text{ s} = 2,500, \text{ p'} = \frac{2,500}{11,000} = 22\frac{8}{11}\%.$$

The rate of profit has fallen one-half, because the period of turnover has doubled.

The quantity of surplus value appropriated in one year is therefore equal to the quantity of surplus value appropriated in one turnover of the *variable* capital multiplied by the number of such turnovers per year. Suppose we call the surplus value, or profit, appropriated in one year S, the surplus value appropriated in one period of turnover s, the number of turnovers of the variable capital in one year n, then S = sn, and the annual rate of surplus value S' = s'n, as already demonstrated in Book II, Chapter XVI, I.<sup>a</sup>

It goes without saying that the formula  $p' = s' \frac{v}{C} = s' \frac{v}{c+v}$ , is correct only so long as the v in the numerator is the same as that in the denominator. In the denominator v stands for the entire portion of the total capital used on an average as variable capital for the payment of wages. The v of the numerator is primarily only determined by the fact that a certain quantity of surplus value = s is produced and appropriated by it, whose relation to it  $\frac{s}{v}$  is s', the rate of surplus value. It is only along these lines that the formula  $p' = \frac{s}{c+v}$  is transformed into the other:  $p' = s' \frac{v}{c+v}$ . The v of the numerator will now

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, pp. 293-307.

be more accurately determined by the fact that it must equal the v of the denominator, that is, the entire variable portion of capital C. In other words, the equation  $p' = \frac{s}{C}$  may be correctly transformed into the equation  $p' = s' \frac{v}{c+v}$  only if s stands for surplus value produced in *one* turnover of the variable capital. Should s be only a portion of this surplus value, then s = s'v is still correct, but this v is then smaller than the v in C = c + v, because it is smaller than the entire variable capital expended for wages. But should s stand for more than the surplus value of one turnover of v, then a portion of this v, or perhaps the whole of it, serves twice, namely in the first and in the second turnover, and eventually in subsequent turnovers. The v which produces the surplus value and represents the sum of all paid wages, is therefore greater than the v in c + v and the calculation falls into error.

To make the formula precise for the annual rate of profit, we must substitute the annual rate of surplus value for the simple rate of surplus value, that is, substitute S' or s'n for s'. In other words, we must multiply the rate of surplus value s', or, what amounts to the same thing, the variable capital v contained in C, by n, the number of turnovers of this variable capital in one year. Thus we obtain  $p' = s'n \frac{v}{C}$ , which is the formula for calculating the annual rate of profit.

The amount of variable capital invested in his business is something the capitalist himself does not know in most cases. We have seen in Chapter VIII of Book II, and shall see further along, that the only essential distinction within his capital which impresses itself upon the capitalist is that of fixed and circulating capital. He takes money to pay wages from his cash-box containing the part of the circulating capital he has on hand in the form of money, so far as it is not deposited in a bank; he takes money from the same cash-box for raw and auxiliary materials, and credits both items to the same cash account. And even if he should keep a separate account for wages, at the close of the year this would only show the sum paid out for this item, hence vn, but not the variable capital v itself. In order to ascertain this, he would have to make a special calculation, of which we propose here to give an illustration.

For this purpose we select the cotton spinnery of 10,000 mule spindles described in Book I  $(S. 209/201)^a$  and assume that the data given

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 35, pp. 228-29.

there for one week of April 1871, are in force during the whole year. The fixed capital incorporated in the machinery was £10,000. The circulating capital was not given. We assume it to have been £2,500. This is a rather high estimate, but justified by the assumption, which we must always make here, that no credit operations were effected, hence no permanent or temporary employment of other people's capital. The value of the weekly product was composed of £20 for depreciation of machinery, £358 circulating constant advanced capital (rent £6; cotton £342; coal, gas, oil, £10), £52 variable capital paid out for wages, and £80 surplus value. Therefore,

 $20_{c}$  (depreciation) +  $358_{c}$  +  $52_{v}$  +  $80_{s}$  = 510.

The weekly advance of circulating capital therefore was  $358_c + 52_v = 410$ . In terms of per cent this was  $87.3_c + 12.7_v$ . For the entire circulating capital of £2,500 this would be £2,182 constant and £318 variable capital. Since the total expenditure for wages in one year was 52 times £52, or £2,704, it follows that in a year the variable capital of £318 was turned over almost exactly  $8\frac{1}{2}$  times. The rate of surplus value was  $\frac{80}{52} = 153\frac{11}{13}$ . We calculate the rate of profit on the basis of these elements by inserting the above values in the formula  $p' = s'n\frac{v}{C}$ :  $s' = 153\frac{11}{13}$ ,  $n = 8\frac{1}{2}$ , v = 318, C = 12,500; hence:

$$\mathbf{p}' = 153\frac{11}{13} \times 8\frac{1}{2} \times \frac{318}{12,500} = 33.27\%.$$

We test this by means of the simple formula  $p' = \frac{s}{C}$ . The total annual surplus value or profit amounts to 52 times £80, or £4,160, and this divided by the total capital of £12,500 gives us 33.28%, or almost an identical result. This is an abnormally high rate of profit, which may only be explained by extraordinarily favourable conditions of the moment (very low prices of cotton along with very high prices of yarn), and could certainly not have obtained throughout the year.

The s'n in the formula  $p' = s'n \frac{v}{C}$  stands, as has been said, for the thing called in Book II<sup>a</sup> the annual rate of surplus value. In the above case it is  $153 \frac{11}{13} %$  multiplied by  $8\frac{1}{2}$ , or in exact figures,  $1,307 \frac{9}{13} %$ . Thus, if a certain philistine was shocked by the abnormity of an annual rate of surplus value of 1,000% used as an illustration in

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 36, p. 295.

Book II, he will now perhaps be pacified by this annual rate of surplus value of more than 1,300% taken from the living experience of Manchester.<sup>16</sup> In times of greatest prosperity, such as we have not indeed seen for a long time, such a rate is by no means a rarity.

For that matter we have here an illustration of the actual composition of capital in modern large-scale industry. The total capital is broken up into £12,182 constant and £318 variable capital, a sum of £12,500. In terms of per cent this is  $97\frac{1}{2}c + 2\frac{1}{2}v = 100$  C. Only one-fortieth of the total, but in more than an eightfold annual turnover, serves for the payment of wages.

Since very few capitalists ever think of making calculations of this sort with reference to their own business, statistics is almost completely silent about the relation of the constant portion of the total social capital to its variable portion. Only the American census gives what is possible under modern conditions, namely the sum of wages paid in each line of business and the profits realised. Questionable as they may be, being based on the industrialist's own uncontrolled statements, they are nevertheless very valuable and the only records available to us on this subject. In Europe we are far too delicate to expect such revelations from our major industrialists.—F. E.//

## Chapter V

#### ECONOMY IN THE EMPLOYMENT OF CONSTANT CAPITAL

## I. IN GENERAL

The increase of absolute surplus value, or the prolongation of surplus labour, and thus of the working day, while the variable capital remains the same and thus employs the same number of labourers at the same nominal wages, regardless of whether overtime is paid or not, reduces relatively the value of the constant capital as compared to the total and the variable capital, and thereby increases the rate of profit, again irrespective of the growth of the quantity of surplus value and a possibly rising rate of surplus value. The volume of the fixed portion of constant capital, such as factory buildings, machinery, etc., remains the same, no matter whether these serve the labour process 16 or 12 hours. A prolongation of the working day does not entail any fresh expenditures in this, the most expensive portion of constant capital. Furthermore, the value of the fixed capital is thereby reproduced in a smaller number of turnover periods, so that the time for which it must be advanced to make a certain profit is abbreviated. A prolongation of the working day therefore increases the profit, even if overtime is paid, or even if, up to a certain point, it is better paid than the normal hours of labour. The ever-mounting need to increase fixed capital in modern industry was therefore one of the main reasons prompting profit-mad capitalists to lengthen the working day.<sup>11</sup>

The same conditions do not obtain if the working day is constant. Then it is necessary either to increase the number of labourers, and with them to a certain extent the amount of fixed capital, the buildings, machinery, etc., in order to exploit a greater quantity of labour (for we leave aside deductions from wages or the depression of wages below their normal level), or, if the intensity and, consequently, the productive power, of labour increase and, generally, more relative surplus value is produced, the magnitude of the circulating portion of constant capital increases in such industrial branches which use raw materials, since more raw material, etc., is processed in a given time; and, secondly, the amount of machinery set in motion by the same number of labourers, therefore also this part of constant capital, increases as well. Hence, an increase in surplus value is accompanied by an increase in constant capital, and the growing exploitation of labour by greater outlays in the conditions of production through which labour is exploited, i.e., by a greater investment of capital. Therefore, the rate of profit is thereby reduced on the one hand while it increases on the other.

Quite a number of current expenses remain almost or entirely the same whether the working day is longer or shorter. The cost of supervision is less for 500 working men during 18 working hours than for 750 working men during 12 working hours.

"The expense of working a factory 10 hours almost equals that of working it 12" (Reports of Insp. of Fact., October 1848, p. 37).

State and municipal taxes, fire insurance, wages of various permanent employees, depreciation of machinery, and various other expenses of a factory, remain unchanged whether the working time is long or short. To the extent to which production decreases, these

<sup>&</sup>lt;sup>11)</sup> "Since in all factories there is a very large amount of fixed capital in buildings and machinery, the greater the number of hours that machinery can be kept at work the greater will be the return" (Reports of Insp. of Fact., 31st October, 1858, p. 8).

expenses rise as compared to the profit (Reports of Insp. of Fact., October 1862, p. 19).

The period in which the value of the machinery and of the other components of fixed capital is reproduced is determined in practice not by their mere lifetime, but by the duration of the entire labour process during which they serve and wear out. If the labourers must work 18 instead of 12 hours, this makes a difference of three days more per week, so that one week is stretched into one and a half, and two years into three. If this overtime is unpaid the labourers give away gratis a week out of every three and a year out of every three on top of the normal surplus labour time. In this way, the reproduction of the value of the machinery is speeded up 50% and accomplished in  $\frac{2}{3}$  of the usually required time.

To avoid useless complications, we proceed in this analysis, and in that of price fluctuations for raw materials (Chap. VI), from the assumption that the mass and rate of surplus value are given.

As already shown in the presentation of co-operation, division of labour and machinery,<sup>a</sup> the economy of production conditions found in large-scale production is essentially due to the fact that these conditions prevail as conditions of social, or socially combined, labour, and therefore as social conditions of labour. They are commonly consumed in the process of production by the aggregate labourer, instead of being consumed in small fractions by a mass of labourers operating disconnectedly or, at best, directly co-operating on a small scale. In a large factory with one or two central motors the cost of these motors does not increase in the same ratio as their horse-power and, hence, their possible sphere of activity. The cost of the transmission equipment does not grow in the same ratio as the number of working machines which it sets in motion. The frame of a machine does not become dearer in the same ratio as the mounting number of tools which it employs as its organs, etc. Furthermore, the concentration of means of production yields a saving on buildings of various kinds not only for the actual workshops, but also for storage, etc. The same applies to expenditures for fuel, lighting, etc. Other conditions of production remain the same, whether used by many or by few.

This total economy, arising as it does from the concentration of means of production and their use *en masse*, imperatively requires, however, the accumulation and co-operation of labourers, i. e., a social

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35, pp. 329-30.

combination of labour. Hence, it originates quite as much from the social nature of labour, just as surplus value originates from the surplus labour of the individual labourer considered singly. Even the continual improvements, which are here possible and necessary, are due solely to the social experience and observation ensured and made possible by production of aggregate labour combined on a large scale.

The same is true of the second big source of economy in the conditions of production. We refer to the reconversion of the excretions of production, the so-called waste, into new elements of production, either of the same, or of some other line of industry; to the processes by which this so-called excretion is thrown back into the cycle of production and, consequently, consumption, whether productive or individual. This line of savings, which we shall later examine more closely, is likewise the result of large-scale social labour. It is the attendant abundance of this waste which renders it available again for commerce and thereby turns it into new elements of production. It is only as waste of combined production, therefore of large-scale production, that it becomes important to the production process and remains a bearer of exchange value. This waste, aside from the services which it performs as a new element of production, reduces the cost of the raw material to the extent to which it is again saleable, for this cost always includes the normal waste, namely the quantity ordinarily lost in processing. The reduction of the cost of this portion of constant capital increases pro tanto<sup>a</sup> the rate of profit, assuming the magnitude of the variable capital and the rate of surplus value to be given.

If the surplus value is given, the rate of profit can be increased only by reducing the value of the constant capital required for commodity production. So far as constant capital enters into the production of commodities, it is not its exchange value, but its use value alone, which matters. The quantity of labour which flax can absorb in a spinnery does not depend on its value, but on its quantity, assuming the productivity of labour, i. e., the level of technical development, to be given. In like manner the assistance rendered by a machine to, say, three labourers does not depend on its value, but on its use value as a machine. On one level of technical development a bad machine may be expensive and on another a good machine may be cheap.

The increased profit received by a capitalist through the cheapening of, say, cotton and spinning machinery, is the result of higher

<sup>&</sup>lt;sup>a</sup> for so much

labour productivity, not in the spinnery, to be sure, but in cotton cultivation and construction of machinery. It requires smaller outlays of the conditions of labour to objectify a given quantity of labour, and hence to appropriate a given quantity of surplus labour. The costs required to appropriate a certain quantity of surplus labour diminish.<sup>a</sup>

We have already mentioned savings yielded in the production process through co-operative use of means of production by the aggregate, or socially combined, labour. Other savings of constant capital arising from the shortening of the time of circulation in which the development of means of communication is a dominant material factor will be discussed later. At this point we shall deal with the savings yielded by continuous improvements of machinery, namely 1) of its material, e.g., the substitution of iron for wood; 2) the cheapening of machinery due to the general improvement of machine-building; so that, although the value of the fixed portion of constant capital increases continually with the development of labour on a large scale. it does not increase at the same rate<sup>12</sup>; 3) special improvements enabling existing machinery to work more cheaply and effectively; for instance, improvements of steam-boilers, etc., which will be discussed later on in greater detail; 4) reduction of waste through better machinery.

Whatever reduces the wear of machinery, and of fixed capital in general, for any given period of production, cheapens not only the individual commodity, in view of the fact that in its price every individual commodity reproduces its aliquot share of this depreciation, but reduces also the aliquot portion of the invested capital for this period. Repair work, etc., to the extent that it becomes necessary, is added to the original cost of the machinery. A reduction in repair costs, due to greater durability of the machinery, lowers *pro tanto* the price of this machinery.

It may again be said of all these savings that they are largely possible only for combined labour, and are often not realised until production is carried forward on a still larger scale, so that they require an even greater combination of labour in the immediate process of production.

<sup>&</sup>lt;sup>12)</sup> Cf. Ure on the progress in factory construction.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, p. 84. - <sup>b</sup> A. Ure, *Philosophie des manufactures...*, Vol. 1, Paris, 1836, pp. 61-63 (Cf. present edition, Vol. 33, pp. 363-64).

However, on the other hand, the development of the productive power of labour in any *one* line of production, e.g., the production of iron, coal, machinery, in architecture, etc., which may again be partly connected with progress in the field of intellectual production, notably natural science and its practical application, appears to be the premiss for a reduction of the value, and consequently of the cost, of means of production in *other* lines of industry, e.g., the textile industry, or agriculture. This is self-evident, since a commodity which is the product of a certain branch of industry enters another as a means of production. Its greater or lesser price depends on the productivity of labour in the line of production from which it issues as a product, and is at the same time a factor that not only cheapens the commodities into whose production it goes as a means of production, but also reduces the value of the constant capital whose element it here becomes, and thereby one that increases the rate of profit.

The characteristic feature of this kind of saving of constant capital arising from the progressive development of industry is that the rise in the rate of profit in one line of industry depends on the development of the productive power of labour in another. Whatever falls to the capitalist's advantage in this case is once more a gain produced by social labour, if not a product of the labourers he himself exploits. Such a development of productive power is again traceable in the final analysis to the social nature of the labour engaged in production; to the division of labour in society; and to the development of intellectual labour, especially in the natural sciences. What the capitalist thus utilises are the advantages of the entire system of the social division of labour. It is the development of the productive power of labour in its exterior department, in that department which supplies it with means of production, whereby the value of the constant capital employed by the capitalist is relatively lowered and consequently the rate of profit is raised.

Another rise in the rate of profit is produced, not by savings in the labour creating the constant capital, but by savings in the application of this capital itself. On the one hand, the concentration of labourers, and their large-scale co-operation, saves constant capital. The same buildings, and heating and lighting appliances, etc., cost relatively less for the large-scale than for small-scale production. The same is true of power and working machinery. Although their absolute value increases, it falls in comparison to the increasing extension of production and the magnitude of the variable capital, or the quantity of labour power set in motion. The economy realised by a certain capital within its own line of production is first and foremost an economy in labour, i. e., a reduction of the paid labour of its own labourers. The previously mentioned economy, on the other hand, is distinguished from this one by the fact that it accomplishes the greatest possible appropriation of other people's unpaid labour in the most economical way, i. e., with as little expense as the given scale of production will permit. Inasmuch as this economy does not rest with the previously mentioned exploitation of the productivity of the social labour employed in the production of constant capital, but with the economy in the constant capital itself, it springs either directly from the co-operation and social form of labour within a certain branch of production, or from the production of machinery, etc., on a scale in which its value does not grow at the same rate as its use value.<sup>a</sup>

Two points must be borne in mind here: If the value of c = zero, then p' = s', and the rate of profit would be at its maximum. Second, however, the most important thing for the direct exploitation of labour itself is not the value of the employed means of exploitation, be they fixed capital, raw or auxiliary materials. In so far as they serve as means of absorbing labour, as media in or by which labour and, hence, surplus labour are objectified, the exchange value of machinery, buildings, raw materials, etc., is quite immaterial. What is ultimately essential is, on the one hand, the quantity of them technically required for combination with a certain quantity of living labour, and, on the other, their suitability, i.e., not only good machinery, but also good raw and auxiliary materials. The rate of profit depends partly on the good quality of the raw material. Good material produces less waste. Less raw materials are then needed to absorb the same quantity of labour. Furthermore, the resistance to be overcome by the working machine is also less. This partly affects even the surplus value and the rate of surplus value. The labourer needs more time when using bad raw materials to process the same quantity. Assuming wages remain the same, this causes a reduction in surplus labour. This also substantially affects the reproduction and accumulation of capital, which depend more on the productivity than on the amount of labour employed, as shown in Book I (S. 627/619 ff.).<sup>b</sup>

The capitalist's fanatical insistence on economy in means of production is therefore quite understandable. That nothing is lost or

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, p. 89. - <sup>b</sup> Ibid., Vol. 35, pp. 599-600.

wasted and the means of production are consumed only in the manner required by production itself, depends partly on the skill and intelligence of the labourers and partly on the discipline enforced by the capitalist for the combined labour. This discipline will become superfluous under a social system in which the labourers work for their own account, as it has already become practically superfluous in piece-work. This fanatical insistence comes to the surface also conversely in the adulteration of the elements of production, which is one of the principal means of lowering the relation of the value of the constant capital to the variable capital, and thus of raising the rate of profit. Whereby the sale of these elements of production above their value, so far as this reappears in the product, acquires a marked element of cheating. This practice plays an essential part particularly in German industry, whose maxim is: People will surely appreciate if we send them good samples at first, and then inferior goods afterward. However, as these matters belong to the sphere of competition they do not concern us here.

It should be noted that this raising of the rate of profit by means of lowering the value of the constant capital, i. e., by reducing its expensiveness, does not in any way depend on whether the branch of industry in which it takes place produces luxuries, or necessities for the consumption of labourers, or means of production generally. This last circumstance would only be of material importance if it were a question of the rate of surplus value, which depends essentially on the value of labour power, i. e., on the value of the customary necessities of the labourer. But in the present case the surplus value and the rate of surplus value have been assumed as given. The relation of surplus value to total capital—and this determines the rate of profit—depends under these circumstances exclusively on the value of the constant capital, and in no way on the use value of the elements of which it is composed.

A relative cheapening of the means of production does not, of course, exclude the possible increase of their absolute aggregate value, for the absolute volume in which they are employed grows tremendously with the development of the productive power of labour and the attendant growth of the level of production. Economy in the use of constant capital, from whatever angle it may be viewed, is, in part, the exclusive result of the fact that the means of production function and are consumed as joint means of production of the combined labourer, so that the resulting saving appears as a product

of the social nature of directly productive labour; in part, however, it is the result of developing productivity of labour in spheres which supply capital with its means of production, so that if we view the total labour in relation to total capital, and not simply the labourers employed by capitalist X in relation to capitalist X, this economy presents itself once more as a product of the development of the productive forces of social labour, with the only difference that capitalist X enjoys the advantage not only of the productivity of labour in his own establishment, but also of that in other establishments. Yet the capitalist views economy of his constant capital as a condition wholly independent of, and entirely alien to, his labourers. He is always well aware, however, that the labourer has something to do with the employer buying much or little labour with the same amount of money (for this is how the transaction between the capitalist and labourer appears in his mind). This economy in the application of the means of production, this method of obtaining a certain result with a minimum outlay appears more than any other inner power of labour as an inherent power of capital and a method peculiar and characteristic of the capitalist mode of production.

This conception is so much the less surprising since it appears to accord with fact, and since the relationship of capital actually conceals the inner connection behind the utter indifference, isolation, and estrangement in which they place the labourer vis-à-vis the conditions of realising his labour.

First, the means of production that make up the constant capital represent only the money belonging to the capitalist (just as the body of the Roman debtor represented the money of his creditor, according to Linguet<sup>a</sup>) and are related to him alone, while the labourer, who comes in contact with them only in the direct process of production, deals with them as use values of production only, as means of labour and materials of labour. Increase or decrease of their value, therefore, has as little bearing on his relations to the capitalist as the circumstance whether he may be working with copper or iron. For that matter, the capitalist likes to view this point differently, as we shall later indicate, whenever the means of production gain in value and thereby reduce his rate of profit.

Second, in so far as these means of production in the capitalist production process are at the same time means of exploiting labour, the

<sup>&</sup>lt;sup>a</sup> [S. N. H. Linguet,] Théorie des loix civiles..., Vol. II, London, 1767, Book V, Ch. XX.

labourer is no more concerned with their relative dearness or cheapness than a horse is concerned with the dearness or cheapness of its bit and bridle.

*Finally*, we have earlier seen<sup>a</sup> that, in fact, the labourer looks at the social nature of his labour, at its combination with the labour of others for a common purpose, as he would at an alien power; the condition of realising this combination is alien property, whose dissipation would be totally indifferent to him if he were not compelled to economise with it. The situation is quite different in factories owned by the labourers themselves, as in Rochdale, for instance.<sup>17</sup>

It scarcely needs to be mentioned, then, that as far as concerns the productivity of labour in one branch of industry as a lever for cheapening and improving the means of production in another, and thereby raising the rate of profit, the general interconnection of social labour affects the labourers as a matter alien to them, a matter that actually concerns the capitalist alone, since it is he who buys and appropriates these means of production. The fact that he buys the product of labourers in another branch of industry with the product of labourers in his own, and that he therefore disposes of the product of the labourers of another capitalist only by gratuitously appropriating that of his own, is a development that is fortunately concealed by the process of circulation, etc.

Moreover, since production on a large scale develops for the first time in its capitalist form, the thirst for profits on the one hand, and competition on the other, which compels the cheapest possible production of commodities, make this economy in the employment of constant capital appear as something peculiar to the capitalist mode of production and therefore as a function of the capitalist.

Just as the capitalist mode of production promotes the development of the productive powers of social labour, on the one hand, so does it whip on to economy in the employment of constant capital on the other.

However, it is not only the estrangement and indifference that arise between the labourer, the bearer of living labour, and the economical, i. e., rational and thrifty, use of the material conditions of his labour. In line with its contradictory and antagonistic nature, the capitalist mode of production proceeds to count the prodigious dissipation of the labourer's life and health, and the lowering of his

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35, p. 330.

living conditions, as an economy in the use of constant capital and thereby as a means of raising the rate of profit.

Since the labourer passes the greater portion of his life in the process of production, the conditions of the production process are largely the conditions of his active life process, or his living conditions, and economy in these living conditions is a method of raising the rate of profit; just as we saw earlier<sup>a</sup> that overwork, the transformation of the labourer into a work horse, is a means of increasing capital, or speeding up the production of surplus value. Such economy extends to overcrowding close and unsanitary premises with labourers, or, as capitalists put it, to space saving; to crowding dangerous machinery into close quarters without using safety devices, to neglecting safety rules in production processes pernicious to health, or, as in mining, bound up with danger, etc. Not to mention the absence of all provisions to render the production process human, agreeable, or at least bearable. From the capitalist point of view this would be quite a useless and senseless waste. The capitalist mode of production is generally, despite all its niggardliness, altogether too prodigal with its human material, just as, conversely, thanks to its method of distribution of products through commerce and manner of competition, it is very prodigal with its material means, and loses for society what it gains for the individual capitalist.

Just as capital has the tendency to reduce the direct employment of living labour to no more than the necessary labour, and always to cut down the labour required to produce a commodity by exploiting the social productive power of labour and thus to save a maximum of directly applied living labour, so it has also the tendency to employ this labour, reduced to a minimum, under the most economical conditions, i. e., to reduce to its minimum the value of the employed constant capital. If it is the necessary labour which determines the value of commodities, instead of all the labour time contained in them, so it is the capital which realises this determination and, at the same time, continually reduces the labour time socially necessary to produce a given commodity. The price of the commodity is thereby lowered to its minimum since every portion of the labour required for its production is reduced to its minimum.<sup>b</sup>

We must make a distinction in economy as regards use of constant capital. If the quantity, and consequently the sum of the value of

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 239-307. - <sup>b</sup> Cf. present edition, Vol. 33, p. 90.

employed capital, increases, this is primarily only a concentration of more capital in a single hand. Yet it is precisely this greater quantity applied by a single source — attended, as a rule, by an absolutely greater but relatively smaller amount of employed labour — which permits economy of constant capital. To take an individual capitalist, the volume of the necessary investment of capital, especially of its fixed portion, increases. But its value decreases relative to the mass of worked-up materials and exploited labour.

This is now to be briefly illustrated by a few examples. We shall begin at the end — the economy in the conditions of production, in so far as these also constitute the living conditions of the labourer.

#### II. SAVINGS IN LABOUR CONDITIONS AT THE EXPENSE OF THE LABOURERS

## Coal mines. Neglect of indispensable outlays.

"Under the competition which exists among the coal-owners and coal-proprietors ... no more outlay is incurred than is sufficient to overcome the most obvious physical difficulties; and under that which prevails among the labouring colliers, who are ordinarily more numerous than the work to be done requires, a large amount of danger and exposure to the most noxious influences will gladly be encountered for wages a little in advance of the agricultural population round them, in an occupation, in which they can moreover make a profitable use of their children. This double competition is quite sufficient ... to cause a large proportion of the pits to be worked with the most imperfect drainage and ventilation; often with ill-constructed shafts, bad gearing, incompetent engineers; and ill-constructed and ill-prepared bays and roadways; causing a destruction of life, and limb, and health, the statistics of which would present an appalling picture" (First Report on Children's Employment in Mines and Collieries, etc., April 21, 1829, p. 102).<sup>18</sup>

About 1860, a weekly average of 15 men lost their lives in the English collieries. According to the report on Coal Mines Accidents (February 6, 1862), a total of 8,466 were killed in the ten years 1852-61.<sup>a</sup> But the report admits that this number is far too low, because in the first few years, when the inspectors had just been installed and their districts were far too large, a great many accidents and deaths were not reported. The very fact that the number of accidents, though still very high, has decreased markedly since the inspection system was established, and this in spite of the limited powers and insufficient numbers of the inspectors, demonstrates the natural tendency of capi-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 30, p. 168.

talist exploitation.— These human sacrifices are mostly due to the inordinate avarice of the mine owners. Very often they had only one shaft sunk, so that apart from the lack of effective ventilation there was no escape were this shaft to become obstructed.

Capitalist production, when considered in isolation from the process of circulation and the excesses of competition, is very economical with the materialised labour objectified in commodities. Yet, more than any other mode of production, it squanders human lives, or living labour, and not only blood and flesh, but also nerve and brain. Indeed, it is only by dint of the most extravagant waste of individual development that the development of the human race is at all safeguarded and maintained in the epoch of history immediately preceding the conscious reorganisation of society. Since all of the economising here discussed arises from the social nature of labour, it is indeed just this directly social nature of labour which causes the waste of life and health. The following question suggested by factory inspector **R**. Baker is characteristic in this respect:

\*"The whole question is one for serious consideration, and in what way this sacrifice of infant life occasioned by congregational labour can be best averted?"\* (Reports of Insp. of Fact., October 1863, p. 157).

*Factories.* Here we have to deal with the disregard for every measure aimed at ensuring the safety, convenience, and health of labourers also in the actual factories. It is to blame for a large portion of the casualty lists containing the wounded and killed of the industrial army (cf. the annual factory reports). Similarly, lack of space, ventilation, etc.<sup>a</sup>

As far back as October 1855, Leonard Horner complained about the resistance of very many manufacturers to the legal requirements concerning safety devices on horizontal shafts, although the danger was continually emphasised by accidents, many of them fatal, and although these safety devices did not cost much and did not interfere with production (Reports of Insp. of Fact., October 1855, p. 6).<sup>b</sup> In their resistance against these and other legal requirements the manufacturers were openly seconded by the unpaid justices of the peace, who were themselves mostly manufacturers or friends of manufacturers, and handed down their decisions accordingly. What sort of verdicts these gentlemen handed down was revealed by Superior Judge

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 152-53. - <sup>b</sup> Cf. present edition, Vol. 35, p. 430.

Campbell, who said with reference to one of them, against which an appeal had been made to him:

"It is not an interpretation of the Act of Parliament, it is a repeal of the Act of Parliament" (l. c., p. 11).

Horner states in the same report that in many factories labourers are not warned when machinery is about to be started up. Since there is always something to be done about machinery even when it is not operating, fingers and hands are always occupied with it, and accidents happen continually due to the mere omission of a warning signal (l. c., p. 44). The manufacturers had formed a TRADES-UNION at the time to oppose factory legislation, the so-called NATIONAL ASSOCIATION FOR THE AMENDMENT OF THE FACTORY LAWS IN Manchester, which in March 1855 collected more than £50,000 by assessing 2 shillings per horsepower, to pay for the court proceedings against its members started by factory inspectors, and to conduct the cases in the name of the union. It was a matter of proving that KILLING was NO MURDER <sup>19</sup> when it occurred for the sake of profit. A factory inspector for Scotland, Sir John Kincaid, tells about a certain firm in Glasgow which used the iron scrap at its factory to make protective shields for all its machinery, the cost amounting to f.9 ls. Joining the manufacturers' union would have cost it an assessment of  $f_{11}$  for its 110 horse-power, which was more than the cost of all its protective appliances. But the NATIONAL Association had been organised in 1854 for the express purpose of opposing the law which prescribed such protection. The manufacturers had not paid the least heed to it during the whole period from 1844 to 1854. When the factory inspectors, at instructions from Palmerston, then informed the manufacturers that the law would be enforced in earnest, the manufacturers instantly founded their association, many of whose most prominent members were themselves justices of the peace and in this capacity were supposed to enforce the law. When in April 1855 the new Home Secretary, Sir George Grey, offered a compromise under which the government would be content with practically nominal safety appliances the Association indignantly rejected even this. In various lawsuits the famous engineer William Fairbairn threw the weight of his reputation behind the principle of economy and in defence of the freedom of capital which had been violated. The head of factory inspection, Leonard Horner, was persecuted and maligned by the manufacturers in every conceivable manner.

But the manufacturers did not rest until they obtained a writ of the COURT OF QUEEN'S BENCH, <sup>20</sup> according to which the Law of 1844 did

not prescribe protective devices for horizontal shafts installed more than 7 feet above the ground and, finally, in 1856 they succeeded in securing an Act of Parliament<sup>21</sup> entirely satisfactory to them in the circumstances, through the services of the bigot Wilson Patten, one of those pious souls whose display of religion is always ready to do the dirty work for the knights of the money-bag. This Act practically deprived the labourers of all special protection and referred them to the common courts for compensation in the event of industrial accidents (sheer mockery in view of the excessive cost of English lawsuits), while it made it almost impossible for the manufacturer to lose the lawsuit by providing in a finely-worded clause for expert testimony. The result was a rapid increase of accidents. In the six months from May to October 1858, Inspector Baker reported that accidents increased by 21%compared with the preceding half-year. In his opinion 36.7% of these accidents might have been avoided. It is true that the number of accidents in 1858 and 1859 was considerably below that of 1845 and 1846. It was actually 29% less although the number of labourers in the industries subject to inspection had increased 20%. But what was the reason for this? In so far as this issue has been settled now (1865), it was mainly accomplished through the introduction of new machinery already provided with safety devices to which the manufacturer did not object because they cost him no extra expense. Furthermore, a few labourers succeeded in securing heavy damages for their lost arms, and had this judgment upheld even by the highest courts (Reports of Insp. of Fact., April 30, 1861, p. 31, ditto April 1862, p. 17).

So much for economy in devices protecting the life and limbs of labourers (among whom many children) against the dangers of handling and operating machinery.

Work in enclosed places generally. It is well known to what extent economy of space, and thus of buildings, crowds labourers into close quarters. In addition, there is also economy in means of ventilation. Coupled with the long working hours, the two cause a large increase in diseases of the respiratory organs, and an attendant increase in mortality. The following illustrations have been taken from Reports on Public Health, 6th report, 1863. This report was compiled by Dr. John Simon, well known from our Book I.<sup>a</sup>

Just as combination and co-operation of labour permits large-scale employment of machinery, concentration of means of production,

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35, p. 468.

and economy in their use, it is this very working together *en masse* in enclosed places and under conditions rather determined by ease of manufacture than by health requirements — it is this mass concentration in one and the same workshop that acts, on the one hand, as a source of greater profits for the capitalist and, on the other, unless counteracted by a reduced number of hours and special precautions, as the cause of the squandering of the lives and health of the labourers.

Dr. Simon formulates the following rule and backs it up with abundant statistics:

"In proportion as the people of a district are attracted to any collective indoor occupation, in such proportion, other things being equal, the district death rate by lung diseases will be increased" (p. 23). The cause is bad ventilation. "And probably in all England there is no exception to the rule, that, in every district which has a large indoor industry, the increased mortality of the workpeople is such as to colour the death return of the whole district with a marked excess of lung disease" (p. 23).

Mortality figures for industries carried on in enclosed places, collected by the Board of Health in 1860 and 1861, indicate that for the same number of men between the ages of 15 and 55, for which the death rate from consumption and other pulmonary diseases in English agricultural districts is 100, the death rate in Coventry is 163, in Blackburn and Skipton 167, Congleton and Bradford 168, Leicester 171, Leek 182, Macclesfield 184, Bolton 190, Nottingham 192, Roch-dale 193, Derby 198, Salford and Ashton-under-Lyne 203, Leeds 218, Preston 220, and Manchester 263 (p. 24). The following table presents a still more striking illustration.

District	Chief industry	Deaths from pulmonary diseases between the ages of 15 and 25, per 100,000 population	
		Men	Women
Berkhampstead	Straw plaiting (women)	219	578
Leighton Buzzard	Straw plaiting (women)	309	554
Newport Pagnell	Lace manufacture (women)	301	617
Towcester	Lace manufacture (women)	239	577
Yeovil	Manufacture of gloves (mainly women)	280	409
Leek	Silk industry (predominantly women).	437	856
Congleton	Silk industry (predominantly women) .	566	790
Macclesfield Healthy country	Silk industry (predominantly women) .	593	890
district	Agriculture	331	333

It shows the death rate for pulmonary diseases separately for both sexes between the ages of 15 and 25 computed for every 100,000 population. In the districts selected only women are employed in industries carried on in enclosed places, while men work in all other possible lines.<sup>a</sup>

In the silk districts, where more men are employed in the factory, their mortality is also higher. The death rate from consumption, etc., for both sexes, reveals, as the report says,

"the ATROCIOUS  $^{\rm b}$  sanitary circumstances under which much of our silk industry is conducted".

And it is in this same silk industry that the manufacturers, pleading exceptionally favourable and sanitary conditions in their establishments, demanded by way of an exception, and partially obtained, long working hours for children under 13 years of age (Buch I, Kap. VIII, 6, S.  $296/286^{\circ}$ ).

"Probably no industry which has yet been investigated has afforded a worse picture than that which Dr. Smith gives of tailoring: -- 'Shops vary much in their sanitary conditions, but almost universally are overcrowded and ill-ventilated, and in a high degree unfavourable to health .... Such rooms are necessarily warm; but when the gas is lit, as during the day-time on foggy days, and at night during the winter, the heat increases to  $80^{\circ}$  and even to upwards of  $90^{\circ}$ , (Fahrenheit, = 27-33° C), 'causing profuse perspiration, and condensation of vapour upon the panes of glass, so that it runs down in streams or drops from the roof, and the operatives are compelled to keep some windows open, at whatever risk to themselves of taking cold.' And he gives the following account of what he found in 16 of the most important West End shops.-- 'The largest cubic space in these ill-ventilated rooms allowed to each operative is 270 feet, and the least 105 feet, and in the whole averages only 156 feet per man. In one room, with a gallery running round it, and lighted only from the roof, from 92 to upwards of 100 men are employed, where a large number of gaslights burn, and where the urinals are in the closest proximity, the cubic space does not exceed 150 feet per man. In another room, which can only be called a kennel in a yard, lighted from the roof, and ventilated by a small skylight opening, five to six men work in a space of 112 cubic feet per man.' ... Tailors, in those ATROCIOUS<sup>d</sup> workshops which Dr. Smith describes, work generally for about 12 or 13 hours a day, and at some times the work will be continued for 15 or 16 hours" (pp. 25, 26, 28).

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 475-76. - <sup>b</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent. - <sup>c</sup> English edition: Ch. X, 6 (see present edition, Vol. 35, pp. 297-98). - <sup>d</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.

Number of persons employed	Branches of industry and locality	Death rate per 100,000 between the ages of		
		25-35	35-45	45-55
958,265	Agriculture, England and Wales	743	805	1,145
22,301 men and } 12,377 women }	Tailoring, London	958	1,262	2,093
13,803	Type-settersandprinters,London	894	1,747	2,367

(p. 30). It must be noted, and has in fact been remarked by John Simon, chief of the Medical Department and author of the report, that the mortality rate for tailors, type-setters, and printers of London between the ages of 25 and 35 was cited lower than the real figure, because London employers in both lines of business have a large number of young people (probably up to 30 years of age) from the country engaged as apprentices and "IMPROVERS", i. e., men getting additional training. These swell the number of hands for which the London industrial death rates are computed. But they do not proportionally contribute to the number of deaths in London because their stay there is only temporary. If they fall ill during this period, they return to their homes in the country, where their death is registered if they die. This circumstance affects the earlier ages still more and renders the London death rates for these age groups completely valueless as indexes of the ill-effects of industry on health (p. 30).

The case of the type-setters is similar to that of the tailors. In addition to lack of ventilation, to poisoned air, etc., there is still nightwork to be mentioned. Their regular working time is 12 to 13 hours, sometimes 15 to 16.

"Great heat and foulness which begin when the gas-jets are lit. ... It not infrequently happens that fumes from a foundry, or foul odours from machinery or sinks, rise from the lower room, and aggravate the evils of the upper one. The heated air of the lower rooms always tends to heat the upper by warming the floor, and when the rooms are low, and the consumption of gas great, this is a serious evil, and one only surpassed in the case where the steam-boilers are placed in the lower room, and supply unwishedfor heat to the whole house.... As a general expression, it may be stated that universally the ventilation is defective, and quite insufficient to remove the heat and the products of the combustion of gas in the evening and during the night, and that in many offices, and particularly in those made from dwelling-houses, the condition is most deplorable. ... And in some offices (especially those of weekly newspapers) there will be work — work too, in which boys between 12 and 16 years of age take equal part — for almost uninterrupted periods of two days and a night at a time; — while, in other printing-offices which lay themselves out for the doing of 'urgent' business, Sunday gives no relaxation to the workman, and his working days become seven instead of six in every week" (pp. 26, 28).

The MILLINERS and DRESSMAKERS<sup>a</sup> have already attracted our attention in Book I (Kap. VIII, 3, S. 249/241)<sup>b</sup> in respect to overwork. Their workshops are described in our report by Dr. Ord. Even if better during the day, they become overheated, FOUL,<sup>c</sup> and unhealthy during the hours in which gas is burned. Dr. Ord found in 34 shops of the better sort that the average number of cubic feet per worker was as follows:

"... In four cases more than 500, in four other cases from 400 to 500, ... in seven others from 200 to 250, in four others from 150 to 200, and in nine others only from 100 to 150. The largest of these allowances would but be scanty for continuous work, unless the space were thoroughly well ventilated; and, except with extraordinary ventilation, its atmosphere could not be tolerably wholesome during gas-light."

And here is Dr. Ord's remark about one of the minor workshops which he visited, operated for the account of a MIDDLEMAN<sup>c</sup>:

"One room, area in cubical feet, 1,280; persons present, 14; area to each, in cubical feet, 91.5. The women here were weary-looking and squalid; their earnings were stated to be 7s. to 15s. a week, and their tea. ... Hours 8 a. m. to 8 p. m. The small room into which these 14 persons were crowded was ill-ventilated. There were two movable windows and a fire-place, but the latter was blocked up, and there was no special ventilation of any kind" (p. 27).

The same report states with reference to the overwork of milliners and dressmakers:

"... The overwork of the young women in fashionable dressmaking establishments does not, for more than about four months of the year, prevail in that monstrous degree which has on many occasions excited momentary public surprise and indignation; but for the indoor hands during these months it will, as a rule, be of full 14 hours a day, and will, when there is pressure, be, for days together, of 17 or even 18 hours. At other times of the year the work of the indoor hands ranges probably from 10 to 14 hours; and uniformly the hours for outdoor hands are 12 or 13. For mantle-makers, collar-makers, shirt-makers, and various other classes of needleworkers (including persons who work at the sewing-machine) the hours; but, says Dr. Ord, the regular hours of work are subject to considerable extension in certain houses at certain times, by the practice of working extra hours for extra pay, and in other houses by the practice of taking work away

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition these English words are given in parentheses after their German equivalents. - <sup>b</sup> English edition: Ch. X, 3 (see present edition, Vol. 35, pp. 261-62). - <sup>c</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.

from houses of business, to be done after hours at home, both practices being, it may be added, often compulsory" (p. 28).

#### John Simon remarks in a footnote to this page:

"Mr. Radcliffe, ... the Honorary Secretary of the EPIDEMIOLOGICAL SOCIETY, ... happening to have unusual opportunities for questioning the young women employed in first-class houses of business ... has found that in only one out of twenty girls examined who called themselves 'quite well' could the state of health be pronounced good; the rest exhibiting in various degrees evidences of depressed physical power, nervous exhaustion, and numerous functional disorders thereupon dependent. He attributes these conditions in the first place to the length of the hours of work — the minimum of which he estimates at 12 hours a day out of the season; and secondarily to ... crowding and bad ventilation of workrooms, gas-vapours, insufficiency or bad quality of food, and inattention to domestic comfort."

# The conclusion arrived at by the chief of the English Board of Health is that

"it is practically impossible for workpeople to insist upon that which in theory is their first sanitary right — the right that whatever work their employer assembles them to do, shall, so far as depends upon him, be, at his cost, divested of all needlessly unwholesome circumstances; ... while workpeople are practically unable to exact that sanitary justice for themselves, they also (notwithstanding the presumed intentions of the law) cannot expect any effectual assistance from the appointed administrators of the NUISANCES REMOVAL ACTS" (p. 29).- "Doubtless there may be some small technical difficulty in defining the exact line at which employers shall become subject to regulation. But ... in principle, the sanitary claim is universal. And in the interest of myriads of labouring men and women, whose lives are now needlessly afflicted and shortened by the infinite physical suffering which their mere employment engenders, I would venture to express my hope, that universally the sanitary circumstances of labour may, at least so far, be brought within appropriate provisions of law, that the effective ventilation of all indoor workplaces may be ensured, and that in every naturally insalubrious occupation the specific health-endangering influence may as far as practicable be reduced" (p. 31).

#### III. ECONOMY IN THE GENERATION AND TRANSMISSION OF POWER, AND IN BUILDINGS

In his October 1852 report L. Horner quotes a letter of the famous engineer James Nasmyth of Patricroft, the inventor of the steamhammer, which, among other things, contains the following <sup>a</sup>:

"... The public are little aware of the vast increase in driving power which has been obtained by such changes of system and improvements" (of steam-engines) "as I allude

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, p. 470.

to. The engine power of this district" (Lancashire) "lay under the incubus of timid and prejudiced traditions for nearly forty years, but now we are happily emancipated. During the last fifteen years, but more especially in the course of the last four years" (since 1848), "some very important changes have taken place in the system of working condensing steam-engines. ... The result ... has been to realise a much greater amount of duty or work performed by the identical engines, and that again at a very considerable reduction of the expenditure of fuel. ... For a great many years after the introduction of steam-power into the mills and manufactories of the above-named districts, the velocity of which it was considered proper to work condensing steam-engines was about 220 feet per minute of the piston; that is to say, an engine with a 5-feet stroke was restricted by 'rule' to make 22 revolutions of the crankshaft per minute. Beyond this speed it was not considered prudent or desirable to work the engine; and as all the mill gearing ... were made suitable to this 220 feet per minute speed of piston, this slow and absurdly restricted velocity ruled the working of such engines for many years. However, at length, either through fortunate ignorance of the 'rule', or by better reasons on the part of some bold innovator, a greater speed was tried, and as the result was highly favourable, others followed the example, by, as it is termed, 'letting the engine away', namely, by so modifying the proportions of the first motion wheels of the mill gearing as to permit the engine to run at 300 feet and upwards per minute, while the mill gearing generally was kept at its former speed.... This 'letting the engine away'... has led to the almost universal 'speeding' of engines, because it was proved that not only was there available power gained from the identical engines, but also as the higher velocity of the engine yielded a greater momentum in the fly-wheel the motion was found to be much more regular .... We ... obtain more power from a steamengine by simply permitting its piston to move at a higher velocity (pressure of steam and vacuum in the condenser remaining the same).... Thus, for example, suppose any given engine yields 40 horse-power when its piston is travelling at 200 feet per minute, if by suitable arrangement or modification we can permit this same engine to run at such a speed as that its piston will travel through space at 400 feet per minute (pressure of steam and vacuum, as before said, remaining the same), we shall then have just double the power ... and as the pressure by steam and vacuum is the same in both cases, the strain upon the parts of this engine will be no greater at 400 than at 200 feet speed of piston, so that the risk of 'break-down' does not materially increase with the increase of speed. All the difference is, that we shall in such case consume steam at a rate proportional to the speed of piston, or nearly so; and there will be some small increase in the wear and tear of 'the brasses' or rubbing-parts, but so slight as to be scarcely worth notice.... But in order to obtain increase of power from the same engine by permitting its piston to travel at a higher velocity it is requisite ... to burn more coal per hour under the same boiler, or employ boilers of greater evaporating capabilities, i.e., greater steam-generating powers. This accordingly was done, and boilers of greater steam-generating or water-evaporating powers were supplied to the old 'speeded' engines, and in many cases near 100 per cent more work was got out of the identical engines by means of such changes as above named. About ten years ago the extraordinary economical production of power as realised by the engines employed in the mining operations of Cornwall began to attract attention; and as competition in the spinning trade forced manufacturers to look to 'savings' as the chief source of profits, the remarkable difference in the consumption of coal per horse-power per hour, as indicated by the performance of the Cornish engines, as also the extraordinary economical performance of Woolf's doublecylinder engines, began to attract increased attention to the subject of economy of fuel
in this district, and as the Cornish and double-cylinder engines gave a horse-power for every  $3\frac{1}{2}$  to 4 pounds of coal per hour, while the generality of cotton-mill engines were consuming 8 or 12 pounds per horse per hour, so remarkable a difference induced mill-owners and engine-makers in this district to endeavour to realise, by the adoption of similar means, such extraordinary economical results as were proved to be common in Cornwall and France, where the high price of coal had compelled manufacturers to look more sharply to such costly departments of their establishments. The result of this increased attention to economy of fuel has been most important in many respects. In the first place, many boilers, the half of whose surface had been in the good old times of high profits left exposed quite naked to the cold air, began to get covered with thick blankets of felt, and brick and plaster, and other modes and means whereby to prevent the escape of that heat from their exposed surface which had cost so much fuel to maintain. Steam-pipes began to be 'protected' in the same manner, and the outside of the cylinder of the engine felted and cased in with wood in like manner. Next came the use of 'high steam', namely, instead of having the safety-valve loaded so as to blow off at 4, 6, or 8 lbs to the square inch, it was found that by raising the pressure to 14 or 20 lbs ... a very decided economy of fuel resulted; in other words, the work of the mill was performed by a very notable reduced consumption of coals, ... and those who had the means and the boldness carried the increased pressure and 'expansion system' of working to the full extent, by employing properly constructed boilers to supply steam of 30, 40, 50, 60, and 70 lbs to the square inch; pressures which would have frightened an engineer of the old school out of his wits. But as the economic results of so increasing the pressure of steam ... soon appeared in most unmistakable  $f_i$  s. d. forms, the use of high-pressure steam-boilers for working condensing engines became almost general. And those who desired to go to the full extent ... soon adopted the employment of the Woolf engine in its full integrity, and most of our mills lately built are worked by the Woolf engines, namely, those on which there are two cylinders to each engine, in one of which the high-pressure steam from the boiler exerts or yields power by its excess of pressure over that of the atmosphere, which, instead of the said high-pressure steam being let pass off at the end of each stroke free into the atmosphere, is caused to pass into a low-pressure cylinder of about four times the area of the former, and after due expansion passes to the condenser, the economic result obtained from engines of this class is such that the consumption of fuel is at the rate of from  $3\frac{1}{2}$  to 4 lbs of coal per horse per hour; while in the engines of the old system the consumption used to be on the average from 12 to 14 lbs per horse per hour. By an ingenious arrangement, the Woolf system of double cylinder or combined low- and high-pressure engine has been introduced extensively to already existing engines, whereby their performance has been increased both as to power and economy of fuel. The same result ... has been in use these eight or ten years, by having a high-pressure engine so connected with a condensing engine as to enable the waste steam of the former to pass on to and work the latter. This system is in many cases very convenient.

"It would not be very easy to get an exact return as to the increase of performance or work done by the identical engines to which some or all of these improvements have been applied; I am confident, however, ... that from the same weight of steam-engine machinery we are now obtaining at least 50 per cent more duty or work performed on the average, and that ... in many cases, the identical steam-engines which, in the days of the restricted speed of 220 feet per minute, yielded 50 horse-power, are now yielding upwards of 100. The very economical results derived from the employment of high-pressure steam in working condensing steam-engines, together with the much higher power required by mill extensions from the same engines, has within the last three years led to the adoption of tubular boilers, yielding a much more economical result than those formerly employed in generating steam for mill engines" (Reports of Insp. of Fact., October 1852, pp. 23-27).

What applies to power generation also applies to power transmission and working machinery.

"The rapid strides with which improvement in machinery has advanced within these few years have enabled manufacturers to increase production without additional moving power. The more economical application of labour has been rendered necessary by the diminished length of the working day, and in most well-regulated mills an intelligent mind is always considering in what manner production can be increased with decreased expenditure. I have before me a statement, kindly prepared by a very intelligent gentleman in my district, showing the number of hands employed, their ages, the machines at work, and the wages paid from 1840 to the present time. In October 1840, his firm employed 600 hands, of whom 200 were under 13 years of age. In October last, 350 hands were employed, of whom 60 only were under 13; the same number of machines, within very few, were at work, and the same sum in wages was paid at both periods" (Redgrave's Report in Reports of Insp. of Fact., Oct. 1852, pp. 58-59).

These improvements of the machinery do not show their full effect until they are used in new, appropriately arranged factories.

"As regards the improvement made in machinery, I may say in the first place that a great advance has been made in the construction of mills adapted to receive improved machinery.... In the bottom room I double all my yarn, and upon that single floor I shall put 29,000 doubling spindles. I effect a saving of labour in the room and shed of at least 10%, not so much from any improvement in the principle of doubling yarn, but from a concentration of machinery under a single management; and I am enabled to drive the said number of spindles by one single shaft, a saving in shafting, compared with what other firms have to use to work the same number of spindles, of 60%, in some cases 80%. There is a large saving in oil, and shafting, and in grease.... With superior mill arrangements and improved machinery, at the lowest estimate I have effected a saving in labour of 10%, a great saving in power, coal, oil, tallow, shafting and strapping" (Evidence of a cotton spinner, Reports of Insp. of Fact., Oct. 1863, pp. 109, 110).

#### IV. UTILISATION OF THE EXCRETIONS OF PRODUCTION

The capitalist mode of production extends the utilisation of the excretions of production and consumption. By the former we mean the waste of industry and agriculture, and by the latter partly the excretions produced by the natural exchange of matter in the human body and partly the form of objects that remains after their consumption. In the chemical industry, for instance, excretions of production are such by-products as are wasted in production on a smaller scale; iron filings accumulating in the manufacture of machinery and returning into the production of iron as raw material, etc. Excretions of consumption are the natural waste matter discharged by the human body, remains of clothing in the form of rags, etc. Excretions of consumption are of the greatest importance for agriculture.<sup>a</sup> So far as their utilisation is concerned, there is an enormous waste of them in the capitalist economy. In London, for instance, they find no better use for the excretion of  $4\frac{1}{2}$  million human beings than to contaminate the Thames with it at heavy expense.

Rising prices of raw materials naturally stimulate the utilisation of waste products.

The general requirements for the re-employment of these excretions are: large quantities of such waste, such as are available only in large-scale production; improved machinery whereby materials, formerly useless in their prevailing form, are put into a state fit for new production; scientific progress, particularly of chemistry, which reveals the useful properties of such waste. It is true that great savings of this sort are also observed in small-scale agriculture, as prevails in, say, Lombardy, southern China, and Japan. But on the whole, the productivity of agriculture under this system obtains from the prodigal use of human labour power, which is withheld from other spheres of production.

The so-called waste plays an important role in almost every industry. Thus, the Factory Report for December 1863 mentions as one of the principal reasons why the English and many of the Irish farmers do not like to grow flax, or do so but rarely,

"the great waste ... which has taken place at the little water SCUTCH MILLS<sup>b</sup> ... the waste in cotton is comparatively small, but in flax very large. The efficiency of water steeping and of good machine scutching will reduce this disadvantage very considerably.... Flax, scutched in Ireland in a most shameful way, and a large percentage actually lost by it, equal to 28 or 30%" (Reports of Insp. of Fact., Dec. 1863, pp. 139, 142),

whereas all this might be avoided through the use of better machinery. So much tow fell by the wayside that the factory inspector reports:

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 34, pp. 218-19. - <sup>b</sup> In the 1894 German edition these English words are given in parentheses after their German equivalents.

"I have been informed with respect to some of the scutch mills in Ireland, that the waste made at them has often been used by the scutchers to burn on their fires at home, and yet it is very valuable" (l. c., p. 140).

We shall speak of cotton waste later, when we deal with the price fluctuations of raw materials.

The wool industry was shrewder than the flax manufacturers.

"It was once the common practice to decry the preparation of waste and woollen rags for re-manufacture, but the prejudice has entirely subsided as regards the SHODDY TRADE,<sup>a</sup> which has become an important branch of the woollen trade of Yorkshire, and doubtless the cotton waste trade will be recognised in the same manner as supplying an admitted want. Thirty years since, woollen rags, i. e., pieces of cloth, old clothes, etc., of nothing but wool, would average about  $\mathcal{L}4$  4s. per ton in price: within the last few years they have become worth  $\mathcal{L}44$  per ton, and the demand for them has so increased that means have been found for utilising the rags of fabrics of cotton and wool mixed by destroying the cotton and leaving the wool intact, and now thousands of operatives are engaged in the manufacture of shoddy, from which the consumer has greatly benefited in being able to purchase cloth of a fair and average quality at a very moderate price" (Reports of Insp. of Fact., Oct. 1863, p. 107).

By the end of 1862 the rejuvenated shoddy made up as much as one-third of the entire consumption of wool in English industry (Reports of Insp. of Fact., October 1862, p. 81). The "big benefit" for the "consumer" is that his shoddy clothes wear out in just one-third of the previous time and turn threadbare in one-sixth of this time.

The English silk industry moved along the same downward path. The consumption of genuine raw silk decreased somewhat between 1839 and 1862, while that of silk waste doubled. Improved machinery helped to manufacture a silk useful for many purposes from this otherwise rather worthless stuff.

The most striking example of utilising waste is furnished by the chemical industry. It utilises not only its own waste, for which it finds new uses, but also that of many other industries. For instance, it converts the formerly almost useless gas-tar into aniline dyes, alizarin, and, more recently, even into drugs.

This economy of the excretions of production through their re-employment is to be distinguished from economy through the prevention of waste, that is to say, the reduction of excretions of production to a minimum, and the immediate utilisation to a maximum of all raw and auxiliary materials required in production.

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition these English words are given in parentheses after their German equivalents.

Reduction of waste depends in part on the quality of the machinery in use. Economy in oil, soap, etc., depends on how well the mechanical parts are machined and polished. This refers to the auxiliary materials. In part, however, and this is most important, it depends on the quality of the employed machines and tools whether a larger or smaller portion of the raw materials is turned into waste in the production process. Finally, this depends on the quality of the raw material itself. This, in turn, depends partly on the development of the extractive industry and agriculture which produce the raw material (strictly speaking on the progress of civilisation), and partly on the improvement of processes through which raw materials pass before they enter into manufacture.

"Parmentier has demonstrated that the art of grinding grain has improved very materially in France since a none too distant epoch, for instance the time of Louis XIV, so that the new mills, compared to the old, can make up to half as much more bread from the same amount of grain. The annual consumption of a Parisian, indeed, has first been estimated at 4 setiers of grain, then at 3, finally at 2, while nowadays it is only  $1\frac{1}{3}$  setiers, or about 342 lbs per capita.... In the Perche, where I have lived for a long time, the crude mills of granite and trap rock millstones have been mostly rebuilt according to the rules of mechanics which has made such rapid progress in the last 30 years. They have been provided with good millstones from La Ferté, have ground the grain twice, the milling sack has been given a circular motion, and the output of flour from the same amount of grain has increased  $\frac{1}{c}$ . The enormous discrepancy between the daily grain consumption of the Romans and ourselves is therefore easily explained. It is due simply to imperfect methods of milling and bread-making. This is the way I feel I must explain a remarkable observation made by Pliny, XVIII, Ch. 20, 2: ... 'The flour was sold in Rome, depending on its quality, at 40, 48 or 96 as per modius. These prices, so high in proportion to the contemporaneous grain prices, are due to the imperfect state of the mills of that period, which were still in their infancy, and the resultant heavy cost of milling" (Dureau de la Malle, Économie politique des Romains, Paris, 1840, I, pp. 280-81).

#### V. ECONOMY THROUGH INVENTIONS

These savings in the application of fixed capital are, we repeat, due to the employment of the conditions of labour on a large scale; in short, are due to the fact that these serve as conditions of directly social, socialised labour or direct co-operation within the process of production. On the one hand, this is the indispensable requirement for the utilisation of mechanical and chemical inventions without increasing the price of the commodity, and this is always the *conditio sine qua non*. On the other hand, only production on a large scale permits the savings derived from co-operative productive consumption. Finally, it is only the experience of the combined labourer which discovers and reveals the where and how of saving, the simplest methods of applying the discoveries, and the ways to overcome the practical frictions arising from carrying out the theory—in its application to the production process—etc.

Incidentally, a distinction should be made between universal labour and co-operative labour. Both kinds play their role in the process of production, both flow one into the other, but both are also differentiated. Universal labour is all scientific labour, all discovery and all invention. This labour depends partly on the co-operation of the living, and partly on the utilisation of the labours of those who have gone before. Co-operative labour, on the other hand, is the direct co-operation of individuals.

The foregoing is corroborated by frequent observation, to wit:

1) The great difference in the cost of the first model of a new machine and that of its reproduction (regarding which, see Ure<sup>a</sup> and Babbage<sup>b</sup>).

2) The far greater cost of operating an ESTABLISHMENT based on a new invention as compared to later ESTABLISHMENTS arising out of their ruins, ex suis ossibus. This is so very true that the trail-blazers generally go bankrupt, and only those who later buy the buildings, machinery, etc., at a cheaper price, make money out of it. It is, therefore, generally the most worthless and miserable sort of money capitalists who draw the greatest profit out of all new developments of the universal labour of the human spirit and their social application through combined labour.

## Chapter VI

### THE EFFECT OF PRICE FLUCTUATIONS

#### I. FLUCTUATIONS IN THE PRICE OF RAW MATERIALS, AND THEIR DIRECT EFFECTS ON THE RATE OF PROFIT

The assumption in this case, as in previous ones, is that no change takes place in the rate of surplus value. It is necessary to analyse

<sup>&</sup>lt;sup>a</sup> See this volume, p.84. - <sup>b</sup> Ch. Babbage, *Traité sur l'economie des machines et des manufactures*, Paris, 1833, pp. 377-78 (cf. present edition, Vol. 33, p. 350 and Vol. 35, p. 408).

the case in its pure form. However, it might be possible for a specific capital, whose rate of surplus value remains unchanged, to employ an increasing or decreasing number of labourers, in consequence of contraction or EXPANSION caused by such fluctuations in the price of raw materials as we are to analyse here. In that case the quantity of surplus value might vary, while the rate of surplus value remains the same. Yet this should also be disregarded here as a side-issue. If improvements of machinery and changes in the price of raw materials simultaneously influence either the number of labourers employed by a definite capital, or the level of wages, one has but to put together 1) the effect caused by the variations of constant capital on the rate of profit, and 2) the effect caused by variations in wages on the rate of profit. The result is then obtained of itself.

But in general, it should be noted here, as in the previous case, that if variations take place, either due to savings in constant capital, or due to fluctuations in the price of raw materials, they always affect the rate of profit, even if they leave the wage, hence the rate and amount of surplus value, untouched. They change the magnitude of C in s'  $\frac{v}{C}$ , and thus the value of the whole fraction. It is therefore immaterial, in this case as well—in contrast to what we found in our analysis of surplus value—in which sphere of production these variations occur; whether or not the production branches affected by them produce necessities for labourers, or constant capital for the production of such necessities. The deductions made here are equally valid for variations occurring in the production of luxury articles, and by luxury articles we here mean all production that does not serve the reproduction of labour power.

The raw materials here include auxiliary materials as well, such as indigo, coal, gas, etc. Furthermore, so far as machinery is concerned under this head, its own raw material consists of iron, wood, leather, etc. Its own price is therefore affected by fluctuations in the price of raw materials used in its construction. To the extent that its price is raised through fluctuations, either in the price of the raw materials of which it consists, or of the auxiliary materials consumed in its operation, the rate of profit falls *pro tanto*. And vice versa.

In the following analysis we shall confine ourselves to fluctuations in the price of raw materials, not so far as they go to make up the raw materials of machinery serving as means of labour or as auxiliary materials applied in its operation, but in so far as they are raw materials entering the process in which commodities are produced. There is just one thing to be noted here: the natural wealth in iron, coal, wood, etc., which are the principal elements used in the construction and operation of machinery, presents itself here as a natural fertility of capital and is a factor determining the rate of profit irrespective of the high or low level of wages.

Since the rate of profit is  $\frac{s}{C}$ , or  $\frac{s}{c+v}$ , it is evident that everything causing a variation in the magnitude of c, and thereby of C, must also bring about a variation in the rate of profit, even if s and v, and their mutual relation, remain unaltered. Now, raw materials are one of the principal components of constant capital. Even in industries which consume no actual raw materials, these enter the picture as auxiliary materials or components of machinery, etc., and their price fluctuations thus pro tanto influence the rate of profit. Should the price of raw material fall by an amount = d, then  $\frac{s}{C}$ , or  $\frac{s}{c+v}$ , becomes  $\frac{s}{C-d}$ , or  $\frac{s}{(c-d)+v}$ . Thus, the rate of profit rises. Conversely, if the price of raw material rises, then  $\frac{s}{C}$ , or  $\frac{s}{c+v}$ , becomes  $\frac{s}{C+d}$ , or  $\frac{s}{(c+d)+v}$ , and the rate of profit falls. Other conditions being equal, the rate of profit, therefore, falls and rises inversely to the price of raw material. This shows, among other things, how important the low price of raw material is for industrial countries, even if fluctuations in the price of raw materials are not accompanied by variations in the sales sphere of the product, and thus quite aside from the relation of demand to supply. It follows furthermore that foreign trade influences the rate of profit, regardless of its influence on wages through the cheapening of the necessities of life. The point is that it affects the prices of raw or auxiliary materials consumed in industry and agriculture. It is due to an as yet imperfect understanding of the nature of the rate of profit and of its specific difference from the rate of surplus value that, on the one hand, economists (like Torrens<sup>a</sup>) wrongly explain the marked influence of the prices of raw material on the rate of profit, which they note through practical experience, and that, on the other, economists like Ricardo,<sup>b</sup> who cling to general principles, do not recognise the influence of, say, world trade on the rate of profit.

<sup>&</sup>lt;sup>a</sup> R. Torrens, An Essay on the Production of Wealth, London, 1821, p. 28 et seq. Cf. present edition, Vol. 32, pp. 262-63. - <sup>b</sup> D. Ricardo, On the Principles of Political Economy, and Taxation, Third edition, London, 1821, pp. 131-38. Cf. present edition, Vol. 32, pp. 71-72.

This makes clear the great importance to industry of the elimination or reduction of customs duties on raw materials. The rational development of the protective tariff system made the utmost reduction of import duties on raw materials one of its cardinal principles. This, and the abolition of the duty on corn,<sup>22</sup> was the main object of the English FREE-TRADERS, who were primarily concerned with having the duty on cotton lifted as well.

The use of flour in the cotton industry may serve as an illustration of the importance of a price reduction for an article which is not strictly a raw material but an auxiliary and at the same time one of the principal elements of nourishment. As far back as 1837, **R**. H. Greg<sup>13)</sup> calculated that the 100,000 power-looms and 250,000 hand-looms then operating in the cotton-mills of Great Britain annually consumed 41 million lbs of flour to smooth the warp. He added a third of this quantity for bleaching and other processes, and estimated the total annual value of the flour so consumed at £342,000 for the preceding 10 years. A comparison with flour prices on the continent showed that the higher flour price forced upon manufacturers by corn tariffs alone amounted to £170,000 per year. Greg estimated the sum at a minimum of £200,000 for 1837 and cited a firm for which the flour price difference amounted to £1,000 annually. As a result,

"great manufacturers, thoughtful, calculating men of business, have said that ten hours' labour would be quite sufficient, if the Corn Laws were repealed" (Reports of Insp. of Fact., Oct. 1848, p. 98).

The Corn Laws were repealed. So were the duties on cotton and other raw materials. But no sooner had this been accomplished than the opposition of the manufacturers to the Ten Hours' Bill<sup>23</sup> became more violent than ever. And when the ten-hour factory day nevertheless became a law soon after, the first result was a general attempt to reduce wages.

The value of raw and auxiliary materials passes entirely and all at one time into the value of the product in the manufacture of which they are consumed, while the elements of fixed capital transfer their value to the product only gradually in proportion to their wear and tear. It follows that the price of the product is influenced far more by the price of raw materials than by that of fixed capital, although the

<sup>13)</sup> The Factory Question and the Ten Hours' Bill by R.H. Greg, London, 1837, p. 115.

rate of profit is determined by the total value of the capital applied no matter how much of it is consumed in the making of the product. But it is evident — although we merely mention it in passing, since we here still assume that commodities are sold at their values, so that price fluctuations caused by competition do not as yet concern us that the expansion or contraction of the market depends on the price of the individual commodity and is inversely proportional to the rise or fall of this price. It actually develops, therefore, that the price of the finished product does not rise in proportion to that of the raw material, and that it does not fall in proportion to that of raw material. Consequently, the rate of profit falls lower in one instance, and rises higher in the other than would have been the case if commodities were sold at their value.

Further, the quantity and value of the employed machinery grows with the development of the productive power of labour but not in the same proportion as this productive power, i.e., not in the proportion in which this machinery increases its output. In those branches of industry, therefore, which do consume raw materials, i.e., in which the subject of labour is itself a product of previous labour, the growing productive power of labour is expressed precisely in the proportion in which a larger quantity of raw material absorbs a definite quantity of labour, hence in the increasing amount of raw material converted in, say, one hour into products, or processed into commodities. The value of raw material, therefore, forms an ever-growing component of the value of the commodity product in proportion to the development of the productive power of labour, not only because it passes wholly into this latter value, but also because in every aliquot part of the aggregate product the portion representing depreciation of machinery and the portion formed by the newly added labour — both continually decrease. Owing to this falling tendency, the other portion of the value representing raw material increases proportionally, unless this increase is counterbalanced by a proportionate decrease in the value of the raw material arising from the growing productivity of the labour employed in its own production.

Further, raw and auxiliary materials, just like wages, form parts of the circulating capital and must, therefore, be continually replaced in their entirety through the sale of the product, while only the depreciation is to be renewed in the case of machinery, and first of all in the form of a reserve fund. It is, moreover, in no way essential for each individual sale to contribute its share to this reserve fund, so long as the total annual sales contribute their annual share. This shows again how a rise in the price of raw material can curtail or arrest the entire process of reproduction if the price realised by the sale of the commodities should not suffice to replace all the elements of these commodities. Or, it may make it impossible to continue the process on the scale required by its technical basis, so that only a part of the machinery will remain in operation, or all the machinery will work for only a fraction of the usual time.

Finally, the expense incurred through waste varies in direct proportion to the price fluctuations of the raw material, rising when they rise and falling when they fall. But there is a limit here as well. In 1850 it was still maintained:

"One source of considerable loss arising from an advance in the price of the raw material would hardly occur to any one but a practical spinner, viz., that from waste. I am informed that when cotton advances, the cost to the spinner, of the lower qualities especially, is increased in a ratio beyond the advance actually paid, because the waste made in spinning coarse yarns is fully 15 per cent; and this rate, while it causes a loss of  $-\frac{1}{2}$  d. per lb. on cotton at  $3\frac{1}{2}$  d. per lb., brings up the loss to ld. per lb. when cotton advances to 7d" (Reports of Insp. of Fact., April 1850, p. 17).

But when, as a result of the American Civil War, the price of cotton rose to a level unequalled in almost 100 years, the report read differently:

"The price now given for waste, and its re-introduction in the factory in the share of cotton waste, go some way to compensate for the difference in the loss by waste, between Surat cotton and American cotton, about  $12 \frac{1}{2}$  per cent.

"The waste in working Surat cotton being 25 per cent, the cost of the cotton to the spinner is enhanced one-fourth before he has manufactured it. The loss by waste used not to be of much moment when American cotton was 5d. or 6d. per lb., for it did not exceed  $-\frac{3}{4}$  d. per lb., but it is now of great importance when upon every lb. of cotton which costs 2s. there is a loss by waste equal to 6d."<sup>14</sup> (Reports of Insp. of Fact., Oct. 1863, p. 106).

<sup>14</sup>) The report errs in the final sentence. Instead of 6d. it should be 3d. for loss through waste. This loss amounts to 25% in the case of Surat, and only  $12^{1}/_{2}$  to 15% in the case of American cotton, and this latter is meant, the same percentage having been correctly calculated for the price of 5 to 6d. It is true, however, that also in the case of American cotton brought to Europe during the latter years of the Civil War the proportion of waste often rose considerably higher than before.— *F. E.* 

#### II. APPRECIATION, DEPRECIATION, RELEASE AND TIE-UP OF CAPITAL

The phenomena analysed in this chapter require for their full development the credit system and competition on the world market, the latter being the basis and the vital element of capitalist production. These more definite forms of capitalist production can only be comprehensively presented, however, after the general nature of capital is understood. Furthermore, they do not come within the scope of this work and belong to its eventual continuation.<sup>1</sup> Nevertheless the phenomena listed in the above title may be discussed in a general way at this stage. They are interrelated, first with one another and, secondly, also with the rate and amount of profit. They are to be briefly discussed here if only because they create the impression that not only the rate, but also the amount of profit—which is actually identical with the amount of surplus value—could increase or decrease independently of the movements of the quantity or rate of surplus value.

Are we to consider release and tie-up of capital, on the one hand, and its appreciation and depreciation, on the other, as different phenomena?

The question is what we mean by release and tie-up of capital? Appreciation and depreciation are self-explanatory. All they mean is that a given capital increases or decreases in value as a result of certain general economic conditions, for we are not discussing the particular fate of an individual capital. All they mean, therefore, is that the value of a capital invested in production rises or falls, irrespective of its self-expansion by virtue of the surplus labour employed by it.

By tie-up of capital we mean that certain portions of the total value of the product must be reconverted into elements of constant and variable capital if production is to proceed on the same scale. By release of capital we mean that a portion of the total value of the product which had to be reconverted into constant or variable capital up to a certain time, becomes disposable and superfluous, should production continue on the previous scale. This release or tie-up of capital is different from the release or tie-up of revenue. If the annual surplus value of an individual capital C is, let us say, equal to x, then a reduction in the price of commodities consumed by the capitalists would make x - a sufficient to procure the same enjoyments, etc., as before. A portion of the revenue = a is released, therefore, and may serve either to increase consumption or to be reconverted into capital (for the purpose of accumulation). Conversely, if x + a is needed to continue to live as before, then this standard of living must either be reduced or a portion of the previously accumulated income = a, expended as revenue.

Appreciation and depreciation may affect either constant or variable capital, or both, and in the case of constant capital it may, in turn, affect either the fixed, or the circulating portion, or both.

Under constant capital we must consider the raw and auxiliary materials, including semi-finished products, all of which we here include under the term of raw materials, machinery, and other fixed capital.

In the preceding analysis we referred especially to VARIATIONS in the price, or the value, of raw materials in respect to their influence on the rate of profit, and determined the general law that with other conditions being equal, the rate of profit is inversely proportional to the value of the raw materials. This is absolutely true for capital newly invested in a business enterprise, in which the investment, i. e., the conversion of money into productive capital, is only just taking place.

But aside from this capital, which is being newly invested, a large portion of the already functioning capital is in the sphere of circulation, while another portion is in the sphere of production. One portion is in the market in the shape of commodities waiting to be converted into money; another is on hand as money, in whatever form, waiting to be reconverted into elements of production; finally, a third portion is in the sphere of production, partly in its original form of means of production such as raw and auxiliary materials, semi-finished products purchased in the market, machinery and other fixed capital, and partly in the form of products which are in the process of manufacture. The effect of appreciation or depreciation depends here to a great extent on the relative proportion of these component parts. Let us, for the sake of simplicity, leave aside all fixed capital and consider only that portion of constant capital which consists of raw and auxiliary materials, and semi-finished products, and both finished commodities in the market and commodities still in the process of production.

If the price of raw material, for instance of cotton, rises, then the price of cotton goods—both semi-finished goods like yarn and finished goods like cotton fabrics—manufactured while cotton was cheaper, rises also. So does the value of the unprocessed cotton held in stock and of the cotton in the process of manufacture. The latter because it comes to represent more labour time in retrospect and thus adds more than its original value to the product which it enters, and more than the capitalist paid for it.

Hence, if the price of raw materials rises, and there is a considerable quantity of available finished commodities in the market, no matter what the stage of their manufacture, the value of these commodities rises, thereby enhancing the value of the existing capital. The same is true for the supply of raw materials, etc., in the hands of the producer. This appreciation of value may compensate, or more than compensate, the individual capitalist, or even an entire separate sphere of capitalist production, for the drop in the rate of profit attending a rise in the price of raw materials. Without entering into the detailed effects of competition, we might state for the sake of thoroughness that 1) if available supplies of raw material are considerable, they tend to counteract the price increase which occurred at the place of their origin; 2) if the semi-finished and finished goods press very heavily upon the market, their price is thereby prevented from rising proportionately to the price of their raw materials.

The reverse takes place when the price of raw materials falls. Other circumstances remaining the same, this increases the rate of profit. The commodities in the market, the articles in the process of production, and the available supplies of raw material, depreciate in value and thereby counteract the attendant rise in the rate of profit.

The effect of price variations for raw materials is the more pronounced, the smaller the supplies available in the sphere of production and in the market at, say, the close of a business year, i. e., after the harvest in agriculture, when great quantities of raw materials are delivered anew.

We proceed in this entire analysis from the assumption that the rise or fall in prices expresses actual fluctuations in value. But since we are here concerned with the effects such price variations have on the rate of profit, it matters little what is at the bottom of them. The present statements apply equally if prices rise or fall under the influence of the credit system, competition, etc., and not on account of fluctuations in value.

Since the rate of profit equals the ratio of the excess over the value of the product to the value of the total capital advanced, a rise caused in the rate of profit by a depreciation of the advanced capital would be associated with a loss in the value of capital. Similarly, a drop caused in the rate of profit by an appreciation of the advanced capital might possibly be associated with a gain.

As for the other portion of constant capital, such as machinery and fixed capital in general, the appreciation of value taking place in it with respect mainly to buildings, real estate, etc., cannot be discussed without the theory of ground rent, and does not therefore belong in this chapter. But of a general importance to the question of depreciation are:

The continual improvements which lower the use value, and therefore the value, of existing machinery, factory equipment, etc. This process has a particularly dire effect during the first period of newly introduced machinery, before it attains a certain stage of maturity, when it continually becomes antiquated before it has time to reproduce its own value. This is one of the reasons for the flagrant prolongation of the working time usual in such periods, for alternating day and night shifts, so that the value of the machinery may be reproduced in a shorter time without having to place the figures for wear and tear too high. If, on the other hand, the short period in which the machinery is effective (its short life vis-à-vis the anticipated improvements) is not compensated in this manner, it gives up so much of its value to the product through moral depreciation that it cannot compete even with hand labour.<sup>15</sup>)

After machinery, equipment of buildings, and fixed capital in general, attain a certain maturity, so that they remain unaltered for some length of time at least in their basic construction, there arises a similar depreciation due to improvements in the methods of reproducing this fixed capital. The value of the machinery, etc., falls in this case not so much because the machinery is rapidly crowded out or depreciated to a certain degree by new and more productive machinery, etc., but because it can be reproduced more cheaply. This is one of the reasons why large enterprises frequently do not flourish until they pass into other hands, i. e., after their first proprietors have been bankrupted, and their successors, who buy them cheaply, therefore begin from the outset with a smaller outlay of capital.

It leaps to the eye, particularly in the case of agriculture, that the

<sup>&</sup>lt;sup>15</sup>) For examples see Babbage,<sup>24</sup> among others. The usual expedient — a reduction of wages — is also employed in this instance, so that this continual depreciation acts quite contrary to the dreams of Mr. Carey's "harmonious brain".<sup>25</sup>

causes which raise or lower the price of a product, also raise or lower the value of capital, since the latter consists to a large degree of this product, whether as grain, cattle, etc. (Ricardo<sup>a</sup>).

There is still variable capital to be considered.

Inasmuch as the value of labour power rises because there is a rise in the value of the means of subsistence required for its reproduction, or falls because there is a reduction in their value — and the appreciation and depreciation of variable capital are really nothing more than expressions of these two cases — a drop in surplus value corresponds to such appreciation and an increase in surplus value to such depreciation, provided the length of the working day remains the same. But other circumstances — the release and tie-up of capital — may also be associated with such cases, and since we have not analysed them so far, we shall briefly mention them now.

If wages fall in consequence of a depreciation in the value of labour power (which may even be attended by a rise in the real price of labour), a portion of the capital hitherto invested in wages is released. Variable capital is set free. In the case of new investments of capital, this has simply the effect of its operating with a higher rate of surplus value. It takes less money than before to set in motion the same amount of labour, and in this way the unpaid portion of labour increases at the expense of the paid portion. But in the case of already invested capital, not only does the rate of surplus value rise but a portion of the capital previously invested in wages is also released. Until this time it was tied up and formed a regular portion which had to be deducted from the proceeds for the product and advanced for wages, acting as variable capital if the business were to continue on its former scale. Now this portion becomes disposable and may be used as a new investment, be it to extend the same business or to operate in some other sphere of production.

Let us assume, for instance, that £500 per week were required at first to employ 500 labourers, and that now only £400 are needed for the same purpose. If the quantity of value produced in either case = £1,000, the amount of weekly surplus value in the first case = £500 and the rate of surplus value  $\frac{500}{500} = 100\%$ . But after the

<sup>&</sup>lt;sup>a</sup> D. Ricardo, On the Principles of Political Economy, and Taxation, Third edition, London, 1821, pp. 123-24. Cf. present edition, Vol. 32, pp. 172-73.

wage reduction the quantity of surplus value  $\pounds 1,000 - \pounds 400 = \pounds 600$ , and its rate  $\frac{600}{400} = 150\%$ . And this increase in the rate of surplus value is the only effect for one who starts a new enterprise in this sphere of production with a variable capital of  $\pounds 400$  and a corresponding constant capital. But when this takes place in a business already in operation, the depreciation of the variable capital does not only increase the quantity of surplus value from  $\pounds 500$  to  $\pounds 600$ , and the rate of surplus value from 100 to 150%, but releases  $\pounds 100$  of the variable capital for the further exploitation of labour. Hence, the same amount of labour is exploited to greater advantage, and, what is more, the release of  $\pounds 100$  makes it possible to exploit more labourers than before at the higher rate with the same variable capital of  $\pounds 500$ .

Now the reverse situation. Suppose, with 500 employed labourers, the original proportion in which the product is divided =  $400_{v}$ +  $600_s = 1,000$ , making the rate of surplus value = 150%. In that case, the labourer receives  $\pounds^4/_5$ , or 16 shillings per week. Should 500 labourers cost £500 per week, due to an appreciation of variable capital, each one of them will receive a weekly wage =  $f_1$ , and  $f_2$ 400 can employ only 400 labourers. If the same number of labourers as before is put to work, therefore, we have  $500_v + 500_s = 1,000$ . The rate of surplus value would fall from 150 to 100%, which is  $\frac{1}{3}$ . In the case of new capital the only effect would be this lower rate of surplus value. Other conditions being equal, the rate of profit would also have fallen accordingly, although not in the same proportion. For instance, if c = 2,000, we have in the one case  $2,000_c + 400_v$ Instance, if c = 2,000, we have in the one case 2,000, i 100,  $+ 600_s = 3,000; s' = 150\%$ ,  $p' = \frac{600}{2,400} = 25\%$ . In the second case,  $2,000_c + 500_v + 500_s = 3,000; s' = 100\%$ ,  $p' = \frac{500}{2,500} = 20\%$ . In the case of already engaged capital, however, there would be a dual effect. Only 400 labourers could be employed with a  $f_{400}$  variable capital, and that at a rate of surplus value of 100%. They would therefore produce an aggregate surplus value of only  $\pounds 400$ . Furthermore, since a constant capital of  $f_{2,000}$  requires 500 labourers for its operation, 400 labourers can put into motion only a constant capital of £1,600. For production to continue on the same scale, so that  $\frac{1}{5}$  of the machinery does not stand idle, £100 must be added to the variable capital in order to employ 500 labourers as before. And this can be accomplished only by tying up hitherto disposable capital, so that part of the accumulation intended to extend production serves

merely to stop a gap, or a portion reserved for revenue is added to the old capital. Then a variable capital increased by  $\pounds 100$  produces  $\pounds 100$  less surplus value. More capital is required to employ the same number of labourers, and at the same time the surplus value produced by each labourer is reduced.

The advantages resulting from a release and the disadvantages resulting from a tie-up of variable capital both exist only for capital already engaged and reproducing itself under certain given conditions. For newly invested capital the advantages on the one hand, and the disadvantages on the other, are confined to an increase or drop in the rate of surplus value, and to a corresponding, if in no way proportionate, change in the rate of profit.

The release and tie-up of variable capital, just analysed, is the result of a depreciation or appreciation of the elements of variable capital, that is, of the cost of reproducing labour power. But variable capital could also be released if, with the wage rate unchanged, fewer labourers were required due to the development of the productive power of labour to set in motion the same amount of constant capital. In like manner, there may reversely be a tie-up of additional variable capital if more labourers are required for the same quantity of constant capital due to a drop in productivity. If, on the other hand, a portion of capital formerly employed as variable capital is employed in the form of constant capital, so that merely a different distribution exists between the components of the same capital, this has an influence on both the rate of surplus value and the rate of profit, but does not belong under the heading of tie-up and release of capital, which is here being discussed.

We have already seen that constant capital may also be tied up or released by the appreciation or depreciation of its component elements. Aside from this, it can be tied up only if the productive power of labour increases (provided a portion of the variable is not converted into constant capital), so that the same amount of labour creates a greater product and therefore sets in motion a larger constant capital. The same may occur under certain circumstances if productive power decreases, for instance in agriculture, so that the same quantity of labour requires more means of production, such as seeds or manure, drainage, etc., in order to produce the same output. Constant capital may be released without depreciation if improvements, utilisation of the forces of Nature, etc., enable a constant capital of smaller value to technically perform the same services as were formerly performed by a constant capital of greater value.

We have seen in Book II<sup>a</sup> that once commodities have been converted into money, or sold, a certain portion of this money must be reconverted into the material elements of constant capital, and in the proportions required by the technical nature of the particular sphere of production. In this respect, the most important element in all branches-aside from wages, i. e., variable capital-is raw material, including auxiliary material, which is particularly important in such lines of production as do not involve raw materials in the strict sense of the term, for instance in mining and the extractive industries in general. That portion of the price which is to make good the wear and tear of machinery enters the accounts chiefly nominally so long as the machinery is at all in an operating condition. It does not greatly matter whether it is paid for and replaced by money one day or the next, or at any other stage of the period of turnover of the capital. It is quite different in the case of the raw material. If the price of raw material rises, it may be impossible to make it good fully out of the price of the commodities after wages are deducted. Violent price fluctuations therefore cause interruptions, great collisions, even catastrophes, in the process of reproduction. It is especially agricultural produce proper, i. e., raw materials taken from organic nature, which — leaving aside the credit system for the present  $^{1}$ — is subject to such fluctuations of value in consequence of changing vields, etc. Due to uncontrollable natural conditions, favourable or unfavourable seasons, etc., the same quantity of labour may be represented in very different quantities of use values, and a definite quantity of these use values may therefore have very different prices. If the value x is represented by 100 lbs of the commodity a, then the price of one lb. of  $a = \frac{x}{100}$ ; if it is represented by 1,000 lbs of a, the price of one lb. of  $a = \frac{x}{1,000}$ , etc. This is therefore one of the elements of these fluctuations in the price of raw materials. A second element, mentioned at this point only for the sake of completeness-since competition and the credit system are still outside the scope of our analysis—is this: It is the nature of things that vegetable and

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, pp. 390-432.

animal substances whose growth and production are subject to certain organic laws and bound up with definite natural time periods, cannot be suddenly augmented in the same degree as, for instance, machines and other fixed capital, or coal, ore, etc., whose augmentation can, provided the natural conditions do not change, be rapidly accomplished in an industrially developed country. It is therefore quite possible, and under a developed system of capitalist production even inevitable, that the production and increase of the portion of constant capital consisting of fixed capital, machinery, etc., should considerably outstrip the portion consisting of organic raw materials, so that demand for the latter grows more rapidly than their supply, causing their price to rise. Rising prices actually cause 1) these raw materials to be shipped from greater distances, since the mounting prices suffice to cover greater freight rates; 2) an increase in their production, which circumstance, however, will probably not, for natural reasons, multiply the quantity of products until the following year; 3) the use of various previously unused substitutes and greater utilisation of waste. When this rise of prices begins to exert a marked influence on production and supply it indicates in most cases that the turning-point has been reached at which demand drops on account of the protracted rise in the price of the raw material and of all commodities of which it is an element, causing a reaction in the price of raw material. Aside from the convulsions which this causes in various forms through depreciation of capital, there are also other circumstances, which we shall mention shortly.

But so much is already evident from the foregoing: The greater the development of capitalist production, and, consequently, the greater the means of suddenly and permanently increasing that portion of constant capital consisting of machinery, etc., and the more rapid the accumulation (particularly in times of prosperity), so much greater the relative overproduction of machinery and other fixed capital, so much more frequent the relative underproduction of vegetable and animal raw materials, and so much more pronounced the previously described rise of their prices and the attendant reaction. And so much more frequent are the convulsions caused as they are by the violent price fluctuations of one of the main elements in the process of reproduction.

If, however, a collapse of these high prices occurs because their rise caused a drop in demand on the one hand, and, on the other, an expansion of production in one place and in another importation from remote and previously less resorted to, or entirely ignored, production areas, and, in both cases, a supply of raw materials exceeding the demand — particularly at the old high prices — then the result may be considered from different points of view. The sudden collapse of the price of raw materials checks their reproduction, and the monopoly of the original producing countries, which enjoy the most favourable conditions of production, is thereby restored — possibly with certain limitations, but restored nevertheless. True, due to the impetus it has had, reproduction of raw material proceeds on an extended scale, especially in those countries which more or less possess a monopoly of this production. But the basis on which production carries on after the extension of machinery, etc., and which, after some fluctuations, is to serve as the new normal basis, the new point of departure, is very much extended by the developments in the preceding cycle of turnover. In the meantime, the barely increased reproduction again experiences considerable impediments in some of the secondary sources of supply. For instance, it is easily demonstrated on the basis of the export tables that in the last 30 years (up to 1865) the production of cotton in India increases whenever there has been a drop in American production, and subsequently it drops again more or less permanently. During the period in which raw materials become dear, industrial capitalists join hands and form associations to regulate production. They did so after the rise of cotton prices in 1848 in Manchester, for example, and similarly in the case of flax production in Ireland. But as soon as the immediate impulse is over and the general principle of competition to "buy in the cheapest market" (instead of stimulating production in the countries of origin, as the associations attempt to do, without regard to the immediate price at which these may happen at that time to be able to supply their product) — as soon as the principle of competition again reigns supreme, the regulation of the supply is left once again to "prices". All thought of a common, all-embracing and far-sighted control of the production of raw materials gives way once more to the faith that demand and supply will mutually regulate one another. And it must be admitted that such control is on the whole irreconcilable with the laws of capitalist production, and remains for ever a pious wish, or is limited to exceptional co-operation in times of great stress and confusion.<sup>16</sup> The superstition of the capitalists in this

<sup>16</sup>) Since the above was written (1865), competition on the world market has been considerably intensified by the rapid development of industry in all civilised countries,

respect is so deep that in their reports even factory inspectors again and again throw up their hands in astonishment. The alternation of good and bad years naturally also provides for cheaper raw materials. Aside from the direct effect this has on raising the demand, there is also the added stimulus of the previously mentioned influence on the rate of profit. The aforesaid process of production of raw materials being gradually overtaken by the production of machinery, etc., is then repeated on a larger scale. An actual improvement of raw materials satisfying not only the desired quantity, but also the quality desired, such as cotton from India of American quality, would require a prolonged, regularly growing and steady European demand (regardless of the economic conditions under which the Indian producer labours in his country). As it is, however, the sphere of production of raw materials is, by fits, first suddenly enlarged, and then again violently curtailed. All this, and the spirit of capitalist production in general, may be very well studied in the cotton shortage of 1861-65, <sup>26</sup> further characterised as it was by the fact that a raw material, one of the principal elements of reproduction, was for a time entirely unavailable. To be sure, the price may also rise in the event of an abundant supply, provided the conditions for this abundance are more knotty. Or, there may be an actual shortage of raw material. It was this last situation which originally prevailed in the cotton crisis.

The closer we approach our own time in the history of production, the more regularly do we find, especially in the essential lines of industry, the ever-recurring alternation between relative appreciation and the subsequent resulting depreciation of raw materials obtained from organic nature. What we have just

especially in America and Germany. The fact that the rapidly and enormously expanding productive forces today outgrow the control of the laws of the capitalist mode of commodity exchange, within which they are supposed to operate, impresses itself more and more even on the minds of the capitalists. This is disclosed especially by two symptoms. First, by the new and general mania for a protective tariff, which differs from the old protectionism in that now articles fit for export are those best protected. And secondly, by the trusts of manufacturers of whole spheres of production which regulate production, and thus prices and profits. It goes without saying that these experiments are practicable only so long as the economic climate is relatively favourable. The first storm must upset them and prove that, although production assuredly needs regulation, it is certainly not the capitalist class which is fitted for that task. Meanwhile, the trusts have no other mission but to see to it that the little fish are swallowed by the big fish still more rapidly than before.—F. E.

analysed will be illustrated by the following examples taken from reports of factory inspectors.

The moral of history, also to be deduced from other observations concerning agriculture, is that the capitalist system works against a rational agriculture, or that a rational agriculture is incompatible with the capitalist system (although the latter promotes technical improvements in agriculture), and needs either the hand of the small farmer living by his own labour or the control of associated producers.

Herewith follow the illustrations referred to above, taken from the English Factory Reports.

"The state of trade is better; but the cycle of good and bad times diminishes as machinery increases, and the changes from the one to the other happen oftener, as the demand for raw materials increases with it.... At present, confidence is not only restored after the panic of 1857, but the panic itself seems to be almost forgotten. Whether this improvement will continue or not depends greatly upon the price of raw materials. There appear to me evidences already, that in some instances the maximum has been reached, beyond which their manufacture becomes gradually less and less profitable, till it ceases to be so altogether. If we take, for instance, the lucrative years in the WORSTED trade of 1849 and 1850, we see that the price of Englsh combing wool stood at 1s.1d., and of Australian at between 1s. 2d. and 1s. 5d. per lb., and that on the average of the ten years from 1841 to 1850, both inclusive, the average price of English wool never exceeded 1s. 2d. and of Australian wool 1s. 5d. per lb. But that in the commencement of the disastrous year of 1857, the price of Australian wool began with 1s. 11d., falling to 1s. 6d. in December, when the panic was at its height, but has gradually risen again to 1s. 9d. through 1858, at which it now stands; whilst that of English wool, commencing with 1s. 8d., and rising in April and September 1857 to 1s. 9d., falling in January 1858 to 1s. 2d., has since risen to 1s. 5d., which is 3d. per lb. higher than the average of the ten years to which I have referred.... This shows, I think, ... either that the bankruptcies which similar prices occasioned in 1857 are forgotten; or that there is barely the wool grown which the existing spindles are capable of consuming; or else, that the prices of manufactured articles are about to be permanently higher.... And as in past experience I have seen spindles and looms multiply both in numbers and speed in an incredibly short space of time, and our exports of wool to France increase in an almost equal ratio, and as both at home and abroad the average age of sheep seems to be getting less and less, owing to rapidly increasing populations and to what the agriculturalists call 'a quick return in stock', so I have often felt anxious for persons whom, without this knowledge, I have seen embarking skill and capital in undertakings, wholly reliant for their success on a product which can only be increased according to organic laws. ... The ... state of supply and demand of all raw materials ... seems to account for many of the fluctuations in the cotton trade ..., as well as for the condition of the English wool market in the autumn of 1857, and the subsequent commercial crisis<sup>a</sup>"<sup>17</sup> (R. Baker in Reports of Insp. of Fact., Oct. 1858, pp. 56-61).

The halcyon days of the West-Riding WORSTED industry, of Yorkshire, were 1849-50. This industry employed 29,246 persons in 1838; 37,000 persons in 1843; 48,097 in 1845; and 74,891 in 1850. The same district had 2,768 mechanical looms in 1838<sup>b</sup>; 11,458 in 1841; 16,870 in 1843; 19,121 in 1845 and 29,539 in 1850 (Reports of Insp. of Fact., 1850, p. 60). This prosperity of the carded wool industry excited certain forebodings as early as October 1850. In his report of April 1851, Sub-Inspector Baker said in regard to Leeds and Bradford:

"The state of trade is, and has been for some time, very unsatisfactory. The worsted spinners are fast losing the profits of 1850, and, in the majority of cases, the manufacturers are not doing much good. I believe, at this moment, there is more woollen machinery standing than I have almost ever known at one time, and the flax spinners are also turning off hands and stopping frames. The cycles of trade, in fact, in the textile fabrics, are now extremely uncertain, and I think we shall shortly find to be true ... that there is no comparison made between the producing power of the spindles, the quantity of raw material, and the growth of the population" (p. 52).

The same is true of the cotton industry. In the cited report for October 1858, we read:

"Since the hours of labour in factories have been fixed, the amounts of consumption, produce, and wages in all textile fabrics have been reduced to a rule of three. ... I quote from a recent lecture delivered by ... the present Mayor of Blackburn, Mr. Baynes, on the cotton trade, who by such means has reduced the cotton statistics of his own neighbourhood to the closest approximation c:—

"Each real and mechanical horse-power will drive 450 self-acting mule spindles with preparation, or 200 THROSTLE spindles, or 15 looms for 40 inches cloth, with winding, warping, and sizing. Each horse-power in spinning will give employment to  $2^{1}/_{2}$  operatives, but in weaving to 10 persons, at wages averaging full 10s. 6d. a week to each person. ... The average counts of yarn spun and woven are from 30s. to 32s. twist, and 34s. to 36s. weft yarns; and taking the spinning production at 13 ounces per spindle per week, will give 824,700 lbs yarn spun per week, requiring 970,000 lbs or 2,300 bales of cotton, at a cost of £28,300. ... The total cotton consumed in this district (within a five-mile radius round Blackburn) per week is 1,530,000 lbs, or 3,650 bales, at a cost of £44,625.... This is one-eighteenth of the whole cotton spinning of the United Kingdom, and one-sixth of the whole power-loom weaving."

<sup>17</sup> It goes without saying that we do not, like Mr. Baker, *explain* the wool crisis of 1857 on the basis of the disproportion between the prices of raw material and finished product. This disproportion was itself but a symptom, and the crisis was a general one.— F.E.

<sup>&</sup>lt;sup>a</sup> The Report has: "with its overwhelming consequences". - <sup>b</sup> The Report has: "1836". - <sup>c</sup> [J.] Baynes, *The Cotton Trade...*, Blackburn, London, 1857, pp. 48-49.

"Thus we see that, according to Mr. Baynes's calculations, the total number of cotton spindles in the United Kingdom is 28,800,000, and supposing these to be always working full time, that the annual consumption of cotton ought to be 1,432,080,000 lbs. But as the import of cotton, less the export in 1856 and 1857, was only 1,022,576,832 lbs, there must necessarily be a deficiency of supply equal to 409,503,168 lbs. Mr. Baynes, however, who has been good enough to communicate with me on this subject, thinks that an annual consumption of cotton based upon the quantity used in the Blackburn district would be liable to be overcharged, owing to the difference, not only in the counts spun, but in the excellence of the machinery. He estimates the total annual consumption of cotton in the United Kingdom at 1,000,000 lbs. But if he is right, and there really is an excess of supply equal to 22,576,832 lbs, supply and demand seem to be nearly balanced already, without taking into consideration those additional spindles and looms which Mr. Baynes speaks of as getting ready for work in his own district, and, by parity of reasoning, probably in other districts also" (pp. 59, 60, 61).

#### III. GENERAL ILLUSTRATION. THE COTTON CRISIS OF 1861-65

#### Preliminary History. 1845-60

1845. The golden age of cotton industry. Price of cotton very low. L. Horner says on this point:

"For the last eight years I have not known so active a state of trade as has prevailed during the last summer and autumn, particularly in cotton spinning. Throughout the half-year I have been receiving notices every week of new investments of capital in factories, either in the form of new mills being built, of the few that were untenanted finding occupiers, of enlargements of existing mills, of new engines of increased power, and of manufacturing machinery" (Reports of Insp. of Fact., Oct. 1845, p. 13).

## 1846. The complaints begin:

"For a considerable time past I have heard from the occupiers of cotton mills very general complaints of the depressed state of their trade ... for within the last six weeks several mills have begun to work short time, usually eight hours a day instead of twelve; this appears to be on the increase.... There has been a great advance in the price of the raw material,... there has been not only no advance in the manufactured articles, but ... prices are lower than they were before the rise in cotton began. From the great increase in the number of cotton mills within the last four years, there must have been, on the one hand, a greatly increased demand for the raw material, and, on the other, a greatly increased supply in the market of the manufactured articles; causes that must concurrently have operated against profits, supposing the supply of the raw material and the consumption of the manufactured article to have remained unaltered; but, of course, in the greater ratio by the late short supply of cotton, and the falling off in the demand for the manufactured articles in several markets, both home and foreign" (Reports of Insp. of Fact., Oct. 1846, p. 10).

The rising demand for raw materials naturally went hand in hand

with a market flooded with manufactures.— By the way, the expansion of industry at that time and the subsequent stagnation were not confined to the cotton districts. The carded wool district of Bradford had only 318 factories in 1836 and 490 in 1846. These figures do not by any means express the actual growth of production, since the existing factories were also considerably enlarged. This was particularly true of the flax spinning-mills.

"All have contributed more or less, during the last ten years, to the over-stocking of the market, to which a great part of the present stagnation of trade must be attributed.... The depression ... naturally results from such rapid increase of mills and machinery" (Reports of Insp. of Fact., Oct. 1846, p. 30).

1847. In October, a money panic. Discount 8%. This was preceded by the debacle of the railway swindle and the East Indian speculation in accommodation bills. But:

"Mr. Baker enters into very interesting details respecting the increased demand, in the last few years, for cotton, wool, and flax, owing to the great extension of these trades. He considers the increased demand for these raw materials, occurring, as it has, at a period when the produce has fallen much below an average supply, as almost sufficient, even without reference to the monetary derangement, to account for the present state of these branches. This opinion is fully confirmed, by my own observations, and conversation with persons well acquainted with trade. Those several branches were all in a very depressed state, while discounts were readily obtained at and under 5 per cent. The supply of raw silk has, on the contrary, been abundant, the prices moderate, and the trade, consequently, very active, till ... the last two or three weeks, when there is no doubt the monetary derangement has affected not only the persons actually engaged in the manufacture, but more extensively still, the manufacturers of fancy goods, who were great customers to the throwster. A reference to published returns shows that the cotton trade had increased nearly 27 per cent in the last three years. Cotton has consequently increased, in round numbers, from 4d. to 6d. per lb., while twist, in consequence of the increased supply, is yet only a fraction above its former price. The woollen trade began its increase in 1836, since which Yorkshire has increased its manufacture of this article 40 per cent, but Scotland exhibits a yet greater increase. The increase of the worsted trade 18) is still larger. Calculations give a result of upwards of 74 per cent increase within the same period. The consumption of raw wool has therefore been immense. Flax has increased since 1839 about 25 per cent in England, 22 per cent in Scotland, and nearly 90 per cent in Ireland  $^{(19)}$ ; the consequence of this,

<sup>18</sup> A sharp distinction is made in England between woollen manufacture, which spins carded yarn from short wool and weaves it (main centre Leeds), and worsted manufacture, which makes worsted yarn from long wool and weaves it (main seat Bradford, in Yorkshire).—F. E.

<sup>19</sup> This rapid expansion of output of machine-made linen yarn in Ireland dealt a death-blow to exports of linen made of hand-made yarn in Germany (Silesia, Lusatia, and Westphalia).—F. E. in connexion with bad crops, has been that the raw material has gone up  $\pounds 10$  per ton, while the price of yarn has fallen 6d. a bundle" (Reports of Insp. of Fact., Oct. 1847, pp. 30-31).

#### 1849. Since late in 1848 business revived.

"The price of flax which has been so low as to almost guarantee a reasonable profit under any future circumstances, has induced the manufacturers to carry on their work very steadily.... The woollen manufacturers were exceedingly busy for a while in the carly part of the year.... I fear that consignments of woollen goods often take the place of real demand, and that periods of apparent prosperity, i. e., of full work, are not always periods of legitimate demand. In some months the WORSTED has been exceedingly good, in fact flourishing.... At the commencement of the period referred to, wool was exceedingly low; what was bought by the spinners was well bought, and no doubt in considerable quantities. When the price of wool rose with the spring wool sales, the spinner had the advantage, and the demand for manufactured goods becoming considerable and imperative, they kept it" (Reports of Insp. of Fact., [April] 1849, p. 42).

"If we look at the variations in the state of trade, which have occurred in the manufacturing districts ... for a period now of between three and four years, I think we must admit the existence of a great disturbing cause somewhere ... but may not the immensely productive power of increased machinery have added another element to the same cause?" (Reports of Insp. of Fact., April 1849, pp. 42, 43).

# In November 1848, and in May and summer of 1849, right up to October, business flourished.

"The worsted stuff trade, of which Bradford and Halifax are the great hives of industry, has been the one most active; this trade has never before reached anything like the extent, to which it has now attained.... Speculation, and uncertainty as to the probable supply of cotton wool, have ever had the effect of causing greater excitement, and more frequent alterations in the state of that branch of manufacture, than any other. There is ... at present an accumulation in stock of the coarser kinds of cotton goods, which creates anxiety on the part of the smaller spinners, and is already acting to their detriment, having caused several of them to work their mills short time" (Reports of Insp. of Fact., Oct. 1849, pp. 64-65).

#### 1850. April. Business continued brisk. The exception:

"The great depression in a part of the cotton trade ... attributable to the scarcity in the supply of the raw material more especially adapted to the branch engaged in spinning low numbers of cotton yarns, or manufacturing heavy cotton goods. A fear is entertained that the increased machinery built recently for the WORSTED trade, may be followed with a similar reaction. Mr. Baker computes that in the year 1849 alone the worsted looms have increased their produce 40 per cent, and the spindles 25 or 30 per cent, and they are still increasing at the same rate" (Reports of Insp. of Fact., April 1850, p. 54).

#### 1850. October.

"The high price of raw cotton continues ... to cause a considerable depression in this branch of manufacture, especially in those descriptions of goods in which the raw material constitutes a considerable part of the cost of production.... The great advance in the price of raw silk has likewise caused a depression in many branches of that manufacture" (Reports of Insp. of Fact., Oct. 1850, p. 14).

From the same report we learn that the Committee of the Royal Society for the Promotion and Improvement of the Growth of Flax in Ireland predicted that the high price of flax, together with the low level of prices for other agricultural products, ensured a considerable increase in flax production in the ensuing year (p. 33).

1853. April. Great prosperity. L. Horner says in his report:

"At no period during the last seventeen years that I have been officially acquainted with the manufacturing districts in Lancashire have I known such general prosperity; the activity in every branch is extraordinary" (Reports of Insp. of Fact., April 1853, p. 19).

## 1853. October. Depression in the cotton industry."Over-production" (Reports of Insp. of Fact., Oct. 1853, p. 15). 1854. April.

"The woollen trade, although not brisk, has given full employment to all the factories engaged upon that fabric, and a similar remark applies to the cotton factories. The WORSTED trade generally has been in an uncertain and unsatisfactory condition during the whole of the last half-year.... The manufacture of flax and hemp are ... seriously impeded, by reason of the diminished supplies of the raw materials from Russia due to the Crimean war" (Reports of Insp. of Fact., [April] 1854, p. 37).

#### 1859.

"The trade in the Scottish flax districts still continues depressed — the raw material being scarce, as well as high in price; and the inferior quality of the last year's crop in the Baltic, from whence come our principal supplies, will have an injurious effect on the trade of the district; jute, however, which is gradually superseding flax in many of the coarser fabrics, is neither unusually high in price, nor scarce in quantity ... about one-half of the machinery in Dundee is now employed in jute spinning" (Reports of Insp. of Fact., April 1859, p. 19).— "Owing to the high price of the raw material, flax spinning is still far from remunerating, and while all the other mills are going full time, there are several instances of the stoppage of flax machinery.... Jute spinning is ... in a rather more satisfactory state, owing to the recent decline in the price of material, which has now fallen to a very moderate point" (Reports of Insp. of Fact., Oct. 1859, p. 20).

## 1861-64. American Civil War. COTTON FAMINE. The Greatest Example of an Interruption in the Production Process through Scarcity and Dearness of Raw Material

#### 1860. April.

"With respect to the state of trade, I am happy to be able to inform you that, notwithstanding the high price of raw material, all the textile manufactures, with the exception of silk, have been fairly busy during the past half-year.... In some of the cotton districts hands have been advertised for, and have migrated thither from Norfolk and other rural counties.... There appears to be, in every branch of trade, a great scarcity of raw material. It is ... the want of it alone, which keeps us within bounds. In the cotton trade, the erection of new mills, the formation of new systems of extension, and the demand for hands, can scarcely, I think, have been at any time exceeded. Everywhere there are new movements in search of raw material" (Reports of Insp. of Fact., April 1860 [p.57]).

#### 1860. October.

"The state of trade in the cotton, woollen, and flax districts has been good; indeed in Ireland, it is stated to have been 'very good' for now more than a year; and that it would have been still better, but for the high price of raw material. The flax spinners appear to be looking with more anxiety than ever to the opening out of India by railways, and to the development of its agriculture, for a supply of flax which may be commensurate with their wants" (Reports of Insp. of Fact., Oct. 1860, p. 37).

#### 1861. April.

"The state of trade is at present depressed.... A few cotton mills are running short time, and many silk mills are only partially employed. Raw material is high. In almost every branch of textile manufacture it is above the price at which it can be manufactured for the masses of the consumers" (Reports of Insp. of Fact., April 1861, p. 33).

It had become evident that in 1860 the cotton industry had overproduced. The effect of this made itself felt during the next few years.

"It has taken between two and three years to absorb the overproduction of 1860 in the markets of the world" (Reports of Insp. of Fact., December 1863, p. 127). "The depressed state of the markets for cotton manufactures in the East, early in 1860, had a corresponding effect upon the trade of Blackburn, in which 30,000 power-looms are usually employed almost exclusively in the production of cloth to be consumed in the East. There was consequently but a limited demand for labour for many months prior to the effects of the cotton blockade being felt.... Fortunately this preserved many of the spinners and manufacturers from being involved in the common ruin. Stocks increased in value so long as they were held, and there had been consequently nothing like that alarming depreciation in the value of property which might not unreasonably have been looked for in such a crisis" (Reports of Insp. of Fact., Oct. 1862, pp. 28-29, 30).

#### 1861. October.

"Trade has been for some time in a very depressed state.... It is not improbable indeed that during the winter months many establishments will be found to work very short time. This might, however, have been anticipated ... irrespective of the causes which have interrupted our usual supplies of cotton from America and our exports, short time must have been kept during the ensuing winter in consequence of the great increase of production during the last three years, and the unsettled state of the Indian and Chinese markets" (Reports of Insp. of Fact., Oct. 1861, p. 19).

## Cotton Waste. East Indian Cotton (SURAT). Influence on the Wages of Labourers. Improvement of Machinery. Adding Starch Flour and Mineral Substitutes to Cotton. Effect of Starch Flour Sizing on Labourers. Manufacturers of Finer Yarn Grades. Manufacturers' Fraud

"A manufacturer writes to me thus: 'As to estimates of consumption per spindle, I doubt if you take sufficiently into calculation the fact that when cotton is high in price, every spinner of ordinary yarns (say up to 40s.) (principally 12s. to 32s.) will raise his counts as much as he can, that is, will spin 16s. where he used to spin 12s., or 22s.in the place of 16s., and so on; and the manufacturer using these fine yarns will make his cloth the usual weight by the addition of so much more size. The trade is availing itself of this resource at present to an extent which is even discreditable. I have heard on good authority of ordinary export SHIRTING weighing 8 lbs of which  $2\frac{3}{4}$  lbs were size... In cloths of other descriptions as much as 50 per cent size is sometimes added; so that a manufacturer may and does truly boast that he is getting rich by selling cloth for less money per pound than he paid for the mere yarn of which they are composed'" (Reports of Insp. of Fact., April 1864, p. 27).

"I have also received statements that the weavers attribute increased sickness to the size which is used in dressing the warps of Surat cotton, and which is not made of the same material as formerly, viz., flour. This substitute for flour is said, however, to have the very important advantage of increasing greatly the weight of the cloth manufactured, making 15 lbs of the raw material to weigh 20 lbs, when woven into cloth." (Reports of Insp. of Fact., Oct. 1863, p. 63. This substitute was ground talcum, called CHINA CLAY, or gypsum, called FRENCH CHALK.) — "The earnings of the weavers" (meaning the operatives) "are much reduced from the employment of substitutes for flour as sizing for warps. This sizing, which gives weight to the yarn, renders it hard and brittle. Each thread of the warp in the loom passes through a part of the loom called 'a heald', which consists of strong threads to keep the warp in its proper place, and the hard state of the warp five minutes to tie up the threads every time they break; and a weaver has to piece these ends at least ten times as often as formerly, thus reducing the productive powers of the loom in the working-hours" (ibid., pp. 42-43).

"In Ashton, Stalybridge, Mossley, Oldham, etc., the reduction of time has been fully one-third, and the hours are lessening every week.... Simultaneously with this diminution of time there is also a reduction of wages in many departments" (Reports of Insp. of Fact., Oct. 1861, pp. 12-13). Early in 1861 there was a strike among the mechanical weavers in some parts of Lancashire. Several manufacturers had announced a wage reduction of 5 to 7.5%. The operatives insisted that the wage scale remain the same while working hours were reduced. This was not granted, and a strike was called. A month later, the operatives had to give in. But then they got both.

"In addition to the reduction of wages to which the operatives at last consented, many mills are now running short time" (Reports of Insp. of Fact., April 1861, p. 23).

#### 1862. April.

"The sufferings of the operatives since the date of my last report have greatly increased; but at no period of the history of manufactures, have sufferings so sudden and so severe been borne with so much silent resignation and so much patient self-respect" (Reports of Insp. of Fact., April 1862, p. 10). "The proportionate number of operatives wholly out of employment at this date appears not to be much larger than it was in 1848, when there was an ordinary panic of sufficient consequences to excite alarm amongst the manufacturers, so much so as to warrant the collection of similar statistics of the state of the cotton trade as are now issued weekly.... In May 1848, the proportion of cotton operatives out of work in Manchester out of the whole number usually employed was 15 per cent, on short time 12 per cent, whilst 70 per cent were in full work. On the 28th of May of the present year, of the whole number of persons usually employed 15 per cent were out of work, 35 per cent were on short time, and 49 per cent were working full time.... In some other places, Stockport for example, the averages of short time and of non-employment are higher, whilst those of full time are less", because coarser numbers are spun there than in Manchester (p. 16).

#### 1862. October.

"I find by the last return to Parliament that there were 2,887 cotton factories in the United Kingdom in 1861, 2,109 of them being in my district" (Lancashire and Cheshire). "I was aware that a very large proportion of the 2,109 factories in my district were small establishments, giving employment to few persons, but I have been surprised to find how large that proportion is. In 392, or 19 per cent, the steam-engine or water-wheel is under 10 horse-power; in 345, or 16 per cent, the horse-power is above 10 and under 20; and in 1,372 the power is 20 horses and more.... A very large proportion of these small manufacturers — being more than a third of the whole number — were operatives themselves at no distant period; they are men without command of capital.... The brunt of the burden then would have to be borne by the remaining two-thirds" (Reports of Insp. of Fact., Oct. 1862, pp. 18, 19).

According to the same report, 40,146, or 11.3%, of the cotton operatives in Lancashire and Cheshire were then working full time; 134,767, or 38%, were working short time; and 179,721, or 50.7%, were unemployed. After deducting the returns from Manchester and Bolton, where mainly fine grades were spun, a line relatively little affected by the cotton famine, the matter looks still more unfavourable;

# namely, fully employed 8.5%, partly employed 38%, and unemployed 53.5% (pp. 19 and 20).

"Working up good or bad cotton makes a material difference to the operatives. In the earlier part of the year, when manufacturers were endeavouring to keep their mills at work by using up all the moderately priced cotton they could obtain, much bad cotton was brought into mills in which good cotton was ordinarily used, and the difference to the operatives in wages was so great that many strikes took place on the ground that they could not make a fair day's wages at the old rates.... In some cases, although working full time, the difference in wages from working bad cotton was as much as one-half" (p. 27).

#### 1863. April.

"During the present year there will not be full employment for much more than one-half of the cotton operatives in the country" (Reports of Insp. of Fact., April 1863, p. 14).

"A very serious objection to the use of Surat cotton, as manufacturers are now compelled to use it, is that the speed of the machinery must be greatly reduced in the processes of manufacture. For some years past every effort has been made to increase the speed of machinery, in order to make the same machinery produce more work; and the reduction of the speed becomes therefore a question which affects the operative as well as the manufacturer; for the chief part of the operatives are paid by the work done; for instance, spinners are paid per lb. for the yarn spun, weavers per piece for the number of pieces woven; and even with the other classes of operatives paid by the week there would be a diminution of wages in consideration of the less amount of goods produced. From inquiries I have made, and statements placed in my hands, of the earnings of cotton operatives during the present year, I find there is a diminution averaging 20 per cent upon their former earnings, in some instances the diminution has been as much as 50 per cent, calculated upon the same rate of wages as prevailed in 1861" (p. 13). "... The sum earned depends upon ... the nature of the material operated upon.... The position of the operatives in regard to the amount of their earnings is very much better now" (October 1863) "than it was this time last year. Machinery has improved, the material is better understood, and the operatives are able better to overcome the difficulties they had to contend with at first. I remember being in a sewing school" (a charity institution for unemployed) "at Preston last spring, when two young women, who had been sent to work at a weaving shed the day before, upon the representation of the manufacturer that they could earn 4s, per week, returned to the school to be readmitted, complaining that they could not have earned 1s. per week. I have been informed of 'SELF-ACTING MINDERS', ... men who manage a pair of self-acting mules, earning at the end of a fortnight's full work 8s. 11d., and that from this sum was deducted the rent of the house, the manufacturer, however, returning half the rent as a gift." (How generous!) "The MINDERS took away the sum of 6s. 11d. In many places the SELF-ACTING MINDERS ranged from 5s. to 9s. per week, and the weavers from 2s. to 6s. per week in the last months of 1862.... At the present time a much more healthy state of things exists, although there is still a great decrease in the earnings in most districts.... There are several causes which have tended to the reduction of earnings, besides the shorter staple of the Surat cotton and its dirty condition; for instance, it is now the practice to mix 'waste' largely with Surat, which consequently increases the difficulties of the spinner or minder. The threads, from their shortness of fibre, are more liable to break in the drawing out of the mule and in the twisting of the yarn, and the mule cannot be kept so continuously in motion.... Then, from the great attention required in watching the threads in weaving, many weavers can only mind one loom, and very few can mind more than two looms.... There has been a direct reduction of 5,  $7\frac{1}{2}$  and 10 per cent upon the wages of the operatives.... In the majority of cases the operative has to make the best of his material, and to earn the best wages he can at the ordinary rates.... Another difficulty the weavers have sometimes to contend with is, that they are expected to produce well-finished cloth from inferior materials, and are subject to fine for the flaws in their work" (Reports of Insp. of Fact., Oct. 1863, pp. 41-43).

Wages were miserable, even where work was full time. The cotton workers willingly offered themselves for all public works such as drainage, road-building, stone-breaking and street-paving, in which they were employed, to get their keep from the local authorities (although this practically amounted to assistance to the manufacturer. See Book I, S. 598/589<sup>a</sup>). The whole bourgeoisie stood guard over the labourers. Were the worst dog's wages offered, and a labourer refused to accept them, the Relief Committee <sup>27</sup> would strike him from its lists.It was in a way a golden age for the manufacturers, for the labourers had either to starve or work at a price most profitable for the bourgeois. The Relief Committees acted as watchdogs. At the same time, the manufacturers acted in secret agreement with the government to hinder emigration as much as possible, partly to retain in readiness the capital invested in the flesh and blood of the labourers, and partly to safeguard the house rent squeezed out of the labourers.

"The Relief Committees acted with great strictness upon this point. If work was offered, the operatives to whom it was proposed were struck off the lists, and thus compelled to accept the offer. When they objected to accept work... the cause has been that their earnings would have been merely nominal, and the work exceedingly severe" (Reports of Insp. of Fact., Oct. 1863, p. 97).

The operatives were willing to perform any work given to them under the PUBLIC WORKS ACT.

"The principle upon which industrial employments were organised varied considerably in different towns, but in those places even in which the outdoor work was not absolutely a LABOUR TEST<sup>b</sup> the manner in which labour was remunerated by its being paid for either at the exact rate of relief, or closely approximating the rate, it became in fact a labour test" (p. 69). "The PUBLIC WORKS ACT of 1863 was intended to remedy this inconvenience, and to enable the operative to earn his day's wages as an independent labourer. The purpose of this Act was three-fold: firstly, to enable local authorities

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35, pp. 574-77. - b In the 1894 German edition this English term is given in parentheses after its German equivalent.

to borrow money of the Exchequer Loan Commissioners" (with consent of the President of the Central Relief Committee); "secondly, to facilitate the improvement of the towns of the cotton districts; thirdly, to provide work and REMUNERATIVE WAGES<sup>a</sup> to the unemployed operatives." Loans to the amount of £883,700 had been granted under this Act up to the end of October 1863 (p. 70).

The works undertaken were mainly canalisation, road-building, street-paving, water-works reservoirs, etc.

Mr. Henderson, Chairman of the committee in Blackburn, wrote with reference to this to factory inspector Redgrave:

"Nothing in my experience, during the present period of suffering and distress, has struck me more forcibly or given me more satisfaction, than the cheerful alacrity with which the unemployed operatives of this district have accepted of the work offered to them through the adoption of the Public Works Act, by the Corporation of Blackburn. A greater contrast than that presented between the cotton spinner as a skilled workman in a factory, and as a labourer in a sewer 14 or 18 feet deep, can scarcely be conceived."

(Depending on the size of his family, he earned 4 to 12s. per week, this enormous amount providing sometimes for a family of eight. The townsmen derived a double profit from this. In the first place, they secured money to improve their smoky and neglected cities at exceptionally low interest. In the second place, they paid the labourers far less than the regular wage.)

"Accustomed as he had been to a temperature all but tropical, to work at which agility and delicacy of manipulation availed him infinitely more than muscular strength and to double and sometimes treble the remuneration which it is possible for him now to obtain, his ready acceptance of the proffered employment involved an amount of self-denial and consideration the exercise of which is most creditable. In Blackburn the men have been tested at almost every variety of outdoor work; in excavating a stiff heavy clay soil to a considerable depth, in draining, in stone-breaking, in road-making, and in excavating for street sewers to a depth of 14, 16, and sometimes 20 feet. In many cases while thus employed they are standing in mud and water to the depth of 10 or 12 inches, and in all they are exposed to a climate which, for chilly humidity is not surpassed I suppose, even if it is equalled, by that of any district in England" (pp. 91-92).— "The conduct of the operatives has been almost blameless, and their readiness to accept and make the best of outdoor labour" (p. 69).

#### 1864. April.

"Complaints are occasionally made in different districts of the scarcity of hands, but this deficiency is chiefly felt in particular departments, as, for instance, of weavers.... These complaints have their origin as much from the low rate of wages which

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

the hands can earn owing to the inferior qualities of yarn used, as from any positive scarcity of workpeople even in that particular department. Numerous differences have taken place during the past month between the masters of particular mills and their operatives in respect of the wages. Strikes, I am sorry to say, are but too frequently resorted to. ... The effect of the PUBLIC WORKS ACT is felt as a competition by the mill-owners. The local committee at Bacup has suspended operations, for although all the mills are not running, yet a scarcity of hands has been experienced" (Reports of Insp. of Fact., April 1864, p. 9).

It was indeed high time for the manufacturers. Due to the PUBLIC WORKS ACT the demand for labour grew so strong that many a factory hand was earning 4 to 5 shillings daily in the quarries of Bacup. And so the public works were gradually suspended — this new edition of the *Ateliers nationaux* of 1848,<sup>28</sup> but this time instituted in the interests of the bourgeoisie.

## Experiments in corpore vili<sup>a</sup>

"Although I have given the very reduced wages" (of the fully employed), "the actual earnings of the operatives in several mills, it does not follow that they earn the same amount week by week. The operatives are subject to great fluctuation, from the constant experimentalising of the manufacturers upon different kinds and proportions of cotton and waste in the same mill, the 'mixings' as it is called, being frequently changed; and the earnings of the operatives rise and fall with the quality of the cotton mixings; sometimes they have been within 15 per cent of former earnings, and then in a week or two, they have fallen from 50 to 60 per cent."

Inspector Redgrave, who makes this report, then proceeds to cite wage figures taken from actual practice, of which the following examples may suffice:

A, weaver, family of 6, employed 4 days a week, 6s. 8.5d.; B, TWIS-TER, employed 4.5 days a week, 6s.; C, weaver, family of 4, employed 5 days a week, 5s. 1d.; D, SLUBBER, family of 6, employed 4 days a week, 7s. 10d.; E, weaver, family of 7, employed 3 days a week, 5s., etc. Redgrave continues:

"The above returns are deserving of consideration, for they show that work would become a misfortune in many a family, as it not merely reduces the income, but brings it so low as to be utterly insufficient to provide more than a small portion of the absolute wants, were it not that supplemental relief is granted to operatives when the wages of the family do not reach the sum that would be given to them as relief, if they were all unemployed" (Reports of Insp. of Fact., Oct.1863, pp. 50, 53).

"In no week since the 5th of June last was there more than two days seven hours and a few minutes employment for all the workers" (ibid., p. 121).

<sup>&</sup>lt;sup>a</sup> on a useless thing

From the beginning of the crisis to March 25, 1863, nearly three million pounds sterling were expended by the guardians, the Central Relief Committee, and the London Mansion House Committee (ibid., p. 13).

"In a district in which the finest yarn is spun ... the spinners suffer an indirect reduction of 15 per cent in consequence of the change from South SEA ISLAND to Egyptian cotton.... In an extensive district, in many parts of which waste is largely used as a mixture with Surat ... the spinners have had a reduction of 5 per cent, and have lost from 20 to 30 per cent in addition, through working SURAT and waste. The weavers are reduced from 4 looms to 2 looms. In 1860, they averaged 5s. 7d. per loom, in 1863, only 3s. 4d. The fines, which formerly varied from 3d. to 6d." (for the weaver) "on American, now run up to from 1s. to 3s. 6d."

## In one district, where Egyptian cotton was used with an admixture of East Indian

"the average of the MULE SPINNERS, which was in 1860 18s. to 25s., now averages from 10s. to 18s. per week, caused, in addition to inferior cotton, by the reduction of the speed of the mule to put an extra amount of twist in the yarn, which in ordinary times would be paid for according to list" (pp. 43, 44). "Although the Indian cotton may have been worked to profit by the manufacturer, it will be seen" (see the wage list on pp. 51-52) "that the operatives are sufferers compared with 1861, and if the use of SURAT be confirmed, the operatives will want to earn the wages of 1861, which would seriously affect the profits of the manufacturer, unless he obtain compensation either in the price of the raw cotton or of his products" (p. 105).

#### House Rent.

"The rent is frequently deducted from the wages of operatives, even when working short time, by the manufacturers whose COTTAGES they may be occupying. Nevertheless the value of this class of property has diminished, and houses may be obtained at a reduction of from 25 to 50 per cent upon the rent of the houses in ordinary times; for instance, a COTTAGE which would have cost 3s. 6d. per week can now be had for 2s. 4d. per week, and sometimes even for less" (p. 57).

## *Emigration.* The manufacturers were naturally opposed to emigration of labourers, because, on the one hand,

"looking forward to the recovery of the cotton trade from its present depression, they keep within their reach the means whereby their mills can be worked in the most advantageous manner". On the other hand, "many manufacturers are owners of the houses in which operatives employed in their mills reside, and some unquestionably expect to obtain a portion of the back rent owing" (p. 96).

Mr. Bernall Osborne said in a speech to his parliamentary constituents on October 22, 1864, that the labourers of Lancashire had behaved like the ancient philosophers (Stoics).<sup>a</sup> Not like sheep?

<sup>&</sup>lt;sup>a</sup> See The Times, No. 25011, October 24, 1864, p. 8.
#### Chapter VII

#### SUPPLEMENTARY REMARKS

Suppose, as is assumed in this part, the amount of profit in any particular sphere of production equals the sum of the surplus value produced by the total capital invested in that sphere. Even then the bourgeois will not consider his profit as identical with surplus value, i. e., with unpaid surplus labour, and, to be sure, for the following reasons:

1) In the process of circulation he forgets the process of production. He thinks that surplus value is made when he realises the value of commodities, which includes realisation of their surplus value. //A blank space which follows in the manuscript, indicates that Marx intended to dwell in greater detail on this point.—F. E.//

2) Assuming a uniform degree of exploitation, we have seen that regardless of all modifications originating in the credit system, regardless of the capitalists' efforts to outwit and cheat one another, and, lastly, regardless of any favourable choice of the market—the rate of profit may differ considerably, depending on the low or high prices of raw materials and the experience of the buyer, on the relative productivity, efficiency and cheapness of the machinery, on the greater or lesser efficiency of the aggregate arrangement in the various stages of the productive process, elimination of waste, the simplicity and efficiency of management and supervision, etc. In short, given the surplus value for a certain variable capital, it still depends very much on the individual business acumen of the capitalist, or of his managers and salesmen, whether this same surplus value is expressed in a greater or smaller rate of profit, and accordingly yields a greater or smaller amount of profit. Let the same surplus value of £1,000, the product of £1,000 in wages, obtain in enterprise A for a constant capital of £9,000, and in enterprise B for £11,000. In case A we have  $p' = \frac{1,000}{10,000}$ , or 10%. In case B we have  $p' = \frac{1,000}{12,000}$ , or  $8\frac{1}{3}$  %. The total capital produces relatively more profit in enterprise A than in B, because of a higher rate of profit, although the variable capital advanced in both cases = 1,000 and the surplus value produced by each likewise = 1,000, so that in both cases there exists the same degree of exploitation of the same number of labourers. This difference in the presentation of the same mass of surplus value, or the difference in the rates of profit, and therefore in the profit itself, while

the exploitation of labour is the same, may also be due to other causes. Still, it may also be due wholly to a difference in the business acumen with which both establishments are run. And this circumstance misleads the capitalist, convinces him that his profits are not due to exploiting labour, but, at least in part, to other independent circumstances, and particularly his individual activity.

The analyses in this first part demonstrate the incorrectness of the view (Rodbertus<sup>a</sup>) according to which (as distinct from ground rent, in which case, for example, the area of real estate remains the same and yet the rent rises) a change in the magnitude of an individual capital is supposed to have no influence on the ratio of profit to capital, and thus on the rate of profit, because if the mass of profit should grow, so does the mass of capital upon which it is calculated, and vice versa.

This is true only in two cases. First, when — assuming that all other circumstances, especially the rate of surplus value, remain unchanged — there is a change in the value of that commodity which is a money commodity. (The same occurs in a merely nominal change of value, the rise or fall of mere tokens of value, other conditions being equal.) Let the total capital =  $f_{100}$ , and the profit =  $f_{20}$ , the rate of profit being = 20%. Should gold fall by half, or double, the same capital previously worth only  $f_1100$ , will be worth  $f_2200$  if it falls and the profit will be worth  $f_{140}$ , i. e., it will be expressed in so much money instead of the former  $f_{20}$ ; if it rises, the capital of  $f_{100}$  will be worth only  $f_{,50}$ , and the profit will be represented by a product, whose value will be f 10. But in either case 200:40 = 50:10 = 100:20 = 20%. In all these examples there would, however, have been no actual change in the magnitude of capital value, and only in the money expression of the same value and the same surplus value. For this reason  $\frac{s}{C}$ , or the rate of profit, could not be affected.

In the second case there is an actual change of magnitude in the value, but unaccompanied by a change in the ratio of v to c; in other words, with a constant rate of surplus value the relation of capital invested in labour power (variable capital considered as an index of

<sup>&</sup>lt;sup>a</sup> [J. K.] Rodbertus, Sociale Briefe an von Kirchmann, Dritter Brief, Berlin, 1851, p. 125. Cf. present edition, Vol. 31, p. 320.

the amount of labour power set in motion) to the capital invested in means of production remains the same. Under these circumstances, no matter whether we have C, or nC, or  $\frac{C}{n}$ , e. g., 1,000, or 2,000, or 500, and the rate of profit being 20%, the profit = 200 in the first case, = 400 in the second, and = 100 in the third. But 200:1,000 = 400:2,000 = 100:500 = 20%. That is to say, the rate of profit is unchanged, because the composition of capital remains the same and is not affected by the change in magnitude. Therefore, an increase or decrease in the amount of profit shows merely an increase or decrease in the magnitude of the applied capital.

In the first case there is, therefore, but the appearance of a change in the magnitude of the employed capital, while in the second case there is an actual change in magnitude, but no change in the organic composition of the capital, i. e., in the relative proportions of its variable and constant portions. But with the exception of these two cases, a change in the magnitude of the employed capital is either the *result* of a preceding change in the value of one of its components, and therefore of a change in the relative magnitude of these components (as long as the surplus value itself does not change with the variable capital); or, this change of magnitude (as in labour processes on a large scale, introduction of new machinery, etc.) is the *cause* of a change in the relative magnitude of its two organic components. In all these cases, other circumstances remaining the same, a change in the magnitude of the employed capital must therefore be accompanied simultaneously by a change in the rate of profit.

A rise in the rate of profit is always due to a relative or absolute increase of the surplus value in relation to its cost of production, i. e., to the advanced total capital, or to a decrease in the difference between the rate of profit and the rate of surplus value.

Fluctuations in the rate of profit may occur irrespective of changes in the organic components of the capital, or of the absolute magnitude of the capital, through a rise or fall in the value of the fixed or circulating advanced capital caused by an increase or a reduction of the working time required for its reproduction, this increase or reduction taking place independently of the already existing capital. The value of every commodity—thus also of the commodities making up the capital—is determined not by the necessary labour time contained in it, but by the social labour time required for its reproduction. This reproduction may take place under unfavourable or under propitious circumstances, distinct from the conditions of original production. If, under altered conditions, it takes double or, conversely, half the time, to reproduce the same material capital, and if the value of money remains unchanged, a capital formerly worth  $f_{100}$  would be worth  $f_{200}$ , or  $f_{50}$  respectively. Should this appreciation or depreciation affect all parts of capital uniformly, then the profit would also be accordingly expressed in double, or half, the amount of money. But if it involves a change in the organic composition of the capital, if the ratio of the variable to the constant portion of capital rises or falls, then, other circumstances remaining the same, the rate of profit will rise with a relatively rising variable capital and fall with a relatively falling one. If only the money value of the advanced capital rises or falls (in consequence of a change in the value of money), then the money expression of the surplus value rises, or falls, in the same proportion. The rate of profit remains unchanged.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 105-06.

# Part II

# CONVERSION OF PROFIT INTO AVERAGE PROFIT

## Chapter VIII

### DIFFERENT COMPOSITIONS OF CAPITALS IN DIFFERENT BRANCHES OF PRODUCTION AND RESULTING DIFFERENCES IN RATES OF PROFIT

In the preceding part we demonstrated, among other things, that the rate of profit may vary—rise or fall—while the rate of surplus value remains the same. In the present chapter we assume that the intensity of labour exploitation, and therefore the rate of surplus value and the length of the working day, are the same in all the spheres of production into which the social labour of a given country is divided. Adam Smith has already comprehensively shown<sup>a</sup> that the numerous differences in the exploitation of labour in various spheres of production balance one another by means of all kinds of existing compensations, or compensations accepted as such on the basis of current prejudice, so that they are merely evanescent distinctions and are of no moment in a study of the general relations. Other differences, for instance those in the wage scale, rest largely on the difference between simple and complicated labour mentioned in the beginning of Book I (S. 19),<sup>b</sup> and have nothing to do with the intensity of exploitation in the different spheres of production, although they render the lot of the labourer in those spheres very unequal. For instance, if the labour of a goldsmith is better paid than that of a day labourer, the former's surplus labour produces proportionately more surplus value than the latter's. And although the equalising of wages and working days, and thereby of the rates of surplus value, among different spheres of production, and even among different investments of capital in the same

<sup>&</sup>lt;sup>a</sup> A. Smith, Recherches sur la nature et les causes de la richesse des nations, Vol. I, Paris, 1802. Cf. present edition, Vol. 31, pp. 451-57. - <sup>b</sup> Sec present edition, Vol. 35, p. 54.

sphere of production, is checked by all kinds of local obstacles, it is nevertheless taking place more and more with the advance of capitalist production and the subordination of all economic conditions to this mode of production. The study of such frictions, while important to any special work on wages, may be dispensed with as incidental and irrelevant in a general analysis of capitalist production. In a general analysis of this kind it is usually always assumed that the actual conditions correspond to their conception, or, what is the same, that actual conditions are represented only to the extent that they are typical of their own general case.

The difference in the rates of surplus value in different countries, and consequently the national differences in the degree of exploitation of labour, are immaterial for our present analysis. What we want to show in this part is precisely the way in which a general rate of profit takes shape in any given country. It is evident, however, that a comparison of the various national rates of profit requires only a collation of the previously studied with that which is here to be studied. First one should consider the differences in the national rates of surplus value, and then, on the basis of these given rates, a comparison should be made of the differences in the national rates of profit. In so far as those differences are not due to differences in the national rates of surplus value, they must be due to circumstances in which the surplus value is assumed, just as in the analysis of this chapter, to be universally the same, i. e., constant.

We demonstrated in the preceding chapter that, assuming the rate of surplus value to be constant, the rate of profit obtaining for a given capital may rise or fall in consequence of circumstances which raise or lower the value of one or the other portion of constant capital, and so affect the proportion between the constant and variable components of capital in general. We further observed that circumstances which prolong or reduce the time of turnover of an individual capital may similarly influence the rate of profit. Since the mass of the profit is identical with the mass of the surplus value, and with the surplus value itself, it was also seen that the mass of the profit — as distinct from the rate of profit - is not affected by the aforementioned fluctuations of value. They only modify the rate in which a given surplus value, and therefore a profit of a given magnitude, express themselves; in other words, they modify only the relative magnitude of profit, i.e., its magnitude compared with the magnitude of the advanced capital. Inasmuch as capital was tied up or released by such fluctuations of value, it was not only the rate of profit, but the profit itself, which was likely to be affected in this indirect manner. However, this has then always applied only to such capital as was already used, and not to new investments. Besides, the increase or reduction of profit always depended on the extent to which the same capital could, in consequence of such fluctuation of value, set in motion more or less labour; in other words, it depended on the extent to which the same capital could, with the rate of surplus value remaining the same, obtain a larger or smaller amount of surplus value. Far from contradicting the general rule, or from being an exception to it, this seeming exception was really but a special case in the application of the general rule.

It was seen in the preceding part that, the degree of exploitation remaining constant, changes in the value of the component parts of constant capital and in the time of turnover of capital are attended by changes in the rate of profit. The obvious conclusion is that the rates of profit in different spheres of production existing side by side have to differ when, other circumstances remaining unchanged, the time of turnover of capitals employed in the different spheres differs, or when the value relation of the organic components of these capitals differs in the various branches of production. What we previously regarded as changes occurring successively with one and the same capital is now to be regarded as simultaneous differences among capital investments existing side by side in different spheres of production.

In these circumstances we shall have to analyse: 1) the difference in the *organic composition* of capitals, and 2) the difference in their period of turnover.

The premiss in this entire analysis is naturally that by speaking of the composition or turnover of a capital in a certain line of production we always mean the average normal proportions of capital invested in this sphere, and generally the average in the total capital employed in that particular sphere, and not the accidental differences of the individual capitals in it.

Since it is further assumed that the rate of surplus value and the working day are constant, and since this assumption also implies constant wages, a certain quantity of variable capital represents a definite quantity of labour power set in motion, and therefore a definite quantity of objectified labour. If, therefore,  $\pounds 100$  represent the weekly wage of 100 labourers, indicating 100 actual labour powers, then n times  $\pounds 100$  indicate the labour powers of n times 100 labourers, and  $\frac{\pounds 100}{n}$  those of  $\frac{100}{n}$  labourers. The variable capital thus serves here (as is always the case when the wage is given) as an index of the amount of labour set in motion by a definite total capital. Differences in the magnitude of the employed variable capitals serve, therefore, as indexes of the difference in the amount of employed labour power. If £100 indicate 100 labourers per week, and represent 6,000 working hours at 60 working hours per week, then £200 represent 12,000, and £50 only 3,000 working hours.

By composition of capital we mean, as stated in Book I, the proportion of its active and passive components, i. e., of variable and constant capital. Two proportions enter into consideration under this heading. They are not equally important, although they may produce similar effects under certain circumstances.

The first proportion rests on a technical basis, and must be regarded as given at a certain stage of development of the productive forces. A definite quantity of labour power represented by a definite number of labourers is required to produce a definite quantity of products in, say, one day, and — what is self-evident — thereby to consume productively, i. e., to set in motion, a definite quantity of means of production, machinery, raw materials, etc. A definite number of labourers corresponds to a difinite quantity of means of production, and hence a definite quantity of living labour to a definite quantity of labour already objectified in means of production. This proportion differs greatly in different spheres of production, and frequently even in different branches of one and the same industry, although it may by coincidence be entirely or approximately the same in entirely separate lines of industry.

This proportion forms the technical composition of capital and is the real basis of its organic composition.

However, it is also possible that this first proportion may be the same in different lines of industry, provided variable capital is merely an index of labour power and constant capital merely an index of the mass of means of production set in motion by this labour power. For instance, certain work in copper and iron may require the same ratio of labour power to mass of means of production. But since copper is more expensive than iron, the value relation between variable and constant capital is different in each case, and hence also the value composition of the two total capitals. The difference between the technical composition and the value composition is manifested in each branch of industry in that the value relation of the two portions of capital may vary while the technical composition is constant, and the value relation may remain the same while the technical composition varies. The latter case will, of course, be possible only if the change in the ratio of the employed masses of means of production and labour power is compensated by a reverse change in their values.

The value composition of capital, inasmuch as it is determined by, and reflects, its technical composition, is called the *organic* composition of capital.<sup>20)</sup>

In the case of variable capital, therefore, we assume that it is the index of a definite quantity of labour power, or of a definite number of labourers, or a definite quantity of living labour set in motion. We have seen in the preceding part that a change in the magnitude of the value of variable capital might eventually indicate nothing but a higher or lower price of the same mass of labour. But here, where the rate of surplus value and the working day are taken to be constant, and the wages for a definite working period are given, this is out of the question. On the other hand, a difference in the magnitude of the constant capital may likewise be an index of a change in the mass of means of production set in motion by a definite quantity of labour power. But it may also stem from a difference in value between the means of production set in motion in one sphere and those of another. Both points of view must therefore be examined here.

Finally, we must take note of the following essential facts:

Let  $\pounds 100$  be the weekly wage of 100 labourers. Let the weekly working hours = 60. Furthermore, let the rate of surplus value = 100%. In this case, the labourers work 30 of the 60 hours for themselves and 30 hours gratis for the capitalist. In fact, the  $\pounds 100$  of wages represent just the 30 working hours of 100 labourers, or altogether 3,000 working hours, while the other 3,000 hours worked by the labourers are incorporated in the  $\pounds 100$  of surplus value, or in the profit pocketed by the capitalist. Although the wage of  $\pounds 100$  does not, therefore, express the value in which the weekly labour of the 100 labourers is incorporated it indicates nevertheless (since the length of the working day and the rate of surplus value are given) that this capital sets

 $^{20_1}$  The above has already been briefly developed in the third edition of Book I in the beginning of Kap. XXIII, S. 628.<sup>a</sup> Since the two first editions do not contain that passage, its repetition here is all the more desirable.—*F. E.* 

<sup>&</sup>lt;sup>a</sup> English edition: Ch. XXV (see present edition, Vol. 35, p. 607).

in motion 100 labourers for 6,000 working hours. The capital of  $f_{100}$ indicates this, first, because it indicates the number of labourers set in motion, with  $f_1 = 1$  labourer per week, hence  $f_1 100 = 100$ labourers; and, secondly, because, since the rate of surplus value is given as 100%, each of these labourers performs twice as much work as is contained in his wages, so that  $f_{i}$ , i.e., his wage, which is the expression of half a week of labour, actuates a whole week's labour, just as £100 sets in motion 100 weeks of labour, although it contains only 50. A very essential distinction is thus to be made in regard to variable capital laid out in wages. Its value as the sum of wages, i.e., as a certain amount of objectified labour, is to be distinguished from its value as a mere index of the mass of living labour which it sets in motion. The latter is always greater than the labour which it incorporates, and is, therefore, represented by a greater value than that of the variable capital. This greater value is determined, on the one hand, by the number of labourers set in motion by the variable capital and, on the other, by the quantity of surplus labour performed by them.

It follows from this manner of looking upon variable capital that: When a capital invested in production sphere A expends only 100 in variable capital for each 700 of total capital, leaving 600 for constant capital, while a capital invested in production sphere B expends 600 for variable and only 100 for constant capital, then capital A of 700 sets in motion only 100 of labour power, or, in the terms of our previous assumption, 100 weeks of labour, or 6,000 hours of living labour, while the same amount of capital B will set in motion 600 weeks of labour, or 36,000 hours of living labour. The capital in A would then appropriate only 50 weeks of labour, or 3,000 hours of surplus labour, while the same amount of capital in B would appropriate 300 weeks of labour, or 18,000 hours. Variable capital is not only the index of the labour embodied in it. When the rate of surplus value is known it is also an index of the amount of labour set in motion over and above that embodied in itself, i.e., of surplus labour. Assuming the same intensity of exploitation, the profit in the first case would be  $\frac{100}{700} = \frac{1}{7} = 14\frac{2}{7}$ %, and in the second case,  $\frac{600}{700} = 85\frac{5}{7}$ %, or a sixfold rate of profit. In this case, the profit itself would actually be six times as great, 600 in B as against 100 in A, because the same capital set in motion six times as much living labour, which at the same level of exploitation means six times as much surplus value, and thus six times as much profit.

But if the capital invested in A were not 700 but £7,000, while that invested in B were only £700, and the organic composition of both were to remain the same, then the capital in A would employ £1,000 of the £7,000 as variable capital, that is, 1,000 labourers per week = 60,000 hours of living labour, of which 30,000 would be surplus labour. Yet each £700 of the capital in A would continue to set in motion only  $\frac{1}{6}$  as much living labour, and hence only  $\frac{1}{6}$  as much surplus labour, as the capital in B, and would produce only  $\frac{1}{6}$  as much profit. If we consider the rate of profit, then in A  $\frac{1,000}{7,000} = \frac{100}{700} = 14\frac{2}{7}$ %, as compared with  $\frac{600}{700}$ , or  $85\frac{5}{7}$ %, in B. Taking equal amounts of capital, the rates of profit differ because, owing to the different masses of living labour set in motion, the masses of surplus value, and thus of profit, differ, although the rates of surplus value are the same.

We get practically the same result if the technical conditions are the same in both spheres of production, but the value of the elements of the employed constant capital is greater or smaller in the one than in the other. Let us assume that both invest  $f_1100$  as variable capital and therefore employ 100 labourers per week to set in motion the same quantity of machinery and raw materials. But let the latter be more expensive in B than in A. For instance, let the  $f_{100}$  of variable capital set in motion £200 of constant capital in A, and £400 in B. With the same rate of surplus value, of 100%, the surplus value produced is in either case equal to  $f_{100}$ . Hence, the profit is also equal to £100 in both. But the rate of profit in A is  $\frac{100}{200_c + 100_v} = \frac{1}{3} = 33\frac{1}{3}\frac{0}{3}$ , while in B it is  $\frac{100}{400_c + 100_v} = \frac{1}{5} = 20\%$ . In fact, if we select a certain aliquot part of the total capital in either case, we find that in every £100 of B only £20, or  $\frac{1}{5}$ , constitute variable capital, while in every £100 of A £33  $\frac{1}{3}$ , or  $\frac{1}{3}$ , form variable capital. B produces less profit for each  $f_{100}$ , because it sets in motion less living labour than A. The difference in the rates of profit thus resolves itself once more, in this case, into a difference of the masses of profit, i.e., in effect, the masses of surplus value, produced by each 100 of invested capital.

The difference between this second example and the first is just this: The equalisation between A and B in the second case would require only a change in the value of the constant capital of either A or B, provided the technical basis remained the same. But in the first case the technical composition itself is different in the two spheres of production and would have to be completely changed to achieve an equalisation.

The different organic composition of various capitals is thus independent of their absolute magnitude. It is always but a question of how much of every 100 is variable and how much constant capital.

Capitals of different magnitude, calculated in percentages, or, what amounts to the same in this case, capitals of the same magnitude operating for the same working time and with the same degree of exploitation may produce very much different amounts of profit, because of surplus value, for the reason that a difference in the organic composition of capital in different spheres of production implies a difference in their variable part, thus a difference in the quantities of living labour set in motion by them, and therefore also a difference in the quantities of surplus labour appropriated by them. And this surplus labour is the substance of surplus value, and thus of profit. In different spheres of production equal portions of the total capital comprise unequal sources of surplus value, and the sole source of surplus value is living labour. Assuming the same degree of labour exploitation, the mass of labour set in motion by a capital of 100, and consequently the mass of surplus labour appropriated by it, depend on the magnitude of its variable component. If a capital, consisting in per cent of  $90_c + 10_v$ , produced as much surplus value, or profit, at the same degree of exploitation as a capital consisting of  $10_{c} + 90_{u}$ , it would be as plain as day that the surplus value, and thus value in general, must have an entirely different source than labour, and that political economy would then be deprived of every rational basis. If we are to assume all the time that  $f_{1}$  stands for the weekly wage of a labourer working 60 hours, and that the rate of surplus value = 100%, then it is evident that the total value product of one labourer in a week =  $f_{2}$ . Ten labourers would then produce no more than £20. And since £10 of the £20 replace the wages, the ten labourers cannot produce more surplus value than  $f_{10}$ . On the other hand, 90 labourers, whose total product =  $\pounds$  180, and whose wages =  $f_{1,90}$ , would produce a surplus value of  $f_{1,90}$ . The rate of profit in the first case would thus be 10%, and in the other 90%. If this were not so, then value and surplus value would be something else than objectified labour. Since capitals in different spheres of production viewed in percentages-or as capitals of equal magnitude-are divided differently into variable and constant capital, setting in motion unequal quantities of living labour and producing different surplus

values, and therefore profits, it follows that the rate of profit, which consists precisely of the ratio of surplus value to total capital in per cent, must also differ.

Now, if capitals in different spheres of production, calculated in per cent, i. e., capitals of equal magnitude, produce unequal profits in consequence of their different organic composition, then it follows that the profits of unequal capitals in different spheres of production cannot be proportional to their respective magnitudes, or that profits in different spheres of production are not proportional to the magnitude of the respective capitals invested in them. For if profits were to grow pro rata to the magnitude of invested capital, it would mean that in per cent the profits would be the same, so that in different spheres of production capitals of equal magnitude would have equal rates of profit, in spite of their different organic composition. It is only in the same sphere of production, where we have a given organic composition of capital, or in different spheres with the same organic composition of capital, that the amounts of profits are directly proportional to the amounts of invested capitals. To say that the profits of unequal capitals are proportional to their magnitudes would only mean that capitals of equal magnitude yield equal profits, or that the rate of profit is the same for all capitals, whatever their magnitude and organic composition.

These statements hold good on the assumption that the commodities are sold at their values. The value of a commodity is equal to the value of the constant capital contained in it, plus the value of the variable capital reproduced in it, plus the increment — the surplus value produced — of this variable capital. At the same rate of surplus value, its quantity evidently depends on the quantity of the variable capital. The value of the product of an individual capital of 100 is, in one case,  $90_c + 10_v + 10_s = 110$ ; and in the other,  $10_c + 90_v +$  $+ 90_s = 190$ . If the commodities go at their values, the first product is sold at 110, of which 10 represent surplus value, or unpaid labour, and the second at 190, of which 90 represent surplus value, or unpaid labour.

This is particularly important in comparing rates of profit in different countries. Let us assume that the rate of surplus value in one European country = 100%, so that the labourer works half of the working day for himself and the other half for his employer. Let us further assume that the rate of surplus value in an Asian country = 25%, so that the labourer works  $\frac{4}{5}$  of the working day for himself.

self, and  $\frac{1}{5}$  for his employer. Let  $84_c + 16_v$  be the composition of the national capital in the European country, and  $16_c + 84_v$  in the Asian country, where little machinery, etc., is used, and where a given quantity of labour power consumes relatively little raw material productively in a given time. Then we have the following calculation:

In the European country the value of the product =  $84_c + 16_v + 16_s = 116$ ; rate of profit =  $\frac{16}{100} = 16\%$ .

In the Asian country the value of the product =  $16_c + 84_v + 21_s = 121$ ; rate of profit =  $\frac{21}{100} = 21\%$ .

The rate of profit in the Asian country is thus more than 25% higher than in the European country although the rate of surplus value in the former is one-fourth that of the latter. Men like Carey, Bastiat, and *tutti quanti*,<sup>a</sup> would arrive at the very opposite conclusion.<sup>b</sup>

By the way, different national rates of profit are mostly based on different national rates of surplus value. But in this chapter we compare unequal rates of profit derived from the same rate of surplus value.

Aside from differences in the organic composition of capitals, and therefore aside from the different masses of labour-and consequently, other circumstances remaining the same, from different masses of surplus labour set in motion by capitals of the same magnitude in different spheres of production, there is yet another source of inequality in rates of profit. This is the different period of turnover of capital in different spheres of production. We have seen in Chapter IV that, other conditions being equal, the rates of profit of capitals of the same organic composition are inversely proportional to their periods of turnover. We have also seen that the same variable capital turned over in different periods of time produces different quantities of annual surplus value. The difference in the periods of turnover is therefore another reason why capitals of equal magnitude in different spheres of production do not produce equal profits in equal periods, and why, consequently, the rates of profit in these different spheres differ.

As far as the ratio of the fixed and circulating capital in the composition of capitals is concerned, however, it does not in itself affect the rate of profit in the least. It can affect the rate of profit only if, in one case, this difference in composition coincides with a different ratio of

<sup>&</sup>lt;sup>a</sup> all the rest - <sup>b</sup> Cf. present edition, Vol. 33, p. 107.

the variable and constant parts, so that the difference in the rate of profit is due to this latter difference, and not to the different ratio of fixed and circulating capital; and, in the other case, if the difference in the ratio of the fixed and circulating parts of capital is responsible for a difference in the period of turnover in which a certain profit is realised. If capitals are divided into fixed and circulating capital in different proportions, this will naturally always influence the period of turnover and cause differences in it. But this does not imply that the period of turnover, in which the same capitals realise certain profits, is different. For instance, A may continually have to convert the greater part of its product into raw materials, etc., while B may use the same machinery, etc., for a longer time, and may need less raw material, but both A and B, being occupied in production, always have a part of their capital engaged, the one in raw materials, i.e., in circulating capital, and the other in machinery, etc., or in fixed capital. A continually converts a portion of its capital from the form of commodities into that of money, and the latter again into the form of raw material, while B employs a portion of its capital for a longer time as an instrument of labour without any such conversions. If both of them employ the same amount of labour, they will indeed sell quantities of products of unequal value in the course of the year, but both quantities of products will contain equal amounts of surplus value, and their rates of profit, calculated on the entire capital advanced, will be the same, although their composition of fixed and circulating capital, and their periods of turnover, are different. Both capitals realise equal profits in equal periods, although their periods of turnover are different.<sup>21)</sup> The difference in the period of turnover is in itself of no importance, except so far as it affects the mass of surplus labour appropriated and realised by the same capital in a given time. If, therefore, a different division into fixed and circulating capital does

<sup>&</sup>lt;sup>21)</sup> //It follows from Chapter IV that the above statement correctly applies only when capitals A and B are differently composed in respect to their values, but that the percentages of their variable parts are proportionate to their periods of turnover, i. e., inversely proportionate to their number of turnovers. Let capital A have the following percentages of composition: 20, fixed + 70, circulating, and thus 90, + 10, = 100.At a rate of surplus value of 100% the 10, produce 10, in one turnover, yielding a rate of profit for one turnover = 10%. Let capital B = 60, fixed + 20, circulating, and thus 80, + 20, = 100. The 20, produce 20, in one turnover at the above rate of surplus value, yielding a rate of profit for one turnover = 20%, which is double that of A. But if A is turned over twice per year, and B only once, then  $2 \times 10$  also make 20, per year, and the numular ate of profit is the same for both, namely 20%. — F. E.//

not necessarily imply a different period of turnover, which would in its turn imply a different rate of profit, it is evident that if there is any such difference in the rates of profit, it is not due to a different ratio of fixed to circulating capital as such, but rather to the fact that this different ratio indicates an inequality in the periods of turnover affecting the rate of profit.

It follows, therefore, that the different composition of constant capital in respect to its fixed and circulating portions in various branches of production has in itself no bearing on the rate of profit, since it is the ratio of variable to constant capital which decides this question, while the value of the constant capital, and therefore also its magnitude in relation to the variable is entirely unrelated to the fixed or circulating nature of its components. Yet it may be found — and this often leads to incorrect conclusions — that wherever fixed capital is considerably advanced this but expresses the fact that production is on a large scale, so that constant capital greatly outweighs the variable, or that the living labour power it employs is small compared to the mass of the means of production which it operates.

We have thus demonstrated that different lines of industry have different rates of profit, which correspond to differences in the organic composition of their capitals and, within indicated limits, also to their different periods of turnover; given the same time of turnover, the law (as a general tendency) that profits are related to one another as the magnitudes of the capitals, and that, consequently, capitals of equal magnitude yield equal profits in equal periods, applies only to capitals of the same organic composition, even with the same rate of surplus value. These statements hold good on the assumption which has been the basis of all our analyses so far, namely that the commodities are sold at their values. There is no doubt, on the other hand, that aside from unessential, incidental and mutually compensating distinctions, differences in the average rate of profit in the various branches of industry do not exist in reality, and could not exist without abolishing the entire system of capitalist production. It would seem, therefore, that here the theory of value is incompatible with the actual process, incompatible with the real phenomena of production, and that for this reason any attempt to understand these phenomena should be given up.

It follows from the first part of this volume that the cost prices of products in different spheres of production are equal if equal portions of capital have been advanced for their production, however different the organic composition of such capitals. The distinction between variable and constant capital escapes the capitalist in the cost price. A commodity for whose production he must advance  $\pounds 100$  costs him just as much, whether he invests  $90_c + 10_v$ , or  $10_c + 90_v$ . It costs him  $\pounds 100$  in either case — no more and no less. The cost prices are the same for equal invested capitals in different spheres, no matter how much the produced values and surplus values may differ. The equality of cost prices is the basis for competition among invested capitals whereby an average profit is brought about.

### Chapter IX

#### FORMATION OF A GENERAL RATE OF PROFIT (AVERAGE RATE OF PROFIT) AND TRANSFORMATION OF THE VALUES OF COMMODITIES INTO PRICES OF PRODUCTION

The organic composition of capital depends at any given time on two circumstances: first, on the technical relation of labour power employed to the mass of the means of production employed; secondly, on the price of these means of production. This composition, as we have seen, must be examined on the basis of percentage ratios. We express the organic composition of a certain capital consisting  $\frac{4}{5}$  of constant and  $\frac{1}{5}$  of variable capital, by the formula  $80_c + 20_c$ . It is furthermore assumed in this comparison that the rate of surplus value is unchangeable. Let it be any rate picked at random; say, 100%. The capital of  $80_c + 20_v$  then produces a surplus value of  $20_s$ , and this yields a rate of profit of 20% on the total capital. The magnitude of the actual value of its product depends on the magnitude of the fixed part of the constant capital, and on the portion which passes from it through wear and tear into the product. But since this circumstance has absolutely no bearing on the rate of profit, and hence, in the present analysis, we shall assume, for the sake of simplicity, that the constant capital is everywhere uniformly and entirely transferred to the annual product of the capitals. It is further assumed that the capitals in the different spheres of production annually realise the same guantities of surplus value proportionate to the magnitude of their variable parts. For the present, therefore, we disregard the difference which may be produced in this respect by variations in the duration of turnovers. This point will be discussed later.

Capitals	Rate of	Surplus	Value	Rate
	Surplus Value	Value	of Product	of Profit
I. $80_{c} + 20_{v}$	100%	20	120	20%
II. $70_{c} + 30_{v}$	100%	30	130	30%
III. $60_{c} + 40_{v}$	100%	40	140	40%
IV. $85_{c} + 15_{v}$	100%	15	115	15%
V. $95_{c} + 5_{v}$	100%	5	105	5%

Let us take five different spheres of production, and let the capital in each have a different organic composition as follows:

Here, in different spheres of production with the same degree of exploitation of labour, we find considerably different rates of profit corresponding to the different organic composition of these capitals.

The sum total of the capitals invested in these five spheres of production = 500; the sum total of the surplus value produced by them = 110; the aggregate value of the commodities produced by them = 610. If we consider the 500 as a single capital, and capitals I to V merely as its component parts (as, say, different departments of a cotton mill, which has different ratios of constant to variable capital in its carding, preparatory spinning, spinning, and weaving shops, and in which the average ratio for the factory as a whole has still to be calculated), the mean composition of this capital of 500 would =  $390_c + 110_v$ , or, in per cent, =  $78_c + 22_v$ . Should each of the capitals of 100 be regarded as  $\frac{1}{5}$  of the total capital, its composition would equal this average of  $78_c + 22_v$ ; for every 100 there would be an average surplus value of 22; thus, the average rate of profit would = 22%, and, finally, the price of every fifth of the total product produced by the 500 would = 122. The product of each fifth of the advanced total capital would then have to be sold at 122.

But to avoid entirely erroneous conclusions it must not be assumed that all cost prices = 100.

With  $80_c + 20_v$  and a rate of surplus value = 100%, the total value of commodities produced by capital I = 100 would be  $80_c + 20_v + 20_s = 120$ , provided the entire constant capital went into the annual product. Now, this may under certain circumstances be the case in some spheres of production. But hardly in cases where the proportion of c: v = 4:1. We must, therefore, remember in com-

paring the values produced by each 100 of the different capitals, that they will differ in accordance with the different composition of c as to its fixed and circulating parts, and that, in turn, the fixed portions of each of the different capitals depreciate slowly or rapidly as the case may be, thus transferring unequal quantities of their value to the product in equal periods of time. But this is immaterial to the rate of profit. No matter whether the  $80_c$  give up a value of 80, or 50, or 5, to the annual product, and the annual product consequently  $= 80_c + 20_v + 20_s = 120$ , or  $50_c + 20_v + 20_s = 90$ , or  $5_c + 20_v + 20_s = 45$ ; in all these cases the excess of the product's value over its cost price = 20, and in calculating the rate of profit these 20 are related to the capital of 100 in all of them. The rate of profit of capital I, therefore, is 20% in every case. To make this still plainer, we let different portions of constant capital go into the value of the product of the same five capitals in the following table:

Capitals	Rate of Surplus Value	Surplus Value	Rate of Profit	Used up c	Value of Com- modities	Cost Price	
$ \begin{array}{c} I. \ 80_{c} + 20_{v} \\ II. \ 70_{c} + 30_{v} \\ III. \ 60_{c} + 40_{v} \\ IV. \ 85_{c} + 15_{v} \\ V. \ 95_{c} + 5_{v} \end{array} $	100% 100% 100% 100% 100%	20 30 40 15 5	20% 30% 40% 15% 5%	50 51 51 40 10	90 111 131 70 20	70 81 91 55 15	
$390_{c} + 110_{v}$	_	110			_		Total
$78_{c} + 22_{v}$		22	22%		—	_	Average

If we now again consider capitals I to V as a single total capital, we shall see that, in this case as well, the composition of the sums of these five capitals =  $500 = 390_c + 110_v$ , so that we get the same average composition =  $78_c + 22_v$ , and, similarly, the average surplus value remains 22.<sup>a</sup> If we divide this surplus value uniformly among capitals I to V, we get the following commodity prices:

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition "22%"; corrected after Marx's manuscript.

Capitals	Surplus Value	Value of Commodities	Cost Price of Commodities	Price of Commodities	Rate of Prolit	Deviation of Price from Value
I. $80_{c} + 20_{c}$	20	90	70	92	22%	+2
II. $70_{c} + 30_{c}$	30	111	81	103	22%	-8
III. $60_{c} + 40_{c}$	40	131	91	113	22%	-18
IV. $85_{c} + 15_{c}$	15	70*	55	77	22%	+7
V. $95_{c} + 5_{c}$	5	20	15	37	22%	+17

Taken together, the commodities are sold at 2 + 7 + 17 = 26 above, and 8 + 18 = 26 below their value, so that the deviations of price from value balance out one another through the uniform distribution of surplus value, or through addition of the average profit of 22 per 100 units of advanced capital to the respective cost prices of the commodities I to V. One portion of the commodities is sold above its value in the same proportion in which the other is sold below it. And it is only the sale of the commodities at such prices that enables the rate of profit for capitals I to V to be uniformly 22%, regardless of their different organic composition. The prices which obtain as the average of the various rates of profit in the different spheres of production added to the cost prices of the different spheres of production, constitute the prices of production. They have as their prerequisite the existence of a general rate of profit, and this, again, presupposes that the rates of profit in every individual sphere of production taken by itself have previously been reduced to just as many average rates. These particular rates of profit =  $\frac{s}{C}$  in every sphere of production, and must, as occurs in Part I of this book, be deduced out of the values of the commodities. Without such deduction the general rate of profit (and consequently the price of production of commodities) remains a vague and senseless conception. Hence, the price of production of a commodity is equal to its cost price plus the profit, added to it in per cent, in accordance with the general rate of profit, or, in other words, to its cost price plus the average profit.

Owing to the different organic compositions of capitals invested in different lines of production, and, hence, owing to the circumstance that —depending on the different percentage which the variable part makes up in a total capital of a given magnitude — capitals of equal

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition "40"; corrected after Marx's manuscript.

magnitude put into motion very different quantities of labour, they also appropriate very different quantities of surplus labour or produce very different quantities of surplus value. Accordingly, the rates of profit prevailing in the various branches of production are originally very different. These different rates of profit are equalised by competition to a single general rate of profit, which is the average of all these different rates of profit. The profit accruing in accordance with this general rate of profit to any capital of a given magnitude, whatever its organic composition, is called the average profit. The price of a commodity, which is equal to its cost price plus the share of the annual average profit on the capital advanced (not merely consumed) in its production that falls to it in accordance with the conditions of turnover, is called its price of production. Take, for example, a capital of 500, of which 100 is fixed capital, and let 10% of this wear out during one turnover of the circulating capital of 400.Let the average profit for the period of turnover be 10%. In that case the cost price of the product created during this turnover will be 10<sub>c</sub> for wear plus 400 (c + v) circulating capital = 410, and its price of production will be 410 cost price plus (10% profit on 500) 50 = 460.

Thus, although in selling their commodities the capitalists of the various spheres of production recover the value of the capital consumed in their production, they do not secure the surplus value, and consequently the profit, created in their own sphere by the production of these commodities. What they secure is only as much surplus value, and hence profit, as falls, when uniformly distributed, to the share of every aliquot part of the total capital from the total surplus value, or total profit, produced in a given time by the total social capital in all spheres of production. Every 100 of an advanced capital, whatever its composition, draws as much profit in a year, or any other period of time, as falls to the share of every 100, the n'th part of the total capital, during the same period. So far as profits are concerned, the various capitalists are just so many stockholders in a stock company in which the shares of profit are uniformly divided per 100, so that profits differ in the case of the individual capitalists only in accordance with the amount of capital invested by each in the aggregate enterprise, i.e., according to his investment in social production as a whole, according to the number of his shares. Therefore, the portion of the price of commodities which replaces the elements of capital consumed in the production of these commodities, the portion, therefore, which will have to be used to buy back these consumed capital values, i. e., their

cost price, depends entirely on the outlay of capital within the respective spheres of production. But the other element of the price of commodities, the profit added to this cost price, does not depend on the amount of profit produced in a given sphere of production by a given capital in a given period of time. It depends on the mass of profit which falls as an average for any given period to each individual capital as an aliquot part of the total social capital invested in social production.<sup>22)</sup>

When a capitalist sells his commodities at their price of production, therefore, he recovers money in proportion to the value of the capital consumed in their production and secures profit in proportion to his advanced capital as the aliquot part in the total social capital. His cost prices are specific. But the profit added to them is independent of his particular sphere of production, being a simple average per 100 units of invested capital.

Let us assume that the five different investments I to V of the foregoing illustration belong to one man. The quantity of variable and constant capital consumed per 100 of the invested capital in each of the departments I to V in the production of commodities would be known, and this portion of the value of the commodities I to V would, needless to say, make up a part of their price, since at least this price is required to recover the advanced and consumed portions of the capital. These cost prices would therefore be different for each class of the commodities I to V, and would as such be set differently by the owner. But as regards the different quantities of surplus value, or profit, produced by I to V, they might easily be regarded by capitalist as profit on his advanced aggregate capital, so that each 100 units would get their definite aliquot part. Hence, the cost prices of the commodities produced in the various departments I to V would be different; but that portion of their selling price derived from the profit added per 100 capital would be the same for all these commodities. The aggregate price of the commodities I to V would therefore equal their aggregate value, i.e., the sum of the cost prices I to V plus the sum of the surplus values, or profits, produced in I to V. It would hence actually be the money expression of the total quantity of past

<sup>22.</sup> Cherbuliez.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Richesse ou pauvreté, 2nd ed., Paris, 1841, pp. 71-72. See also present edition, Vol. 33, pp. 292-99.

and newly added labour incorporated in commodities I to V. And in the same way the sum of the prices of production of all commodities produced in society—the totality of all branches of production—is equal to the sum of their values.

This statement seems to conflict with the fact that under capitalist production the elements of productive capital are, as a rule, bought on the market, and that for this reason their prices include profit which has already been realised, hence, include the price of production of the respective branch of industry together with the profit contained in it, so that the profit of one branch of industry goes into the cost price of another. But if we place the sum of the cost prices of the commodities of an entire country on one side, and the sum of its surplus values, or profits, on the other, the calculation must evidently be right. For instance, take a certain commodity A. Its cost price may contain the profits of B, C, D, etc., just as the cost prices of B, C, D, etc., may contain the profits of A. Now, as we make our calculation the profit of A will not be included in its cost price, nor will the profits of B, C, D, etc., be included in theirs. Nobody ever includes his own profit in his cost price. If there are, therefore, n spheres of production, and if each makes a profit amounting to p, then their aggregate cost price = k - np. Considering the calculation as a whole we see that since the profits of one sphere of production pass into the cost price of another, they are therefore included in the calculation as constituents of the total price of the end product, and so cannot appear a second time on the profit side. If any do appear on this side, however, then only because the commodity in question is itself an ultimate product, whose price of production does not pass into the cost price of some other commodity.

If the cost price of a commodity includes a sum = p, which stands for the profits of the producers of the means of production, and if a profit =  $p_1$  is added to this cost price, the aggregate profit  $P = p + p_1$ . The aggregate cost price of the commodity, considered without the profit portions, is then its own cost price minus P. Let this cost price be k. Then, obviously,  $k + P = k + p + p_1$ . In dealing with surplus values, we have seen in Book I (Kap. VII, 2, S. 211/203)<sup>a</sup> that the product of every capital may be so treated, as though a part of it replaces only capital, while the other part represents only surplus

<sup>&</sup>lt;sup>a</sup> English edition: Ch. IX, 2 (see present edition, Vol. 35, pp. 230-33).

value. In applying this approach to the aggregate product of society, we must make some rectifications. Looking upon society as a whole, the profit contained in, say, the price of flax cannot appear twice — not both as a portion of the linen price and as the profit of the flax.

There is no difference between surplus value and profit, as long as, e. g., A's surplus value passes into B's constant capital. It is, after all, quite immaterial to the value of the commodities, whether the labour contained in them is paid or unpaid. This merely shows that B pays for A's surplus value. A's surplus value cannot be entered twice in the total calculation.

But the difference is this: Aside from the fact that the price of a particular product, let us say that of capital B, differs from its value because the surplus value realised in B may be greater or smaller than the profit added to the price of the products of B, the same circumstance applies also to those commodities which form the constant part of capital B, and indirectly also its variable part, as the labourers' necessities of life. So far as the constant portion is concerned, it is itself equal to the cost price plus the surplus value, here therefore equal to cost price plus profit, and this profit may again be greater or smaller than the surplus value for which it stands. As for the variable capital, the average daily wage is indeed always equal to the value produced in the number of hours the labourer must work to produce the necessities of life. But this number of hours is in its turn obscured by the deviation of the prices of production of the necessities of life from their values. However, this always resolves itself to one commodity receiving too little of the surplus value while another receives too much, so that the deviations from the value which are embodied in the prices of production compensate one another. Under capitalist production, the general law acts as the prevailing tendency only in a very complicated and approximate manner, as a never ascertainable average of ceaseless fluctuations.

Since the general rate of profit is formed by taking the average of the various rates of profit for each 100 of capital advanced in a definite period, e.g., a year, it follows that in it the difference brought about by different periods of turnover of different capitals is also effaced. But these differences have a decisive bearing on the different rates of profit in the various spheres of production whose average forms the general rate of profit.

In the preceding illustration concerning the formation of the general rate of profit we assumed each capital in each sphere of production = 100, and we did so to show the difference in the rates of profit in per cent, and thus also the difference in the values of commodities produced by equal amounts of capital. But it goes without saying that the actual amounts of surplus value produced in each sphere of production depend on the magnitude of the employed capitals, since the composition of capital is given in each sphere of production. Yet the actual *rate* of profit in any particular sphere of production is not affected by the fact that the capital invested is 100, or m times 100, or xm times 100. The rate of profit remains 10%, whether the total profit is 10:100, or 1,000:10,000.

However, since the rates of profit differ in the various spheres of production, with very much different quantities of surplus value, or profit, being produced in them, depending on the proportion of the variable to the total capital, it is evident that the average profit per 100 of the social capital, and hence the average, or general, rate of profit, will differ considerably in accordance with the respective magnitudes of the capitals invested in the various spheres. Let us take four capitals A, B, C, D. Let the rate of surplus value for all = 100%. Let the variable capital for each 100 of the total be 25 in A, 40 in B, 15 in C, and 10 in D. Then each 100 of the total capital would yield a surplus value, or profit, of 25 in A, 40 in B, 15 in C, and 10 in D. This would total 90, and if these four capitals are of the same magnitude, the average rate of profit would then be  $\frac{90}{4}$  or  $22 \frac{1}{2}\%$ .

Suppose, however, the total capitals are as follows: A = 200, B = 300, C = 1,000, D = 4,000. The profits produced would then respectively = 50, 120, 150, and 400. This makes a profit of 720, and an average rate of profit of 13 1/11% for 5,500, the sum of the four capitals.

The masses of the total value produced differ in accordance with the magnitudes of the total capitals invested in A, B, C, D, respectively. The formation of the general rate of profit is, therefore, not merely a matter of obtaining the simple average of the different *rates* of profit in the various spheres of production, but rather one of the relative weight which these different rates of profit have in forming this average. This, however, depends on the relative magnitude of the capital invested in each particular sphere, or on the aliquot part which the capital invested in each particular sphere forms in the aggregate social capital. There will naturally be a very great difference, depending on whether a greater or smaller part of the total capital produces a higher or lower rate of profit. And this, again, depends on how much capital is invested in spheres, in which the variable capital is relatively small or large compared to the total capital. It is just like the average interest obtained by a usurer who lends various quantities of capital at different interest rates; for instance, at 4, 5, 6, 7%, etc. The average rate will depend entirely on how much of his capital he has loaned out at each of the different rates of interest.

The general rate of profit is, therefore, determined by two factors:

1) The organic composition of the capitals in the different spheres of production, and thus, the different rates of profit in the individual spheres.

2) The distribution of the total social capital in these different spheres, and thus, the relative magnitude of the capital invested in each particular sphere at the specific rate of profit prevailing in it; i. e., the relative share of the total social capital absorbed by each individual sphere of production.

In Books I and II we dealt only with the *value* of commodities. On the one hand, the *cost price* has now been singled out as a part of this value, and, on the other, the *price of production* of commodities has been developed as its converted form.

Suppose the composition of the average social capital is  $80_c + 20_v$ , and the annual rate of surplus value,  $s'_{,} = 100\%$ . In that case the average annual profit for a capital of 100 = 20, and the general annual rate of profit = 20%. Whatever the cost price, k, of the commodities annually produced by a capital of 100, their price of production would then  $= \mathbf{k} + 20$ . In those spheres of production in which the composition of capital would =  $(80 - x)_c + (20 + x)_v$ , the actually produced surplus value, or the annual profit produced in that particular sphere, would = 20 + x, that is, greater than 20, and the value of the produced commodities = k + 20 + x, that is, greater than k + 20, or greater than their price of production. In those spheres, in which the composition of the capital =  $(80 + x)_c + (20 - x)_{yy}$ the annually produced surplus value, or profit, would = 20 - x, or less than 20, and consequently the value of the commodities k + 20 - x less than the price of production, which = k + 20. Aside from possible differences in the periods of turnover, the price of production of the commodities would then equal their value only in spheres, in which the composition of capital would happen to be  $80_{c} + 20_{v}$ 

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in each particular sphere of production varies in degree, higher or lower, depending on how large a quantity of means of production are set in motion by a definite quantity of labour, hence in a given working day by a definite number of labourers, and, consequently, on how small a quantity of labour is required for a given quantity of means of production. Such capitals as contain a larger percentage of constant and a smaller percentage of variable capital than the average social capital are, therefore, called capitals of higher composition, and, conversely, those capitals in which the constant is relatively smaller, and the variable relatively greater than in the average social capital, are called capitals of *lower* composition. Finally, we call those capitals whose composition coincides with the average, capitals of average composition. Should the average social capital be composed in per cent of  $80_{c} + 20_{u}$ , then a capital of  $90_{c} + 10_{u}$  is higher, and a capital of  $70_c + 30_v$  lower than the social average. Generally speaking, if the composition of the average social capital =  $m_c + n_{y}$ , in which m and n are constant magnitudes and m + n = 100, the formula  $(m + x)_c + (n - x)_v$  represents the higher composition, and  $(m - x)_c +$  $+ (n + x)_{v}$  the lower composition of an individual capital or group of capitals. The way in which these capitals perform their functions after establishment of an average rate of profit and assuming one turnover per year, is shown in the following tabulation, in which I represents the average composition with an average rate of profit of 20%.

I) 
$$80_c + 20_v + 20_s$$
. Rate of profit =  $20\%$ .  
Price of product = 120. Value = 120  
II)  $90_c + 10_v + 10_s$ . Rate of profit =  $20\%$ .  
Price of product = 120. Value = 110  
III)  $70_c + 30_v + 30_s$ . Rate of profit =  $20\%$ .

Price of product = 120. Value = 130.

The value of the commodities produced by capital II would, therefore, be smaller than their price of production, the price of production of the commodities of III smaller than their value, and only in the case of capital I in branches of production in which the composition happens to coincide with the social average, would value and price of production be equal. In applying these terms to any particular cases note must, however, be taken whether a deviation of the ratio between c and v from the general average is simply due to a change in the value of the elements of constant capital, rather than to a difference in the technical composition.

The foregoing statements have at any rate modified the original assumption concerning the determination of the cost price of commodities. We had originally assumed that the cost price of a commodity equalled the *value* of the commodities consumed in its production.But for the buyer the price of production of a specific commodity is its cost price, and may thus pass as cost price into the prices of other commodities. Since the price of production may differ from the value of a commodity, it follows that the cost price of a commodity containing this price of production of another commodity may also stand above or below that portion of its total value derived from the value of the means of production consumed by it. It is necessary to remember this modified significance of the cost price, and to bear in mind that there is always the possibility of an error if the cost price of a commodity in any particular sphere is identified with the value of the means of production consumed by it. Our present analysis does not necessitate a closer examination of this point. It remains true, nevertheless, that the cost price of a commodity is always smaller than its value. For no matter how much the cost price of a commodity may differ from the value of the means of production consumed by it, this past mistake is immaterial to the capitalist. The cost price of a particular commodity is a definite condition which is given, and independent of the production of our capitalist, while the result of his production is a commodity containing surplus value, therefore an excess of value over and above its cost price. For all other purposes, the statement that the cost price is smaller than the value of a commodity has now changed practically into the statement that the cost price is smaller than the price of production. As concerns the total social capital, in which the price of production is equal to the value, this statement is identical with the former, namely that the cost price is smaller than the value. And while it is modified in the individual spheres of production, the fundamental fact always remains that in the case of the total social capital the cost price of the commodities produced by it is smaller than their value, or, in the case of the total mass of social commodities, smaller than their price of production, which is identical with their value. The cost price of a commodity refers only to the quantity of paid labour contained in it, while its value refers to all the paid and unpaid labour contained in it. The price of production refers to the sum of the paid labour plus a certain quantity of unpaid labour determined for any particular sphere of production by conditions over which it has no control.

The formula that the price of production of a commodity = k + p, i.e., equals its cost price plus profit, is now more precisely defined with p = kp' (p' being the general rate of profit). Hence the price of production = k + kp'. If k = 300 and p' = 15%, then the price of production is  $k + kp' = 300 + 300 \times \frac{15}{100}$ , or 345.

The price of production of the commodities in any particular sphere may change in magnitude:

1) If the general rate of profit changes independently of this particular sphere, while the value of the commodities remains the same (the same quantities of congealed and living labour being consumed in their production as before).

2) If there is a change of value, either in this particular sphere in consequence of technical changes, or in consequence of a change in the value of those commodities which form the elements of its constant capital, while the general rate of profit remains unchanged.

3) Finally, if a combination of the two aforementioned circumstances takes place.

In spite of the great changes occurring continually, as we shall see, in the actual rates of profit within the individual spheres of production, any real change in the general rate of profit, unless brought about by way of an exception by extraordinary economic events, is the belated effect of a series of fluctuations extending over very long periods, fluctuations which require much time before consolidating and equalising one another to bring about a change in the general rate of profit. In all shorter periods (quite aside from fluctuations of market prices), a change in the prices of production is, therefore, always traceable *prima facie* to actual changes in the value of commodities, i. e., to changes in the total amount of labour time required for their production. Mere changes in the money expression of the same values are, naturally, not at all considered here.<sup>23)</sup>

On the other hand, it is evident that from the point of view of the total social capital the value of the commodities produced by it (or, expressed in money, their price) = value of constant capital + value of variable capital + surplus value. Assuming the degree of labour exploitation to be constant, the rate of profit cannot change so long as

<sup>23)</sup> Corbet, p. 174.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> An Inquiry into the Causes and Modes of the Wealth of Individuals..., London, 1841. Cf. present edition, Vol. 33, p. 250.

the mass of surplus value remains the same, unless there is a change in either the value of the constant capital, the value of the variable

capital, or the value of both, so that C changes, and thereby  $\frac{s}{C}$ ,

which represents the general rate of profit. In each case, therefore, a change in the general rate of profit implies a change in the value of commodities which form the elements of the constant or variable capital, or of both.

Or, the general rate of profit may change, while the value of the commodities remains the same, when the degree of labour exploitation changes.

Or, if the degree of labour exploitation remains the same, the general rate of profit may change through a change in the amount of labour employed relative to the constant capital as a result of technical changes in the labour process. But such technical changes must always show themselves in, and be attended by, a change in the value of the commodities, whose production would then require more or less labour than before.

We saw in Part I that surplus value and profit are identical from the standpoint of their mass. But the rate of profit is from the very outset distinct from the rate of surplus value, which appears at first sight as merely a different form of calculating. But at the same time this serves, also from the outset, to obscure and mystify the actual origin of surplus value, since the rate of profit can rise or fall while the rate of surplus value remains the same, and vice versa, and since the capitalist is in practice solely interested in the rate of profit. Yet there was difference of magnitude only between the rate of surplus value and the rate of profit and not between the surplus value itself and profit. Since in the rate of profit the surplus value is calculated in relation to the total capital and the latter is taken as its standard of measurement, the surplus value itself appears to originate from the total capital, uniformly derived from all its parts, so that the organic difference between constant and variable capital is obliterated in the conception of profit. Disguised as profit, surplus value actually denies its origin, loses its character, and becomes unrecognisable. However, hitherto the distinction between profit and surplus value applied solely to a qualitative change, or change of form, while there was no real difference of magnitude in this first stage of the change between profit and surplus value, but only between the rate of profit and the rate of surplus value.

But it is different, as soon as a general rate of profit, and thereby an average profit corresponding to the magnitude of employed capital given in the various spheres of production, have been established.

It is then only an accident if the surpuls value, and thus the profit, actually produced in any particular sphere of production, coincides with the profit contained in the selling price of a commodity. As a rule, surplus value and profit and not their rates alone, are then different magnitudes. At a given degree of exploitation, the mass of surplus value produced in a particular sphere of production is then more important for the aggregate average profit of social capital, and thus for the capitalist class in general, than for the individual capitalist in any specific branch of production. It is of importance to the latter <sup>24</sup> only in so far as the quantity of surplus value produced in his branch helps to regulate the average profit. But this is a process which occurs behind his back, one he does not see, nor understand, and which indeed does not interest him. The actual difference of magnitude between profit and surplus value --- not merely between the rate of profit and the rate of surplus value - in the various spheres of production now completely conceals the true nature and origin of profit not only from the capitalist, who has a special interest in deceiving himself on this score, but also from the labourer. The transformation of values into prices of production serves to obscure the basis for determining value itself. Finally, since the mere transformation of surplus value into profit distinguishes the portion of the value of a commodity forming the profit from the portion forming its cost price, it is natural that the conception of value should elude the capitalist at this juncture, for he does not see the total labour put into the commodity, but only that portion of the total labour for which he has paid in the shape of means of production, be they living or not, so that his profit appears to him as something outside the immanent value of the commodity. Now this idea is fully confirmed, fortified, and ossified in that, from the standpoint of his particular sphere of production, the profit added to the cost price is not actually determined by the limits of the formation of value within his own sphere, but through completely outside influences.

The fact that this intrinsic connection is here revealed for the first time; that up to the present time political economy, as we shall see in

 $<sup>^{24</sup>_1}$  We naturally leave aside for the moment the possibility of securing a temporary extra profit through wage reductions, monopoly prices, etc. [F. E.]

the following and in Book IV, <sup>7</sup> either forcibly abstracted itself from the distinctions between surplus value and profit, and their rates, so it could retain value determination as a basis, or else abandoned this value determination and with it all vestiges of a scientific approach, in order to cling to the differences that strike the eye in this phenomenon — this confusion of the theorists best illustrates the utter incapacity of the practical capitalist, blinded by competition as he is, and incapable of penetrating its phenomena, to recognise the inner essence and inner structure of this process behind its outer appearance.

In fact, all the laws evolved in Part I concerning the rise and fall of the rate of profit have the following twofold meaning:

1) On the one hand, they are the laws of the general rate of profit. In view of the many different causes which make the rate of profit rise or fall one would think, after everything that has been said and done, that the general rate of profit must change every day. But a trend in one sphere of production compensates for that in another, their effects cross and paralyse one another. We shall later examine to which side these fluctuations ultimately gravitate. But they are slow. The suddenness, multiplicity, and different duration of the fluctuations in the individual spheres of production make them compensate for one another in the order of their succession in time, a fall in prices following a rise, and vice versa, so that they remain limited to local, i.e., individual, spheres. Finally, the various local fluctuations neutralise one another. Within each individual sphere of production, there take place changes, i.e., deviations from the general rate of profit, which counterbalance one another in a difinite time on the one hand, and thus have no influence upon the general rate of profit, and which, on the other, do not react upon it, because they are balanced by other simultaneous local fluctuations. Since the general rate of profit is not only determined by the average rate of profit in each sphere, but also by the distribution of the total capital among the different individual spheres, and since this distribution is continually changing, it becomes another constant cause of change in the general rate of profit. But it is a cause of change which mostly paralyses itself, owing to the uninterrupted<sup>a</sup> and many-sided nature of this movement.

2) Within each sphere, there is some room for play for a longer or shorter space of time, in which the rate of profit of this sphere may fluctuate, before this fluctuation consolidates sufficiently after rising

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition "interrupted"; corrected after Marx's manuscript.

or falling to gain time for influencing the general rate of profit and therefore assuming more than local importance. The laws of the rate of profit, as developed in Part I of this book, likewise remain applicable within these limits of space and time.

The theoretical conception concerning the first transformation of surplus value into profit, that every part of a capital yields a uniform profit, <sup>25</sup>) expresses a practical fact. Whatever the composition of an industrial capital, whether it sets in motion one-quarter of congealed labour and three-quarters of living labour, or three-quarters of congealed labour and one-quarter of living labour, whether in one case it absorbs three times as much surplus labour, or produces three times as much surplus value than in another — in either case it yields the same profit, given the same degree of labour exploitation and leaving aside individual differences, which, incidentally, disappear because we are dealing in both cases with the average composition of the entire sphere of production. The individual capitalist (or all the capitalists in each individual sphere of production), whose outlook is limited, rightly believes that his profit is not derived solely from the labour employed by him, or in his line of production. This is quite true, as far as his average profit is concerned. To what extent this profit is due to the aggregate exploitation of labour on the part of the total capital, i. e., by all his capitalist colleagues - this interrelation is a complete mystery to the individual capitalist; all the more so, since no bourgeois theorists, the political economists, have so far revealed it. A saving of labour - not only labour necessary to produce a certain product, but also the number of employed labourers - and the employment of more congealed labour (constant capital), appear to be very sound operations from the economic standpoint and do not seem to exert the least influence on the general rate of profit and the average profit. How could living labour be the sole source of profit, in view of the fact that a reduction in the quantity of labour required for production appears not to exert any influence on profit? Moreover, it even seems in certain circumstances to be the nearest source of an increase of profits, at least for the individual capitalist.

If in any particular sphere of production there is a rise or fall of the

<sup>25</sup> Malthus.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Principles of Political Economy, 2nd ed., London, 1836, p. 268. Cf. present edition, Vol. 33, p. 71.

portion of the cost price which represents the value of constant capital, this portion comes from the circulation and, either enlarged or reduced, passes from the very outset into the process of production of the commodity. If, on the other hand, the same number of labourers produces more or less in the same time, so that the quantity of labour required for the production of a definite quantity of commodities varies while the number of labourers remains the same, that portion of the cost price which represents the value of the variable capital may remain the same, i.e., contribute the same amount to the cost price of the total product. But every one of the individual commodities whose sum makes up the total product, shares in more or less labour (paid and therefore also unpaid), and shares consequently in the greater or smaller outlay for this labour, i.e., a larger or smaller portion of the wage. The total wages paid by the capitalist remain the same, but wages differ if calculated per piece of the commodity. Thus, there is a change in this portion of the cost price of the commodity. But no matter whether the cost price of the individual commodity (or, perhaps, the cost price of the sum of commodities produced by a capital of a given magnitude) rises or falls, be it due to such changes in its own value, or in that of its elements, the average profit of, e.g., 10% remains 10%. Still, 10% of an individual commodity may represent very different amounts, depending on the change of magnitude caused in the cost price of the individual commodity by such changes of value as we have assumed.<sup>26)</sup>

So far as the variable capital is concerned—and this is most important, because it is the source of surplus value, and because anything which conceals its relation to the enrichment of the capitalist serves to mystify the entire system—matters get cruder or appear to the capitalist in the following light: A variable capital of £100 represents the weekly wage of, say, 100 labourers. If these 100 labourers weekly produce 200 pieces of a commodity = 200C in a given working time, then 1C—abstracted from that portion of its cost price which is added by the constant capital, costs  $\frac{£100}{200} = 10$  shillings, since £100 = 200C. Now suppose that a change occurs in the productive power of labour. Suppose it doubles, so that the same number of

<sup>26</sup>, Corbet.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> An Inquiry into the Causes and Modes of the Wealth of Individuals..., London, 1841, p. 20. Cf. present edition, Vol. 33, pp. 241-42.

labourers now produces twice 200C in the time which it previously took to produce 200C. In that case (considering only that part of the cost price which consists of wages)  $1C = \frac{\pounds 100}{400} = 5$  shillings, since now  $\pounds 100 = 400$ C. Should the productive power decrease one-half, the same labour would produce only  $\frac{200C}{2}$  and since  $\pounds 100 = \frac{200C}{2}$ ,  $1C = \frac{\pounds 200}{200} = \pounds 1$ . The changes in the labour time required for the production of the commodities, and hence the changes in their value, thus appear in regard to the cost price, and hence to the price of production, as a different distribution of the same wage for more or fewer commodities, depending on the greater or smaller quantity of commodities produced in the same working time for the same wage. What the capitalist, and consequently also the political economist, see is that the part of the paid labour per piece of commodity changes with the productivity of labour, and that the value of each piece also changes accordingly. What they do not see is that the same applies to unpaid labour contained in every piece of the commodity, and this is perceived so much less since the average profit actually is only accidentally determined by the unpaid labour absorbed in the sphere of the individual capitalist. It is only in such crude and meaningless form that we can glimpse that the value of commodities is determined by the labour contained in them.

## Chapter X

#### EQUALISATION OF THE GENERAL RATE OF PROFIT THROUGH COMPETITION. MARKET PRICES AND MARKET VALUES. SURPLUS PROFIT

The capital employed in some spheres of production has a mean, or average, composition, that is, it has the same, or almost the same composition as the average social capital.

In these spheres the price of production of the produced commodities is exactly or almost the same as their value expressed in money. If there were no other way of reaching a mathematical limit, this would be the one. Competition so distributes the social capital among the various spheres of production that the prices of production in each sphere take shape according to the model of the prices of production in

these spheres of average composition, i.e., they  $= \mathbf{k} + \mathbf{k}\mathbf{p}'$  (cost price plus the average rate of profit multiplied by the cost price). This average rate of profit, however, is the percentage of profit in that sphere of average composition in which profit, therefore, coincides with surplus value. Hence, the rate of profit is the same in all spheres of production, for it is equalised on the basis of those average spheres of production which has the average composition of capital. Consequently, the sum of the profits in all spheres of production must equal the sum of the surplus values, and the sum of the prices of production of the total social product equal the sum of its value. But it is evident that the balance among spheres of production of different composition must tend to equalise them with the spheres of average composition, be it exactly or only approximately the same as the social average. Between the spheres more or less approximating the average there is again a tendency toward equalisation, seeking the ideal average, i.e., an average that does not really exist, i.e., a tendency to take this ideal as a standard. In this way the tendency necessarily prevails to make the prices of production merely converted forms of value, or to turn profits into mere portions of surplus value. However, these are not distributed in proportion to the surplus value produced in each special sphere of production, but rather in proportion to the mass of capital employed in each sphere, so that equal masses of capital, whatever their composition, receive equal aliquot shares of the total surplus value produced by the total social capital.

In the case of capitals of average, or approximately average, composition, the price of production is thus the same or almost the same as the value, and the profit the same as the surplus value produced by them. All other capitals, of whatever composition, tend toward this average under pressure of competition. But since the capitals of average composition are of the same, or approximately the same, structure as the average social capital, all capitals have the tendency, regardless of the surplus value produced by them, to realise the average profit, rather than their own surplus value in the price of their commodity, i. e., to realise the prices of production.

On the other hand, it may be said that wherever an average profit, and therefore a general rate of profit, are produced — no matter by what means — such an average profit cannot be anything but the profit on the average social capital, whose sum is equal to the sum of surplus value. Moreover, the prices obtained by adding this average profit to the cost prices cannot be anything but the values converted
into prices of production. Nothing would be altered if capitals in certain spheres of production would not, for some reason, be subject to the process of equalisation. The average profit would then be computed on that portion of the social capital which enters the equalisation process. It is evident that the average profit can be nothing but the total mass of surplus values allotted to the various quantities of capital proportionally to their magnitudes in the different spheres of production. It is the total realised unpaid labour, and this total mass, like the paid, congealed or living, labour, obtains in the total mass of commodities and money that falls to the capitalists.

The really difficult question is this: how is this equalisation of profits into a general rate of profit brought about, since it is obviously a result rather than a point of departure?

To begin with, an estimate of the values of commodities, for instance in terms of money, can obviously only be the result of their exchange. If, therefore, we assume such an estimate, we must regard it as the outcome of an actual exchange of commodity value for commodity value. But how does this exchange of commodities at their real values come about?

Let us first assume that all commodities in the different branches of production are sold at their real values. What would then be the outcome? According to the foregoing, very different rates of profit would then reign in the various spheres of production. It is *prima facie* two entirely different matters whether commodities are sold at their values (i. e., exchanged in proportion to the value contained in them at prices corresponding to their value), or whether they are sold at such prices that their sale yields equal profits for equal masses of the capitals advanced for their respective production.

The fact that capitals employing unequal amounts of living labour produce unequal amounts of surplus value, presupposes at least to a certain extent that the degree of exploitation or the rate of surplus value are the same, or that any existing differences in them are equalised by real or imaginary (conventional) grounds of compensation. This would assume competition among labourers and equalisation through their continual migration from one sphere of production to another. Such a general rate of surplus value — viewed as a tendency, like all other economic laws — has been assumed by us for the sake of theoretical simplification. But in reality it is an actual premiss of the capitalist mode of production, although it is more or less obstructed by practical frictions causing more or less considerable local differences, such as the SETTLEMENT LAWS<sup>a 29</sup> for farm labourers in Britain. But in theory it is assumed that the laws of capitalist mode of production operate in their pure form. In reality there exists only approximation; but, this approximation is the greater, the more developed the capitalist mode of production and the less it is adulterated and amalgamated with survivals of former economic conditions.

The whole difficulty arises from the fact that commodities are not exchanged simply as *commodities*, but as *products of capitals*, which claim participation in the total amount of surplus value, proportional to their magnitude, or equal if they are of equal magnitude. And this claim is to be satisfied by the total price for commodities produced by a given capital in a certain space of time. This total price is, however, only the sum of the prices of the individual commodities produced by this capital.

The punctum saliens<sup>b</sup> will be best brought out if we approach the matter as follows: Suppose, the labourers themselves are in possession of their respective means of production and exchange their commodities with one another. In that case these commodities would not be products of capital. The value of the various means of labour and raw materials would differ in accordance with the technical nature of the labours performed in the different branches of production. Furthermore, aside from the unequal value of the means of production employed by them, they would require different quantities of means of production for given quantities of labour, depending on whether a certain commodity can be finished in one hour, another in one day, and so forth. Also suppose the labourers work an equal average length of time, allowing for compensations that arise from the different labour intensities, etc. In such a case, two labourers would, first, both have replaced their outlays, the cost prices of the consumed means of production, in the commodities which make up the product of their day's work. These outlays would differ, depending on the technical nature of their labour. Secondly, both of them would have created equal amounts of new value, namely the working day added by them to the means of production. This would comprise their wages plus the surplus value, the latter representing surplus labour over and above their necessary wants, the product of which would however belong to them. To put it the capitalist way, both of them receive the same

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent. -  $^{\rm b}$  the essential point

wages plus the same profit, = the value, expressed, say, by the product of a ten-hour working day. But in the first place, the values of their commodities would have to differ. In commodity I, for instance, the portion of value corresponding to the consumed means of production might be higher than in commodity II. And, to introduce all possible differences, we might assume right now that commodity I absorbs more living labour, and consequently requires more labour time to be produced, than commodity II. The values of commodities I and II are, therefore, very different. So are the sums of the values of the commodities, which represent the product of the labour performed by labourers I and II in a given time. The rates of profit would also differ considerably for I and II if we take the rate of profit to be the proportion of the surplus value to the total value of the invested means of production. The means of subsistence daily consumed by I and II during production, which take the place of wages, here form the part of the invested means of production ordinarily called variable capital. But for equal working periods the surplus values would be the same for I and II, or, more precisely, since I and II each receive the value of the product of a day's work, both of them receive equal values after the value of the invested "constant" elements has been deducted, and one portion of these equal values may be regarded as a substitute for the means of subsistence consumed in production, and the other as surplus value in excess of it. If labourer I has greater expenses, they are made good by a greater portion of the value of his commodity, which replaces this "constant" part, and he therefore has to reconvert a larger portion of the total value of his product into the material elements of this constant part, while labourer II, if he receives less for this, has so much less to reconvert. In these circumstances, a difference in the rates of profit would therefore be immaterial, just as it is immaterial to the wage labourer today what rate of profit may express the amount of surplus value filched from him, and just as in international commerce the difference in the various national rates of profit is immaterial to commodity exchange.

The exchange of commodities at their values, or approximately at their values, thus requires a much lower stage than their exchange at their prices of production, which requires a definite level of capitalist development.

Whatever the manner in which the prices of various commodities are first mutually fixed or regulated, their movements are always governed by the law of value. If the labour time required for their production happens to shrink, prices fall; if it increases, prices rise, provided other conditions remain the same.

Apart from the domination of prices and price movement by the law of value, it is quite appropriate to regard the values of commodities as not only theoretically but also historically prius a to the prices of production. This applies to conditions in which the labourer owns his means of production, and this is the condition of the land-owning farmer living off his own labour and the craftsman, in the ancient as well as in the modern world. This agrees also with the view 27) we expressed previously, that the evolution of products into commodities arises through exchange between different communities, not between the members of the same community.<sup>b</sup> It holds not only for this primitive condition, but also for subsequent conditions, based on slavery and serfdom, and for the guild organisation of handicrafts, so long as the means of production involved in each branch of production can be transferred from one sphere to another only with difficulty and therefore the various spheres of production are related to one another, within certain limits, as foreign countries or communist communities.

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For prices at which commodities are exchanged to approximately correspond to their values, nothing more is necessary than 1) for the exchange of the various commodities to cease being purely accidental or only occasional; 2) so far as direct exchange of commodities is concerned, for these commodities to be produced on both sides in approximately sufficient quantities to meet mutual requirements, something learned from mutual experience in trading and therefore a natural outgrowth of continued trading; and 3) so far as selling is concerned, for no natural or artificial monopoly to enable either of the contracting sides to sell commodities above their value or to compel them to undersell. By accidental monopoly we mean a monopoly which a buyer or seller acquires through an accidental state of supply and demand.

The assumption that the commodities of the various spheres of production are sold at their value merely implies, of course, that their

<sup>&</sup>lt;sup>27:</sup> In 1865, this was merely Marx's "view". Today, after the extensive research ranging from Maurer to Morgan into the nature of primitive communities, it is an accepted fact which is hardly anywhere denied.—F.E.

<sup>&</sup>lt;sup>a</sup> prior - <sup>b</sup> See present edition, Vol. 29, p. 290 and Vol. 35, p. 98.

value is the centre of gravity around which their prices fluctuate, and their continual rises and drops tend to equalise. There is also the market value-of which later-to be distinguished from the individual value of particular commodities produced by different producers. The individual value of some of these commodities will be below their market value (that is, less labour time is required for their production than expressed in the market value) while that of others will exceed the market value. On the one hand, market value is to be viewed as the average value of commodities produced in a single sphere, and, on the other, as the individual value of the commodities produced under average conditions of their respective sphere and forming the bulk of the products of that sphere. It is only in extraordinary combinations that commodities produced under the worst, or the most favourable, conditions regulate the market value, which, in turn, forms the centre of fluctuation for market prices. The latter, however, are the same for commodities of the same kind. If the ordinary demand is satisfied by the supply of commodities of average value, hence of a value midway between the two extremes, then the commodities whose individual value is below the market value realise an extra surplus value, or surplus profit, while those, whose individual value exceeds the market value, are unable to realise a portion of the surplus value contained in them.

It does no good to say that the sale of commodities produced under the least favourable conditions proves that they are required to satisfy the demand.<sup>a</sup> If in the assumed case the price were higher than the average market value, the demand would be smaller.<sup>b</sup> At a certain price, a commodity occupies just so much place on the market. This place remains the same in case of a price change only if the higher price is accompanied by a drop in the supply of the commodity, and a lower price by an increase of supply. And if the demand is so great that it does not contract when the price is regulated by the value of commodities produced under the least favourable conditions, then these determine the market value. This is not possible unless demand is greater than usual, or if supply drops below the usual level. Finally, if the mass of the produced commodities exceeds the quantity disposed of at average market values, the commodities produced under the most favourable conditions regulate the market value. They may, for

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition "supply"; corrected after Marx's manuscript. - <sup>b</sup> In the 1894 German edition "greater"; corrected after Marx's manuscript.

example, be sold exactly or approximately at their individual value, in which case the commodities produced under the least favourable conditions may not even realise their cost price, while those produced under average conditions realise only a portion of the surplus value contained in them. What has been said here of market value applies to the price of production as soon as it takes the place of market value. The price of production is regulated in each sphere, and likewise regulated by special circumstances. And this price of production is, in its turn, the centre around which the daily market prices fluctuate and tend to equalise one another within definite periods. (See Ricardo on determining the price of production through those working under the least favourable conditions.<sup>a</sup>)

No matter how the prices are regulated, we arrive at the following:

1) The law of value dominates price movements since reduction or increase in the labour time required for production makes prices of production fall or rise. It is in this sense that Ricardo (who doubtlessly realised that his prices of production deviated from the value of commodities) says that

\* "the inquiry to which I wish to draw the reader's attention relates to the effect of the variations in the relative value of commodities, and not in their absolute value".\* <sup>b</sup>

2) The average profit determining the prices of production must always be approximately equal to that quantity of surplus value which falls to the share of individual capital in its capacity of an aliquot part of the total social capital. Suppose that the general rate of profit, and therefore the average profit, are expressed by money value greater than the money value of the actual average surplus value. So far as the capitalists are concerned, it is then immaterial whether they reciprocally charge 10 or 15% profit. Neither of these percentages covers more actual commodity value than the other, since the overcharge in money is mutual. As for the labourer (the assumption being that he receives his normal wage and the rise in the average profit does not therefore imply an actual deduction from his wage, i. e., something entirely different from the normal surplus value of the capitalist), the rise in commodity prices caused by an increase of the

<sup>&</sup>lt;sup>a</sup> D. Ricardo, On the Principles of Political Economy, and Taxation, 3rd ed., London, 1821, pp. 60-61. Cf. present edition, Vol. 31, p. 428. - <sup>b</sup> D. Ricardo, op. cit., p. 15. Cf. present edition, Vol. 31, pp. 394-400.

average profit must correspond to the rise of the money expression of the variable capital. Such a general nominal increase in the rate of profit and the average profit above the limit provided by the ratio of the actual surplus value to the total invested capital is not, in effect, possible without causing an increase in wages, and also an increase in the prices of commodities forming the constant capital. The reverse is true in case of a reduction. Since the total value of the commodities regulates the total surplus value, and this in turn regulates the level of average profit and thereby the general rate of profit—as a general law or a law governing fluctuations—it follows that the law of value regulates the prices of production.

What competition, first in a single sphere, achieves is a single market value and market price derived from the various individual values of commodities. And it is competition of capitals in different spheres, which first brings out the price of production equalising the rates of profit in the different spheres. The latter process requires a higher development of capitalist production than the previous one.

For commodities of the same sphere of production, the same kind, and approximately the same quality, to be sold at their values, the following two requirements are necessary:

First, the different individual values must be equalised at one social value, the above-named market value, and this implies competition among producers of the same kind of commodities and, likewise, the existence of a common market in which they offer their articles for sale. For the market price of identical commodities, each, however, produced under different individual circumstances, to correspond to the market value and not to deviate from it either by rising above or falling below it, it is necessary that the pressure exerted by different sellers upon one another be sufficient to bring enough commodities to market to fill the social requirements, i.e., a quantity for which society is capable of paying the market value. Should the mass of products exceed this demand, the commodities would have to be sold below their market value; and conversely, above their market value if the mass of products were not large enough to meet the demand, or, what amounts to the same, if the pressure of competition among sellers were not strong enough to bring this mass of commodities to market. Should the market value change, this would also entail a change in the conditions on which the total mass of commodities could be sold. Should the market value fall, this would entail a rise in

the average social demand (this always taken to mean the effective demand), which could, within certain limits, absorb larger masses of commodities. Should the market value rise, this would entail a drop in the social demand, and a smaller mass of commodities would be absorbed. Hence, if supply and demand regulate the market price, or rather the deviations of the market price from the market value, then, in turn, the market value regulates the ratio of supply to demand, or the centre round which fluctuations of supply and demand cause market prices to oscillate.

Looking closer, we find that the conditions applicable to the value of an individual commodity are here reproduced as conditions governing the value of the aggregate of a certain kind of commodity. Capitalist production is mass production from the very outset. But even in other, less developed, modes of production that which is produced in relatively small quantities as a common product by small-scale, even if numerous, producers, is concentrated in the market in large quantities—at least in the case of the vital commodities—in the hands of relatively few merchants. The latter accumulate them and sell them as the common product of an entire branch of production, or of a more or less considerable contingent of it.

It should be here noted in passing that the "social demand", i. e., the factor which regulates the principle of demand, is essentially subject to the mutual relationship of the different classes and their respective economic position, notably therefore to, firstly, the ratio of total surplus value to wages, and, secondly, to the relation of the various parts into which surplus value is split up (profit, interest, ground rent, taxes, etc.). And this thus again shows how absolutely nothing can be explained by the relation of supply to demand before ascertaining the basis on which this relation rests.

Although both commodity and money represent a unity of exchange value and use value, we have already seen (Buch I, Kap. I, 3) that in buying and selling both of these functions are polarised at the two extremes, the commodity (seller) representing the use value, and the money (buyer) representing the exchange value. One of the first premisses of selling was that a commodity should have use value and should therefore satisfy a social need. The other premiss was that the quantity of labour contained in the commodity should represent socially necessary labour, i. e., its individual value (and, what amounts to the same under the present assumption, its selling price) should coincide with its social value.<sup>28)</sup>

Let us apply this to the mass of commodities available in the market, which represents the product of a whole sphere.

The matter will be most readily pictured by regarding this whole mass of commodities, produced by one branch of industry, as one commodity, and the sum of the prices of the many identical commodities as one price. Then, whatever has been said of a single commodity applies literally to the mass of commodities of an entire branch of production available in the market. The requirement that the individual value of a commodity should correspond to its social value is now realised, or further determined, in that the mass contains social labour necessary for its production, and that the value of this mass = its market value.

Now suppose that the bulk of these commodities is produced under approximately similar normal social conditions, so that this value is at the same time the individual value of the individual commodities which make up this mass. If a relatively small portion of these commodities may now have been produced below, and another above, these conditions, so that the individual value of one portion is greater, and that of the other smaller, than the average value of the bulk of the commodities, but in such proportions that these extremes balance one another, so that the average value of the commodities at these extremes is equal to the value of commodities in the centre, then the market value is determined by the value of the commodities produced under average conditions.<sup>29)</sup> The value of the entire mass of commodities is equal to the actual sum of the values of all individual commodities taken together, whether produced under average conditions, or under conditions above or below the average. In that case, the market value, or social value, of the mass of commodities — the necessary labour time contained in them-is determined by the value of the preponderant mean mass.

Suppose, on the contrary, that the total mass of the commodities in question brought to market remains the same, while the value of the commodities produced under less favourable conditions fails

<sup>&</sup>lt;sup>28</sup> K. Marx, Zur Kritik der pol. Oek., Berlin, 1859.<sup>a</sup>

<sup>&</sup>lt;sup>29)</sup> K. Marx, Zur Kritik etc.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 29, pp. 273-74. - <sup>b</sup> Ibid., p. 302.

to balance out the value of commodities produced under more favourable conditions, so that the part of the mass produced under less favourable conditions forms a relatively weighty quantity as compared with the average mass and with the other extreme. In that case, the mass produced under less favourable conditions regulates the market, or social, value.

Suppose, finally, that the mass of commodities produced under better than average conditions considerably exceeds that produced under worse conditions, and is large even compared with that produced under average conditions. In that case, the part produced under the most favourable conditions determines the market value. We ignore here the overstocked market, in which the part produced under most favourable conditions always regulates the market price. We are not dealing here with the market price, in so far as it differs from the market value, but with the various determinations of the market value itself.<sup>30</sup>

In fact, strictly speaking (which, of course, occurs in reality only in approximation and with a thousand modifications) the market value of the entire mass, regulated as it is by the average values, is in case I equal to the sum of their individual values; although in the case of the commodities produced at the extremes, this value is represented as an average value which is forced upon them. Those who produce at the worst extreme must then sell their commodities below the individual value; those producing at the best extreme sell them above it.

In case II the individual lots of commodity values produced at the

<sup>30</sup> The controversy between Storch and Ricardo with regard to ground rent (a controversy pertaining only to the subject; in fact, the two opponents pay no attention to one another), whether the market value (or rather what they call market price and price of production respectively) was regulated by the commodities produced under unfavourable conditions (Ricardo), or by those produced under favourable conditions (Storch),<sup>30</sup> resolves itself in the final analysis in that both are right and both wrong, and that both of them have failed to consider the average case. Compare Corbet on the cases in which the price is regulated by commodities produced under the most favourable conditions <sup>31</sup> — "It is not meant to be asserted by him" (Ricardo) "that two particular lots of two different articles, as a hat and a pair of shoes, exchange with one another when those two particular lots were produced by equal quantities of labour. By 'commodity' we must here understand the 'description of commodity', not a particular individual hat, pair of shoes, etc. The whole labour which produces all the hats in England is to be considered, to this purpose, as divided among all the hats. This seems to me not to have been expressed at first, and in the general statements of this doctrine." (Observations on Certain Verbal Disputes in Pol. Econ., etc., London, 1821, pp. 53-54.)

two extremes do not balance one another. Rather, the lot produced under the worse conditions decides the issue. Strictly speaking, the average price, or the market value, of each individual commodity, or each aliquot part of the total mass, would now be determined by the total value of the mass as obtained by adding up the values of the commodities produced under different conditions, and in accordance with the aliquot part of this total value falling to the share of each individual commodity. The market value thus obtained would exceed the individual value not only of the commodities belonging to the favourable extreme, but also of those belonging to the average lot. Yet it would still be below the individual value of those commodities produced at the unfavourable extreme. How close the market value approaches, or finally coincides with, the latter would depend entirely on the volume occupied by commodities produced at the unfavourable extreme of the commodity sphere in question. If demand is only slightly greater than supply, the individual value of the unfavourably produced commodities regulates the market price.

Finally, if the lot of commodities produced at the favourable extreme occupies greater place than the other extreme, and also than the average lot, as it does in case III, then the market value falls below the average value. The average value, computed by adding the sums of values at the two extremes and at the middle, stands here below the value of the middle, which it approaches, or vice versa, depending on the relative place occupied by the favourable extreme. Should demand be weaker than supply, the favourable situated part, whatever its size, makes room for itself forcibly by contracting its price down to its individual value. The market value cannot ever coincide with this individual value of the commodities produced under the most favourable conditions, except when supply far exceeds demand.

This mode of determining market values, which we have here outlined *abstractly*, is promoted in the real market by competition among the buyers, provided the demand is large enough to absorb the mass of commodities at values so fixed. And this brings us to the other point.

Second, to say that a commodity has a use value is merely to say that it satisfies some social want. So long as we dealt with individual commodities only, we could assume that there was a need for a particular commodity—its quantity already implied by its price—without inquiring further into the quantity required to satisfy this want. This quantity is, however, of essential importance, as soon as the product of an entire branch of production is placed on one side, and the social need for it on the other. It then becomes necessary to consider the extent, i.e., the amount of this social want.

In the foregoing determinations of market value it was assumed that the mass of the produced commodities is given, i.e., remains the same, and that there is a change only in the proportions of its constituent elements, which are produced under different conditions, and that, hence, the market value of the same mass of commodities is differently regulated. Suppose, this mass corresponds in size to the usual supply, leaving aside the possibility that a portion of the produced commodities may be temporarily withdrawn from the market. Should demand for this mass now also remain the same, this commodity will be sold at its market value, no matter which of the three aforementioned cases regulates this market value. This mass of commodities does not merely satisfy a need, but satisfies it to its full social extent. Should their quantity be smaller or greater, however, than the demand for them, there will be deviations of the market price from the market value. And the first deviation is that if the supply is too small, the market value is always regulated by the commodities produced under the least favourable circumstances and, if the supply is too large, always by the commodities produced under the most favourable conditions: that therefore it is one of the extremes which determines the market value, in spite of the fact that in accordance with the mere proportion of the commodity masses produced under different conditions, a different result should obtain. If the difference between demand and the available quantity of the product is more considerable, the market price will likewise be considerably above or below the market value. Now, the difference between the quantity of the produced commodities and that quantity of them at which they are sold at market value may be due to two reasons. Either the quantity itself changes, becoming too small or too large, so that reproduction would have taken place on a different scale than that which regulated the given market value. In that case the supply changed, although demand remained the same, and there was, therefore, relative overproduction or underproduction. Or else reproduction, and thus supply, remained the same, while demand shrank or increased, which may be due to several reasons. Although the absolute magnitude of the supply was the same, its relative magnitude, its magnitude relative to, or measured by, the demand, had changed. The effect is the

same as in the first case, but in the reverse direction. Finally, if changes take place on both sides, but either in reverse directions, or, if in the same direction, then not to the same extent, if therefore there are changes on both sides, but these alter the former proportion between the two sides, then the final result must always lead to one of the two above-mentioned cases.

The real difficulty in formulating the general definition of supply and demand is that it seems to take on the appearance of a tautology. First consider the supply-the product available in the market, or that which can be delivered to it. To avoid dwelling upon useless detail, we shall here consider only the mass annually reproduced in every given branch of production and ignore the greater or lesser faculty possessed by the different commodities to be withdrawn from the market and stored away for consumption, say, until next year. This annual reproduction is expressed by a certain quantity-in weight or numbers-depending on whether this mass of commodities is measured in discrete elements or continuously. They are not only use values satisfying human wants, but these use values are available in the market in definite quantities. Secondly, however, this quantity of commodities has a specific market value, which may be expressed by a multiple of the market value of the commodity, or of its measure, which serves as unit. Thus, there is no necessary connection between the quantitative volume of the commodities in the market and their market value, since, for instance, many commodities have a specifically high value, and others a specifically low value, so that a given sum of values may be represented by a very large quantity of one commodity, and a very small quantity of another. There is only the following connection between the quantity of the articles available in the market and the market value of these articles: On a given basis of labour productivity the production of a certain quantity of articles in every particular sphere of production requires a definite quantity of social labour time; although this proportion varies in different spheres of production and has no inner relation to the usefulness of these articles or the special nature of their use values. Assuming all other circumstances to be equal, and a certain quantity a of some commodity to cost b labour time, a quantity na of the same commodity will cost nb labour time. Further, if society wants to satisfy some want and have an article produced for this purpose, it must pay for it. Indeed, since commodity production necessitates a division of labour, society buys this article by devoting a portion of the avail-

able labour time to its production. Therefore, society buys it with a definite quantity of its disposable labour time. That part of society which through the division of labour happens to employ its labour in producing this particular article, must receive an equivalent in social labour incorporated in articles which satisfy its own wants. However, there exists an accidental rather than a necessary connection between the total amount of social labour applied to a social article, i. e., between the aliquot part of society's total labour power allocated to producing this article, or between the volume which the production of this article occupies in total production, on the one hand, and the volume whereby society seeks to satisfy the want gratified by the article in question, on the other. Every individual article, or every definite quantity of a commodity may, indeed, contain no more than the social labour required for its production, and from this point of view the market value of this entire commodity represents only necessary labour, but if this commodity has been produced in excess of the existing social needs, then so much of the social labour time is squandered and the mass of the commodity comes to represent a much smaller quantity of social labour in the market than is actually incorporated in it. (It is only where production is under the actual, predetermining control of society that the latter establishes a relation between the volume of social labour time applied in producing definite articles, and the volume of the social want to be satisfied by these articles.) For this reason, these commodities must be sold below their market value, and a portion of them may even be altogether unsaleable. The reverse applies if the quantity of social labour employed in the production of a certain kind of commodity is too small to meet the social demand for that commodity. But if the quantity of social labour expended in the production of a certain article corresponds to the social demand for that article, so that the produced quantity corresponds to the usual scale of reproduction and the demand remains unchanged, then the commodity is sold at its market value. The exchange, or sale, of commodities at their value is the rational state of affairs, i.e., the natural law of their equilibrium. It is this law that explains the deviations, and not vice versa, the deviations that explain the law.

Now let us look at the other side—the demand.

Commodities are bought either as means of production or means of subsistence to enter productive or individual consumption. It does not alter matters that some commodities may serve both purposes. There is, then, a demand for them on the part of producers (here capitalists, since we have assumed that means of production have been transformed into capital) and of consumers. Both appear at first sight to presuppose a given quantity of social want on the side of demand, corresponding on the other side to a definite quantity of social output in the various lines of production. If the cotton industry is to accomplish its annual reproduction on a given scale, it must have the usual supply of cotton, and, other circumstances remaining the same, an additional amount of cotton corresponding to the annual extension of reproduction caused by the accumulation of capital. This is equally true with regard to means of subsistence. The working class must find at least the same quantity of necessities on hand if it is to continue living in its accustomed average way, although they may be more or less differently distributed among the different kinds of commodities. Moreover, there must be an additional quantity to allow for the annual increase of population. The same, with more or less modification, applies to other classes.

It would seem, then, that there is on the side of demand a certain magnitude of definite social wants which require for their satisfaction a definite quantity of a commodity on the market. But quantitatively, the definite social needs are very elastic and changing. Their fixedness is only apparent. If the means of subsistence were cheaper, or money wages higher, the labourers would buy more of them, and a greater "social need" would arise for them, leaving aside the paupers, etc., whose "demand" is even below the narrowest limits of their physical wants. On the other hand, if cotton were cheaper, for example, the capitalists' demand for it would increase, more additional capital would be thrown into the cotton industry, etc. We must never forget that the demand for productive consumption is, under our assumption, a demand of the capitalist, whose essential purpose is the production of surplus value, so that he produces a particular commodity to this sole end. Still, this does not hinder the capitalist, so long as he appears in the market as a buyer of, say, cotton, from representing the need for this cotton, just as it is immaterial to the seller of cotton whether the buyer converts it into shirting or gun-cotton, or whether he intends to turn it into wads for his own, and the world's ears. But this does exert a considerable influence on the kind of buyer the capitalist is. His demand for cotton is substantially modified by the fact that it disguises his real need for making profit. The limits within which the need for commodities in the market, the demand, differs quantitatively from the actual social need, naturally vary considerably for different commodities; what I mean is the difference between the demanded quantity of commodities and the quantity which would have been in demand at other money prices of commodities or other money or living conditions of the buyers.

Nothing is easier than to realise the inconsistencies of demand and supply, and the resulting deviation of market prices from market values. The real difficulty consists in determining what is meant by the equation of supply and demand.

Supply and demand coincide when their mutual proportions are such that the mass of commodities of a definite line of production can be sold at their market value, neither above nor below it. That is the first thing we hear.

The second is this: If commodities are sold at their market values, supply and demand coincide.

If supply equals demand, they cease to act, and for this very reason commodities are sold at their market values. Whenever two forces operate equally in opposite directions, they balance one another, exert no outside influence, and any phenomena taking place in these circumstances must be explained by causes other than the effect of these two forces. If supply and demand balance one another, they cease to explain anything, do not affect market values, and therefore leave us so much more in the dark about the reasons why the market value is expressed in just this sum of money and no other. It is evident that the real inner laws of capitalist production cannot be explained by the interaction of supply and demand (quite aside from a deeper analysis of these two social motive forces, which would be out of place here), because these laws cannot be observed in their pure state, until supply and demand cease to act, i.e., are equated. In reality, supply and demand never coincide, or, if they do, it is by mere accident, hence scientifically = 0, and to be regarded as not having occurred. But political economy assumes that supply and demand coincide with one another.<sup>a</sup> Why? To be able to study phenomena in their fundamental relations, in the form corresponding to their conception, that is, to study them independent of the appearances caused by the movement of supply and demand. The other reason is to find the actual tendencies of their movements and to some extent to record them. Since the inconsistencies are of an antagonistic nature, and since they conti-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 28, pp. 338-39.

nually succeed one another, they balance out one another through their opposing movements, and their mutual contradiction. Since, therefore, supply and demand never equal one another in any given case, their differences follow one another in such a way — and the result of a deviation in one direction is that it calls forth a deviation in the opposite direction — that supply and demand are always equated when the whole is viewed over a certain period, but only as an average of past movements, and only as the continuous movement of their contradiction. In this way, the market prices which have deviated from the market values adjust themselves, as viewed from the standpoint of their average number, to equal the market values, in that deviations from the latter cancel each other as plus and minus. And this average is not merely of theoretical, but also of practical importance to capital, whose investment is calculated on the fluctuations and compensations of a more or less fixed period.

On the one hand, the relation of demand and supply, therefore, only explains the deviations of market prices from market values. On the other, it explains the tendency to eliminate these deviations, i.e., to eliminate the effect of the relation of demand and supply. (Such exceptions as commodities which have a price without having a value are not considered here.) Supply and demand may eliminate the effect caused by their difference in many different ways. For instance, if the demand, and consequently the market price, fall, capital may be withdrawn, thus causing supply to shrink. It may also be that the market value itself shrinks and balances with the market price as a result of inventions which reduce the necessary labour time. Conversely, if the demand increases, and consequently the market price rises above the market value, this may lead to too much capital flowing into this line of production and production may swell to such an extent that the market price will even fall below the market value. Or, it may lead to a price increase, which cuts the demand. In some lines of production it may also bring about a rise in the market value itself for a shorter or longer period, with a portion of the desired products having to be produced under worse conditions during this period.

Supply and demand determine the market price, and so does the market price, and the market value in the further analysis, determine supply and demand. This is obvious in the case of demand, since it moves in a direction opposite to prices, swelling when prices fall, and vice versa. But this is also true of supply. Because the prices of means of production incorporated in the offered commodities determine the demand for these means of production, and thus the supply of commodities whose supply embraces the demand for these means of production. The prices of cotton are determinants in the supply of cotton goods.

To this confusion — determining prices through demand and supply, and, at the same time, determining supply and demand through prices — must be added that demand determines supply, just as supply determines demand, and production determines the market, as well as the market determines production.<sup>31)</sup>

Even the ordinary economist (see footnote) agrees that the proportion between supply and demand may vary in consequence of a change in the market value of commodities, without a change being brought about in demand or supply by extraneous circumstances. Even he must admit that, whatever the market value, supply and demand must coincide in order for it to be established. In other words, the ratio of supply to demand does not explain the market value, but

<sup>31)</sup> The following subtility is sheer nonsense: "Where the quantity of wages, capital, and land, required to produce an article, are become different from what they were, that which Adam Smith calls the natural price of it, is also different, and that price, which was previously its natural price, becomes, with reference to this alteration, its market price; because, though neither the supply, nor the quantity wanted, may have been changed" --- both of them change here, just because the market value, or in the case of Adam Smith, the price of production, changes in consequence of a change of value — "that supply is not now exactly enough for those persons who are able and willing to pay what is now the cost of production, but is either greater or less than that; so that the proportion between the supply and what is with reference to the new cost of production the effectual demand, is different from what it was. An alteration in the rate of supply will then take place, if there is no obstacle in the way of it, and at last bring the commodity to its new natural price. It may then seem good to some persons to say that, as the commodity gets to its natural price by an alteration in its supply, the natural price is as much owing to one proportion between the demand and supply, as the market price is to another; and consequently, that the natural price, just as much as the market price, depends on the proportion that demand and supply bear to each other." ("The great principle of demand and supply is called into action to determine what A. Smith calls natural prices as well as market prices."-Malthus.<sup>a</sup>) (Observations on Certain Verbal Disputes, etc., London, 1821, pp. 60-61.) The good man does not grasp the fact that it is precisely the change in the cost of production, and thus in the value, which caused a change in the demand, in the present case, and thus in the proportion between demand and supply, and that this change in the demand may bring about a change in the supply. This would prove just the reverse of what our good thinker wants to prove. It would prove that the change in the cost of production is by no means due to the proportion of demand and supply, but rather regulates this proportion.

<sup>&</sup>lt;sup>a</sup> Principles of Political Economy, London, 1820, p. 75.

conversely, the latter rather explains the fluctuations of supply and demand. The author of the *Observations* continues after the passage quoted in the footnote:

\*"This proportion" \* (between demand and supply), \* "however, if we still mean by 'demand' and 'natural price', what we meant just now, when referring to Adam Smith, must always be a proportion of equality; for it is only when the supply is equal to the effectual demand, that is, to that demand which will neither more nor less than pay the natural price, that the natural price is in fact paid; consequently, there may be two very different natural prices, at different times, for the same commodity, and yet the proportion, which the supply bears to the demand, be in both cases the same, namely, the proportion of equality." \*

It is admitted, then, that with two different NATURAL PRICES of the same commodity, at different times, demand and supply are always able to, and must, balance one another if the commodity is to be sold at its NATURAL PRICE in both instances. Since there is no difference in the ratio of supply to demand in either case, but a difference in the magnitude of the NATURAL PRICE itself, it follows that this price is obviously determined independently of demand and supply, and thus that it can least of all be determined by them.

For a commodity to be sold at its market value, i. e., proportionally to the necessary social labour contained in it, the total quantity of social labour used in producing the total mass of this commodity must correspond to the quantity of the social want for it, i. e., the effective social want. Competition, the fluctuations of market prices which correspond to the fluctuations in the ratio of demand to supply, tend continually to reduce to this scale the total quantity of labour devoted to each kind of commodity.

The proportion of supply and demand recapitulates, first, the relation of use value to exchange value, of commodity to money, and of buyer to seller; and, second, that of producer to consumer, although both of them may be represented by third parties, the merchants. In considering buyer and seller, it suffices to counterpose them individually in order to present their relationship. Three individuals are enough for the complete metamorphosis of a commodity, and therefore for the process of sale and purchase taken as a whole. A converts his commodity into the money of B, to whom he sells his commodity, and reconverts his money again into commodities, when he uses it to make purchases from C; the whole process takes place among these three. Further, in the study of money it had been assumed that the commodities are sold at their values because there was absolutely no reason to consider prices divergent from values, it being merely a matter of changes of form which commodities undergo in their transformation into money and their reconversion from money into commodities.<sup>a</sup> As soon as a commodity has been sold and a new commodity bought with the receipts, we have before us the entire metamorphosis, and to this process as such it is immaterial whether the price of the commodity lies above or below its value. The value of the commodity remains important as a basis, because the concept of money cannot be developed on any other foundation, and price, in its general meaning, is but value in the form of money. At any rate, it is assumed in the study of money as a medium of circulation that there is not just one metamorphosis of a certain commodity. It is rather the social interrelation of these metamorphoses which is studied. Only thus do we arrive at the circulation of money and the development of its function as a medium of circulation. But however important this connection may be for the conversion of money into a circulating medium, and for its resulting change of form, it is of no moment to the transaction between individual buyers and sellers.

In the case of supply and demand, however, the supply is equal to the sum of sellers, or producers, of a certain kind of commodity, and the demand equals the sum of buyers, or consumers (both productive and individual) of the same kind of commodity. The sums react on one another as units, as aggregate forces. The individual counts here only as part of a social force, as an atom of the mass, and it is in this form that competition brings out the *social* character of production and consumption.

The side of competition which happens for the moment to be weaker is also the side in which the individual acts independently of, and often directly against, the mass of his competitors, and precisely in this manner is the dependence of one upon the other impressed upon them, while the stronger side acts always more or less as a united whole against its antagonist. If the demand for this particular kind of commodity is greater than the supply, one buyer outbids another — within certain limits — and so raises the price of the commodity for all of them above the market value,<sup>b</sup> while on the other hand the sellers unite in trying to sell at a high market price. If, conversely, the supply exceeds the demand, one begins to dispose of his

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35, pp. 113-14. - <sup>b</sup> In the 1894 German edition "market price".

goods at a cheaper rate and the others must follow, while the buyers unite in their efforts to depress the market price as much as possible below the market value. The common interest is appreciated by each only so long as he gains more by it than without it. And unity of action ceases the moment one or the other side becomes the weaker, when each tries to extricate himself on his own as advantageously as he possibly can. Again, if one produces more cheaply and can sell more goods, thus possessing himself of a greater place in the market by selling below the current market price, or market value, he will do so, and will thereby begin a movement which gradually compels the others to introduce the cheaper mode of production, and one which reduces the socially necessary labour to a new, and lower, level. If one side has the advantage, all belonging to it gain. It is as though they exerted their common monopoly. If one side is weaker, then one may try on his own hook to become the stronger (for instance, one who works with lower costs of production), or at least to get off as lightly as possible, and in such cases each for himself and the devil take the hindmost, although his actions affect not only himself, but also all his boon companions.<sup>32</sup>

Demand and supply imply the conversion of value into market value, and so far as they proceed on a capitalist basis, so far as the commodities are products of capital, they are based on capitalist production processes, i. e., on quite different relationships than the mere purchase and sale of goods. Here it is not a question of the formal conversion of the value of commodities into prices, i. e., not of a mere change of form. It is a question of definite deviations in quantity of the market prices from the market values, and, further, from the prices of production. In simple purchase and sale it suffices to have the producers of commodities as such counterposed to one another. In further analysis supply and demand presuppose the existence of different classes and sections of classes which divide the total revenue of a society and consume it among themselves as revenue, and, therefore, make up the demand created by revenue. While on the other hand it

 $^{32)}$  "If each man of a class could never have more than a given share, or aliquot part, of the gains and possessions of the whole, he would readily combine to raise the gain"; (he does it as soon as the proportion of demand to supply permits it) "this is monopoly. But where each man thinks that he may anyway increase the absolute amount of his own share, though by a process which lessens the whole amount, he will often do it; this is competition" (An Inquiry into Those Principles Respecting the Nature of Demand, etc., London, 1821, p. 105). requires an insight into the overall structure of the capitalist production process for an understanding of the supply and demand created among themselves by producers as such.

Under capitalist production it is not merely a matter of obtaining an equal mass of value in another form — be it that of money or some other commodity — for a mass of values thrown into circulation in the form of a commodity, but it is rather a matter of realising as much surplus value, or profit, on capital advanced for production, as any other capital of the same magnitude, or *pro rata* to its magnitude in whichever line it is applied. It is, therefore, a matter, at least as a minimum, of selling the commodities at prices which yield the average profit, i. e., at prices of production. In this form capital becomes conscious of itself as a *social power* in which every capitalist participates proportionally to his share in the total social capital.

First, capitalist production is in itself indifferent to the particular use value, and distinctive features of any commodity it produces. In every sphere of production it is only concerned with producing surplus value, and appropriating a certain quantity of unpaid labour incorporated in the product of labour. And it is likewise in the nature of the wage labour subordinated by capital that it is indifferent to the specific character of its labour and must submit to being transformed in accordance with the requirements of capital and to being transferred from one sphere of production to another.

Second, one sphere of production is, in fact, just as good or just as bad as another. Every one of them yields the same profit, and every one of them would be useless if the commodities it produced did not satisfy some social need.

Now, if the commodities are sold at their values, then, as we have shown, very different rates of profit arise in the various spheres of production, depending on the different organic composition of the masses of capital invested in them. But capital withdraws from a sphere with a low rate of profit and invades others, which yield a higher profit. Through this incessant outflow and influx, or, briefly, through its distribution among the various spheres, which depends on how the rate of profit falls here and rises there, it creates such a ratio of supply to demand that the average profit in the various spheres of production becomes the same, and values are, therefore, converted into prices of production. Capital succeeds in this equalisation, to a greater or lesser degree, depending on the extent of capitalist development in the given nation; i. e., on the extent the conditions in the country in question are adapted for the capitalist mode of production. With the progress of capitalist production, it also develops its own conditions and subordinates to its specific character and its immanent laws all the social prerequisites on which the production process is based.

The incessant equilibration of constant divergences is accomplished so much more quickly, 1) the more mobile the capital, i.e., the more easily it can be shifted from one sphere and from one place to another; 2) the more quickly labour power can be transferred from one sphere to another and from one production locality to another. The first condition implies complete freedom of trade within the society and the removal of all monopolies with the exception of the natural ones, those, that is, which naturally arise out of the capitalist mode of production. It implies, furthermore, the development of the credit system, which concentrates the inorganic mass of the disposable social capital vis-à-vis the individual capitalist. Finally, it implies the subordination of the various spheres of production to the control of capitalists. This last implication is included in our premisses, since we assumed that it was a matter of converting values into prices of production in all capitalistically exploited spheres of production. But this equilibration itself runs into greater obstacles, whenever numerous and large spheres of production not operated on a capitalist basis (such as soil cultivation by small farmers), filter in between the capitalist enterprises and become linked with them. A great density of population is another requirement.— The second condition implies the abolition of all laws preventing the labourers from transferring from one sphere of production to another and from one local centre of production to another; indifference of the labourer to the nature of his labour: the greatest possible reduction of labour in all spheres of production to simple labour; the elimination of all vocational prejudices among labourers; and last but not least, a subjugation of the labourer to the capitalist mode of production. Further reference to this belongs to a special analysis of competition.

It follows from the foregoing that in each particular sphere of production the individual capitalist, as well as the capitalists as a whole, take direct part in the exploitation of the total working class by the totality of capital and in the degree of that exploitation, not only out of general class sympathy, but also for direct economic reasons. For, assuming all other conditions — among them the value of the total advanced constant capital — to be given, the average rate of profit depends on the intensity of exploitation of the sum total of labour by the sum total of capital.

The average profit coincides with the average surplus value produced for each 100 of capital, and so far as the surplus value is concerned the foregoing statements apply as a matter of course. In the case of the average profit the value of the advanced capital becomes an additional element determining the rate of profit. In fact, the direct interest taken by the capitalist, or the capital, of any individual sphere of production in the exploitation of the labourers who are directly employed is confined to making an extra gain, a profit exceeding the average, either through exceptional overwork, or reduction of the wage below the average, or through the exceptional productivity of the labour employed. Aside from this, a capitalist who would not in his line of production employ any variable capital, and therefore any labourer (in reality an exaggerated assumption), would nonetheless be as much interested in the exploitation of the working class by capital, and would derive his profit quite as much from unpaid surplus labour, as, say, a capitalist who would employ only variable capital (another exaggeration), and who would thus invest his entire capital in wages. But the degree of exploitation of labour depends on the average intensity of labour if the working day is given, and on the length of the working day if the intensity of exploitation is given. The degree of exploitation of labour determines the rate of surplus value, and therefore the mass of surplus value for a given total mass of variable capital, and consequently the magnitude of the profit. The individual capitalist, as distinct from his sphere as a whole, has the same special interest in exploiting the labourers he personally employs as the capital of a particular sphere, as distinct from the sum total of capital, has in exploiting the labourers directly employed in that sphere.

On the other hand, every particular sphere of capital, and every individual capitalist, have the same interest in the productivity of the social labour employed by the sum total of capital. For two things depend on this productivity: First, the mass of use values in which the average profit is expressed; and this is doubly important, since this average profit serves as a fund for the accumulation of new capital and as a fund for revenue to be spent for consumption. Second, the value of the total capital advanced (constant and variable), which, the amount of surplus value, or profit, for the whole capitalist class being given, determines the rate of profit, or the profit on a certain quantity of capital. The special productivity of labour in any particular sphere, or in any individual enterprise of this sphere, is of interest only to those capitalists who are directly engaged in it, since it enables that particular sphere, vis-à-vis the total capital, or that individual capitalist, vis-à-vis his sphere, to make an extra profit.

Here, then, we have a mathematically precise proof why capitalists form a veritable freemason society vis-à-vis the whole working class, while there is little love lost between them in competition among themselves.

The price of production includes the average profit. We call it price of production. It is really what Adam Smith calls NATURAL PRICE, Ricardo calls PRICE OF PRODUCTION, Or COST OF PRODUCTION, and the Physiocrats call *prix nécessaire*, because in the long run it is a prerequisite of supply, of the reproduction of commodities in every individual sphere.<sup>33)</sup> But none of them has revealed the difference between price of production and value. We can well understand why the same economists who oppose determining the value of commodities by labour time, i. e., by the quantity of labour contained in them, why they always speak of prices of production as centres around which market prices fluctuate. They can afford to do it because the price of production is an utterly external and *prima facie* meaningless form of the value of commodities, a form as it appears in competition, therefore in the mind of the vulgar capitalist, and consequently in that of the vulgar economist.

Our analysis has revealed how the market value (and everything said concerning it applies with appropriate modifications to the price of production) embraces a surplus profit for those who produce in any particular sphere of production under the most favourable conditions. With the exception of crises, and of overproduction in general, this applies to all market prices, no matter how much they may deviate from market values or market prices of production. For the market price signifies that the same price is paid for commodities of the same kind, although they may have been produced under very different individual conditions and hence may have considerably different cost prices. (We do not speak at this point of any surplus profits due

<sup>33)</sup> Malthus.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Principles of Political Economy, London, 1836, p. 77 et seq.

to monopolies in the usual sense of the term, whether artificial or natural.)

A surplus profit may also arise if certain spheres of production are in a position to evade the conversion of the values of their commodities into prices of production, and thus the reduction of their profits to the average profit. We shall devote more attention to the further modifications of these two forms of surplus profit in the part dealing with ground rent.

# Chapter XI

#### EFFECTS OF GENERAL WAGE FLUCTUATIONS ON PRICES OF PRODUCTION

Let the average composition of social capital be  $80_c + 20_v$ , and the profit 20%. The rate of surplus value is then 100%. A general increase of wages, all else remaining the same, is tantamount to a reduction in the rate of surplus value. In the case of average capital, profit and surplus value are identical. Let wages rise 25%. Then the same quantity of labour, formerly set in motion with 20, will cost 25. We shall then have a turnover value of  $80_{e} + 25_{v} + 15_{p}$  instead of  $80_{\rm c} + 20_{\rm v} + 20_{\rm n}$ . As before, the labour set in motion by the variable capital produces a value of 40. If v rises from 20 to 25, the surplus s, or p, will amount to only 15. The profit of 15 on 105 is  $14\frac{2}{7}$ %, and this would be the new average rate of profit. Since the price of production of commodities produced by the average capital coincides with their value, the price of production of these commodities would have remained inchanged. A wage increase would therefore have caused a drop in profit, but no change in the value and price of the commodities.

Formerly, as long as the average profit was 20%, the price of production of commodities produced in one period of turnover was equal to their cost price plus a profit of 20% on this cost price, therefore  $= k + kp' = k + \frac{20k}{100}$ . In this formula k is a variable magnitude, changing in accordance with the value of the means of production that go into the commodities, and with the amount of depreciation given up to the product by the fixed capital employed in its produc-

tion. The price of production would then amount to  $k + \frac{1+\frac{1}{7}k}{100}$ .

Let us now select a capital, whose composition is lower than the original composition of the average social capital of  $80_{c} + 20_{v}$  (which has now changed into  $76\frac{4}{21} + 23\frac{17}{21}$ , say,  $50_c + 50_v$ . In this case, the price of production of the annual product before the wage increase would have been  $50_{c} + 50_{v} + 20_{p} = 120$ , assuming for the sake of simplicity that the entire fixed capital passes through depreciation into the annual product and that the period of turnover is the same as in the first case. For the same quantity of labour set in motion a wage increase of  $25^{\circ}_{\circ}$  means an increase of the variable capital from 50 to  $62\frac{1}{2}$ . If the annual product were sold at the former price of production of 120, this would give us  $50_c + 62\frac{1}{2}v + 7\frac{1}{2}p_r$ , or a rate of profit of  $6\frac{2}{3}$  %. But the new average rate of profit is  $14\frac{2}{7}$  %, and since we assume all other circumstances to remain the same, the capital of  $50_c + 62\frac{1}{2}$ , must also make this profit. Now, a capital of  $112\frac{1}{2}$ makes a profit of  $16\frac{1}{14}$  at a rate of profit of  $14\frac{2}{7}$ %. Therefore, the price of production of the commodities produced by this capital is now  $50_c + 62\frac{1}{2}v + 16\frac{1}{14}v = 128\frac{8}{14}$ . Owing to a wage rise of 25%, the price of production of the same quantity of the same commodities, therefore, has here risen from 120 to 128  $\frac{8}{14}$ , or more than 7%.

Conversely, suppose we take a sphere of production of a higher composition than the average capital; say,  $92_c + 8_v$ . The original average profit in this case would still be 20, and if we again assume that the entire fixed capital passes into the annual product and that the period of turnover is the same as in cases I and II, the price of production of the commodity is here also 120.

Owing to the rise in wages of 25% the variable capital for the same quantity of labour rises from 8 to 10, the cost price of the commodities from 100 to 102, while the average rate of profit falls from 20% to  $14\frac{2}{7}\%$ . But  $100:14\frac{2}{7} = 102:14\frac{4}{7}$ . The profit now falling to the share of 102 is therefore  $14\frac{4}{7}$ . For this reason, the total product sells at  $k + kp' = 102 + 14\frac{4}{7} = 116\frac{4}{7}$ . The price of production has therefore fallen from 120 to  $116\frac{4}{7}$ , or  $3\frac{3}{7}$ .

Consequently, if wages are raised 25%:

1) the price of production of the commodities of a capital of average social composition does not change;

2) the price of production of the commodities of a capital of lower composition rises, but not in proportion to the fall in profit;

3) the price of production of the commodities of a capital of higher composition falls, but also not in the same proportion as profit.

Since the price of production of the commodities of the average capital remained the same, equal to the value of the product, the sum of the prices of production of the products of all capitals remained the same as well, and equal to the sum total of the values produced by the aggregate capital. The increase on one side and the decrease on the other balance for the aggregate capital on the level of the average social capital.

If the price of production rises in case II and falls in case III, these opposite effects alone, which are brought about by a fall in the rate of surplus value or by a general wage increase, show that this cannot be a matter of compensation in the price for the rise in wages, since the fall in the price of production in case III cannot compensate the capitalist for the fall in profit, and since the rise of the price in case II does not prevent a fall in profit. Rather, in either case, whether the price rises or falls, the profit remains the same as that of the average capital, in which case the price remains unchanged. It is the same average profit which has fallen by  $5\frac{5}{7}$ , or somewhat over 25%, in the case of II as well as III. It follows from this that if the price did not rise in II and fall in III, II would have to sell below and III above the new reduced average profit. It is self-evident that, depending on whether 50, 25, or 10 per 100 units of capital are laid out for labour, the effect of a wage increase on a capitalist who has invested  $\frac{1}{10}$  of his capital in wages must be quite different from that on one who has invested  $\frac{1}{4}$ or  $\frac{1}{2}$ . An increase in the price of production on the one side, a fall on the other, depending on a capital being below or above the average social composition, occurs solely by virtue of the process of levelling the profit to the new reduced average profit.

How would a general reduction in wages, and a corresponding general rise of the rate of profit, and thus of the average profit, now affect the prices of production of commodities produced by capitals deviating in opposite directions from the average social composition? We have but to reverse the foregoing exposition to obtain the result (which Ricardo fails to analyse).

I. Average capital =  $80_c + 20_v = 100$ ; rate of surplus value = 100%; price of production = value of commodities =  $80_c + 20_v + 20_p = 120$ ; rate of profit = 20%. Suppose wages fall by one-fourth. Then the same constant capital is set in motion by  $15_v$ , instead of  $20_v$ . Then the value of commodities =  $80_c + 15_v + 25_p = 120$ . The quantity of labour performed by v remains unchanged, except that the value newly created by it is distributed differently between the capitalist and the labourer. The surplus value rises from 20 to 25 and the rate of surplus value from  $\frac{20}{20}$  to  $\frac{25}{15}$  or from 100% to  $166\frac{2}{3}\%$ . The profit on 95 now = 25, so that the rate of profit per  $100 = 26\frac{6}{19}$ . The new composition of the capital in per cent is now  $84\frac{4}{19}c + 15\frac{15}{19}v = 100$ .

II. Lower composition. Originally  $50_c + 50_v$ , as above. Due to the fall of wages by  $\frac{1}{4}$  v is reduced to  $37\frac{1}{2}$ , and consequently the advanced total capital to  $50_c + 37\frac{1}{2}$ ,  $= 87\frac{1}{2}$ . If we apply the new rate of profit of  $26\frac{6}{19}$  % to this, we get  $100: 26\frac{6}{19} = 87\frac{1}{2}: 23\frac{1}{38}$ . The same mass of commodities which formerly cost 120, now costs  $87\frac{1}{2} + 23\frac{1}{38} = 110\frac{10}{19}$ , this being a price reduction of almost 10.

III. Higher composition. Originally  $92_c + 8_v = 100$ . The reduction of wages by  $\frac{1}{4}$  reduces  $8_v$  to  $6_v$ , and the total capital to 98. Consequently,  $100:26\frac{6}{19} = 98:25\frac{15}{19}$ . The price of production of the commodity, formerly 100 + 20 = 120, is now, after the fall in wages,  $98 + 25\frac{15}{19} = 123\frac{15}{19}$ , this being a rise of almost 4.

It is evident, therefore, that we have but to follow the same development in the opposite direction with the appropriate modifications; that a general reduction of wages is attended by a general rise of surplus value, of the rate of surplus value and, other circumstances remaining the same, of the rate of profit, even if expressed in a different proportion; a fall in the prices of production for commodities produced by capitals of lower composition, and a rise in the prices of production for commodities produced by capitals of higher composition. The result is just the reverse of that observed for a general rise of wages.<sup>34</sup> In both cases — rise or fall of wages — it is assumed that the

<sup>34)</sup> It is very peculiar that Ricardo<sup>a</sup> (who naturally proceeds differently from us, since he did not understand the levelling of values to prices of production) did not once consider this eventuality, but only the first case, that of a wage rise and its influence on the prices of production of commodities. And the *servum pecus imitatorum*<sup>b</sup> did not even attempt to make this extremely self-evident, actually tautological, practical application.

<sup>&</sup>lt;sup>a</sup> D. Ricardo, On the Principles of Political Economy..., pp. 36-41. Cf. present edition, Vol. 31, pp. 421-22. - <sup>b</sup> Horace, Epistles, I, 19.

working day remains the same, and also the prices of all the necessary means of subsistence. In these circumstances a fall in wages is possible only if they stood higher than the normal price of labour, or if they are depressed below this price. The way in which the matter is modified if the rise or fall of wages is due to a change in value, and consequently the price of production of commodities usually consumed by the labourer, will be analysed at some length in the part dealing with ground rent. At this point, however, the following remarks are to be made once and for all:

Should the rise or fall in wages be due to a change in the value of the necessities of life, a modification of the foregoing findings can take place only to the extent that commodities, whose change of price raises or lowers the variable capital, also go into the constant capital as constituent elements and therefore affect more than just the wages alone. But if they affect only wages, the above analysis contains all that needs to be said.

In this entire chapter, the establishment of the general rate of profit and the average profit, and consequently, the transformation of values into prices of production, are assumed as given. The question merely was, how a general rise or fall in wages affected the assumed prices of production of commodities. This is but a very secondary question compared with the other important points analysed in this part. But it is the only relevant question treated by Ricardo, and, as we shall see,<sup>32</sup> he treated it one-sidedly and unsatisfactorily.

## Chapter XII

### SUPPLEMENTARY REMARKS

### I. CAUSES IMPLYING A CHANGE IN THE PRICE OF PRODUCTION

There are just two causes that can change the price of production of a commodity:

First. A change in the general rate of profit. This can solely be due to a change in the average rate of surplus value, or, if the average rate of surplus value remains the same, to a change in the ratio of the sum of the appropriated surplus values to the sum of the advanced total social capital.

If the change in the rate of surplus value is not due to a depression

of wages below normal, or their rise above normal — and movements of that kind are to be regarded merely as oscillations — it can only occur either through a rise, or fall, in the value of labour power, the one being just as impossible as the other unless there is a change in the productivity of the labour producing means of subsistence, i. e., in the value of commodities consumed by the labourer.

Or, through a change in the proportion of the sum of appropriated surplus values to the advanced total capital of society. Since the change in this case is not caused by the rate of surplus value, it must be caused by the total capital, or rather its constant part. The mass of this part, technically considered, increases or decreases in proportion to the quantity of labour power bought by the variable capital, and the mass of its value thus increases or decreases with the increase or decrease of its own mass. It also increases or decreases, therefore, proportionately to the mass of the value of the variable capital. If the same labour sets more constant capital in motion, it has become more productive. If the reverse, then less productive. Thus, there has been a change in the productivity of labour, and there must have occurred a change in the value of certain commodities.

The following law, then, applies to both cases: If the price of production of a commodity changes in consequence of a change in the general rate of profit, its own value may have remained unchanged. However, a change must have occurred in the value of other commodities.

Second. The general rate of profit remains unchanged. In this case the price of production of a commodity can change only if its own value has changed. This may be due to more, or less, labour being required to reproduce the commodity in question, either because of a change in the productivity of labour which produces this commodity in its final form, or of the labour which produces those commodities that go into its production. The price of production of cotton yarn may fall, either because raw cotton is produced cheaper than before, or because the labour of spinning has become more productive due to improved machinery.

The price of production, as we have seen, = k + p, equal to cost price plus profit. This, however, = k + kp', in which k, the cost price, is a variable magnitude, which changes for different spheres of production and is everywhere equal to the value of the constant and variable capital consumed in the production of the commodity, and p' is the average rate of profit in percentage form. If k = 200, and p' = 20%, the price of production  $k + kp' = 200 + 200 \cdot \frac{20}{100} = 200 + 40 = 240$ . This price of production may clearly remain the same, in spite of a change in the value of the commodities.

All changes in the price of production of commodities are reduced, in the last analysis, to changes in value. But not all changes in the value of commodities need express themselves in changes in the price of production. The price of production is not determined by the value of any one commodity alone, but by the aggregate value of all commodities. A change in commodity A may therefore be balanced by an opposite change in commodity B, so that the general relation remains the same.

#### II. PRICE OF PRODUCTION OF COMMODITIES OF AVERAGE COMPOSITION

We have seen how a deviation in prices of production from values arises from:

1) adding the average profit instead of the surplus value contained in a commodity to its cost price;

2) the price of production, which so deviates from the value of a commodity, entering into the cost price of other commodities as one of its elements, so that the cost price of a commodity may already contain a deviation from the value of the means of production consumed by it, quite aside from a deviation of its own which may arise through a difference between the average profit and the surplus value.

It is therefore possible that even the cost price of commodities produced by capitals of average composition may differ from the sum of the values of the elements which make up this component of their price of production. Suppose, the average composition is  $80_c + 20_v$ . Now, it is possible that in the actual capitals of this composition  $80_c$ may be greater or smaller than the value of c, i. e., the constant capital, because this c may be made up of commodities whose price of production differs from their value. In the same way,  $20_v$  might diverge from its value if the consumption of the wage includes commodities whose price of production diverges from their value; in which case the labourer would work a longer, or shorter, time to buy them back (to replace them) and would thus perform more, or less, necessary labour than would be required if the price of production of such necessities of life coincided with their value.

However, this possibility does not detract in the least from the correctness of the theorems demonstrated which hold for commodities of average composition. The quantity of profit falling to these commodities is equal to the quantity of surplus value contained in them. For instance, in a capital of the given composition  $80_c + 20_v$ , the most important thing in determining surplus value is not whether these figures are expressions of actual values, but how they are related to one another, i.e., whether  $v = \frac{1}{5}$  of the total capital, and  $c = \frac{4}{5}$ . Whenever this is the case, the surplus value produced by v is, as was assumed, equal to the average profit. On the other hand, since it equals the average profit, the price of production = cost price + profit = k + p = k + s; i.e., in practice it is equal to the value of the commodity. This implies that a rise or fall in wages would not change  $\mathbf{k} + \mathbf{p}$  any more than it would change the value of the commodities, and would merely effect a corresponding opposite movement, a fall or a rise, in the rate of profit. For if a rise or fall of wages were here to bring about a change in the price of commodities, the rate of profit in these spheres of average composition would rise above, or fall below, the level prevailing in other spheres. The sphere of average composition maintains the same level of profit as the other spheres only so long as the price remains unchanged. The practical result is therefore the same as it would be if its products were sold at their real value. For if commodities are sold at their actual values, it is evident that, other conditions being equal, a rise, or fall, in wages will cause a corresponding fall or rise in profit, but no change in the value of commodities, and that under all circumstances a rise or fall in wages can never affect the value of commodities, but only the magnitude of the surplus value.

#### III. THE CAPITALIST'S GROUNDS FOR COMPENSATING

It has been said that competition levels the rates of profit of the different spheres of production into an average rate of profit and thereby turns the values of the products of these different spheres into prices of production. This occurs through the continual transfer of capital from one sphere to another, in which, for the moment, the profit happens to lie above average. The fluctuations of profit caused by the cycle of fat and lean years succeeding one another in any given branch of industry within given periods must, however, receive due consideration. This incessant outflow and inflow of capital between the different spheres of production creates trends of rise and fall in the rate of profit, which equalise one another more or less and thus have a tendency to reduce the rate of profit everywhere to the same common and general level.

This movement of capitals is primarily caused by the level of market prices, which lift profits above the general average in one place and depress them below it in another. Merchant's capital is left out of consideration as it is irrelevant at this point, for we know from the sudden paroxysms of speculation appearing in certain popular articles that it can withdraw masses of capital from one line of business with extraordinary rapidity and throw them with equal rapidity into another. Yet with respect to each sphere of actual productionindustry, agriculture, mining, etc.- the transfer of capital from one sphere to another offers considerable difficulties, particularly on account of the existing fixed capital. Experience shows, moreover, that if a branch of industry, such as, say, the cotton industry, yields unusually high profits at one period, it makes very little profit, or even suffers losses, at another, so that in a certain cycle of years the average profit is much the same as in other branches. And capital soon learns to take this experience into account.

What competition does not show, however, is the determination of value, which dominates the movement of production; and the values that lie beneath the prices of production and that determine them in the last instance. Competition, on the other hand, shows: 1) the average profits, which are independent of the organic composition of capital in the different spheres of production, and therefore also of the mass of living labour appropriated by any given capital in any given sphere of exploitation; 2) the rise and fall of prices of production caused by changes in the level of wages, a phenomenon which at first glance completely contradicts the value relation of commodities; 3) the fluctuations of market prices, which reduce the average market price of commodities in a given period of time, not to the market value, but to a very different market price of production, which diverges considerably from this market value. All these phenomena seem to contradict the determination of value by labour time as much as the nature of surplus value consisting of unpaid surplus labour. Thus everything appears reversed in competition. The final pattern of economic relations as seen on the surface, in their real existence and consequently in the conceptions by which the bearers and agents of these

relations seek to understand them, is very much different from, and indeed quite the reverse of, their inner but concealed essential pattern and the conception corresponding to it.<sup>a</sup>

Further. As soon as capitalist production reaches a certain level of development, the equalisation of the different rates of profit in individual spheres to general rate of profit no longer proceeds solely through the play of attraction and repulsion, by which market prices attract or repel capital. After average prices, and their corresponding market prices, become stable for a time it reaches the *consciousness* of the individual capitalists that this equalisation balances *definite differences*, so that they include these in their mutual calculations. The differences exist in the mind of the capitalist and are taken into account as grounds for compensating.

Average profit is the basic conception, the conception that capitals of equal magnitude must yield equal profits in equal time spans. This, again, is based on the conception that the capital in each sphere of production must share *pro rata* to its magnitude in the total surplus value squeezed out of the labourers by the total social capital; or, that every individual capital should be regarded merely as a part of the total capital, and every capitalist actually as a shareholder in the total enterprise, each sharing in the total profit *pro rata* to the magnitude of his share of capital.

This conception serves as a basis for the capitalist's calculations, for instance, that a capital whose turnover is slower than another's because its commodities take longer to be produced, or because they are sold in remoter markets, nevertheless charges the profit it loses in this way, and compensates itself by raising the price. Or else, that investments of capital in lines exposed to greater hazards, for instance in shipping, are compensated by higher prices. As soon as capitalist production, and with it the insurance business, are developed, the hazards are, in effect, made equal for all spheres of production (cf. Corbet<sup>b</sup>); but the more hazardous lines pay higher insurance rates, and recover them in the prices of their commodities. In practice all this means that every circumstance, which renders one line of production—and all of them are considered equally necessary within certain limits—less profitable, and another more profitable, is taken in-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, p. 102. - <sup>b</sup> Th. Corbet, An Inquiry into the Causes and Modes of the Wealth of Individuals..., London, 1841, pp. 100-02. Cf. present edition, Vol. 33, pp. 243 and 281.

to account once and for all as valid ground for compensation, without always requiring the renewed action of competition to justify the motives or factors for calculating this compensation. The capitalist simply forgets — or rather fails to see, because competition does not point it out to him — that all these grounds for compensation mutually advanced by capitalists in calculating the prices of commodities of different lines of production merely come down to the fact that they all have an equal claim, *pro rata* to the magnitude of their respective capitals, to the common loot, the total surplus value. It rather *seems* to them that since the profit pocketed by them differs from the surplus value they squeezed out, these grounds for compensation do not level out their participation in the total surplus value, but *create the profit itself*, which seems to be derived from the additions made on one or another ground to the cost price of their commodities.

In other respects the statements made in Chapter VII, p. 116,<sup>a</sup> concerning the capitalists' assumptions as to source of surplus value, apply also to average profit. The present case appears different only in so far as a saving in cost price depends on individual business acumen, alertness, etc., assuming the market price of commodities and the exploitation of labour to be given.

<sup>&</sup>lt;sup>a</sup> See this volume, p. 137.
# Part III

# THE LAW OF THE TENDENCY OF THE RATE OF PROFIT TO FALL

## Chapter XIII

#### THE LAW AS SUCH

Assuming a given wage and working day, a variable capital, for instance of 100, represents a certain number of employed labourers. It is the index of this number. Suppose £100 are the wages of 100 labourers for, say, one week. If these labourers perform equal amounts of necessary and surplus labour, if they work daily as many hours for themselves, i. e., for the reproduction of their wage, as they do for the capitalist, i. e., for the production of surplus value, then the value of their total product = £200, and the surplus value they produce would amount to £100. The rate of surplus value,  $\frac{s}{v}$ , would = 100%. But, as we have seen, this rate of surplus value would nonetheless express itself in very different rates of profit, depending on the different volumes of constant capital c and consequently of the total capital C, because the rate of profit =  $\frac{s}{C}$ . The rate of surplus value is 100%:

If c = 50, and v = 100, then p' = 
$$\frac{100}{150} = 66^{2}/_{3}\%$$
;  
" c = 100, and v = 100, then p' =  $\frac{100}{200} = 50\%$ ;  
" c = 200, and v = 100, then p' =  $\frac{100}{300} = 33^{1}/_{3}\%$ ;  
" c = 300, and v = 100, then p' =  $\frac{100}{400} = 25\%$ ;  
" c = 400, and v = 100, then p' =  $\frac{100}{500} = 20\%$ .

This is how the same rate of surplus value would express itself under the same degree of labour exploitation in a falling rate of profit, because the material growth of the constant capital implies also a growth — albeit not in the same proportion — in its value, and consequently in that of the total capital.<sup>a</sup>

If it is further assumed that this gradual change in the composition of capital is not confined only to individual spheres of production, but that it occurs more or less in all, or at least in the key spheres of production, so that it involves changes in the average organic composition of the total capital of a certain society, then the gradual growth of constant capital in relation to variable capital must necessarily lead to a gradual fall of the general rate of profit, so long as the rate of surplus value, or the intensity of exploitation of labour by capital, remain the same. Now we have seen that it is a law of capitalist production that its development is attended by a relative decrease of variable in relation to constant capital, and consequently to the total capital set in motion.<sup>b</sup> This is just another way of saying that owing to the distinctive methods of production developing in the capitalist system the same number of labourers, i.e., the same quantity of labour power set in motion by a variable capital of a given value, operate, work up and productively consume in the same time span an everincreasing quantity of means of labour, machinery and fixed capital of all sorts, raw and auxiliary materials - and consequently a constant capital of an ever-increasing value. This continual relative decrease of the variable capital vis-à-vis the constant, and consequently the total capital, is identical with the progressively higher organic composition of the social capital in its average. It is likewise just another expression for the progressive development of the social productive power of labour, which is demonstrated precisely by the fact that the same number of labourers, in the same time, i.e., with less labour, convert an ever-increasing quantity of raw and auxiliary materials into products, thanks to the growing application of machinery and fixed capital in general. To this growing quantity of value of the constant capital—although indicating the growth of the real mass of use values of which the constant capital materially consists only approximately—corresponds a progressive cheapening of products. Every individual product, considered by itself, contains a smaller quantity of labour than it did on a lower level of production, where the capital invested in labour occupies a far greater place compared to the capital invested in means of production. The hypothetical se-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 76-78. - <sup>b</sup> Ibid., Vol. 35, pp. 616-20.

ries drawn up at the beginning of this chapter expresses, therefore, the actual tendency of capitalist production. This mode of production produces a progressive relative decrease of the variable capital as compared to the constant capital, and consequently a continuously rising organic composition of the total capital. The immediate result of this is that the rate of surplus value, at the same, or even a rising, degree of labour exploitation, is represented by a continually falling general rate of profit. (We shall see later a why this fall does not manifest itself in an absolute form, but rather as a tendency toward a progressive fall.) The progressive tendency of the general rate of profit to fall is, therefore, just an expression peculiar to the capitalist mode of production of the progressive development of the social productive power of labour. This does not mean to say that the rate of profit may not fall temporarily for other reasons. But proceeding from the nature of the capitalist mode of production, it is thereby proved a logical necessity that in its development the general average rate of surplus value must express itself in a falling general rate of profit. Since the mass of the employed living labour is continually on the decline as compared to the mass of objectified labour set in motion by it, i.e., to the productively consumed means of production, it follows that the portion of living labour, unpaid and congealed in surplus value, must also be continually on the decrease compared to the amount of value represented by the invested total capital. Since the ratio of the mass of surplus value to the value of the invested total capital forms the rate of profit, this rate must constantly fall.

Simple as this law appears from the foregoing statements, all of political economy has so far had little success in discovering it, as we shall see in a later part.<sup>1</sup> The economists perceived the phenomenon and cudgelled their brains in tortuous attempts to interpret it. Since this law is of great importance to capitalist production, it may be said to be a mystery whose solution has been the goal of all political economy since Adam Smith, the difference between the various schools since Adam Smith having been in the divergent approaches to a solution. When we consider, on the other hand, that up to the present political economy has been running in circles round the distinction between constant and variable capital, but has never known how to define it accurately; that it has never separated surplus value from profit, and never even considered profit in its pure form as distinct

<sup>&</sup>lt;sup>a</sup> See this volume, Ch. XIV.

from its different, self-established components, such as industrial profit, commercial profit, interest, and ground rent; that it has never thoroughly analysed the differences in the organic composition of capital, and, for this reason, has never thought of analysing the formation of the general rate of profit—if we consider all this, the failure to solve this riddle is no longer surprising.

We intentionally present this law before going on to the division of profit into different self-established categories. The fact that this analysis is made independently of the division of profit into different parts, which fall to the share of different categories of people, shows from the outset that this law is, in its entirety, independent of this division, and just as independent of the mutual relations of the resultant categories of profit. The profit to which we are here referring is but another name for surplus value itself, which is presented only in its relation to total capital rather than to variable capital, from which it arises. The drop in the rate of profit, therefore, expresses the falling relation of surplus value to advanced total capital, and is for this reason independent of any division whatsoever of this surplus value among the various categories.

We have seen that at a certain stage of capitalist development, where the composition of capital c : v was 50 : 100, a rate of surplus value of 100% was expressed in a rate of profit of  $66\frac{-2}{3}$ %, and that at a higher stage, where c : v was 400 : 100, the same rate of surplus value was expressed in a rate of profit of only 20%. What is true of different successive stages of development in one country, is also true of different coexisting stages of development in different countries. In an undeveloped country, in which the former composition of capital is the average, the general rate of profit would =  $66\frac{-2}{3}$ %, while in a country with the latter composition and a much higher stage of development it would = 20%.

The difference between the two national rates of profit might disappear, or even be reversed, if labour were less productive in the less developed country, so that a larger quantity of labour were to be represented in a smaller quantity of the same commodities, and a larger exchange value were represented in less use value. The labourer would then spend more of his time in reproducing his own means of subsistence, or their value, and less time in producing surplus value; consequently, he would perform less surplus labour, with the result that the rate of surplus value would be lower. Suppose, the labourer of the less developed country were to work  $\frac{2}{3}$  of the working

day for himself and  $\frac{1}{3}$  for the capitalist; in accordance with the above illustration, the same labour power would then be paid with  $133\frac{1}{3}$  and would furnish a surplus of only  $66\frac{2}{3}$ . A constant capital of 50 would correspond to a variable capital of  $133\frac{1}{3}$ . The rate of surplus value would amount to  $66\frac{2}{3}$ :  $133\frac{1}{3} = 50\%$ , and the rate of profit to  $66\frac{2}{3}$ :  $183\frac{1}{3}$ , or approximately  $36\frac{1}{2}\%$ .

Since we have not so far analysed the different component parts of profit, i.e., they do not for the present exist for us, we make the following remarks beforehand merely to avoid misunderstanding: In comparing countries in different stages of development it would be a big mistake to measure the level of the national rate of profit by, say, the level of the national rate of interest, namely when comparing countries with a developed capitalist production with countries in which labour has not yet been formally subjected to capital, although in reality the labourer is exploited by the capitalist (as, for instance, in India, where the ryot manages his farm as an independent producer whose production as such is not, therefore, as yet subordinated to capital, although the usurer may not only rob him of his entire surplus labour by means of interest, but may also, to use a capitalist term, hack off a part of his wage).<sup>a</sup> This interest comprises all the profit, and more than the profit, instead of merely expressing an aliquot part of the produced surplus value, or profit, as it does in countries with a developed capitalist production. On the other hand, the rate of interest is, in this case, mostly determined by relations (loans granted by usurers to owners of larger estates who draw ground rent) which have nothing to do with profit, and rather indicate to what extent usury appropriates ground rent.

As regards countries with capitalist production in different stages of development, and consequently capitals of different organic composition, a country where the normal working day is shorter than another's may have a higher rate of surplus value (one of the factors which determines the rate of profit). *First*, if the English ten-hour working day is, on account of its higher intensity, equal to an Austrian working day of 14 hours, then, dividing the working day equally in both instances, 5 hours of English surplus labour may represent a greater value on the world market than 7 hours of Austrian surplus labour.

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 34, pp. 118-19.

Second, a larger portion of the English working day than of the Austrian may represent surplus labour.

The law of the falling rate of profit, which expresses the same, or even a higher, rate of surplus value, states, in other words, that any quantity of the average social capital, say, a capital of 100, comprises an ever larger portion of means of labour, and an ever smaller portion of living labour. Therefore, since the aggregate mass of living labour added to the means of production decreases in relation to the value of these means of production, it follows that the unpaid labour and the portion of value in which it is expressed must decline as compared to the value of the advanced total capital. Or: An ever smaller aliquot part of invested total capital is converted into living labour, and this total capital, therefore, absorbs in proportion to its magnitude less and less surplus labour, although the unpaid part of the labour applied may at the same time grow in relation to the paid part. The relative decrease of the variable and increase of the constant capital, however much both parts may grow in absolute magnitude, is, as we have said, but another expression for greater productivity of labour.

Let a capital of 100 consist of  $80_c + 20_v$ , and the latter = 20 labourers. Let the rate of surplus value be 100%, i. e., the labourers work half the day for themselves and the other half for the capitalist. Now let the capital of 100 in a less developed country =  $20_c + 80_v$ , and let the latter = 80 labourers. But these labourers require  $\frac{2}{3}$  of the day for themselves, and work only  $\frac{1}{3}$  for the capitalist. Everything else being equal, the labourers in the first case produce a value of 40, and in the second of 120. The first capital produces  $80_c + 20_v +$  $+ 20_s = 120$ ; rate of profit = 20%. The second capital,  $20_c + 80_v +$  $+ 40_s = 140$ ; rate of profit = 40%. In the second case the rate of profit is, therefore, double the first, although the rate of surplus value in the first = 100%, which is double that of the second, where it is only 50%. But then, a capital of the same magnitude appropriates the surplus labour of only 20 labourers in the first case, and of 80 labourers in the second case.

The law of the progressive falling of the rate of profit, or the relative decline of appropriated surplus labour compared to the mass of objectified labour set in motion by living labour, does not rule out in any way that the absolute mass of exploited labour set in motion by the social capital, and consequently the absolute mass of the surplus labour it appropriates, may grow; nor, that the capitals controlled by individual capitalists may dispose of a growing mass of labour and, hence, of surplus labour, the latter even though the number of labourers they employ does not increase.

Take a certain working population of, say, two million. Assume, furthermore, that the length and intensity of the average working day, and the level of wages, and thereby the proportion between necessary and surplus labour, are given. In that case the aggregate labour of these two million, and their surplus labour expressed in surplus value, always produces the same magnitude of value. But with the growth of the mass of the constant (fixed and circulating) capital set in motion by this labour, this produced quantity of value declines in relation to the value of this capital, which value grows with its mass, even if not in guite the same proportion. This ratio, and consequently the rate of profit, shrinks in spite of the fact that the mass of commanded living labour is the same as before, and the same amount of surplus labour is absorbed by the capital. It changes because the mass of objectified labour set in motion by living labour increases, and not because the mass of living labour has shrunk. It is a relative decrease, not an absolute one, and has, in fact, nothing to do with the absolute magnitude of the labour and surplus labour set in motion. The drop in the rate of profit is not due to an absolute, but only to a relative decrease of the variable part of the total capital, i.e., to its decrease in relation to the constant part.

What applies to any given mass of labour and surplus labour, also applies to a growing number of labourers, and, thus, under the above assumption, to any growing mass of commanded labour in general, and to its unpaid part, the surplus labour, in particular. If the working population increases from two million to three, and if the variable capital paid out in wages also rises to three million from its former two million, while the constant capital rises from 4 million to 15 million, then, under the above assumption of a constant working day and a constant rate of surplus value, the mass of surplus labour, and of surplus value, rises by one-half, i.e., 50%, from 2 million to 3. Nevertheless, in spite of this growth of the absolute mass of surplus labour, and hence of surplus value, by 50%, the ratio of variable to constant capital would fall from 2 : 4 to 3 : 15, and the ratio of surplus value to total capital would be (in millions)

I. 
$$4_c + 2_v + 2_s$$
; C = 6, p' = 33  $\frac{1}{3}$ %.  
II.  $15_c + 3_v + 3_s$ ; C = 18, p' =  $16 \frac{2}{3}$ %.

While the mass of surplus value has increased by one-half, the rate of profit has fallen by one-half. However, the profit is only the surplus value calculated in relation to the social capital, and the mass of profit, its absolute magnitude, is socially equal to the absolute magnitude of the surplus value. The absolute magnitude of the profit, its total amount, would, therefore, have grown by 50%, in spite of its enormous relative decrease compared to the advanced total capital, or in spite of the enormous decrease in the general rate of profit. The number of labourers employed by capital, hence the absolute mass of the labour set in motion by it, and therefore the absolute mass of surplus labour absorbed by it, the mass of the surplus value produced by it, and therefore the absolute mass of the profit produced by it, can, consequently, increase, and increase progressively, in spite of the progressive drop in the rate of profit. And this not only can be so. Aside from temporary fluctuations it *must* be so, on the basis of capitalist production.

Essentially, the capitalist production process is simultaneously a process of accumulation. We have shown that with the development of capitalist production the mass of values to be simply reproduced, or maintained, increases and grows as the productivity of labour grows, even if the labour power employed should remain constant.<sup>a</sup> But with the development of social productivity of labour the mass of produced use values, of which the means of production form a part, grows still more. And the additional labour, through whose appropriation this additional wealth can be reconverted into capital, does not depend on the value, but on the mass of these means of production (including means of subsistence), because in the production process the labourers have nothing to do with the value, but with the use value, of the means of production. Accumulation itself, however, and the concentration of capital that goes with it, is a material means of increasing productive power. Now, this growth of the means of production includes the growth of the working population, the creation of a working population, which corresponds to the surplus capital, or even exceeds its general requirements, thus leading to an overpopulation of workers. A momentary excess of surplus capital over the working population it has commandeered, would have a two-fold effect. It would, on the one hand, by raising wages, mitigate the adverse

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35, pp. 623-34.

conditions which decimate the offspring of the labourers and would make marriages easier among them, so as gradually to increase the population. On the other hand, by applying methods which yield relative surplus value (introduction and improvement of machinery) it would produce a far more rapid, artificial, relative overpopulation, which in its turn, would be a breeding ground for a really swift propagation of the population, since under capitalist production misery produces population.<sup>a</sup> It therefore follows of itself from the nature of the capitalist process of accumulation, which is but one facet of the capitalist production process, that the increased mass of means of production that is to be converted into capital always finds a correspondingly increased, even excessive, exploitable worker population. As the process of production and accumulation advances therefore, the mass of available and appropriated surplus labour, and hence the absolute mass of profit appropriated by the social capital, must grow. Along with the volume, however, the same laws of production and accumulation increase also the value of the constant capital in a mounting progression more rapidly than that of the variable part of capital, invested as it is in living labour. Hence, the same laws produce for the social capital a growing absolute mass of profit, and a falling rate of profit.

We shall entirely ignore here that with the advance of capitalist production and the attendant development of the productive power of social labour and multiplication of production branches, hence products, the same amount of value represents a progressively increasing mass of use values and enjoyments.

The development of capitalist production and accumulation lifts labour processes to an increasingly enlarged scale and thus imparts to them ever greater dimensions, and involves accordingly larger investments of capital for each individual establishment. A mounting concentration of capitals (accompanied, though on a smaller scale, by an increase in the number of capitalists) is, therefore, one of its material prerequisites as well as one of its results. Hand in hand with it, mutually interacting, there occurs a progressive expropriation of the more or less direct producers. It is, then, natural for the individual capitalists to command increasingly large armies of labourers (no matter how much the variable capital may decrease in relation to

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 34, p. 165.

the constant), and natural, too, that the mass of surplus value, and hence profit, appropriated by them, should grow simultaneously with, and in spite of, the fall in the rate of profit. The causes which concentrate masses of labourers under the command of individual capitalists, are the very same that swell the mass of the employed fixed capital, and auxiliary and raw materials, in mounting proportion as compared to the mass of employed living labour.

It requires no more than a passing remark at this point to indicate that, given a certain labouring population, the mass of surplus value, hence the absolute mass of profit, must grow if the rate of surplus value increases, be it through a lengthening or intensification of the working day, or through a drop in the value of wages due to an increase in the productive power of labour, and that it must do so in spite of the relative decrease of variable capital in respect to constant.

The same development of the productive power of social labour, the same laws which express themselves in a relative decrease of variable as compared to total capital, and in the thereby facilitated accumulation, while this accumulation in its turn becomes a starting point for the further development of the productive power and for a further relative decrease of variable capital—this same development manifests itself, aside from temporary fluctuations, in a progressive increase of the total employed labour power and a progressive increase of the absolute mass of surplus value, and hence of profit.

Now, what must be the form of this double-edged law of a decrease in the *rate* of profit and a simultaneous increase in the absolute *mass* of profit arising from the same causes? A law based on the fact that under given conditions the appropriated mass of surplus labour, hence of surplus value, increases, and that, so far as the total capital is concerned, or the individual capital as an aliquot part of the total capital, profit and surplus value are identical magnitudes?

Let us take an aliquot part of capital upon which we calculate the rate of profit, e. g., 100. These 100 represent the average composition of the total capital, say,  $80_c + 20_v$ . We have seen in the second part of this book that the average rate of profit in the various branches of production is determined not by the particular composition. As the variable capital decreases relative to the constant, hence the total capital of 100, the rate of profit, or the relative magnitude of surplus value, i. e., its ratio to the advanced total capital of 100, falls even though the intensity of labour exploitation were to remain the same, or even

to increase. But it is not this relative magnitude alone which falls. The magnitude of the surplus value or profit absorbed by the total capital of 100 also falls absolutely. At a rate of surplus value of 100%, a capital of  $60_c + 40_v$  produces a mass of surplus value, and hence of profit, amounting to 40; a capital of  $70_c + 30_y$  a mass of profit of 30; and for a capital of  $80_c + 20_v$  the profit falls to 20. This falling applies to the mass of surplus value, and hence of profit, and is due to the fact that the total capital of 100 employs less living labour, and, the intensity of labour exploitation remaining the same, sets in motion less surplus labour, and therefore produces less surplus value. Taking any aliquot part of the social capital, i.e., a capital of average social composition, as a standard by which to measure surplus value — and this is done in all calculations of profit — a relative fall of surplus value is generally identical with its absolute fall. In the cases given above, the rate of profit sinks from 40% to 30% and to 20%, because, in fact, the mass of surplus value, and hence of profit, produced by the same capital falls absolutely from 40 to 30 and to 20. Since the magnitude of the value of the capital, by which the surplus value is measured, is given as 100, a fall in the proportion of surplus value to this given magnitude can be only another expression for the decrease of the absolute magnitude of surplus value and profit. This is, indeed, a tautology. But, as shown, the fact that this decrease occurs at all, arises from the nature of the development of the capitalist process of production.

On the other hand, however, the same causes which bring about an absolute decrease of surplus value, and hence profit, on a given capital, and consequently of the rate of profit calculated in per cent, produce an increase in the absolute mass of surplus value, and hence of profit, appropriated by the social capital (i.e., by all capitalists taken as a whole). How does this occur, what is the only way in which this can occur, or what are the conditions obtaining in this seeming contradiction?

If any aliquot part = 100 of the social capital, and hence any 100 of average social composition, is a given magnitude, for which therefore a fall in the rate of profit coincides with a fall in the absolute magnitude of the profit because the capital which here serves as a standard of measurement is a constant magnitude, then the magnitude of the total social capital like that of the capital in the hands of individual capitalists, is variable, and in keeping with our assumptions it must vary inversely with the decrease of its variable portion.

In our former illustration, when the percentage of composition was

 $60_{\rm c} + 40_{\rm v}$ , the corresponding surplus value, or profit, was 40, and hence the rate of profit 40%. Suppose, the total capital in this stage of composition was one million. Then the total surplus value, and hence the total profit, amounted to 400,000. Now, if the composition later =  $80_c + 20_v$ , while the degree of labour exploitation remained the same, then the surplus value or profit for each 100 = 20. But since the absolute mass of surplus value or profit increases, as demonstrated, in spite of the decreasing rate of profit or the decreasing production of surplus value by every 100 of capital—increases, say, from 400,000 to 440,000, then this occurs solely because the total capital which formed at the time of this new composition has risen to 2,200,000. The mass of the total capital set in motion has risen to 220%, while the rate of profit has fallen by 50%. Had the capital no more than doubled, it would have to produce as much surplus value and profit to obtain a rate of profit of 20% as the old capital of 1,000,000 produced at 40%. Had it grown to less than double, it would have produced less surplus value, or profit, than the old capital of 1,000,000, which, in its former composition, would have had to grow from 1,000,000 to no more than 1,100,000 to raise its surplus value from 400,000 to 440,000.

We again meet here the previously defined law <sup>33</sup> that the relative decrease of the variable capital, hence the development of the social productive power of labour, involves an increasingly large mass of total capital to set in motion the same quantity of labour power and absorb the same quantity of surplus labour. Consequently, the possibility of a relative surplus of labouring people develops proportionately to the advances made by capitalist production not because the productive power of social labour *decreases*, but because it *increases*. It does not therefore arise out of an absolute disproportion between labour and the means of subsistence, or the means for the production of these means of subsistence, but out of a disproportion occasioned by capitalist exploitation of labour, a disproportion between the progressive growth of capital and its relatively shrinking need for an increasing population.

Should the rate of profit fall by 50%, it would shrink one-half. If the mass of profit is to remain the same, the capital must be doubled. For the mass of profit made at a declining rate of profit to remain the same, the multiplier indicating the growth of the total capital must be equal to the divisor indicating the fall of the rate of profit. If the rate of profit falls from 40 to 20, the total capital must rise inversely at the rate of 20:40 to obtain the same result. If the rate of profit falls from 40 to 8, the capital would have to increase at the rate of 8:40, fivefold. A capital of 1,000,000 at 40% produces 400,000, and a capital of 5,000,000 at 8% likewise produces 400,000. This applies if we want the result to remain the same. But if the result is to be higher, then the capital must grow at a greater rate than the rate of profit falls. In other words, for the variable portion of the total capital not to remain the same in absolute terms, but to increase absolutely, in spite of its falling in percentage of the total capital, the total capital must grow at a faster rate than the percentage of the variable capital falls. It must grow so considerably that in its new composition it should require more than the old portion of a capital = 100 should fall from 40 to 20, the total capital must rise higher than 200 to be able to employ a larger variable capital than 40.

Even if the exploited mass of the working population were to remain constant, and only the length and intensity of the working day were to increase, the mass of the employed capital would have to increase, since it would have to be greater in order to employ the same mass of labour under the old conditions of exploitation after the composition of capital changes.

Thus, the same development of the social productive power of labour expresses itself with the progress of capitalist production on the one hand in a tendency of the rate of profit to fall progressively and, on the other, in a constant growth of the absolute mass of the appropriated surplus value, or profit; so that on the whole a relative decrease of variable capital and profit is accompanied by an absolute increase of both. This two-fold effect, as we have seen, can express itself only in a growth of the total capital at a pace more rapid than that at which the rate of profit falls. For an absolutely increased variable capital to be employed in a capital of higher composition, or one in which the constant capital has increased relatively more, the total capital must not only grow proportionately to its higher composition, but still more rapidly. It follows, then, that as the capitalist mode of production develops, an ever larger quantity of capital is required to employ the same, let alone an increased, amount of labour power. Thus, on a capitalist foundation, the increasing productive power of labour necessarily and permanently creates a seeming overpopulation of labouring people. If the variable capital forms just  $\frac{1}{6}$  of the total capital instead of the former  $\frac{1}{2}$ , the total capital must be trebled

to employ the same amount of labour power. And if twice as much labour power is to be employed, the total capital must increase six-fold.

Political economy, which has until now been unable to explain the law of the tendency of the rate of profit to fall, pointed self-consolingly to the increasing mass of profit, i.e., to the growth of the absolute magnitude of profit, be it for the individual capitalist or for the social capital, but this was also based on mere platitude and speculation.

To say that the mass of profit is determined by two factors — first, the rate of profit, and, secondly, the mass of capital invested at this rate, is mere tautology. It is therefore but a corollary of this tautology to say that there is a possibility for the mass of profit to grow even though the rate of profit may fall at the same time. It does not help us one step farther, since it is just as possible for the capital to increase without the mass of profit growing, and for it to increase even while the mass of profit falls. For 100 at 25% yields 25, and 400 at 5% yields only 20.<sup>35</sup> But if the same causes which make the rate of profit fall, entail the accumulation, i. e., the formation, of additional capital, and if each additional capital employs additional labour and produces additional surplus value; if, on the other hand, the mere fall

<sup>&</sup>lt;sup>35</sup> "We should also expect that, however the rate of the profits of stock might diminish in consequence of the accumulation of capital on the land and the rise of wages, yet the aggregate amount of profits would increase. Thus, supposing that, with repeated accumulations of £100,000, the rate of profit should fall from 20 to 19, to 18, to 17%, a constantly diminishing rate, we should expect that the whole amount of profits received by those successive owners of capital would be always progressive; that it would be greater when the capital was  $\pounds 200,000$ , than when  $\pounds 100,000$ ; still greater when  $f_{300,000}$ ; and so on, increasing, though at a diminishing rate, with every increase of capital. This progression, however, is only true for a certain time; thus 19%on £200,000 is more than 20% on £100,000; again 18% on £300,000 is more than 19% on £200,000; but after capital has accumulated to a large amount, and profits have fallen, the further accumulation diminishes the aggregate of profits. Thus, suppose the accumulation should be  $f_{1,000,000}$ , and the profits 7%, the whole amount of profits will be  $\pounds$ 70,000; now if an addition of  $\pounds$ 100,000 capital be made to the million, and profits should fall to 6%, £66,000 or a diminution of £4,000 will be received by the owners of the stock, although the whole amount of stock will be increased from 1,000,000 to 1,100,000."-Ricardo, Political Economy, Chap. VI (Works, ed. by MacCulloch, 1852, pp. 68-69). — The fact is, that the assumption has here been made that the capital increases from 1,000,000 to 1,100,000, that is, by 10%, while the rate of profit falls from 7 to 6, hence by  $14 \frac{2}{7} %$ . Hinc illae lacrimae!<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Hence those tears (Terence, Andria, I, 1, 99).

in the rate of profit implies that the constant capital, and with it the total old capital, have increased, then this process ceases to be mysterious. We shall see later <sup>1</sup> to what deliberate falsifications some people resort in their calculations to spirit away the possibility of an increase in the mass of profit simultaneous with a decrease in the rate of profit.<sup>a</sup>

We have shown how the same causes that bring about a tendency for the general rate of profit to fall necessitate an accelerated accumulation of capital and, consequently, an increase in the absolute magnitude, or total mass, of the surplus labour (surplus value, profit) appropriated by it. Just as everything appears reversed in competition, and thus in the consciousness of the agents of competition, so also this law, this inner and necessary connection between two seeming contradictions. It is evident that within the proportions indicated above a capitalist disposing of a large capital will receive a larger mass of profit than a small capitalist making seemingly high profits. Even a cursory examination of competition shows, furthermore, that under certain circumstances, when the greater capitalist wishes to make room for himself on the market, and to crowd out the smaller ones, as happens in times of crises, he makes practical use of this, i.e., he deliberately lowers his rate of profit in order to drive the smaller ones to the wall. Merchant's capital, which we shall describe in detail later, also notably exhibits phenomena which appear to attribute a fall in profit to an expansion of business, and thus of capital. The scientific expression for this false conception will be given later. Similar superficial observations result from a comparison of rates of profit in individual lines of business, distinguished either as subject to free competition, or to monopoly. The utterly shallow conception existing in the minds of the agents of competition is found in Roscher, namely, that a reduction in the rate of profit is "more prudent and humane".<sup>b</sup> The fall in the rate of profit appears in this case as an effect of an increase in capital and of the concomitant calculation of the capitalist that the mass of profits pocketed by him will be greater at a smaller rate of profit. This entire conception (with the exception of Adam Smith's, which we shall mention later <sup>34</sup>) rests on an utter misapprehension of what the general rate of profit is, and on the crude notion that prices are actually determined by adding a more or less arbitrary

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 170-74. - <sup>b</sup> W. Roscher, *Die Grundlage der National*ökonomie, 3rd edition, Stuttgart and Augsburg, 1858, §108, p. 192.

quota of profit to the true value of commodities. Crude as these ideas are, they arise necessarily out of the inverted aspect which the immanent laws of capitalist production represent in competition.

The law that a fall in the rate of profit due to the development of productiveness is accompanied by an increase in the mass of profit, also expresses itself in the fact that a fall in the price of commodities produced by a capital is accompanied by a relative increase of the masses of profit contained in them and realised by their sale.

Since the development of the productive power and the correspondingly higher composition of capital sets in motion an everincreasing quantity of means of production through a constantly decreasing quantity of labour, every aliquot part of the total product, i.e., every single commodity, or each particular lot of commodities in the total mass of products, absorbs less living labour, and also contains less objectified labour, both in the depreciation of the fixed capital applied and in the raw and auxiliary materials consumed. Hence every single commodity contains a smaller sum of labour objectified in means of production and of labour newly added during production. This causes the price of the individual commodity to fall. But the mass of profits contained in the individual commodities may nevertheless increase if the rate of the absolute or relative surplus value grows. The commodity contains less newly added labour, but its unpaid portion grows in relation to its paid portion. However, this is the case only within certain limits. With the absolute amount of living labour newly incorporated in individual commodities decreasing enormously as production develops, the absolute mass of unpaid labour contained in them will likewise decrease, however much it may have grown as compared to the paid portion. The mass of profit on each individual commodity will shrink considerably with the development of the productive power of labour, in spite of a growth in the rate of surplus value. And this reduction, just as the fall in the rate of profit, is only delayed by the cheapening of the elements of constant capital and by the other circumstances set forth in the first part of this book, which increase the rate of profit at a given, or even falling, rate of surplus value.

That the price of individual commodities whose sum makes up the total product of capital falls, means simply that a certain quantity of labour is realised in a larger quantity of commodities, so that each individual commodity contains less labour than before. This is the case even if the price of one part of constant capital, such as raw material, etc., should rise. Outside of a few cases (for instance, if the productiveness of labour uniformly cheapens all elements of the constant, and the variable, capital), the rate of profit will fall, in spite of the higher rate of surplus value, 1) because even a larger unpaid portion of the smaller total amount of newly added labour is smaller than a smaller aliquot unpaid portion of the former larger amount, and 2) because the higher composition of capital is expressed in the individual commodity by the fact that the portion of its value in which newly added labour is represented decreases in relation to the portion of its value which represents raw and auxiliary material, and the wear and tear of fixed capital. This change in the proportion of the various component parts in the price of individual commodities, i.e., the decrease of that portion of the price in which newly added living labour is objectified and the increase of that portion of it in which formerly objectified labour is represented, is the form which expresses the decrease of the variable in relation to the constant capital through the price of the individual commodities. Just as this decrease is absolute for a certain amount of capital, say of 100, it is also absolute for every individual commodity as an aliquot part of the reproduced capital. However, the rate of profit, if calculated merely on the elements of the price of an individual commodity, would be different from what it actually is. And for the following reason:

//The rate of profit is calculated on the total capital invested, but for a definite time, actually a year. The rate of profit is the ratio of the surplus value, or profit, produced and realised in a year, to the total capital calculated in per cent. It is, therefore, not necessarily equal to a rate of profit calculated for the period of turnover of the invested capital rather than for a year. It is only if the capital is turned over exactly in one year that the two coincide.

On the other hand, the profit made in the course of a year is merely the sum of profits on commodities produced and sold during that same year. Now, if we calculate the profit on the cost price of commodities, we obtain a rate of profit  $= \frac{p}{k}$  in which p stands for the profit realised during one year, and k for the sum of the cost prices of commodities produced and sold within the same period. It is evident that this rate of profit  $\frac{p}{k}$  will not coincide with the actual rate of profit  $\frac{p}{C}$ , mass of profit divided by total capital, unless k = C, that is, unless the capital is turned over in exactly one year. Let us take three different conditions of an industrial capital.

I. A capital of £8,000 produces and sells annually 5,000 pieces of a commodity at 30s. per piece, thus making an annual turnover of £7,500. It makes a profit of 10s. on each piece, or £2,500 per year. Every piece, then, contains 20s. advanced capital and 10s. profit, so that the rate of profit per piece is  $\frac{10}{20} = 50\%$ . The turned-over sum of £7,500 contains £5,000 advanced capital and £2,500 profit. Rate of profit per turnover,  $\frac{P}{k}$ , likewise = 50%. But calculated on the total capital the rate of profit  $\frac{P}{C} = \frac{2,500}{8,000} = 31^{1}/4\%$ .

II. The capital rises to £10,000. Owing to increased productivity of labour it is able to produce annually 10,000 pieces of the commodity at a cost price of 20s. per piece. Suppose, the commodity is sold at a profit of 4s., hence at 24s. per piece. In that case the price of the annual product = £12,000, of which £10,000 is advanced capital and £2,000 is profit. The rate of profit  $\frac{p}{k} = \frac{4}{20}$  per piece, and  $\frac{2,000}{10,000}$  for the annual turnover, or in both cases = 20%. And since the total capital is equal to the sum of the cost prices, namely £10,000 it follows that  $\frac{p}{C}$ , the actual rate of profit, is in this case also 20%.

III. Let the capital rise to £15,000 owing to a constant growth of the productive power of labour, and let it annually produce 30,000 pieces of the commodity at a cost price of 13s. per piece, each piece being sold at a profit of 2s., or at 15s. The annual turnover therefore =  $30,000 \times 15s. = £22,500$ , of which £19,500 is advanced capital and £3,000 profit. The rate of profit  $\frac{p}{k}$  then =  $\frac{2}{13} = \frac{3,000}{19,500} = 15^{5}/_{13}$ %. But  $\frac{p}{C} = \frac{3,000}{15,000} = 20\%$ .

We see, therefore, that only in case II, where the turned-over capital value is equal to the total capital, the rate of profit per piece, or per total amount of turnover, is the same as the rate of profit calculated on the total capital. In case I, in which the amount of the turnover is smaller than the total capital, the rate of profit calculated on the cost price of the commodity is higher; and in case III, in which the total capital is smaller than the amount of the turnover, it is lower than the actual rate of profit calculated on the total capital. This is a general rule.

In commercial practice, the turnover is generally calculated inaccurately. It is assumed that the capital has been turned over once as soon as the sum of the realised commodity prices equals the sum of the invested total capital. But the *capital* can complete one whole turnover only when the sum of the *cost prices* of the realised commodities equals the sum of the total capital.—F. E.//

This again shows how important it is in capitalist production to regard individual commodities, or the commodity product of a certain period, as products of advanced capital and in relation to the total capital which produces them, rather than in isolation, by themselves, as mere commodities.<sup>a</sup>

The *rate* of profit must be calculated by measuring the mass of produced and realised surplus value not only in relation to the consumed portion of capital reappearing in the commodities, but also to this part plus that portion of unconsumed but applied capital which continues to operate in production. However, the *mass* of profit cannot be equal to anything but the mass of profit or surplus value, contained in the commodities themselves, and to be realised by their sale.

If the productivity of industry increases, the price of individual commodities falls. There is less labour in them, less paid and unpaid labour. Suppose, the same labour produces, say, triple its former product. Then  $\frac{2}{3}$  less labour yields individual product. And since profit can make up but a portion of the amount of labour contained in an individual commodity, the mass of profit in the individual commodity must decrease, and this takes place within certain limits, even if the rate of surplus value should rise. In any case, the mass of profit on the total product does not fall below the original mass of profit so long as the capital employs the same number of labourers at the same degree of exploitation. (This may also occur if fewer labourers are employed at a higher rate of exploitation.) For the mass of profit on the individual product decreases proportionately to the increase in the number of products. The mass of profit remains the same, but it is distributed differently over the total amount of commodities. Nor does this alter the distribution between the labourers and capitalists of the amount of value created by newly added labour. The mass of profit cannot increase so long as the same amount of labour is employed, unless the unpaid surplus labour increases, or, should intensity of exploitation remain the same, unless the number of labourers grows. Or, both these causes may combine to produce this result. In all these cases -- which, however, in accordance with our assumption, presup-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 34, pp. 355-84.

pose an increase of constant capital as compared to variable, and an increase in the magnitude of total capital invested — the individual commodity contains a smaller mass of profit and the rate of profit falls even if calculated on the individual commodity. A given quantity of newly added labour materialises in a larger quantity of commodities. The price of the individual commodity falls. Considered abstractly the rate of profit may remain the same, even though the price of the individual commodity may fall as a result of greater productive power and a simultaneous increase in the number of this cheaper commodity if, for instance, the increase in productive power acts uniformly and simultaneously on all the elements of the commodity, so that its total price falls in the same proportion in which the productivity of labour increases, while, on the other hand, the mutual relation of the different elements of the price of the commodity remains the same. The rate of profit could even rise if a rise in the rate of surplus value were accompanied by a substantial reduction in the value of the elements of constant, and particularly of fixed, capital. But in reality, as we have seen, the rate of profit will fall in the long run. In no case does a fall in the price of any individual commodity by itself give a clue to the rate of profit. Everything depends on the magnitude of the total capital invested in its production. For instance, if the price of one yard of fabric falls from 3s. to  $1\frac{2}{3}$  s., if we know that before this price reduction it contained  $1\frac{2}{3}$  s. constant capital, yarn, etc.,  $\frac{2}{3}$  s. wages, and  $\frac{2}{3}$  s. profit, while after the reduction it contains ls. constant capital,  $\frac{1}{3}$  s. wages, and  $\frac{1}{3}$  s. profit, we cannot tell if the rate of profit has remained the same or not. This depends on whether, and by how much, the advanced total capital has increased, and how many yards more it produces in a given time.

The phenomenon, springing from the nature of the capitalist mode of production, that increasing productivity of labour implies a drop in the price of the individual commodity, or of a certain mass of commodities, an increase in the number of commodities, a reduction in the mass of profit on the individual commodity and in the rate of profit on the aggregate of commodities, and an increase in the mass of profit on the total quantity of commodities — this phenomenon appears on the surface only in a reduction of the mass of profit on the individual commodity, a fall in its price, an increase in the mass of profit on the augmented total number of commodities produced by the total social capital or an individual capitalist. It then appears as if the capitalist adds less profit to the price of the individual commodity of his own free will, and makes up for it through the greater number of commodities he produces. This conception rests upon the notion of **PROFIT UPON ALIENATION**,<sup>a 35</sup> which, in its turn, is deduced from the conception of merchant capital.<sup>b</sup>

We have previously seen in Book I (4 and 7 Abschnitt<sup>c</sup>) that the mass of commodities growing along with the productive power of labour and the cheapening of the individual commodity as such (as long as these commodities do not enter the price of labour power as determinants) do not affect the proportion between paid and unpaid labour in the individual commodity, in spite of the falling price.

Since all things appear distorted, namely, reversed in competition, the individual capitalist may imagine: 1) that he is reducing his profit on the individual commodity by cutting its price, but still making a greater profit by selling a larger quantity of commodities; 2) that he fixes the price of the individual commodities and that he determines the price of the total product by multiplication, while the original process is really one of division (see Book I, Kap. X, S. 314/323<sup>d</sup>), and multiplication is only correct secondarily, since it is based on that division. The vulgar economist does practically no more than translate the singular concepts of the capitalists, who are in the thrall of competition, into a seemingly more theoretical and generalised language, and attempt to substantiate the justice of those conceptions.<sup>e</sup>

The fall in commodity prices and the rise in the mass of profit on the augmented mass of these cheapened commodities is, in fact, but another expression for the law of the falling rate of profit attended by a simultaneously increasing mass of profit.

The analysis of how far a falling rate of profit may coincide with rising prices no more belongs here than that of the point previously discussed in Book I (S. 314/323), concerning relative surplus value. A capitalist working with improved but not as yet generally adopted methods of production sells below the market price, but above his individual price of production; his rate of profit rises until competition levels it out. During this equalisation period the second requisite,

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent. - <sup>b</sup> Cf. present edition, Vol. 34, pp. 368-70. - <sup>c</sup> English edition: Vol. I, parts IV and VII. - <sup>d</sup> English edition: Ch. XII (cf. present edition, Vol. 35, pp. 321-22). - <sup>c</sup> Ibid., Vol. 32, p. 395.

increase of the invested capital, makes its appearance. According to the degree of this expansion the capitalist will be able to employ a part of his former labourers, actually perhaps all of them, or even more, under the new conditions, and hence to produce the same, or a greater, mass of profit.<sup>a</sup>

# Chapter XIV

#### COUNTERACTING INFLUENCES

If we consider the enormous development of the productive forces of social labour in the last 30 years alone as compared with all preceding periods; if we consider, in particular, the enormous mass of fixed capital, aside from the actual machinery, which goes into the process of social production as a whole, then the difficulty which has hitherto troubled the economists, namely to explain the falling rate of profit, gives place to its opposite, namely to explain why this fall is not greater and more rapid. There must be some counteracting influences at work, which cross and annul the effect of the general law, and which give it merely the characteristic of a tendency, for which reason we have referred to the fall of the general rate of profit as a tendency to fall. The following are the most general counterbalancing forces:

#### I. INCREASING INTENSITY OF EXPLOITATION

The degree of exploitation of labour, the appropriation of surplus labour and surplus value, is raised notably by lengthening the working day and intensifying labour. These two points have been comprehensively treated in Book I as incidental to the production of absolute and relative surplus value. There are many ways of intensifying labour which imply an increase of constant, as compared to variable, capital, and hence a fall in the rate of profit, such as compelling a labourer to operate a larger number of machines. In such cases — and in most procedures serving the production of relative surplus values — the same causes which increase the rate of surplus value, may also, from the standpoint of given quantities of invested total capital,

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 35-36.

involve a fall in the mass of surplus value. But there are other aspects of intensification, such as the greater velocities of machinery, which consume more raw material in the same time, but, so far as the fixed capital is concerned, wear out the machinery so much faster, and yet do not in any way affect the relation of its value to the price of the labour which sets it in motion. But notably, it is prolongation of the working day, this invention of modern industry, which increases the mass of appropriated surplus labour without essentially altering the proportion of the employed labour power to the constant capital set in motion by it, and which rather tends to reduce this capital relatively. Moreover, it has already been demonstrated - and this constitutes the real secret of the tendency of the rate of profit to fall-that the manipulations to produce relative surplus value amount, on the whole, to transforming as much as possible of a certain quantity of labour into surplus value, on the one hand, and employing as little labour as possible in proportion to the advanced capital, on the other, so that the same reasons which permit raising the intensity of exploitation rule out exploiting the same quantity of labour as before by the same capital. These are the counteracting tendencies, which, while effecting a rise in the rate of surplus value, also tend to decrease the mass of surplus value, and hence the rate of profit produced by a certain capital. Mention should also be made here of the widespread introduction of female and child labour, in so far as the whole family must now perform more surplus labour for capital than before, even when the total amount of their wages increases, which is by no means always the case.<sup>a</sup>-Everything that promotes the production of relative surplus value by mere improvement in methods, as in agriculture, without altering the magnitude of the invested capital, has the same effect. The constant capital, it is true, does not, in such cases, increase in relation to the variable, inasmuch as we regard the variable capital as an index of the amount of labour power employed, but the mass of the product does increase in proportion to the labour power employed. The same occurs, if the productive power of labour (no matter, whether its product goes into the labourer's consumption or into the elements of constant capital) is freed from hindrances in communications, from arbitrary or other restrictions which have become obstacles in the course of time; from

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 30, pp. 332-35; Vol. 33, pp. 123-24; Vol. 34, pp. 24-25.

fetters of all kinds, without directly affecting the ratio of variable to constant capital.

It might be asked whether the factors that check the fall of the rate of profit, but that always hasten its fall in the last analysis, whether these include the temporary, but always recurring, elevations in surplus value above the general level, which keep occurring now in this and now in that line of production redounding to the benefit of those individual capitalists, who make use of inventions, etc., before these are introduced elsewhere. This question must be answered in the affirmative.

The mass of surplus value produced by a capital of a given magnitude is the product of two factors — the rate of surplus value multiplied by the number of labourers employed at this rate. At a given rate of surplus value it therefore depends on the number of labourers, and it depends on the rate of surplus value when the number of labourers is given. Generally, therefore, it depends on the composite ratio of the absolute magnitudes of the variable capital and the rate of surplus value. Now we have seen that, on the average, the same factors which raise the rate of relative surplus value lower the mass of the employed labour power. It is evident, however, that this will occur to a greater or lesser extent, depending on the definite proportion in which this conflicting movement obtains, and that the tendency towards a reduction in the rate of profit is notably weakened by a rise in the rate of absolute surplus value, which originates with the lengthening of the working day.

We saw in the case of the rate of profit that a drop in the rate was generally accompanied by an increase in the mass of profit, due to the increasing mass of total capital employed. From the standpoint of the total variable capital of society, the surplus value it has produced is equal to the profit it has produced. Both the absolute mass and the rate of surplus value have increased; the one because the quantity of labour power employed by society has grown, and the other, because the intensity of exploitation of this labour has increased. But in the case of a capital of a given magnitude, e. g., 100, the rate of surplus value may increase, while the average mass may decrease; for the rate is determined by the proportion, in which the variable capital produces value, while the mass is determined by the proportion of variable capital to the total capital.

The rise in the rate of surplus value is a factor which determines the mass of surplus value, and hence also the rate of profit, for it takes

place especially under conditions, in which, as we have previously seen, the constant capital is either not increased at all, or not proportionately increased, in relation to the variable capital. This factor does not abolish the general law. But it causes that law to act rather as a tendency, i.e., as a law whose absolute action is checked, retarded, and weakened, by counteracting circumstances. But since the same influences which raise the rate of surplus value (even a lengthening of the working time is a result of large-scale industry) tend to decrease the labour power employed by a certain capital, it follows that they also tend to reduce the rate of profit and to retard this reduction.<sup>a</sup> If one labourer is compelled to perform as much labour as would rationally be performed by at least two, and if this is done under circumstances in which this one labourer can replace three, then this one labourer will perform as much surplus labour as was formerly performed by two, and the rate of surplus value will have risen accordingly. But he will not perform as much as three had performed, and the mass of surplus value will have decreased accordingly. But this reduction in mass will be compensated, or limited, by the rise in the rate of surplus value. If the entire population is employed at a higher rate of surplus value, the mass of surplus value will increase, in spite of the population remaining the same. It will increase still more if the population increases. And although this is tied up with a relative reduction of the number of employed labourers in proportion to the magnitude of the total capital, this reduction is moderated, or checked, by the rise in the rate of surplus value.

Before leaving this point, it is to be emphasised once more that with a capital of a given magnitude the *rate* of surplus value may rise, while its *mass* is decreasing, and vice versa. The mass of surplus value is equal to the rate multiplied by the number of labourers; however, the rate is never calculated on the total, but only on the variable capital, actually only for every working day. On the other hand, with a given magnitude of capital value, the *rate of profit* can neither rise nor fall without the *mass of surplus value* also rising or falling.

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<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 35, p. 408.

## 234 Part III.— The Law of the Tendency of the Rate of Profit to Fall

#### II. DEPRESSION OF WAGES BELOW THE VALUE OF LABOUR POWER

This is mentioned here only empirically, since, like many other things which might be enumerated, it has nothing to do with the general analysis of capital, but belongs in an analysis of competition, which is not presented in this work.<sup>1</sup> However, it is one of the most important factors checking the tendency of the rate of profit to fall.

#### III. CHEAPENING OF ELEMENTS OF CONSTANT CAPITAL

Everything said in Part I of this book about factors which raise the rate of profit while the rate of surplus value remains the same, or regardless of the rate of surplus value, belongs here. Hence also, with respect to the total capital, that the value of the constant capital does not increase in the same proportion as its material volume. For instance, the quantity of cotton worked up by a single European spinner in a modern factory has grown tremendously compared to the quantity formerly worked up by a European spinner with a spinningwheel. Yet the value of the worked-up cotton has not grown in the same proportion as its mass. The same applies to machinery and other fixed capital. In short, the same development which increases the mass of the constant capital in relation to the variable reduces the value of its elements as a result of the increased productivity of labour, and therefore prevents the value of constant capital, although it continually increases, from increasing at the same rate as its material volume, i.e., the material volume of the means of production set in motion by the same amount of labour power. In isolated cases the mass of the elements of constant capital may even increase, while its value remains the same, or even falls.

The foregoing is bound up with the depreciation of existing capital (that is, of its material elements), which occurs with the development of industry. This is another continually operating factor which checks the fall of the rate of profit, although it may under certain circumstances encroach on the mass of profit by reducing the mass of the capital yielding a profit. This again shows that the same influences which tend to make the rate of profit fall, also moderate the effects of this tendency.

#### IV. RELATIVE OVERPOPULATION

Its propagation is inseparable from, and hastened by, the development of the productivity of labour as expressed by a fall in the rate of profit. The relative overpopulation becomes so much more apparent in a country, the more the capitalist mode of production is developed in it. This, again, is the reason why, on the one hand, the more or less imperfect subordination of labour to capital continues in many branches of production, and continues longer than seems at first glance compatible with the general stage of development. This is due to the cheapness and abundance of disposable or unemployed wage labourers, and to the greater resistance, which some branches of production, by their very nature, render to the transformation of manual work into machine production. On the other hand, new lines of production are opened up, especially for the production of luxuries, and it is these that take as their basis this relative overpopulation, often set free in other lines of production through the increase of their constant capital. These new lines start out predominantly with living labour, and by degrees pass through the same evolution as the other lines of production. In either case the variable capital makes up a considerable portion of the total capital and wages are below the average, so that both the rate and mass of surplus value in these lines of production are unusually high. Since the general rate of profit is formed by levelling the rates of profit in the individual branches of production, however, the same factor which brings about the tendency in the rate of profit to fall, again produces a counterbalance to this tendency and more or less paralyses its effects.

#### V. FOREIGN TRADE

Since foreign trade partly cheapens the elements of constant capital, and partly the necessities of life into which the variable capital is converted, it tends to raise the rate of profit by increasing the rate of surplus value and lowering the value of constant capital. It generally acts in this direction by permitting an expansion of the scale of production. It thereby hastens the process of accumulation, on the one hand, but causes the variable capital to shrink in relation to the constant capital, on the other, and thus hastens a fall in the rate of profit. In the same way, the expansion of foreign trade, although the basis of the capitalist mode of production in its infancy, has become its own product, however, with the further progress of the capitalist mode of production, through the innate necessity of this mode of production, its need for an ever-expanding market. Here we see once more the dual nature of this effect. (Ricardo has entirely overlooked this side of foreign trade.<sup>a</sup>)

Another question — really beyond the scope of our analysis <sup>1</sup> because of its special nature — is this: Is the general rate of profit raised by the higher rate of profit produced by capital invested in foreign, and particularly colonial, trade?

Capitals invested in foreign trade can yield a higher rate of profit, because, in the first place, there is competition with commodities produced in other countries with inferior production facilities, so that the more advanced country sells its commodities above their value even though cheaper than the competing countries. In so far as the labour of the more advanced country is here realised as labour of a higher specific weight, the rate of profit rises, because labour which has not been paid as being of a higher quality is sold as such. The same may obtain in relation to the country, to which commodities are exported and to that from which commodities are imported; namely, the latter may offer more objectified labour in natura than it receives, and yet thereby receive commodities cheaper than it could produce them. Just as a manufacturer who employs a new invention before it becomes generally used, undersells his competitors and yet sells his commodity above its individual value, that is, realises the specifically higher productiveness of the labour he employs as surplus labour. He thus secures a surplus profit. As concerns capitals invested in colonies, etc., on the other hand, they may yield higher rates of profit for the simple reason that the rate of profit is higher there due to backward development, and likewise the exploitation of labour, because of the use of slaves, coolies, etc. It is hard to see why these higher rates of profit, realised by capitals invested in certain lines and sent home by them, should not, unless monopolies stand in the way, enter here into the equalisation of the general rate of profit and thus tend, pro tanto, to raise it.<sup>36</sup>) It is

<sup>36)</sup> Adam Smith<sup>b</sup> was right in this respect, contrary to Ricardo, who said: "They contend that the equality of profits will be brought about by the general rise of profits; and I am of the opinion that the profits of the favoured trade will speedily submit to the general level." (*Works*, ed. by MacCulloch, p. 73.)

<sup>&</sup>lt;sup>a</sup> See D. Ricardo, On the Principles of Political Economy, and Taxation, 3rd edition, Ch. VII; cf. present edition, Vol. 32, pp. 73-74. - <sup>b</sup> An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. I, London, 1776, Ch. 9.

hard to see this in particular if these spheres of investment of capital are subject to the laws of free competition. What Ricardo fancies, in contrast, is mainly this: with the higher prices realised abroad commodities are bought there and sent home. These commodities are thus sold on the home market, so that the result can at best be but a temporary extra advantage for these favoured spheres of production over others. This illusion falls away as soon as it is divested of its money form. The favoured country recovers more labour in exchange for less labour, although this difference, this excess is pocketed, as in any exchange between labour and capital, by a certain class. Since the rate of profit is higher, therefore, because it is generally higher in a colonial country, it may, provided natural conditions are favourable, go hand in hand with low commodity prices. A levelling takes place but not a levelling to the old level, as Ricardo feels.

This same foreign trade develops the capitalist mode of production in the home country, which implies the decrease of variable capital in relation to constant, and, on the other hand, causes overproduction in respect to foreign markets, so that in the long run it again has an opposite effect.

We have thus seen in a general way that the same influences which produce a tendency in the general rate of profit to fall, also call forth countereffects, which hamper, retard, and partly paralyse this fall. The latter do not do away with the law, but impair its effect. Otherwise, it would not be the fall of the general rate of profit, but rather its relative slowness, that would be incomprehensible. Thus, the law acts only as a tendency. And it is only under certain circumstances and only after long periods that its effects become strikingly pronounced.

Before we go on, in order to avoid misunderstandings, we should recall two, repeatedly treated, points.

First: The same process which brings about a cheapening of commodities in the course of the development of the capitalist mode of production, causes a change in the organic composition of the social capital invested in the production of commodities, and consequently lowers the rate of profit. We must be careful, therefore, not to identify the reduction in the relative cost of an individual commodity, including that portion of it which represents wear and tear of machinery, with the rise in the value of the constant in relation to variable capital, although, conversely, every reduction in the relative cost of the constant capital assuming the volume of its material elements remains the same, or increases, tends to raise the rate of profit, i. e., to reduce *pro tanto* the value of the constant capital in relation to the shrinking proportions of the employed variable capital.

Second: The fact that the newly added living labour contained in the individual commodities, which taken together make up the product of capital, decreases in relation to the materials they contain and the means of labour consumed by them; the fact, therefore, that an ever-decreasing quantity of newly added living labour is objectified in them, because their production requires less labour with the development of the social productiveness-this fact does not affect the ratio, in which the living labour contained in the commodities breaks up into paid and unpaid labour. Quite the contrary. Although the total quantity of newly added living labour contained in the commodities decreases, the unpaid portion increases in relation to the paid portion, either by an absolute or a relative shrinking of the paid portion; for the same mode of production which reduces the total quantity of newly added living labour in a commodity is accompanied by a rise in the absolute and relative surplus value. The tendency of the rate of profit to fall is bound up with a tendency of the rate of surplus value to rise, hence with a tendency for the rate of labour exploitation to rise. Nothing is more absurd, for this reason, than to explain the fall in the rate of profit by a rise in the rate of wages, although this may be the case by way of an exception.<sup>a</sup> Statistics is not able to make actual analyses of the rates of wages in different epochs and countries, until the conditions which shape the rate of profit are thoroughly understood. The rate of profit does not fall because labour becomes less productive, but because it becomes more productive. Both the rise in the rate of surplus value and the fall in the rate of profit are but specific forms through which growing productivity of labour is expressed under capitalism.

#### VI. THE INCREASE OF STOCK CAPITAL

The foregoing five points may still be supplemented by the following, which, however, cannot be more fully treated for the present. With the progress of capitalist production, which goes hand in hand

<sup>&</sup>lt;sup>a</sup> See D. Ricardo, op. cit., pp. 120-21; cf. present edition, Vol. 32, p. 73.

with accelerated accumulation, a portion of capital is calculated and applied only as interest-bearing capital. Not in the sense in which every capitalist who lends out capital is satisfied with interest, while the industrial capitalist pockets the investor's profit. This has no bearing on the level of the general rate of profit, because for the latter profit = interest + profit of all kinds + ground rent, the division into these particular categories being immaterial to it. But in the sense that these capitals, although invested in large productive enterprises, yield only large or small amounts of interest, so-called dividends, after all costs have been deducted. In railways, for instance. These do not therefore go into levelling the general rate of profit, because they yield a lower than average rate of profit. If they did enter into it, the general rate of profit would fall much lower. Theoretically, they may be included in the calculation, and the result would then be a lower rate of profit than the seemingly existing rate, which is decisive for the capitalists; it would be lower, because the constant capital particularly in these enterprises is largest in its relation to the variable capital.

## Chapter XV

## EXPOSITION OF THE INTERNAL CONTRADICTIONS OF THE LAW

#### 1. GENERAL

We have seen in the first part of this book that the rate of profit expresses the rate of surplus value always lower than it actually is. We have just seen that even a rising rate of surplus value has a tendency to express itself in a falling rate of profit. The rate of profit would equal the rate of surplus value only if c = 0, i.e., if the total capital were paid out in wages. A falling rate of profit does not express a falling rate of surplus value, unless the proportion of the value of the constant capital to the quantity of labour power which sets it in motion remains unchanged or the amount of labour power increases in relation to the value of the constant capital.

On the plea of analysing the rate of profit, Ricardo actually analyses the rate of surplus value alone, and this only on the assumption that the working day is intensively and extensively a constant magnitude.<sup>a</sup>

A fall in the rate of profit and accelerated accumulation are different expressions of the same process only in so far as both reflect the development of the productive power. Accumulation, in turn, hastens the fall of the rate of profit, inasmuch as it implies concentration of labour on a large scale, and thus a higher composition of capital. On the other hand, a fall in the rate of profit again hastens the concentration of capital and its centralisation through expropriation of minor capitalists, the few direct producers who still have anything left to be expropriated. This accelerates accumulation with regard to mass, although the rate of accumulation falls with the rate of profit.

On the other hand, the rate of self-expansion of the total capital, the rate of profit, being the goad of capitalist production (just as selfexpansion of capital is its only purpose), its fall checks the formation of new independent capitals and thus appears as a threat to the development of the capitalist production process. It breeds overproduction, speculation, crises, and surplus capital alongside surplus population. Those economists, therefore, who, like Ricardo, regard the capitalist mode of production as absolute, feel at this point that it creates a barrier to itself, and for this reason attribute the barrier to Nature (in the theory of rent), not to production. But the main thing about their horror of the falling rate of profit is the feeling that the capitalist mode of production meets in the development of its productive forces a barrier which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the limitations and to the merely historical, transitory character of the capitalist mode of production; testifies that for the production of wealth, it is not an absolute mode, moreover, that at a certain stage it rather conflicts with its further development.<sup>b</sup>

True, Ricardo and his school considered only industrial profit, which includes interest. But the rate of ground rent likewise has a tendency to fall, although its absolute mass increases, and may also increase proportionately more than industrial profit. (See Ed. West,<sup>c</sup> who developed the law of ground rent *before* Ricardo). If we consider the total social capital C, and use  $p_1$  for the industrial profit that

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 44, 51-52 and 60-67. - <sup>b</sup> Ibid., Vol. 33, p. 114. - <sup>c</sup> [E. West,] *Essay on the Application of Capital to Land...*, London, 1815; cf. present edition, Vol. 31, pp. 344-45.

remains after deducting interest and ground rent, i for interest, and r for ground rent, then  $\frac{s}{C} = \frac{p}{C} = \frac{p_1 + i + r}{C} = \frac{p_1}{C} + \frac{i}{C} + \frac{r}{C}$ . We have seen that while s, the total amount of surplus value, is continually increasing in the course of capitalist development,  $\frac{s}{C}$  is just as steadily declining, because C grows still more rapidly than s. Therefore it is by no means a contradiction for  $p_1$ , i, and r to be steadily increasing, each individually, while  $\frac{s}{C} = \frac{p}{C}$ , as well as  $\frac{p_1}{C}$ ,  $\frac{i}{C}$ , and  $\frac{r}{C}$ , should each by itself be steadily shrinking, or that  $p_1$  should increase in relation to i, or r in relation to  $p_1$ , or to  $p_1$  and i. With a rising total surplus value or profit s = p, and a simultaneously falling rate of profit  $\frac{s}{C} = \frac{p}{C}$ , the proportions of the parts  $p_1$ , i, and r, which make up s = p, may change at will within the limits set by the total amount of s without thereby affecting the magnitude of s or  $\frac{s}{C}$ .

The mutual variation of  $p_1$ , i, and r is merely a varying distribution of s among different classes. Consequently,  $\frac{p_1}{C}$ ,  $\frac{i}{C}$ , or  $\frac{r}{C}$ , the rate of individual industrial profit, the rate of interest, and the ratio of ground rent to the total capital, may rise in relation to one another, while  $\frac{s}{C}$ , the general rate of profit, falls. The only condition is that the sum of all three =  $\frac{s}{C}$ . If the rate of profit falls from 50% to 25%, because the composition of a certain capital with, say, a rate of surplus value = 100% has changed from 50c + 50v to 75c + 25v, then a capital of 1,000 will yield a profit of 500 in the first case, and in the second a capital of 4,000 will yield a profit of 1,000. We see that s or p have doubled, while p' has fallen by one-half. And if that 50% was formerly divided into 20 profit, 10 interest, and 20 rent, then  $\frac{p_1}{C} = 20\%, \frac{i}{C} = 10\%$ , and  $\frac{r}{C} = 20\%$ . If the proportions had remained the same after the change from 50\% to 25\%, then  $\frac{p_1}{C} = 10\%$ ,  $\frac{i}{C} = 5\%$ , and  $\frac{r}{C} = 10\%$ . If, however,  $\frac{p_1}{C}$  should fall to 8% and  $\frac{i}{C}$  to 4%, then  $\frac{r}{C}$  would rise to 13%. The relative magnitude of r would have risen as against  $p_1$  and i, while p' would have remained the same. Under both assumptions, the sum of  $p_1$ , i, and r would have increased, because produced by a capital four times as large. Furthermore, Ricardo's assumption that originally industrial profit (plus interest) contains the entire surplus value is historically and logically false.<sup>a</sup> It

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 31, p. 265.

is rather the progress of capitalist production which 1) gives the whole profit directly to the industrial and commercial capitalists for further distribution, and 2) reduces rent to the excess over the profit. On this capitalist basis, again, the rent grows, being a portion of profit (i. e., of the surplus value viewed as the product of the total capital), but not that specific portion of the product, which the capitalist pockets.

Given the necessary means of production, i. e., a sufficient accumulation of capital, the creation of surplus value is only limited by the labouring population if the rate of surplus value, i. e., the intensity of exploitation, is given; and no other limit but the intensity of exploitation if the labouring population is given. And the capitalist process of production consists essentially of the production of surplus value, represented in the surplus product or the aliquot portion of the produced commodities in which unpaid labour is objectified. It must never be forgotten that the production of this surplus value-and the reconversion of a portion of it into capital, or the accumulation, forms an integrate part of this production of surplus value—is the immediate purpose and compelling motive of capitalist production. It will never do, therefore, to represent capitalist production as something which it is not, namely as production whose immediate purpose is enjoyment or the manufacture of the means of enjoyment for the capitalist. This would be overlooking its specific character, which is revealed in all its inner essence.<sup>a</sup>

The creation of this surplus value makes up the direct process of production, which, as we have said, has no other limits but those mentioned above. As soon as all the surplus labour it was possible to squeeze out has been objectified in commodities, surplus value has been produced. But this production of surplus value completes but the first act of the capitalist process of production—the direct production process. Capital has absorbed so and so much unpaid labour. With the development of the process, which expresses itself in a drop in the rate of profit, the mass of surplus value thus produced swells to immense dimensions. Now comes the second act of the process. The entire mass of commodities, i. e., the total product, including the portion which replaces the constant and variable capital, and that representing surplus value, must be sold. If this is not done, or done only in part, or only at prices below the prices of production, the labourer

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 28, pp. 339-40 and Vol. 32, p. 126.

has been indeed exploited, but his exploitation is not realised as such for the capitalist, and this can be bound up with a total or partial failure to realise the surplus value pressed out of him, indeed even with the partial or total loss of the capital. The conditions of direct exploitation, and those of realising it, are not identical. They diverge not only in place and time, but also logically. The first are only limited by the productive power of society, the latter by the proportional relation of the various branches of production and the consumer power of society. But this last-named is not determined either by the absolute productive power, or by the absolute consumer power, but by the consumer power based on antagonistic conditions of distribution, which reduce the consumption of the bulk of society to a minimum varying within more or less narrow limits. It is furthermore restricted by the tendency to accumulate, the drive to expand capital and produce surplus value on an extended scale. This is law for capitalist production, imposed by incessant revolutions in the methods of production themselves, by the depreciation of existing capital always bound up with them, by the general competitive struggle and the need to improve production and expand its scale merely as a means of selfpreservation and under penalty of ruin. The market must, therefore, be continually extended, so that its interrelations and the conditions regulating them assume more and more the form of a natural law working independently of the producer, and become ever more uncontrollable. This internal contradiction seeks to resolve itself through expansion of the outlying field of production. But the more the productive power develops, the more it finds itself at variance with the narrow basis on which the conditions of consumption rest. It is no contradiction at all on this self-contradictory basis that there should be an excess of capital simultaneously with a growing surplus of population. For while a combination of these two would, indeed, increase the mass of produced surplus value, it would at the same time intensify the contradiction between the conditions under which this surplus value is produced and those under which it is realised.

If a certain rate of profit is given, the mass of profit will always depend on the magnitude of the advanced capital. The accumulation, however, is then determined by that portion of this mass which is reconverted into capital. As for this portion, being equal to the profit minus the revenue consumed by the capitalists, it will depend not merely on the value of this mass, but also on the cheapness of the commodities which the capitalist can buy with it, commodities which pass partly into his consumption, his revenue, and partly into his constant capital. (Wages are here assumed to be given.)

The mass of capital set in motion by the labourer, whose value he preserves by his labour and reproduces in his product, is quite different from the value which he adds to it. If the mass of the capital = 1,000 and the added labour = 100, the reproduced capital = 1,100. If the mass = 100 and the added labour = 20, the reproduced capital = 120. In the first case the rate of profit = 10%, in the second = 20%. And yet more can be accumulated out of 100 than out of 20. And thus the river of capital rolls on (aside from its depreciation through increase of the productive power), or its accumulation does, not in proportion to the rate of profit, but in proportion to the impetus it already possesses. So far as it is based on a high rate of surplus value, a high rate of profit is possible when the working day is very long, although labour is not productive. It is possible, because the wants of the labourers are very small, hence average wages very low, although the labour itself is unproductive. The low wages will correspond to the labourer's lack of energy. Capital then accumulates slowly, in spite of the high rate of profit. Population is stagnant and the working time which the product costs, is great, while the wages paid to the labourer are small.<sup>a</sup>

The rate of profit does not sink because the labourer is exploited any less, but because generally less labour is employed in proportion to the employed capital.

If, as shown, a falling rate of profit is bound up with an increase in the mass of profit, a larger portion of the annual product of labour is appropriated by the capitalist under the category of capital (as a replacement for consumed capital) and a relatively smaller portion under the category of profit. Hence the fantastic idea of priest Chalmers,<sup>b</sup> that the less of the annual product is expended by capitalists as capital, the greater the profits they pocket. In which case the state church comes to their assistance, to care for the consumption of the greater part of the surplus product, rather than having it used as capital. The preacher confounds cause with effect. Furthermore, the mass of profit increases in spite of its slower rate with the growth of the invested capital. However, this requires a simultaneous concentration

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 32, pp. 434-35. - <sup>b</sup> Th. Chalmers, On Political Economy in Connexion with the Moral State and Moral Prospects of Society, Second edition, Glasgow, 1832, pp. 88-92; cf. present edition, Vol. 32, pp. 434-35.
of capital, since the conditions of production then demand employment of capital on a larger scale. It also requires its centralisation, i.e., the swallowing up of the small capitalists by the big and their deprivation of capital. It is again but an instance of separating - raised to the second power - the conditions of labour from the producers to whose number these small capitalists still belong, since their own labour continues to play a role in their case. The labour of a capitalist stands altogether in inverse proportion to the size of his capital, i.e., to the degree in which he is a capitalist. It is this same severance of the conditions of labour, on the one hand, from the producers, on the other, that forms the conception of capital. It begins with primitive accumulation (Buch I, Kap. XXIV<sup>a</sup>), appears as a permanent process in the accumulation and concentration of capital, and expresses itself finally as centralisation of existing capitals in a few hands and a deprivation of many of their capital (to which expropriation is now changed). This process would soon bring about the collapse of capitalist production if it were not for counteracting tendencies, which have a continuous decentralising effect alongside the centripetal one.

### II. CONFLICT BETWEEN EXPANSION OF PRODUCTION AND PRODUCTION OF SURPLUS VALUE

The development of the social productive power of labour is manifested in two ways: First, in the magnitude of the already produced productive forces, the value and mass of the conditions of production under which new production is carried on, and in the absolute magnitude of the already accumulated productive capital; secondly, in the relative smallness of the portion of total capital laid out in wages, i. e., in the relatively small quantity of living labour required for the reproduction and self-expansion of a given capital, for mass production. This also implies concentration of capital.

In relation to employed labour power the development of the productive power again reveals itself in two ways: First, in the increase of surplus labour, i. e., the reduction of the necessary labour time required for the reproduction of labour power. Secondly, in the decrease of the quantity of labour power (the number of labourers) generally employed to set in motion a given capital.

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 35, Ch. XXVI-XXVII.

The two movements not only go hand in hand, but mutually influence one another and are phenomena in which the same law expresses itself. Yet they affect the rate of profit in opposite ways. The total mass of profit is equal to the total mass of surplus value, the rate of profit =  $\frac{s}{C} = \frac{\text{surplus value}}{\text{advanced total capital}}$ . The surplus value, however, as a total, is determined first by its rate, and second by the mass of labour simultaneously employed at this rate, or, what amounts to the same, by the magnitude of the variable capital. One of these factors, the rate of surplus value, rises, and the other, the number of labourers, falls (relatively or absolutely). Inasmuch as the development of the productive power reduces the paid portion of employed labour, it raises the surplus value, because it raises its rate; but inasmuch as it reduces the total mass of labour employed by a given capital, it reduces the factor of the number by which the rate of surplus value is multiplied to obtain its mass. Two labourers, each working 12 hours daily, cannot produce the same mass of surplus value as 24 who work only 2 hours, even if they could live on air and hence did not have to work for themselves at all. In this respect, then, the compensation of the reduced number of labourers by intensifying the degree of exploitation has certain insurmountable limits. It may, for this reason, well check the fall in the rate of profit, but cannot prevent it altogether.<sup>a</sup>

With the development of the capitalist mode of production, therefore, the rate of profit falls, while its mass increases with the growing mass of the capital employed. Given the rate, the absolute increase in the mass of capital depends on its existing magnitude. But, on the other hand, if this magnitude is given, the proportion of its growth, i. e., the rate of its increment, depends on the rate of profit. The increase in the productive power (which, moreover, we repeat, always goes hand in hand with a depreciation of the available capital) can directly only increase the value of the existing capital if by raising the rate of profit it increases that portion of the value of the annual product which is reconverted into capital. As concerns the productive power of labour, this can only occur (since this productive power has nothing direct to do with the *value* of the existing capital) by raising the relative surplus value, or reducing the value of the constant capital, so that the commodities which enter either the reproduction of

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 108-11.

labour power, or the elements of constant capital, are cheapened. Both imply a depreciation of the existing capital, and both go hand in hand with a reduction of the variable capital in relation to the constant. Both cause a fall in the rate of profit, and both slow it down. Furthermore, inasmuch as an increased rate of profit causes a greater demand of labour, it tends to increase the working population and thus the material, whose exploitation makes real capital out of capital.

Indirectly, however, the development of the productive power of labour contributes to the increase of the value of the existing capital by increasing the mass and variety of use values in which the same exchange value is represented and which form the material substance, i.e., the material elements of capital, the material objects making up the constant capital directly, and the variable capital at least indirectly. More products which may be converted into capital, whatever their exchange value, are created with the same capital and the same labour. These products may serve to absorb additional labour, hence also additional surplus labour, and therefore create additional capital. The amount of labour which a capital can command does not depend on its value, but on the mass of raw and auxiliary materials, machinery and elements of fixed capital and necessities of life, all of which it comprises, whatever their value may be. As the mass of the labour employed, and thus of surplus labour increases, there is also a growth in the value of the reproduced capital and in the surplus value newly added to it.

These two elements embraced by the process of accumulation, however, are not to be regarded merely as existing side by side in repose, as Ricardo does. They contain a contradiction which manifests itself in contradictory tendencies and phenomena.<sup>a</sup> These antagonistic agencies counteract each other simultaneously.

Alongside the stimulants of an actual increase of the labouring population, which spring from the increase of the portion of the total social product serving as capital, there are agencies which create a merely relative overpopulation.

Alongside the fall in the rate of profit mass of capitals grows, and hand in hand with this there occurs a depreciation of existing capitals which checks the fall and gives an accelerating motion to the accumulation of capital values.

Alongside the development of productivity there develops a higher

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 32, pp. 167-74 and 158.

composition of capital, i. e., the relative decrease of the ratio of variable to constant capital.

These different influences may at one time operate predominantly side by side in space, and at another succeed each other in time. From time to time the conflict of antagonistic agencies finds vent in crises. The crises are always but momentary and forcible solutions of the existing contradictions. They are violent eruptions which for a time restore the disturbed equilibrium.

The contradiction, to put it in a very general way, consists in that the capitalist mode of production involves a tendency towards absolute development of the productive forces, regardless of the value and surplus value it contains, and regardless of the social conditions under which capitalist production takes place; while, on the other hand, its aim is to preserve the value of the existing capital and promote its self-expansion to the highest limit (i. e., to promote an ever more rapid growth of this value). The specific feature about it is that it uses the existing value of capital as a means of increasing this value to the utmost. The methods by which it accomplishes this include the fall of the rate of profit, depreciation of existing capital, and development of the productive forces of labour at the expense of already created productive forces.

The periodical depreciation of existing capital — one of the means immanent in capitalist production to check the fall of the rate of profit and hasten accumulation of capital value through formation of new capital — disturbs the given conditions, within which the process of circulation and reproduction of capital takes place, and is therefore accompanied by sudden stoppages and crises in the production process.

The decrease of variable in relation to constant capital, which goes hand in hand with the development of the productive forces, stimulates the growth of the labouring population, while continually creating an artificial overpopulation. The accumulation of capital in terms of value is slowed down by the falling rate of profit, to hasten still more the accumulation of use values, while this, in its turn, adds new momentum to accumulation in terms of value.

Capitalist production seeks continually to overcome these immanent barriers, but overcomes them only by means which again place these barriers in its way and on a more formidable scale.

The real barrier of capitalist production is capital itself. It is that capital and its self-expansion appear as the starting and the closing

point, the motive and the purpose of production; that production is only production for *capital* and not vice versa, the means of production are not mere means for a constant expansion of the living process of the society of producers. The limits within which the preservation and self-expansion of the value of capital resting on the expropriation and pauperisation of the great mass of producers can alone move -these limits come continually into conflict with the methods of production employed by capital for its purposes, which drive towards unlimited extension of production, towards production as an end in itself, towards unconditional development of the social productivity of labour. The means-unconditional development of the productive forces of society - comes continually into conflict with the limited purpose, the self-expansion of the existing capital. The capitalist mode of production is, for this reason, a historical means of developing the material forces of production and creating an appropriate world market and is, at the same time, a continual conflict between this its historical task and its corresponding social relations of production.<sup>a</sup>

### III. EXCESS CAPITAL AND EXCESS POPULATION

A drop in the rate of profit is attended by a rise in the minimum capital required by an individual capitalist for the productive employment of labour; required both for its exploitation generally, and for making the consumed labour time suffice as the labour time necessary for the production of the commodities, so that it does not exceed the average social labour time required for the production of the commodities. Concentration increases simultaneously, because beyond certain limits a large capital with a small rate of profit accumulates faster than a small capital with a large rate of profit. At a certain high point this increasing concentration in its turn causes a new fall in the rate of profit. The mass of small dispersed capitals is thereby driven along the adventurous road of speculation, credit frauds, stock swindles, and crises. The so-called plethora of capital always applies essentially to a plethora of the capital for which the fall in the rate of profit is not compensated through the mass of profit<sup>b</sup>— this is always

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 28, p. 23 and Vol. 34, pp. 24-25. - <sup>b</sup> Ibid., Vol. 33, p. 112.

true of newly developing fresh offshoots of capital — or to a plethora which places capitals incapable of action on their own at the disposal of the managers of large enterprises in the form of credit. This plethora of capital arises from the same causes as those which call forth relative overpopulation, and is, therefore, a phenomenon supplementing the latter, although they stand at opposite poles — unemployed capital at one pole, and unemployed worker population at the other.

Overproduction of capital, not of individual commodities although overproduction of capital always includes overproduction of commodities—is therefore simply overaccumulation of capital. To appreciate what this overaccumulation is (its closer analysis follows later), one need only assume it to be absolute. When would overproduction of capital be absolute? Overproduction which would affect not just one or another, or a few important spheres of production, but would be absolute in its full scope, hence would extend to all fields of production?

There would be absolute overproduction of capital as soon as additional capital for purposes of capitalist production = 0. The purpose of capitalist production, however, is self-expansion of capital, i. e., appropriation of surplus labour, production of surplus value, of profit. As soon as capital would, therefore, have grown in such a ratio to the labouring population that neither the absolute working time supplied by this population, nor the relative surplus working time, could be expanded any further (this last would not be feasible at any rate in the case when the demand for labour were so strong that there were a tendency for wages to rise); at a point, therefore, when the increased capital produced just as much, or even less, surplus value than it did before its increase, there would be absolute overproduction of capital: i.e., the increased capital  $C + \Delta C$  would produce no more, or even less, profit than capital C before its expansion by  $\Delta C$ . In both cases there would be a steep and sudden fall in the general rate of profit, but this time due to a change in the composition of capital not caused by the development of the productive power, but rather by a rise in the money value of the variable capital (because of increased wages) and the corresponding reduction in the proportion of surplus labour to necessary labour.

In reality, it would appear that a portion of the capital would lie completely or partially idle (because it would have to crowd out some of the active capital before it could expand its own value), and the other portion would produce values at a lower rate of profit, owing to

the pressure of unemployed or but partly employed capital. It would be immaterial in this respect if a part of the additional capital were to take the place of the old capital, and the latter were to take its position in the additional capital. We should still always have the old sum of capital on one side, and the sum of additional capital on the other. The fall in the rate of profit would then be accompanied by an absolute decrease in the mass of profit, since the mass of employed labour power could not be increased and the rate of surplus value raised under the conditions we had assumed, so that the mass of surplus value could not be increased either. And the reduced mass of profit would have to be calculated on an increased total capital. But even if it is assumed that the employed capital continues to self-expand at the old rate of profit, and the mass of profit hence remains the same, this mass would still be calculated on an increased total capital, this likewise implying a fall in the rate of profit. If a total capital of 1,000 yielded a profit of 100, and after being increased to 1,500 still yielded 100, then, in the second case, 1,000 would yield only  $66\frac{2}{3}$ . Self-expansion of the old capital, in the absolute sense, would have been reduced. The capital = 1,000 would yield no more under the new circumstances than formerly a capital =  $666 \frac{2}{3}$ .

It is evident, however, that this actual depreciation of the old capital could not occur without a struggle, and that the additional capital  $\Delta C$  could not assume the functions of capital without a struggle. The rate of profit would not fall under the effect of competition due to overproduction of capital. It would rather be the reverse; it would be the competitive struggle which would begin because the fallen rate of profit and overproduction of capital originate from the same conditions. The part of  $\Delta C$  in the hands of old functioning capitalists would be allowed to remain more or less idle to prevent a depreciation of their own original capital and not to narrow its place in the field of production. Or they would employ it, even at a momentary loss, to shift the need of keeping additional capital idle on newcomers and on their competitors in general.

That portion of  $\Delta C$  which is in new hands would seek to assume a place for itself at the expense of the old capital, and would accomplish this in part by forcing a portion of the old capital to lie idle. It would compel the old capital to give up its old place and withdraw to join completely or partially unemployed additional capital.

A portion of the old capital has to lie unused under all circumstances;

it has to give up its characteristic quality as capital, so far as acting as such and producing value is concerned. The competitive struggle would decide what part of it would be particularly affected. So long as things go well, competition effects an operating fraternity of the capitalist class, as we have seen in the case of the equalisation of the general rate of profit, so that each shares in the common loot in proportion to the size of his respective investment. But as soon as it no longer is a question of sharing profits, but of sharing losses, everyone tries to reduce his own share to a minimum and to shove it off upon another. The class, as such, must inevitably lose. How much the individual capitalist must bear of the loss, i.e., to what extent he must share in it at all, is decided by strength and cunning, and competition then becomes a fight among hostile brothers. The antagonism between each individual capitalist's interests and those of the capitalist class as a whole, then comes to the surface, just as previously the identity of these interests operated in practice through competition.

How is this conflict settled and the conditions restored which correspond to the "sound" operation of capitalist production? The mode of settlement is already indicated in the very emergence of the conflict whose settlement is under discussion. It implies the withdrawal and even the partial destruction of capital amounting to the full value of additional capital  $\Delta C$ , or at least a part of it. Although, as the description of this conflict shows, the loss is by no means equally distributed among individual capitals, its distribution being rather decided through a competitive struggle in which the loss is distributed in very different proportions and forms, depending on special advantages or previously captured positions, so that one capital is left unused, another is destroyed, and a third suffers but a relative loss, or is just temporarily depreciated, etc.

But the equilibrium would be restored under all circumstances through the withdrawal or even the destruction of more or less capital. This would extend partly to the material substance of capital, i. e., a part of the means of production, of fixed and circulating capital, would not operate, not act as capital; some of the operating establishments would then be brought to a standstill. Although, in this respect, time attacks and worsens all means of production (except land), the stoppage would in reality cause far greater damage to the means of production. However, the main effect in this case would be that these means of production would cease to function as such, that their function as means of production would be disturbed for a shorter or longer period.

The main damage, and that of the most acute nature, would occur in respect to capital, and in so far as the latter possesses the characteristic of value it would occur in respect to the values of capitals. That portion of the value of a capital which exists only in the form of claims on prospective shares of surplus value, i.e., profit, in fact in the form of promissory notes on production in various forms, is immediately depreciated by the reduction of the receipts on which it is calculated. A part of the gold and silver lies unused, i.e., does not function as capital. Part of the commodities on the market can complete their process of circulation and reproduction only through an immense contraction of their prices, hence through a depreciation of the capital which they represent. The elements of fixed capital are depreciated to a greater or lesser degree in just the same way. It must be added that definite, presupposed, price relations govern the process of reproduction, so that the latter is halted and thrown into confusion by a general drop in prices. This confusion and stagnation paralyses the function of money as a medium of payment, whose development is geared to the development of capital and is based on those presupposed price relations. The chain of payment obligations due at specific dates is broken in a hundred places. The confusion is augmented by the attendant collapse of the credit system, which develops simultaneously with capital, and leads to violent and acute crises, to sudden and forcible depreciations, to the actual stagnation and disruption of the process of reproduction, and thus to a real falling off in reproduction.<sup>a</sup>

But there would have been still other agencies at work at the same time. The stagnation of production would have laid off a part of the working class and would thereby have placed the employed part in a situation where it would have to submit to a reduction of wages even below the average. This has the very same effect on capital as an increase of the relative or absolute surplus value at average wages would have had. Prosperity would have led to more marriages among labourers and reduced the decimation of offspring. While implying a real increase in population, this does not signify an increase in the actual working population. But it affects the relations of the labourer

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 127-28.

to capital in the same way as an increase of the number of actually working labourers would have affected them. On the other hand, the fall in prices and the competitive struggle would have driven every capitalist to lower the individual value of his total product below its general value by means of new machines, new and improved working methods, new combinations, i. e., to increase the productive farmer of a given quantity of labour, to lower the proportion of variable to constant capital, and thereby to release some labourers; in short, to create an artificial overpopulation. Ultimately, the depreciation of the elements of constant capital would itself tend to raise the rate of profit. The mass of employed constant capital would have increased in relation to variable, but its value could have fallen. The ensuing stagnation of production would have prepared — within capitalistic limits — a subsequent expansion of production.

And thus the cycle would run its course anew. Part of the capital, depreciated by its functional stagnation, would recover its old value. For the rest, the same vicious circle would be described once more under expanded conditions of production, with an expanded market and increased productive forces.

However, even under the extreme conditions assumed by us this absolute overproduction of capital is not absolute overproduction, not absolute overproduction of means of production. It is overproduction of means of production only in so far as the latter *serve as capital*, and consequently include a self-expansion of value, must produce an additional value in proportion to the increased mass.

Yet it would still be overproduction, because capital would be unable to exploit labour to the degree required by a "sound", "normal" development of the process of capitalist production, to a degree which would at least increase the mass of profit along with the growing mass of the employed capital; to a degree which would, therefore, prevent the rate of profit from falling as much as the capital grows, or even more rapidly.

Overproduction of capital is never anything more than overproduction of means of production — of means of labour and necessities of life — which may serve as capital, i. e., may serve to exploit labour at a given degree of exploitation; a fall in the intensity of exploitation below a certain point, however, calls forth disturbances, and stoppages in the capitalist production process, crises, and destruction of capital. It is no contradiction that this overproduction of capital is accompanied by more or less considerable relative overpopulation. The circumstances which increased the productive power of labour, augmented the mass of produced commodities, expanded markets, accelerated accumulation of capital both in terms of its mass and its value, and lowered the rate of profit—these same circumstances have also created, and continuously create, a relative overpopulation, an overpopulation of labourers not employed by the surplus capital owing to the low degree of exploitation at which alone they could be employed, or at least owing to the low rate of profit which they would yield at the given degree of exploitation.

If capital is sent abroad, this is not done because it absolutely could not be applied at home, but because it can be employed at a higher rate of profit in a foreign country. But such capital is absolute excess capital for the employed labouring population and for the home country in general. It exists as such alongside the relative overpopulation, and this is an illustration of how both of them exist side by side, and mutually influence one another.

On the other hand, a fall in the rate of profit connected with accumulation necessarily calls forth a competitive struggle. Compensation of a fall in the rate of profit by a rise in the mass of profit applies only to the total social capital and to the big, firmly placed capitalists. The new additional capital operating independently does not enjoy any such compensating conditions. It must still win them, and so it is that a fall in the rate of profit calls forth a competitive struggle among capitalists, not vice versa. To be sure, the competitive struggle is accompanied by a temporary rise in wages and a resultant further temporary fall of the rate of profit. The same occurs when there is an overproduction of commodities, when markets are overstocked. Since the aim of capital is not to minister to certain wants, but to produce profit, and since it accomplishes this purpose by methods which adapt the mass of production to the scale of production, not vice versa, a rift must continually ensue between the limited dimensions of consumption under capitalism and a production which forever tends to exceed this immanent barrier. Furthermore, capital consists of commodities, and therefore overproduction of capital implies overproduction of commodities. Hence the peculiar phenomenon of economists who deny overproduction of commodities, admitting overproduction of capital.<sup>a</sup> To say that there is no general overproduction, but rather a disproportion within the various branches of production, is no more than to say

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 32, pp. 132-35 and Vol. 33, pp. 113-14.

that under capitalist production the proportionality of the individual branches of production springs as a continual process from disproportionality, because the cohesion of the aggregate production imposes itself as a blind law upon the agents of production, and not as a law which, being understood and hence controlled by their common mind, brings the production process under their joint control. It amounts furthermore to demanding that countries in which the capitalist mode of production is not developed, should consume and produce at a rate which suits the countries with the capitalist mode of production. If it is said that overproduction is only relative, this is quite correct; but the entire capitalist mode of production is only a relative one, whose barriers are not absolute. They are absolute only for this mode, i.e., on its basis. How could there otherwise be a shortage of demand for the very commodities which the mass of the people lack, and how would it be possible for this demand to be sought abroad, in foreign markets, to pay the labourers at home the average amount of necessities of life? This is possible only because in this specific capitalist interrelation the surplus product assumes a form in which its owner cannot offer it for consumption. unless it first reconverts itself into capital for him. If it is finally said that the capitalists have only to exchange and consume their commodities among themselves, then the entire nature of the capitalist mode of production is lost sight of; and also forgotten is the fact that it is a matter of expanding the value of the capital, not consuming it. In short, all these objections to the obvious phenomena of overproduction (phenomena which pay no heed to these objections) amount to the contention that the barriers of capitalist production are not barriers of production generally, and therefore not barriers of this specific, capitalist mode of production. The contradiction of the capitalist mode of production, however, lies precisely in its tendency towards an absolute development of the productive forces, which continually comes into conflict with the specific conditions of production in which capital moves, and alone can move.

There are not too many necessities of life produced, in proportion to the existing population. Quite the reverse. Too little is produced to decently and humanely satisfy the wants of the great mass.

There are not too many means of production produced to employ the able-bodied portion of the population. Quite the reverse. In the first place, too large a portion of the produced population is not really capable of working, and is through force of circumstances made dependent on exploiting the labour of others, or on labour which can pass under this name only under a miserable mode of production. In the second place, not enough means of production are produced to permit the employment of the entire able-bodied population under the most productive conditions, so that their absolute working period could be shortened by the mass and effectiveness of the constant capital employed during working hours.

On the other hand, too many means of labour and necessities of life are produced at times to permit of their serving as means for the exploitation of labourers at a certain rate of profit. Too many commodities are produced to permit of a realisation and conversion into new capital of the value and surplus value contained in them under the conditions of distribution and consumption peculiar to capitalist production, i. e., too many to permit of the continuation of this process without constantly recurring explosions.

Not too much wealth is produced. But at times too much wealth is produced in its capitalistic, self-contradictory forms.

The limitations of the capitalist mode of production come to the surface:

1) In that the development of the productive power of labour creates out of the falling rate of profit a law which at a certain point comes into antagonistic conflict with this development and must be overcome constantly through crises.

2) In that the expansion or contraction of production are determined by the appropriation of unpaid labour and the proportion of this unpaid labour to objectified labour in general, or, to speak the language of the capitalists, by profit and the proportion of this profit to the employed capital, thus by a definite rate of profit, rather than by the relation of production to social requirements, i. e., to the requirements of socially developed human beings. It is for this reason that the capitalist mode of production meets with barriers at a certain expanded stage of production which, if viewed from the other premiss, would reversely have been altogether inadequate. It comes to a standstill at a point fixed by the production and realisation of profit, and not by the satisfaction of requirements.

If the rate of profit falls, there follows, on the one hand, an exertion of capital in order that the individual capitalists, through improved methods, etc., may depress the value of their individual commodity below the social average value and thereby realise an extra profit at the prevailing market price. On the other hand, there appears swindling and a general promotion of swindling by recourse to frenzied ventures with new methods of production, new investments of capital, new adventures, all for the sake of securing a shred of extra profit which is independent of the general average and rises above it.

The rate of profit, i.e., the relative increment of capital, is above all important to all new offshoots of capital seeking to find an independent place for themselves. And as soon as formation of capital were to fall into the hands of a few established big capitals, for which the mass of profit compensates for the falling rate of profit, the vital flame of production would be altogether extinguished. It would die out. The rate of profit is the motive power of capitalist production. Things are produced only so long as they can be produced with a profit. Hence the concern of the English economists over the decline of the rate of profit.<sup>a</sup> The fact that the bare possibility of this happening should worry Ricardo, shows his profound understanding of the conditions of capitalist production. It is that which is held against him, it is his unconcern about "human beings", and his having an eye solely for the development of the productive forces, whatever the cost in human beings and capital values — it is precisely that which is the important thing about him.<sup>b</sup> Development of the productive forces of social labour is the historical task and justification of capital. This is just the way in which it unconsciously creates the material conditions of a higher mode of production. What worries Ricardo is the fact that the rate of profit, the stimulating principle of capitalist production, the fundamental premiss and driving force of accumulation, should be endangered by the development of production itself. And here the quantitative proportion means everything. There is, indeed, something deeper behind it, of which he is only vaguely aware. It comes to the surface here in a purely economic way — i.e., from the bourgeois point of view, within the limitations of capitalist understanding, from the standpoint of capitalist production itself—that it has its barrier, that it is relative, that it is not an absolute, but only a historical mode of production corresponding to a definite limited epoch in the development of the material conditions of production.

### IV. SUPPLEMENTARY REMARKS

Since the development of the productive power of labour proceeds very disproportionately in the various lines of industry, and not only

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, p. 112. - <sup>b</sup> Ibid., p. 114.

disproportionately in degree but frequently also in opposite directions, it follows that the mass of average profit (= surplus value) must be substantially below the level one would naturally expect after the development of the productive power in the most advanced branches of industry. The fact that the development of the productive power in different lines of industry proceeds at substantially different rates and frequently even in opposite directions, is not due merely to the anarchy of competition and the peculiarity of the bourgeois mode of production. Productivity of labour is also bound up with natural conditions, which frequently become less productive as productivity grows—inasmuch as the latter depends on social conditions. Hence the opposite movements in these different spheres — progress here, and retrogression there. Consider the mere influence of the seasons, for instance, on which the bulk of raw materials depends for its mass, the exhaustion of forest lands, coal and iron mines, etc.<sup>a</sup>

While the circulating part of constant capital, such as raw materials, etc., continually increases its mass in proportion to the productivity of labour, this is not the case with fixed capital, such as buildings, machinery, and lighting and heating facilities, etc. Although in absolute terms a machine becomes dearer with the growth of its bodily mass, it becomes relatively cheaper. If five labourers produce ten times as much of a commodity as before, this does not increase the outlay for fixed capital ten-fold; although the value of this part of constant capital increases with the development of the productive power it does not by any means increase in the same proportion.<sup>b</sup> We have frequently pointed out the difference in the ratio of constant to variable capital as expressed in the fall of the rate of profit, and the difference in the same ratio as expressed in relation to the individual commodity and its price with the development of the productivity of labour.

//The value of a commodity is determined by the total labour time of past and living labour incorporated in it.<sup>e</sup> The increase in labour productivity consists precisely in that the share of living labour is reduced while that of past labour is increased, but in such a way that the total quantity of labour incorporated in that commodity declines; in such a way, therefore, that living labour decreases more than past labour increases. The past labour contained in the value of a commodity — the constant part of capital — consists partly of the wear and tear of fixed, partly of circulating, constant capital entirely consumed

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 131 and 135. - <sup>b</sup> Ibid., pp. 131-32. - <sup>c</sup> Ibid., pp. 136-37.

by that commodity, such as raw and auxiliary materials. The portion of value deriving from raw and auxiliary materials must decrease with the increased productivity of labour, because with regard to these materials the productivity expresses itself precisely by reducing their value. On the other hand, it is most characteristic of the rising productive power of labour that the fixed part of constant capital is strongly augmented, and with it that portion of its value which is transferred by wear and tear to the commodities. For a new method of production to represent a real increase in productivity, it must transfer a smaller additional portion of the value of fixed capital to each unit of the commodity in wear and tear than the portion of value deducted from it through the saving in living labour; in short, it must reduce the value of the commodity. It must obviously do so even if, as it occurs in some cases, an additional value goes into the value of the commodity for more or dearer raw or auxiliary materials over and above the additional portion for wear and tear of the fixed capital. All additions to the value must be more than offset by the reduction in value resulting from the decrease in living labour.

This reduction of the total quantity of labour going into a commodity seems, accordingly, to be the essential criterion of increased productive power of labour, no matter under what social conditions production is carried on. Productivity of labour, indeed, would always be measured by this standard in a society, in which producers regulate their production according to a preconceived plan, or even under simple commodity production. But how does the matter stand under capitalist production?

Suppose, a certain branch of capitalist industry produces a normal unit of its commodity under the following conditions: The wear and tear of fixed capital amounts to  $\frac{1}{2}$  shilling per piece; raw and auxiliary materials go into it to the amount of  $17 \frac{1}{2}$  shillings per piece; wages, 2 shillings; and surplus value, 2 shillings at a rate of surplus value of 100%. Total value = 22 shillings. We assume for the sake of simplicity that the capital in this branch of production has the average composition of social capital, so that the price of production of the commodity is identical with its value, and the profit of the capitalist with the created surplus value. Then the cost price of the commodity  $ty = \frac{1}{2} + 17\frac{1}{2} + 2 = 20s$ , the average rate of profit  $\frac{2}{20} = 10\%$ , and the price of production per piece of the commodity, like its value = 22s.

Suppose a machine is invented which reduces by half the living labour required per piece of the commodity, but trebles that portion of its value accounted for by the wear and tear of the fixed capital. In that case, the calculation is: Wear and tear =  $l\frac{1}{2}$  s., raw and auxiliary materials, as before,  $17\frac{1}{2}$  s., wages, ls., surplus value ls., total 21s. The commodity then falls 1s. in value; the new machine has certainly increased the productivity of labour. But the capitalist sees the matter as follows: his cost price is now  $1\frac{1}{2}$  s. for wear,  $17\frac{1}{2}$  s. for raw and auxiliary materials, 1s. for wages, total 20s., as before. Since the rate of profit is not immediately altered by the new machine, he will receive 10% over his cost price, that is, 2s. The price of production, then, remains unaltered = 22s., but is 1s. above the value. For a society producing under capitalist conditions the commodity has not cheapened. The new machine is no improvement for it. The capitalist is, therefore, not interested in introducing it. And since its introduction would make his present, not as yet worn-out, machinery simply worthless, would turn it into scrap-iron, hence would cause a positive loss, he takes good care not to commit this, what is for him a utopian, mistake.

The law of the increased productive power of labour is not, therefore, absolutely valid for capital. So far as capital is concerned, this productive power does not increase through a saving in living labour in general, but only through a saving in the *paid* portion of living labour, as compared to labour expended in the past, as we have already indicated in passing in Book I (Kap. XIII, 2, S. 409/398).<sup>a</sup> Here the capitalist mode of production is beset with another contradiction. Its historical mission is unconstrained development in geometrical progression of the productivity of human labour. It goes back on its mission whenever, as here, it checks the development of productivity. It thus demonstrates again that it is becoming senile and that it is more and more outlived.// <sup>37</sup>

Under competition, the increasing minimum of capital required with the increase in productivity for the successful operation of an in-

<sup>&</sup>lt;sup>37)</sup> The foregoing is placed in two oblique lines, because, though a rehash of the notes of the original manuscript, it goes in some points beyond the scope of the material found in the original.—F. E.

<sup>&</sup>lt;sup>a</sup> English edition: Vol. I, Ch. XV, 2 (present edition, Vol. 35).

dependent industrial establishment, assumes the following aspect: As soon as the new, more expensive equipment has become universally established, smaller capitals are henceforth excluded from this industry. Smaller capitals can carry on independently in the various spheres of production only in the infancy of mechanical inventions. Very large undertakings, such as railways, on the other hand, which have an unusually high proportion of constant capital, do not yield the average rate of profit, but only a portion of it, only an interest. Otherwise the general rate of profit would have fallen still lower. But this offers direct employment to large concentrations of capital in the form of stocks.

Growth of capital, hence accumulation of capital, does not imply a fall in the rate of profit, unless it is accompanied by the aforementioned changes in the proportion of the organic constituents of capital. Now it so happens that in spite of the constant daily revolutions in the mode of production, now this and now that larger or smaller portion of the total capital continues to accumulate for certain periods on the basis of a given average proportion of those constituents, so that there is no organic change with its growth, and consequently no cause for a fall in the rate of profit. This constant expansion of capital, hence also an expansion of production, on the basis of the old method of production which goes quietly on while new methods are already being introduced at its side, is another reason, why the rate of profit does not decline as much as the total capital of society grows.

The increase in the absolute number of labourers does not occur in all branches of production, and not uniformly in all, in spite of the relative decrease of variable capital laid out in wages. In agriculture, the decrease of the element of living labour may be absolute.

At any rate, it is but a requirement of the capitalist mode of production that the number of wage workers should increase absolutely, in spite of its relative decrease. Labour power becomes redundant for it as soon as it is no longer necessary to employ it for 12 to 15 hours daily. A development of productive forces which would diminish the absolute number of labourers, i. e., enable the entire nation to accomplish its total production in a shorter time span, would cause a revolution, because it would put the bulk of the population out of the running. This is another manifestation of the specific barrier of capitalist production, showing also that capitalist production is by no means an absolute form for the development of the productive forces and for the creation of wealth, but rather that at a certain point it comes into collision with this development. This collision appears partly in periodical crises, which arise from the circumstance that now this and now that portion of the labouring population becomes redundant under its old mode of employment. The limit of capitalist production is the excess time of the labourers. The absolute spare time gained by society does not concern it. The development of the productive power concerns it only in so far as it increases the surplus labour time of the working class, not because it decreases the labour time for material production in general. It moves thus in a contradiction.<sup>a</sup>

We have seen that the growing accumulation of capital implies its growing concentration. Thus grows the power of capital, the alienation of the conditions of social production personified in the capitalist from the real producers. Capital comes more and more to the fore as a social power, whose agent is the capitalist. This social power no longer stands in any possible relation to that which the labour of a single individual can create. It becomes an estranged, independent, social power, which stands opposed to society as an object, and as an object that is the capitalist's source of power. The contradiction between the general social power into which capital develops, on the one hand, and the private power of the individual capitalists over these social conditions of production, on the other, becomes ever more irreconcilable, and yet contains the solution of the problem, because it implies at the same time the transformation of the conditions of production into general, common, social, conditions. This transformation stems from the development of the productive forces under capitalist production, and from the ways and means by which this development takes place.

No capitalist ever voluntarily introduces a new method of production, no matter how much more productive it may be, and how much it may increase the rate of surplus value, so long as it reduces the rate of profit. Yet every such new method of production cheapens the commodities. Hence, the capitalist sells them originally above their prices of production, or, perhaps, above their value. He pockets the difference between their costs of production and the market prices of the same commodities produced at higher costs of production. He can do this, because the average labour time required socially for the pro-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 141-42.

duction of these latter commodities is higher than the labour time required for the new methods of production. His method of production stands above the social average. But competition makes it general and subject to the general law. There follows a fall in the rate of profit — perhaps first in this sphere of production, and eventually it achieves a balance with the rest— which is, therefore, wholly independent of the will of the capitalist.

It is still to be added to this point, that this same law also governs those spheres of production, whose product passes neither directly nor indirectly into the consumption of the labourers, or into the conditions under which their necessities are produced; it applies, therefore, also to those spheres of production, in which there is no cheapening of commodities to increase the relative surplus value or cheapen labour power. (At any rate, a cheapening of constant capital in all these branches may increase the rate of profit, with the exploitation of labour remaining the same.) As soon as the new production method begins to spread, and thereby to furnish tangible proof that these commodifies can actually be produced more cheaply, the capitalists working with the old methods of production must sell their product below its full price of production, because the value of this commodity has fallen, and because the labour time required by them to produce it is greater than the social average. In one word — and this appears as an effect of competition - these capitalists must also introduce the new method of production, in which the proportion of variable to constant capital has been reduced.<sup>a</sup>

All the circumstances which lead to the use of machinery cheapening the price of a commodity produced by it, come down in the last analysis to a reduction of the quantity of labour absorbed by a single piece of the commodity; and secondly, to a reduction in the wear-andtear portion of the machinery, whose value goes into a single piece of the commodity. The less rapid the wear of machinery, the more the commodities over which it is distributed, and the more living labour it replaces before its term of reproduction arrives. In both cases the quantity and value of the fixed constant capital increase in relation to the variable.

\* "All other things being equal, the power of a nation to save from its profits varies with the rate of profits: is great when they are high, less, when low; but as the rate of

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 144-49.

profit declines, all other things do not remain equal.... A low rate of profit is ordinarily accompanied by a rapid rate of accumulation, relatively to the numbers of the people, as in England ... a high rate of profit by a slower rate of accumulation, relatively to the numbers of the people." \* Examples: Poland, Russia, India, etc. (Richard Jones, *An Introductory Lecture on Political Economy*, London, 1833, p. 50 ff.)

Jones emphasises correctly that in spite of the falling rate of profit the INDUCEMENTS AND FACULTIES TO ACCUMULATE are augmented <sup>a</sup>; first, on account of the growing relative overpopulation; second, because the growing productivity of labour is accompanied by an increase in the mass of use values represented by the same exchange value, hence in the material elements of capital; third, because the branches of production become more varied; fourth, due to the development of the credit system, the stock companies, etc., and the resultant case of converting money into capital without becoming an industrial capitalist; fifth, because the wants and the greed for wealth increase; and, sixth, because the mass of investments in fixed capital grows, etc.

Three cardinal facts of capitalist production:

1) Concentration of means of production in few hands, whereby they cease to appear as the property of the immediate labourers and turn into social production capacities. Even if initially they are the private property of capitalists. These are the trustees of bourgeois society, but they pocket all the proceeds of this trusteeship.

2) Organisation of labour itself into social labour: through cooperation, division of labour, and the uniting of labour with the natural sciences.

In these two senses, the capitalist mode of production abolishes private property and private labour, even though in contradictory forms.<sup>b</sup>

3) Creation of the world market.

The stupendous productive power developing under the capitalist mode of production relative to population, and the increase, if not in the same proportion, of capital values (not just of their material substance), which grow much more rapidly than the population, contradict the basis, which constantly narrows in relation to the expanding wealth, and for which all this immense productive power works. They also contradict the conditions under which this swelling capital augments its value. Hence the crises.

<sup>&</sup>lt;sup>a</sup> Ibid., p. 336. - <sup>b</sup> Ibid., pp. 342-43.

# Part IV

# CONVERSION OF COMMODITY CAPITAL AND MONEY CAPITAL INTO COMMERCIAL CAPITAL AND MONEY-DEALING CAPITAL (MERCHANT'S CAPITAL)

## Chapter XVI

### COMMERCIAL CAPITAL

Merchant's, or trading, capital breaks up into two forms or subdivisions, namely, commercial capital and money-dealing capital, which we shall now define more closely, in so far as this is necessary for our analysis of capital in its basic structure. This is all the more necessary, because modern political economy, even in the persons of its best exponents, throws trading capital and industrial capital indiscriminately together and, in effect, wholly overlooks the characteristic peculiarities of the former.<sup>a</sup>

The movements of commodity capital have been analysed in Book II.<sup>b</sup> To take the total capital of society, one part of it—always made up of different elements and even changing in magnitude —always exists in the form of commodities on the market, to be converted into money. Another part exists on the market in the form of money, to be converted into commodities. It is always in the process of this transition, of this formal metamorphosis. Inasmuch as this function of capital in the process of circulation is at all set apart as a special function of a special capital, as a function established by virtue of the division of labour to a special group of capitalists, commodity capital becomes commercial capital.

We have explained (Book II, Chapter VI, "The Costs of Circulation," 2 and 3) to what extent the transport industry, storage and dis-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 63-64. - <sup>b</sup> Ibid., Vol. 36, pp. 92-105.

tribution of commodities in a distributable form, may be regarded as production processes continuing within the process of circulation. These episodes incidental to the circulation of commodity capital are sometimes confused with the distinct functions of merchant's or commercial capital. Sometimes they are, indeed, practically bound up with these distinct, specific functions, although with the development of the social division of labour the function of merchant's capital evolves in a pure form, i. e., divorced from those real functions, and independent of them. Those functions are therefore irrelevant to our purpose, which is to define the specific difference of this special form of capital. In so far as capital solely employed in the circulation process, special commercial capital, partly combines those functions with its specific ones, it does not appear in its pure form. We obtain its pure form after stripping it of all these functions.

We have seen that the existence of capital as commodity capital and the metamorphosis it undergoes within the sphere of circulation, in the market, as commodity capital-a metamorphosis which resolves itself into buying and selling, converting commodity capital into money capital and money capital into commodity capital-that this forms a phase in the reproduction process of industrial capital, hence in its process of production as a whole. We have also seen, however, that it is distinguished in its function as a capital of circulation from its function as productive capital. These are two different and separate forms of existence of the same capital. One portion of the total social capital is continually on the market in the form of capital of circulation, passing through this process of transmutation, although for each individual capital its existence as commodity capital, and its metamorphosis as such, merely represent ever-vanishing and ever renewed points of transition - i. e., stages of transition in the continuity of its production process, and although the elements of commodity capital in the market vary continuously for this reason, being constantly withdrawn from the commodity market and equally periodically returned to it as new products of the process of production.

Commercial capital is nothing but a converted form of a part of this capital of circulation constantly to be found in the market, ever in the process of its metamorphosis, and always encompassed by the sphere of circulation. We say a part, because a part of the selling and buying of commodities always takes place directly between industrial capitalists. We leave this part entirely out of consideration in this analysis, because it contributes nothing to defining the conception, or to understanding the specific nature of merchant's capital, and because it has furthermore been exhaustively treated for our purpose in Book II.<sup>a</sup>

The dealer in commodities, as a capitalist generally, appears on the market primarily as the representative of a certain sum of money, which he advances as a capitalist, i. e., which he wants to turn from x (its original value) into  $x + \Delta x$  (the original sum plus profit). But it is evident to him—not being just a capitalist in general, but rather a special dealer in commodities— that his capital must first enter the market in the form of money capital, for he does not produce commodities. He merely trades in them, promotes their movement, and to operate with them he must first buy them, and, therefore, must be in possession of money capital.

Suppose that a dealer in commodities owns £3,000 which he invests as a trading capital. With these £3,000 he buys, say, 30,000 yards of linen from some linen manufacturer at 2s. per yard. He then sells the 30,000 yards. If the annual average rate of profit = 10% and he makes an annual profit of 10% after deducting all incidental expenses, then by the end of the year he has converted his £3,000 into £3,300. How he makes this profit is a question which we shall discuss later. At present, we intend to consider solely the form of the movement of his capital. With his £3,000 he keeps buying linen and selling it; he constantly repeats this operation of buying in order to sell, M - C - M', the simple form of capital as it obtains entirely in the process of circulation, uninterrupted by the production process, which lies outside its own movement and function.

What is now the relation of this commercial capital to commodity capital as a mere form of existence of industrial capital? So far as the linen manufacturer is concerned, he has realised the value of his linen with the merchant's money and thereby completed the first phase in the metamorphosis of his commodity capital—its conversion into money. Other conditions being equal, he can now proceed to reconvert this money into yarn, coal, wages, etc., and into means of subsistence, etc., for the consumption of his revenue. Hence, leaving aside the revenue expenditure, he can go on with his process of reproduction.

<sup>&</sup>lt;sup>a</sup> Ibid., Ch. III.

But while the sale of the linen, its metamorphosis into money, has taken place for him, as producer, it has not yet taken place for the linen itself. It is still on the market as commodity capital awaiting to undergo its first metamorphosis — to be sold. Nothing has happened to this linen besides a change in the person of its owner. As concerns its purpose, as concerns its place in the process, it is still commodity capital, a saleable commodity, with the only difference that it is now in the merchant's hands instead of the manufacturer's. The function of selling it, of effecting the first phase of its metamorphosis, has passed from the manufacturer to the merchant, has become the special business of the merchant, whereas previously it was a function which the producer had to perform himself after having completed the function of its production.

Let us assume that the merchant fails to sell the 30,000 yards of linen during the interval required by the linen manufacturer to bring another 30,000 yards to market at a value of  $f_{.3,000}$ . The merchant cannot buy them again, because he still has in stock the unsold 30,000 yards which have not as yet been reconverted into money capital. A stoppage ensues, i.e., an interruption of reproduction. The linen producer might, of course, have additional money capital at his disposal, which he could convert into productive capital, regardless of the sale of the 30,000 vards, in order to continue the production process. But this would not alter the situation. So far as the capital tied up in the 30,000 yards of linen is concerned, its process of reproduction is, and remains, interrupted. It is, indeed, easily seen here that the merchant's operations are really nothing but operations that must be performed at all events to convert the producer's commodity capital into money. They are operations which effect the functions of commodity capital in the circulation and reproduction processes. If it devolved upon the producer's clerk to attend exclusively to the sale, and also the purchase, instead of an independent merchant, this connection would not be obscured for a single moment.

Commercial capital is, therefore, nothing but the producer's commodity capital which has to undergo the process of conversion into money— to perform its function of commodity capital on the market— the only difference being that instead of representing an incidental function of the producer, it is now the exclusive operation of a special kind of capitalist, the dealer in commodities, and is set apart as the business of a special investment of capital.

This becomes evident, furthermore, in the specific form of circula-

tion of commercial capital. The merchant buys a commodity and then sells it: M - C - M'. In the simple circulation of commodities, or even in the circulation of commodities as it appears in the circulation process of industrial capital, C' - M - C, circulation is effected by each piece of money changing hands twice. The linen manufacturer sells his commodity-linen, converting it into money; the buyer's money passes into his hands. With this same money he buys yarn, coal, labour, etc.-expends the money for reconverting the value of linen into the commodities which make up its production elements. The commodity he buys is not the same commodity, not the same kind of commodity which he sells. He has sold products and bought means of production. But it is different with respect to the movement of merchant's capital. With his  $\pounds 3,000$  the linen merchant buys 30,000 yards of linen; he sells the same 30,000 yards of linen in order to retrieve his money capital ( $f_{.3,000}$  and the profit) from circulation. It is not the same pieces of money, but rather the same commodity which here changes places twice; the commodity passes from the seller into the hands of the buyer, and from the hands of the buyer, who now becomes seller, into those of another buyer. It is sold twice, and may be sold repeatedly through the medium of a series of merchants. And it is precisely through this repeated sale, through this two-fold change of place of the same commodity, that the money advanced for its purchase by the first buyer is retrieved, its reflux to him effected. In one case, C' - M - C effects the two-fold change of place of the same money, the sale of a commodity in one form and the purchase of a commodity in another. In the other case, M - C - M'effects the two-fold change of place of the same commodity, the withdrawal of advanced money from circulation. It is evident that the commodity has not been finally sold when it passes from the producer into the hands of the merchant and that the latter merely carries on the operation of selling — or effects the function of commodity capital. But at the same time it is evident that what is C-M, a mere function of his capital in its transient form of commodity capital, for the productive capitalist, is M - C - M', a specific increase in the value of his advanced money capital, for the merchant. One phase of the metamorphosis of commodities appears here in respect to the merchant in the form of M - C - M', hence as evolution of a distinct kind of capital.

The merchant finally sells his commodity, that is, the linen, to the consumer, be it a productive consumer (for instance, a bleacher), or

an individual who acquires the linen for his private use. The merchant thereby recovers his advanced capital (with a profit), and can repeat his operation anew. Had the money served merely as a means of payment in purchasing the linen, so that the merchant would have had to pay only after six weeks, and had he succeeded in selling before this term was out, he could have paid the linen manufacturer without advancing any money capital of his own. Had he not sold it, he would have had to advance his  $\pounds 3,000$  on the date of expiration, instead of on delivery of the linen. And if a drop in the market prices had compelled him to sell below the purchase price, he would have had to make good the shortage out of his own capital.

What is it, then, that lends to commercial capital the character of an independently operating capital, whereas in the hands of the producer who does his own selling it is obviously merely a special form of his capital in a specific phase of the reproduction process during its sojourn in the sphere of circulation?

First: The fact that commodity capital is finally converted into money, that it performs its initial metamorphosis, i.e., its appropriate function on the market qua commodity capital while in the hands of an agent other than the producer, and that this function of commodity capital is effected by the merchant in his operations, his buying and selling, so that these operations assume the appearance of a separate undertaking distinct from the other functions of industrial capital-and hence of an independent undertaking. It is a distinct form of the social division of labour, so that part of the function ordinarily performed as a special phase of the reproduction process of capital, in this case-circulation, appears as the exclusive function of specific circulation agent distinct from the producer. But this alone would by no means give this particular business the aspect of a function of a specific capital distinct from, and independent of, industrial capital engaged in the process of reproduction; indeed, it does not so appear in cases where trade is carried on by travelling salesmen or other direct agents of the industrial capitalist. Therefore, there must be a second element involved.

Second: This arises from the fact that in his capacity as an independent circulation agent, the merchant advances money capital (his own or borrowed). The transaction which for industrial capital in the reproduction process amounts merely to C-M, i.e., converting commodity capital into money capital, or mere sale, assumes for the merchant the form of M-C-M', or purchase and sale of the same commodity, and thus of a reflux of money capital which leaves him in the purchase, and returns to him in the sale.

It is always C — M, the conversion of commodity capital into money capital, which for the merchant assumes the form of M - C - M, inasmuch as he advances capital to purchase commodities from their producers: it is always the first metamorphosis of commodity capital, although for a producer, or for industrial capital in process of reproduction, the same transaction may amount to M-C, to a reconversion of money into commodities (means of production), to the second phase of the metamorphosis. For the linen producer, the first metamorphosis was C - M, the conversion of his commodity capital into money capital. For the merchant the same act appears as M - C, as a conversion of his money capital into commodity capital. Now, if he sells this linen to a bleacher, it will mean M-C, i.e., the conversion of money capital into productive capital, this being the second metamorphosis of his commodity capital for the bleacher, while for the merchant it means C-M, the sale of the linen he had bought. But in fact it is only at this point that the commodity capital produced by the linen manufacturer has been finally sold. In other words, this M - C - M of the merchant represents no more than a middleman's function for C - M between two manufacturers. Or let us assume that the linen manufacturer buys yarn from a yarn dealer with a portion of the value of the sold linen. This is M-C for him. But for the merchant selling the varn it is C - M, the resale of the varn. As concerning the yarn in its capacity of commodity capital, it is no more than its final sale, whereby it passes from the sphere of circulation into that of consumption; it is C - M, the consummation of its first metamorphosis. Whether the merchant buys from, or sells to the industrial capitalist, his M - C - M, the circuit of merchant's capital, always expresses what is just C-M, or simply the completion of its first metamorphosis, with regard to the commodity capital, a transient form of industrial capital in process of reproduction. The M-C of merchant's capital is C - M only for the industrial capitalist, not for the commodity capital produced by him. It is but the transfer of commodity capital from the industrialist to the circulation agent. It is not until the merchant's capital closes C -- M that functioning commodity capital performs its final C - M. M - C - M amounts solely to two  $\mathbf{C} - \mathbf{M}$ 's of the same commodity capital, two successive sales of it, which merely effect its last and final sale.

Thus, commodity capital assumes in commercial capital the form

of an independent type of capital because the merchant advances money capital, which is expanded and functions as capital only by serving exclusively to mediate the metamorphosis of commodity capital, its function as commodity capital, i. e., its conversion into money, and it accomplishes this by the continual purchase and sale of commodities. This is its exclusive operation. This activity of effecting the circulation process of industrial capital is the exclusive function of the money capital with which the merchant operates. By means of this function he converts his money into money capital, moulds his M into M - C - M', and by the same process converts commodity capital into commercial capital.

So long and so far as commercial capital exists in the form of commodity capital, it is obviously nothing else — from the standpoint of the reproduction process of the total social capital — but a portion of industrial capital in the market in process of metamorphosis, which exists and functions as commodity capital. It is therefore only the *money* capital advanced by the merchant which is exclusively destined for purchase and sale and for this reason never assumes any other form but that of commodity capital and money capital, never that of productive capital, and is always confined to the sphere of circulation of capital — it is only this money capital which is now to be regarded with reference to the entire reproduction process of capital.

As soon as the producer, the linen manufacturer, has sold his 30,000 yards to the merchant for £3,000, he uses the money so obtained to buy the necessary means of production, so that his capital returns to the production process. His process of production continues without interruption.<sup>a</sup> So far as he is concerned, the conversion of his commodity into money is accomplished. But for the linen itself, as we have seen, its metamorphosis has not yet taken place. It has not yet been finally reconverted into money, has not yet passed as a use value into either productive or individual consumption. It is now the linen merchant who represents on the market the same commodity capital originally represented by the linen manufacturer. For the latter the process of transformation has been curtailed, only to be continued in the merchant's hands.

Had the linen producer been obliged to wait until his linen had really ceased being a commodity, until it has passed into the hands of its ultimate buyer, its productive or individual consumer, his process of

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 50-51.

reproduction would have been interrupted. Or, to avoid interrupting it, he would have had to curtail his operations, to convert a smaller portion of his linen into yarn, coal, labour, etc., in short, into the elements of productive capital, and to retain a larger portion of it as a money reserve, so that with one portion of his capital on the market in the shape of commodities, another would continue the process of production; one portion would be on the market in the form of commodities, while the other returned in the form of money. This division of his capital is not abolished by the merchant's intervention. But without it the portion of money reserve in the capital of circulation would always have to be greater in relation to the part employed in the form of productive capital, and the scale of reproduction would have to be restricted accordingly. Instead, however, the manufacturer is enabled to constantly employ a larger portion of his capital in the actual process of production, and a smaller portion as money reserve.

On the other hand, however, another portion of the social capital, in the form of merchant's capital, is kept continually within the sphere of circulation. It is employed all the time for the sole purpose of buying and selling. Hence there seems to have been no more than a replacement of persons holding this capital in their hands.

If, instead of buying  $\pounds 3,000$  worth of linen with the purpose of selling it again, the merchant had applied these  $\pounds 3,000$  productively, the productive capital of society would have increased. True, the linen manufacturer would then have been obliged to hold back a larger portion of his capital as money reserve, and likewise the merchant, now transformed into an industrial capitalist. On the other hand, if the merchant remains merchant, the manufacturer saves time in selling, which he can devote to supervising the production process, while the merchant must apply all his time to selling.

If merchant's capital does not overstep its necessary proportions, it is to be inferred:

1) that as a result of the division of labour the capital devoted exclusively to buying and selling (and this includes not only the money required to buy commodities, but also the money which must be invested in labour to maintain the merchant's establishment, and in his constant capital—the storehouses, transport, etc.) is smaller than it would be if the industrial capitalist were constrained to carry on the entire commercial part of his business on his own;

2) that because the merchant devotes all his time exclusively to

this business, the producer is able to convert his commodities more rapidly into money, and, moreover, the commodity capital itself passes more rapidly through its metamorphosis than it would in the hands of the producer;

3) that in viewing the aggregate merchant's capital in its relation to industrial capital, one turnover of merchant's capital may represent not only the turnovers of many capitals in one sphere of production, but the turnovers of a number of capitals in different spheres of production. The former is the case when, for instance, the linen merchant, after buying the product of some linen manufacturer with his £3,000, sells it before the same manufacturer brings another lot of the same quantity to market, and buys, and again sells, the product of another, or several other, linen manufacturers, thus effecting the turnovers of different capitals in the same sphere of production. The latter is the case if, for example, the merchant after selling his linen buys silk, thus effecting the turnover of a capital in a different sphere of production.<sup>a</sup>

In general, it may be noted that the turnover of industrial capital is limited not by the time of circulation alone, but also by the time of production. The turnover of merchant's capital dealing in one kind of commodity is not merely limited by the turnover of a single industrial capital, but by that of all industrial capitals in the same branch of production. After the merchant has bought and sold the linen of one producer he can buy and sell that of another, before the first brings another lot to the market. The same merchant's capital may, therefore, successively promote the different turnovers of capitals invested in a certain branch of production, with the effect that its turnover is not identical with the turnovers of a sole industrial capital, and does not therefore replace just the single money reserve which that one industrial capitalist would have had to hold in petto.<sup>b</sup> The turnover of merchant's capital in one sphere of production is naturally restricted by the total production of that sphere. But it is not restricted by the scale of production, or the period of turnover, of any one capital of the same sphere, so far as its period of turnover is qualified by its time of production. Suppose, A supplies a commodity requiring three months for its production. After the merchant has bought and sold it, say, in one month, he can buy and sell the same product of some other manufacturer. Or after he has sold, say, the corn of one farmer, he

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 51-53. - <sup>b</sup> within the breast, in reserve

can buy and sell that of another with the same money, etc. The turnover of his capital is restricted by the mass of corn he is able to buy and sell successively within a certain period, for instance, in one year, while the turnover of the farmer's capital is, regardless of the time of turnover, restricted by the time of production, which lasts one year.

However, the turnover of the same merchant's capital may equally well effect the turnovers of capitals in different branches of production.

In so far as the same merchant's capital serves in different turnovers to transform different commodity capitals successively into money, buying and selling them one after another, it performs the same function in its capacity of money capital with regard to commodity capital, which money in general performs by means of the number of its turnovers in a given period with regard to commodities.

The turnover of merchant's capital is not identical with the turnover, or a single reproduction, of an industrial capital of equal size; it is rather equal to the sum of the turnovers of a number of such capitals, whether in the same or in different spheres of production. The more quickly merchant's capital is turned over, the smaller the portion of total money capital serving as merchant's capital; and conversely, the more slowly it is turned over, the larger this portion. The less developed production, the larger the sum of merchant's capital in its relation to the sum of the commodities thrown into circulation; but the smaller in absolute terms, or in comparison with more developed conditions, and vice versa. In such undeveloped conditions, therefore, the greater part of the actual money capital is in the hands of merchants, whose fortune constitutes money wealth vis-à-vis the others.

The velocity of circulation of the money capital advanced by the merchant depends 1) on the speed with which the process of production is renewed and the different processes of production are linked together; and 2) on the velocity of consumption.<sup>a</sup>

To accomplish the turnover we have examined above, merchant's capital does not first have to buy commodities for its full amount of value, and then to sell them. Instead, the merchant performs both movements simultaneously. His capital then breaks up into two parts. One of them consists of commodity capital, and the other of money capital. He buys and converts his money into commodities at one place. Elsewhere, he sells and converts another part of his commodity

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 57-58.

capital into money. On one side, his capital returns to him in the form of money capital, while on the other he gets commodity capital. The larger the portion in one form, the smaller the portion in the other. This alternates and balances itself. If the use of money as a medium of circulation combines with its use as a means of payment and the attendant development of the credit system, then the money capital part of merchant's capital is reduced still more in relation to the volume of the transactions this merchant's capital effects. If I buy  $f_{3,000}$  worth of wine on 3 months' credit and sell all the wine for cash before this term expires, I do not need to advance a single penny for these transactions. In this case it is also guite obvious that the money capital, which here acts as merchant's capital, is nothing more than industrial capital in its money capital form, in its process of reflux in the form of money. (The fact that the manufacturer who sold  $f_{3,000}$  worth of wine on 3 months' credit may discount his promissory note at the banker's does not alter the matter at all and has nothing to do with the merchant's capital.) If market prices should fall in the meantime by, say,  $\frac{1}{10}$ , the merchant, far from making a profit, would recover only  $f_{2,700}$  instead of  $f_{3,000}$ . He would have to put up  $\pounds$  300 out of his own pocket. These  $\pounds$  300 would serve merely as a reserve to balance the difference in price. But the same applies to the manufacturer. If he himself had sold at falling prices, he would likewise have lost  $f_{,300}$ , and would not be able to resume production on the same scale without reserve capital.

The linen dealer buys  $f_{3,000}$  worth of linen from the manufacturer. The latter pays, say, £2,000 of the £3,000 for yarn. He buys this yarn from a yarn dealer. The money which the manufacturer pays to the varn dealer is not the linen dealer's money, for the latter has received commodities to this amount. It is the money form of the manufacturer's own capital. Now in the hands of the yarn dealer these  $\pounds$ 2,000 appear as returned money capital. But to what extent are they that as distinct from the  $f_{2,000}$  representing the discarded money form of the linen and the assumed money form of the yarn? If the yarn dealer bought on credit and sold for cash before the expiration of his term of payment, then these  $\pounds 2,000$  do not contain one penny of merchant's capital as distinct from the money form which the industrial capital itself assumes in the course of its circuit. In so far as commercial capital is not, therefore, just a form of industrial capital in the merchant's hands as commodity capital or money capital, it is nothing but that portion of money capital which belongs to the merchant himself and circulates in the purchase and sale of commodities. On a reduced scale this portion represents that part of capital advanced for production which should always have to be in the hands of the industrialist as money reserve and means of purchase, and which should always have to circulate as his money capital. This portion, on a reduced scale, is now in the hands of merchant capitalists and always performs its functions as such in the process of circulation. It is that portion of the total capital which, aside from what is expended as revenue, must continually circulate on the market as a means of purchase in order to maintain the continuity of the process of reproduction. The more rapid the process of reproduction, and the more developed the function of money as a means of payment, i. e., the more developed the credit system,<sup>381</sup> the smaller that portion is in relation to the total capital.

Merchant's capital is simply capital functioning in the sphere of circulation. The process of circulation is a phase of the total process of

<sup>38</sup> To be able to classify merchant's capital as production capital, Ramsay confounds it with the transportation industry and calls commerce "the transport of commodities from one place to another" (An Essay on the Distribution of Wealth, p. 19). The same confusion by Verri (Meditazioni sulla Economia Politica, § 4ª and by Say (Traité d'économie politique, I, pp. 14, 15). In his Elements of Political Economy (Andover and New York, 1835) S. P. Newman says: "In the existing economical arrangements of society, the very act, which is performed by the merchant, of standing between the producer and the consumer, advancing to the former capital and receiving products in return, and then handing over these products to the latter, receiving back capital in return, is a transaction which both facilitates the economical processes of the community, and adds value to the products in relation to which it is performed" (p. 174). Producer and consumer thus save time and money through the intervention of the merchant. This service requires an advance of capital and labour, and must be rewarded, "since it adds value to products, for the same products in the hands of consumers are worth more than in the hands of producers". And so commerce appears to him, as it does to M. Say, as "strictly an act of production" (p. 175). This Newman's view is fundamentally wrong. The use value of a commodity is greater in the hands of the consumer than in those of the producer, because it is first realised by the consumer. For the use value of a commodity does not serve its end, does not begin to function until the commodity enters the sphere of consumption. So long as it is in the hands of the producer, it exists only in potential form. But one does not pay twice for a commodity-first for its exchange value, and then for its use value. By paying for its exchange value, I appropriate its use value. And its exchange value is not in the least augmented by transferring the commodity from the producer or middleman to the consumer.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> In Scrittori Classici Italiani di Economia Politica. Parte moderna, t. XV, p. 32.

<sup>- &</sup>lt;sup>b</sup> Cf. present edition, Vol. 33, p. 239.

reproduction. But no value is produced in the process of circulation, and, therefore, no surplus value. Only changes of form of the same mass of value take place. In fact, nothing occurs there outside the metamorphosis of commodities, and this has nothing to do as such either with the creation or change of values. If a surplus value is realised in the sale of produced commodities, then this is only because it already existed in them. In the second act, the re-exchange of money capital against commodities (elements of production), the buyer therefore does not realise any surplus value either. He merely initiates the production of surplus value through exchanging his money for means of production and labour power. But so far as these metamorphoses require circulation time — time during which capital does not produce at all, least of all surplus value-it restricts the creation of values, and the surplus value expresses itself through the rate of profit in inverse ratio to the duration of the circulation period. Merchant's capital, therefore, does not create either value or surplus value, at least not directly. In so far as it contributes to shortening the time of circulation, it may help indirectly to increase the surplus value produced by the industrial capitalists. In so far as it helps to expand the market and effects the division of labour between capitals, hence enabling capital to operate on a larger scale, its function promotes the productivity of industrial capital, and its accumulation. In so far as it shortens circulation time, it raises the ratio of surplus value to advanced capital, hence the rate of profit. And to the extent that it confines a smaller portion of capital to the sphere of circulation in the form of money capital, it increases that portion of capital which is engaged directly in production.<sup>a</sup>

# Chapter XVII

### COMMERCIAL PROFIT

We have seen in Book II <sup>b</sup>that the pure functions of capital in the sphere of circulation — the operations which the industrial capitalist must perform, first, to realise the value of his commodities, and second, to reconvert this value into elements of production, operations effecting the metamorphosis of commodity capital, C' - M - C, hence

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 58-63.- <sup>b</sup> See present edition, Vol. 36, pp. 133-37.

the acts of selling and buying - produce neither value nor surplus value. It was rather seen that the time required for this purpose, objectively in regard to commodities and subjectively in regard to the capitalist, sets the limit to the production of value and surplus value. What is true of the metamorphosis of commodity capital in general, is, of course, not in the least altered by the fact that a part of it may assume the shape of commercial capital, or that the operations, effecting the metamorphosis of commodity capital, appear as the special concern of a special group of capitalists, or as the exclusive function of a portion of the money capital. If selling and buying commodities-and that is what the metamorphosis of commodity capital C' - M - C amounts to - by industrial capitalists themselves are not operations which create value or surplus value, they will certainly not create either of these when carried out by persons other than the industrial capitalists. Furthermore, if that portion of the total social capital, which must continually be on hand as money capital, in order that the process of reproduction is not interrupted by the process of circulation and proceeds continuously — if this money capital creates neither value nor surplus value, it cannot acquire the properties of creating them by being continually thrown into circulation by some section of capitalists other than the industrial capitalists, to perform the same function. We have already indicated to what extent merchant's capital may be indirectly productive, and we shall later discuss this point at greater length.

Commercial capital, therefore-stripped of all heterogeneous functions, such as storing, expressing, transporting, distributing, retailing, which may be connected with it, and confined to its true function of buying in order to sell — creates neither value nor surplus value, but acts as middleman in their realisation and thereby simultaneously in the actual exchange of commodities, i.e., in their transfer from hand to hand, in the social metabolism. Nevertheless, since the circulation phase of industrial capital is just as much a phase of the reproduction process as production is, the capital operating independently in the process of circulation must yield the average annual profit just as well as capital operating in the various branches of production. Should merchant's capital yield a higher percentage of average profit than industrial capital, then a portion of the latter would transform itself into merchant's capital. Should it yield a lower average profit, then the converse would result. A portion of the merchant's capital would then be transformed into industrial capital.
No species of capital changes its purpose, or function, with greater ease than merchant's capital.

Since merchant's capital does not itself produce surplus value, it is evident than the surplus value which it pockets in the form of average profit must be a portion of the surplus value produced by the total productive capital. But now the question arises: How does merchant's capital attract its share of the surplus value or profit produced by the productive capital?<sup>a</sup>

It is just an illusion that commercial profit is a mere addition to, or a nominal rise of, the prices of commodities above their value.

It is plain that the merchant can draw his profit only out of the price of the commodities he sells, and plainer still that the profit he makes in selling his commodities must be equal to the difference between his purchase price and his selling price, i. e., equal to the excess of the latter over the former.

It is possible that additional costs (costs of circulation) may enter into the commodities after their purchase and before their sale, and it is also possible that this may not happen. If such costs should occur, it is plain that the excess of the selling price over the purchase price would not be all profit. To simplify the analysis, we shall assume at this point that no such costs occur.

For the industrial capitalist the difference between the selling price and the purchase price of his commodities is equal to the difference between their price of production and their cost price, or, from the standpoint of the total social capital, equal to the difference between the value of the commodities and their cost price for the capitalists, which again comes down to the difference between the total quantity of labour objectified in them and the quantity of paid labour objectified in them. Before the commodities bought by the industrial capitalist are thrown back on the market as saleable commodities, they pass through the process of production, in which alone the portion of their price to be realised as profit is created. But it is different with the dealer in commodities. The commodities are in his hands only so long as they are in the process of circulation. He merely continues their sale, the realisation of their price which was begun by the productive capitalist, and therefore does not cause them to pass through any intermediate process in which they could again absorb surplus value. While the industrial capitalist merely realises the previously produced sur-

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 64-68.

plus value, or profit, in the process of circulation, the merchant has not only to realise his profit during and through circulation, but must first make it. There appears to be no other way of doing this outside of selling the commodities bought by him from the industrial capitalist at their prices of production, or, from the standpoint of the total commodity capital, at their values in excess of their prices of production, making a nominal extra charge to their prices, hence, selling them, from the standpoint of the total commodity capital, above their value, and pocketing this excess of their nominal value over their real value; in short, selling them for more than they are worth.

This method of adding an extra charge is easy to grasp. For instance, one yard of linen costs 2s. If I want to make a 10% profit in reselling it, I must add  $\frac{1}{10}$  to the price, hence sell the yard at 2s.  $2\frac{2}{5}$  d. The difference between its actual price of production and its selling price is then  $= 2\frac{2}{5}$  d., and this represents a profit of 10% on 2s. This amounts to my selling the yard to the buyer at a price which is in reality the price of  $1\frac{1}{10}$  yard. Or, what amounts to the same, it is as though I sold to the buyer only  $\frac{10}{11}$  of a yard for 2s. and kept  $\frac{1}{11}$  of a yard for  $2\frac{2}{5}$  d. at the price of 2s.  $2\frac{2}{5}$  d. per yard. This would, therefore, be just a round-about way of sharing in the surplus value and surplus product by a nominal rise in the price of commodities.

This is realisation of commercial profit by raising the price of commodities, as it appears at first glance. And, indeed, this whole notion that profit originates from a nominal rise in the price of commodities, or from their sale above their value, springs from the observations of commercial capital.

But it is quickly apparent on closer inspection that this is mere illusion. Assuming capitalist production to be predominant, commercial profit cannot be realised in this manner. (It is here always a question of averages, not of isolated cases.) Why do we assume that the dealer in commodities can realise a profit of no more than, say, 10% on his commodities by selling them 10% above their price of production? Because we assume that the producer of these commodities, the industrial capitalist (who appears as "the producer" before the outside world, being the personification of industrial capital), had sold them to the merchant at their prices of production. If the purchase price of commodities paid by the dealer is equal to their price of production, or, in the last instance, equal to their value, so that the price of produc-

tion or, in the last instance, the value, represent the merchant's cost price, then, indeed, the excess of his selling price over his purchase price — and this difference alone is the source of his profit — must be an excess of their commercial price over their price of production, so that in the final analysis the merchant sells all commodities above their values. But why was it assumed that the industrial capitalist sells his commodities to the merchant at their prices of production? Or rather, what was taken for granted in that assumption? It was that merchant's capital (we are dealing with it as yet only in its capacity of commercial capital) did not go into forming the general rate of profit. We proceeded necessarily from this premiss in discussing the general rate of profit, first, because merchant's capital as such did not exist for us at the time, and, second, because average profit, and hence the general rate of profit, had first to be developed as a levelling of profits or surplus values actually produced by the industrial capitals in the different spheres of production. But in the case of merchant's capital we are dealing with a capital which shares in the profit without participating in its production. Hence, it is now necessary to supplement our earlier exposition.

Suppose, the total industrial capital advanced in the course of the year =  $720_c + 180_v = 900$  (say million f), and that s' = 100%. The product therefore =  $720_c + 180_v + 180_s$ . Let us call this product or the produced commodity capital, C, whose value, or price of production (since both are identical for the totality of commodities) = 1,080, and the rate of profit for the total capital of 900 = 20%. These 20%are, according to our earlier analyses, the average rate of profit, since the surplus value is not calculated here on this or that capital of any particular composition, but on the total industrial capital of average composition. Thus, C = 1,080, and the rate of profit = 20%. Let us now assume, however, that aside from these  $f_{.900}$  of industrial capital, there are still  $f_{100}$  of merchant's capital, which shares in the profit pro rata to its magnitude just as the former. According to our assumption, it is  $\frac{1}{10}$  of the total capital of 1,000. Therefore, it participates to the extent of  $\frac{1}{10}$  in the total surplus value of 180, and thus secures a profit of  $180_{0}^{10}$ . Actually, then, the profit to be distributed among the other  $\frac{9}{10}$  of the total capital is only = 162, or on the capital of 900 likewise = 18%. Hence, the price at which C is sold by the owners of the industrial capital of 900 to the dealers in commodities =  $720_c + 180_v + 162_s = 1,062$ . If the merchant then adds the average profit of 18% to his capital of 100, he sells the commodities at

1,062 + 18 = 1,080, i.e., at their price of production, or, from the standpoint of the total commodity capital, at their value, although he makes his profit only during and through the circulation process, and only from an excess of his selling price over his purchase price. Yet he does not sell the commodities above their value, or above their price of production, precisely because he has bought them from the industrial capitalist below their value, or below their price of production.

Thus, merchant's capital enters the formation of the general rate of profit as a determinant pro rata to its part in the total capital. Hence, if we say in the given case that the average rate of profit = 18%, it would = 20%, if it were not that  $\frac{1}{10}$  of the total capital was mer-chant's capital and the general rate of profit thereby lowered by  $\frac{1}{10}$ . This leads to a closer and more comprehensive definition of the price of production. By price of production we mean, just as before, the price of a commodity = its costs (the value of the constant + variable capital contained in it) + the average profit. But this average profit is now determined differently. It is determined by the total profit produced by the total productive capital; but not as calculated on the total productive capital alone, so that if this = 900, as assumed above, and the profit = 180, then the average rate of profit =  $\frac{180}{900}$  = 20%. But, rather, as calculated on the total productive + merchant's capital, so that with 900 productive and 100 merchant's capital, the average rate of profit =  $\frac{180}{1,000}$  = 18%. The price of production is, therefore = k (the costs) + 18, instead of k + 20. The share of the total profit falling to merchant's capital is thus included in the average rate of profit. The actual value, or price of production, of the total commodity capital is therefore = k + p + m (where m is commercial profit). The price of production, or the price at which the industrial capitalist as such sells his commodities, is thus smaller than the actual price of production of the commodity; or in terms of all commodities taken together, the prices at which the class of industrial capitalists sell their commodities are lower than their value. Hence, in the above case, 900 (costs) + 18% on 900, or 900 + 162 = 1,062. It follows, then, that in selling a commodity at 118 for which he paid 100 the merchant does, indeed, add 18% to the price. But since this commodity, for which he paid 100, is really worth 118, he does not sell it above its value. We shall henceforth use the term price of production in this, its more precise, sense. It is evident, therefore, that the profit of the industrial capitalist equals the excess of the price of production of the commodity over its cost price, and that commercial profit, as distinct from this industrial profit, equals the excess of the selling price over the price of production of the commodity which, for the merchant, is its purchase price; but that the actual price of the commodity = its price of production + the commercial profit. Just as industrial capital realises only such profits as already exist in the value of commodities as surplus value, so merchant's capital realises profits only because the entire surplus value, or profit, has not as yet been fully realised in the price charged for the commodities by the industrial capitalist.<sup>39)</sup> The merchant's selling price thus exceeds the purchase price not because the former exceeds the total value, but because the latter is below this value.

Merchant's capital, therefore, participates in levelling surplus value to average profit, although it does not take part in the production of this surplus value. Thus, the general rate of profit contains a deduction from surplus value due to merchant's capital, hence a deduction from the profit of industrial capital.<sup>b</sup>

It follows from the foregoing:

1) The larger the merchant's capital in proportion to the industrial capital, the smaller the rate of industrial profit, and vice versa.

2) It was demonstrated in the first part that the rate of profit is always lower than the rate of the actual surplus value, i. e., it always understates the intensity of exploitation, as in the above case,  $720_c + 180_v + 180_s$ , the rate of surplus value of 100% and a rate of profit of only 20%. And the difference becomes still greater, inasmuch as the average rate of profit appears smaller again, dropping from 20% to 18%, if the share falling to merchant's capital is also taken into account. The average rate of profit of the direct capitalist exploiter, therefore, expresses a rate of profit smaller than it actually is.

Assuming all other circumstances remaining the same, the relative volume of merchant's capital (with the exception of the small dealer who represents a hybrid form) is in inverse proportion to the velocity of its turnover, hence in inverse proportion to the energy of the process of reproduction in general. In the course of scientific analysis, the formation of a general rate of profit appears to result from industrial

<sup>391</sup> John Bellers.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Essays About the Poor, Manufactures, Trade, Plantations, and Immorality..., London, 1699, p. 10. - <sup>b</sup> Cf. present edition, Vol. 33, p. 154.

capitals and their competition, and is only later corrected, supplemented, and modified by the intervention of merchant's capital. In the course of its historical development, however, the process is really reversed. It is the commercial capital which first determines the prices of commodities more or less in accordance with their values, and it is the sphere of circulation, the sphere that promotes the process of reproduction, in which a general rate of profit initially takes shape. It is originally the commercial profit which determines the industrial profit. Not until the capitalist mode of production has asserted itself and the producer himself has become merchant, is commercial profit reduced to that aliquot part of the total surplus value falling to the share of merchant's capital as an aliquot part of the total capital engaged in the social process of reproduction.<sup>a</sup>

It was seen in the supplementary equalisation of profit through the intervention of merchant's capital that no additional element entered the value of commodities with the merchant's advanced money capital, and that the extra charge to the price, whereby the merchant makes his profit, was merely equal to that portion of the value of the commodities, which productive capital had not calculated in the price of production, i. e., had left out. The case of this money capital is similar to that of the industrial capitalist's fixed capital, since it is not consumed and its value, therefore, does not make up an element of the value of commodity. It is in the purchase price of commodity capital that the merchant replaces its price of production = M, in money. His own selling price, as previously shown, is =  $M + \Delta M$ , where  $\Delta M$ stands for the addition to the price of commodities determined by the general rate of profit. Once he sells the commodities, his original money capital, which he advanced for their purchase, returns to him together with this  $\Delta M$ . We see once more that his money capital is nothing but the industrial capitalist's commodity capital transformed into money capital, which affects the magnitude of the value of this commodity capital no more than would a direct sale of the latter to the ultimate consumer, instead of to the merchant. In fact, it merely anticipates the payment of the consumer. However, this is correct only on the condition hitherto assumed, that the merchant has no overhead expenses, or that aside from the money capital which he must advance to buy commodities from the producer he need not advance any other capital, circulating or fixed, in the process of commodity meta-

<sup>&</sup>lt;sup>a</sup> Ibid., p. 155.

morphosis, the process of buying and selling. But this is not so in reality, as we have seen in the analysis of the costs of circulation (Book II, Chap. VI).<sup>a</sup> These costs of circulation are partly expenses which the merchant has to reclaim from other agents of circulation, and partly expenses arising directly from his specific business.

No matter what the nature of these costs of circulation — whether they arise from the purely commercial nature of the merchant's establishment as such and hence belong to the merchant's specific costs of circulation, or represent items which are charges for subsequent processes of production added in the process of circulation, such as expressage, transport, storage, etc.—they always require of the merchant, aside from his money capital, advanced to the purchase of commodities, some additional capital for the purchase and payment of such means of circulation. As much of this element of cost as consists of circulating capital passes wholly as an additional element into the selling price of the commodities; and as much of it as consists of fixed capital only to the extent of its wear and tear. But only as an element which forms a nominal value, even if as the purely commercial costs of circulation, it does not add any real value to the commodities. But whether fixed or circulating, this entire additional capital participates in forming the general rate of profit.

The purely commercial costs of circulation (hence, excluding costs of expressage, shipping, storage, etc.) resolve themselves into costs required to realise the value of commodities, to transform it from commodities into money, or from money into commodities, to effect their exchange. We leave entirely out of consideration all possible processes of production which may continue in the process of circulation, and from which the merchant's business can be altogether separated; as, in fact, the actual transport industry and expressage may be, and are, industrial branches entirely distinct from commercial; and purchaseable and saleable commodities may be stored in DOCKS or in other public premises, with the resultant cost of storage being charged to the merchant by third persons inasmuch as he has to advance it. All this takes place in actual wholesale commerce, where merchant's capital appears in its purest form, unmixed with other functions. The express company owner, the railway director, and the shipowner, are not "merchants". The costs which we consider here are those of buying and selling. We have already remarked earlier that these resolve

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36.

themselves into accounting, book-keeping, marketing, correspondence, etc. The constant capital required for this purpose consists of offices, paper, postage, etc. The other costs break up into variable capital advanced for the employment of mercantile wage workers. (Expressage, transport costs, advances for customs duties, etc., may partly be considered as being advanced by the merchant in purchasing commodities and thus enter the purchase price as far as he is concerned.)

All these costs are not incurred in producing the use value of commodities, but in realising their value. They are pure costs of circulation. They do not enter into the immediate process of production, but since they are part of the process of circulation they are also part of the total process of reproduction.

The only portion of these costs of interest to us at this point is that advanced as variable capital. (The following questions should also be analysed: First, how does the law that only necessary labour enters the value of commodities operate in the process of circulation? Second, how does accumulation obtain in merchant's capital? Third, how does merchant's capital function in the actual aggregate reproduction process of society?)

These costs arise due to the product having the economic form of a commodity.<sup>a</sup>

If the labour time which the industrial capitalists themselves lose while directly selling commodities to one another - hence, speaking objectively, the circulation time of the commodities-does not add value to these commodities, it is evident that this labour time does not change its nature in the least by falling to the merchant instead of the industrial capitalist. The conversion of commodities (products) into money, and of money into commodities (means of production) is a necessary function of industrial capital and, therefore, a necessary operation of the capitalist — who is actually but personified capital endowed with a consciousness of its own and a will. But these functions neither increase value, nor produce surplus value. By performing these operations and carrying on the functions of capital in the sphere of circulation after the productive capitalist has ceased to be involved the merchant merely takes the place of the industrial capitalist. The labour time required in these operations is devoted to certain necessary operations of the reproduction process of capital, but

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 157-58.

yields no additional value. If the merchant did not perform these operations (hence, did not expend the labour time entailed), he would not be applying his capital as a circulation agent of industrial capital; he would not then be continuing the interrupted function of the industrial capitalist, and consequently could not participate as a capitalist, *pro rata* to his advanced capital, in the mass of profit produced by the class of industrial capitalists. In order to share in the mass of surplus value, to expand the value of his advance as capital, the commercial capitalist need not employ wage workers. If his business and capital are small, he may be the only worker in it. He is paid with that portion of the profit which falls to him through the difference between the purchase price paid by him for commodities and their actual price of production.

But, on the other hand, the profit realised by the merchant on a small amount of advanced capital may be no larger, or may even be smaller, than the wages of one of the better-paid skilled wage workers. In fact, he brushes shoulders with many direct commercial agents of the productive capitalist, such as buyers, sellers, travellers, who enjoy the same or a higher income either in the form of wages, or in the form of a share in the profit (percentages, bonuses) made from each sale. In the first case, the merchant pockets the mercantile profit as an independent capitalist; in the other, the salesman, the industrial capitalist's wage labourer, receives a portion of the profit either in the form of wages, or as a proportional share in the profit of the industrial capitalist, whose direct agent he is, while his employer pockets both the industrial and the commercial profit. But in all these cases, although his income may appear to the circulation agent as an ordinary wage, as payment for work performed, and although, where it does not so appear, the profit may be no larger than the wage of a better-paid labourer, his income is derived solely from the mercantile profit. This follows from his labour not being labour which produces value.

The lengthening of the act of circulation represents for the industrial capitalist 1) a personal loss of time, since it prevents him from performing in person his function as manager of the productive process; 2) a longer stay of his product in money or commodity form, in the circulation process, hence in a process where it does not expand value and where the direct production process is interrupted. If this process is not to be interrupted, production must either be curtailed, or more money capital must be advanced to maintain the process of

production on the same scale. This means that each time either a smaller profit is made on the capital hitherto invested, or that additional money capital must be advanced to make the previous profit. All this remains unchanged when the merchant takes the place of the industrial capitalist. Instead of the industrial capitalist devoting more time to the process of circulation, it is the merchant who is so engaged; instead of the industrial capitalist it is the merchant who advances additional capital for circulation; or, what amounts to the same thing, instead of a large portion of the industrial capital being continually diverted into the process of circulation, it is the merchant's capital which is wholly tied up in it; and instead of making a smaller profit, the industrial capitalist must yield a portion of his profit wholly to the merchant. So long as merchant's capital remains within the bounds in which it is necessary, the only difference is that this division of the functions of capital reduces the time exclusively used up in the process of circulation, that less additional capital is advanced for this purpose, and that the loss in total profit, represented by mercantile profit, is smaller than it would otherwise have been. If in the above example,  $720_{c} + 180_{v} + 180_{s}$ , assisted by a merchant's capital of 100, produces a profit of 162, or 18%, for the industrial capitalist, hence implying a deduction of 18, then, but for this independent merchant's capital, the additional capital required would probably be 200, and we should have a total advance by the industrial capitalist of 1,100 instead of 900, which, based upon a surplus value of 180, would yield a rate of profit of only  $16\frac{4}{11}$ %.

If the industrial capitalist who acts as his own merchant advances not only the additional capital to buy new commodities before his product in the process of circulation has been reconverted into money, but also capital (office expenses and wages for commercial employees) to realise the value of his commodity capital, or, in other words, for the process of circulation, then these supplements form additional capital, but do not create surplus value. They must be made good out of the value of the commodities, because a portion of the value of these commodities must be reconverted into these circulation costs. But no additional surplus value is created thereby. So far as this concerns the total capital of society, it means in fact that a portion of it must be set aside for secondary operations which are no part of the self-expansion process, and that this portion of the social capital must be continually reproduced for this purpose. This reduces the rate of profit for the individual capitalist and for the entire class of industrial capitalists, an effect arising from every new investment of additional capital whenever such capital is required to set in motion the same mass of variable capital.

In so far as these additional costs connected with the business of circulation are transferred from the industrial to the commercial capitalist, there takes place a similar reduction in the rate of profit, but to a lesser degree and in a different way. It now develops that the merchant advances more capital than would be necessary if these costs did not exist, and that the profit on this additional capital increases the amount of the commercial profit, so that more of the merchant's capital joins industrial capital in levelling the average rate of profit and thereby the average profit falls. If in our above example an additional capital of 50 is advanced besides the merchant's capital of 100 to cover the costs in question, then the total surplus value of 180 is distributed with respect to a productive capital of 900 plus a merchant's capital of 150, together = 1,050. The average rate of profit, therefore, sinks to  $17\frac{1}{7}$ %. The industrial capitalist sells his commodities to the merchant at 900 +  $154\frac{2}{7} = 1,054\frac{2}{7}$ , and the merchant sells them at 1,130 (1,080 + 50 for costs which he must recover). Moreover, it must be admitted that the division between merchant's and industrial capital is accompanied by a centralisation of the commercial expenses and, consequently, by their reduction.

The question now arises: What about the commercial wage workers employed by the commercial capitalist, here the dealer in commodities?

In one respect, such a commercial employee is a wage worker like any other. In the first place, his labour is bought with the variable capital of the merchant, not with money expended as revenue, and consequently it is not bought for private service, but for the purpose of expanding the value of the capital advanced for it. In the second place, the value of his labour power, and thus his wages, are determined as those of other wage workers, i. e., by the cost of production and reproduction of his specific labour power, not by the product of his labour.<sup>a</sup>

However, we must make the same distinction between him and the workers directly employed by industrial capital which exists between industrial capital and merchant's capital, and thus between the industrial capitalist and the merchant. Since the merchant, as a mere

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, p. 156.

agent of circulation, produces neither value nor surplus value (for the additional value which he adds to the commodities through his expenses resolves itself into an addition of previously existing values, although the question here poses itself, how he preserves this value of his constant capital?) it follows that the mercantile workers employed by him in these same functions cannot directly create surplus value for him. Here, as in the case of productive labourers, we assume that wages are determined by the value of the labour power, and that, hence, the merchant does not enrich himself by depressing wages, so that he does not enter into his cost account an advance for labour which he has paid only in part; in other words, that he does not enrich himself through cheating his clerks, etc.

The difficulty as concerns mercantile wage workers is by no means to explain how they produce direct profits for their employer without creating any direct surplus value (of which profit is but a converted form). This question has, indeed, already been solved in the general analysis of commercial profits. Just as industrial capital makes profit by selling labour embodied and realised in commodities, for which it has not paid any equivalent, so merchant's capital derives profit from not paying in full to productive capital for all the unpaid labour contained in the commodities (in commodities, in so far as capital invested in their production functions as an aliquot part of the total industrial capital), and by demanding payment for this unpaid portion still contained in the commodities when making a sale. The relation of merchant's capital to surplus value is different from that of industrial capital. The latter produces surplus value by directly appropriating the unpaid labour of others. The former appropriates a portion of this surplus value by having this portion transferred from industrial capital to itself.

It is only through its function of realising values that merchant's capital acts as capital in the process of reproduction, and hence as functioning capital draws on the surplus value produced by the total capital. The mass of the individual merchant's profits depends on the mass of capital that he can apply in this process, and he can apply so much more of it in buying and selling, the more the unpaid labour of his clerks. The very function, by virtue of which the merchant's money becomes capital, is largely done through his employees. The unpaid labour of these clerks, while it does not create surplus value, enables him to appropriate surplus value, which, in effect, amounts to the same thing with respect to this capital. It is, therefore, a source of prof-

it for him. Otherwise commercial business could never be conducted on a large scale, capitalistically.<sup>a</sup>

Just as the labourer's unpaid labour directly creates surplus value for productive capital, so the unpaid labour of the commercial wage worker secures a share of this surplus value for merchant's capital.

The difficulty lies here: Since the merchant's labour time and labour do not create value, although they secure for him a share of already produced surplus value, how does the matter stand with the variable capital which he lays out in purchasing commercial labour power? Is this variable capital to be included in the cost outlays of the advanced merchant's capital? If not, this appears to conflict with the law of equalisation of the rate of profit; what capitalist would advance 150 if he could charge only 100 to advanced capital? If so, it seems to conflict with the nature of merchant's capital, since this kind of capital does not act as capital by setting in motion the labour of others, as industrial capital does, but rather by doing its own work, i. e., performing the functions of buying and selling, this being precisely the means and the reason why it transfers to itself a portion of the surplus value produced by the industrial capital.

(We must therefore analyse the following points: the merchant's variable capital; the law of necessary labour in the sphere of circulation; how the merchant's labour maintains the value of his constant capital; the part played by merchant's capital in the process of reproduction as a whole; and, finally, the duplication in commodity capital and money capital, on the one hand, and in commercial capital and money-dealing capital on the other.)

If every merchant had only as much capital as he himself were able to turn over by his own labour, there would be infinite fragmentation of merchant's capital. This fragmentation would increase in the same proportion as productive capital raised production and operated with greater masses in the forward march of the capitalist mode of production. Hence, an increasing disproportion of the two. Capital in the sphere of circulation would become decentralised in the same proportion as it became centralised in the sphere of production. The purely commercial business of the industrial capitalist, and thus his purely commercial expenses, would expand infinitely thereby, for he would have to deal with, say, 1,000 merchants, instead of 100. Thus, the advantages of independently operating merchant's capital would large-

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 156 and 165-66.

ly be lost. And not the purely commercial expenses alone, but also the other costs of circulation, such as sorting, expressage, etc., would grow. This, as far as the industrial capital is concerned. Now let us consider merchant's capital. Firstly, the purely commercial operations. It does not take more time to deal with large figures than with small ones. It takes ten times as much time to make 10 purchases at  $f_1100$  each as it does to make one purchase at  $f_11,000$ . It takes ten times as much correspondence, paper, and postage, to correspond with 10 small merchants as it does with one large merchant. The clearly defined division of labour in a commercial office, in which one keeps the books, another looks after money matters, a third has charge of correspondence, one buys, another sells, a third travels, etc., saves immense quantities of labour time, so that the number of workers employed in wholesale commerce are in no way related to the comparative size of the establishment. This is so, because in commerce much more than in industry the same function requires the same labour time, whether performed on a large or a small scale. This is the reason why concentration appears earlier historically in the merchant's business than in the industrial workshop. Further, regarding outlays in constant capital. One hundred small offices cost incomparably more than one large office, 100 small warehouses more than a large one, etc. The costs of transport, which enter the accounts of a commercial establishment at least as costs to be advanced, grow with the fragmentation.

The industrial capitalist would have to lay out more in labour and in circulation costs in the commercial part of his business. The same merchant's capital, when divided among many small merchants, would, owing to this fragmentation, require more labourers to perform its functions, and more merchant's capital would, furthermore, be needed to turn over the same commodity capital.

Suppose B is the entire merchant's capital directly applied in buying and selling commodities, and b the corresponding variable capital paid out in wages to the commercial employees. Then B + b is smaller than the total merchant's capital, B, would be if every merchant had to get along without assistants, hence would invest nothing in b. However, we have not yet overcome the difficulty.

The selling price of the commodities must suffice 1) to pay the average profit on B + b. This is explained if only by the fact that B + b is generally a reduction of the original B, representing a smaller merchant's capital than would be required without b. But this selling price must suffice 2) to cover not only the additional profit on b, but to replace also the paid wages, the merchant's variable capital = b. This last consideration gives rise to the difficulty. Does b represent a new constituent of the price, or is it merely a part of the profit made by means of B + b, which appears as wages only so far as the mercantile worker is concerned, and as concerns the merchant simply replaces variable capital? In the latter case, the merchant's profit on his advanced capital B + b would just equal the profit due to B by virtue of the general rate, plus b, which he pays out in the form of wages, but which does not itself yield a profit.

The crux of the matter is, indeed, to find the limits (mathematically speaking) of b. Let us first accurately define the problem. Let B stand for capital invested directly in buying and selling commodities, K for the constant capital (actual handling costs) consumed in this function, and b for the variable capital invested by the merchant.

Recovering B offers no difficulties at all. For the merchant it is simply the realised purchase price, and the price of production for the manufacturer. It is the price paid by the merchant, and in reselling he recovers B as part of his selling price; in addition to this B, he makes a profit on B, as previously explained. For example, let the commodity cost  $\pounds 100$ . Suppose the profit is 10%. In that case, the commodity is sold at 110. The commodity previously cost 100, and the merchant's capital of 100 merely adds 10 to it.

Now if we look at K, it is at most as large as, but in fact smaller than, the portion of constant capital which the producer would use up in buying and selling, but then it would form an addition to the constant capital he requires directly in production. This portion, nonetheless, must be continually recovered in the price of the commodity, or, what amounts to the same, a corresponding portion of the commodity must be continually expended in this form, or, from the standpoint of the total capital of society, must be continually reproduced in this form. This portion of the advanced constant capital would have a limiting effect on the rate of profit, just as the entire mass of it directly invested in production. In so far as the industrial capitalist leaves the commercial part of his business to the merchant, he need not advance this part of the capital. The merchant advances it in his stead. In a way, he does this but nominally, since a merchant neither produces, nor reproduces, the constant capital consumed by him (the actual handling costs). Its production appears a separate business, or at least a part of the business, of some industrial capitalists who thus play a role similar to those who supply constant capital to producers of necessities of life. First, therefore, the merchant has this constant capital recovered for him and, secondly, receives his profit on it. Through both of these, therefore, the industrial capitalist's profit is reduced. But owing to economising and concentration which are bound up with division of labour, it shrinks less than it would if he himself had to advance this capital. The reduction in the rate of profit is less, because the capital thus advanced is less.

So far, then, the selling price is made up of B + K + the profit on B + K. This portion of it offers no further difficulties. But now b, the variable capital advanced by the merchant, enters into it.

The resultant selling price is B + K + b + the profit on B + K, + the profit on b.

B merely recovers the purchase price and adds nothing to it but the profit on B. K adds the profit on K, and K itself; but K + the profit on K, the part of the circulation costs advanced in the form of constant capital + the corresponding average profit, would be larger in the hands of the industrial capitalist than in the merchant's. The shrinking of the average profit appears in the form of the full average profit calculated after deducting B + K from the advanced industrial capital, with the deduction from the average profit on B + K paid to the merchant, so that this deduction appears as the profit of a specific capital, merchant's capital.

But the situation is different with respect to b + the profit on b, or, in the present case, where the rate of profit is assumed = 10% with b +  $\frac{1}{10}$ b. And the real difficulty lies here.

What the merchant buys with b is, according to our assumption, nothing but commercial labour, hence labour required to perform the functions of circulating capital, C - M and M - C. But commercial labour is the labour generally necessary for a capital to operate as merchant's capital, to help convert commodities into money and money into commodities. It is labour which realises, but does not create, values. And only in so far as a capital performs these functions hence a capitalist performs these operations, or this work with his capital—does it serve as merchant's capital and participate in regulating the general rate of profit, i. e., draw its dividends out of the total profit. But (b + the profit on b) appears to include, first, payment for labour (for it makes no difference whether the industrial capitalist pays the merchant for his own labour, or the labour of the clerks paid by the merchant), and, secondly, the profit on the payment for this labour, which the merchant would have to perform in person. First, merchant's capital gets its b refunded, and, secondly, he makes the profit on it. This arises from the fact, therefore, that, first, it requires payment for the work whereby it operates as *merchant's* capital, and that, secondly, it demands the profit, because it operates as *capital*, i. e., because it performs work for which profit is paid to it as functioning capital. This is, therefore, the question to be solved.

Let us assume that B = 100, b = 10, and the rate of profit = 10%. We take it that K = 0, in order to leave out of consideration this element of the purchase price, which does not belong here and has already been accounted for. Hence, the selling price would = B + p + b + p (= B + Bp' + b + bp'; where p' stands for the rate of profit) = 100 + 10 + 10 + 1 = 121.

But if b were not invested by the merchant in wages — since b is paid only for commercial labour, hence labour required to realise the value of the commodity capital thrown on the market by industrial capital-the matter would stand as follows: to buy or sell for  $\mathbf{B} = 100$ , the merchant would devote his time, and we wish to assume that this is the only time at his disposal. The commercial labour represented by b, or 10, if paid for by profit instead of wages, would presuppose another merchant's capital = 100, since at 10% this makes b = 10. This second B = 100 would not additionally go into the price of commodities, but the 10% would. There would, hence, be two ope-100 = 200, that would rations at buy commodities at 200 + 20 = 220.

Since merchant's capital is absolutely nothing but self-established form of a portion of industrial capital engaged in the process of circulation, all questions referring to it must be solved by representing the problem primarily in a form, in which the phenomena peculiar to merchant's capital do not yet appear independently, but still in direct connection with industrial capital, as a branch of it. As an office, distinct from a workshop, mercantile capital operates continually in the circulation process. It is here — in the office of the industrial capitalist himself — that we must first analyse the b now under consideration.<sup>a</sup>

The office is from the outset always infinitesimally small compared to the industrial workshop. As for the rest, it is clear that as the scale of production is extended, commercial operations required constantly for the circulation of industrial capital, in order to sell the product

<sup>&</sup>lt;sup>a</sup> Ibid., p. 159.

existing as commodity capital, to reconvert the money so received into means of production, and to keep account of the whole process, multiply accordingly. Calculation of prices, book-keeping, managing funds, correspondence — all belong under this head. The more developed the scale of production, the greater, even if not proportionately greater, the commercial operations of the industrial capital, and consequently the labour and other costs of circulation involved in realising value and surplus value. This necessitates the employment of commercial wage workers who make up the actual office staff. The outlay for these, although made in the form of wages, differs from the variable capital laid out in purchasing productive labour. It increases the outlay of the industrial capitalist, the mass of the capital to be advanced, without directly increasing surplus value. Because it is an outlay for labour employed solely in realising value already created. Like every other outlay of this kind, it reduces the rate of profit because the advanced capital increases, but not the surplus value. If surplus value s remains constant while advanced capital C increases to  $\dot{C} + \Delta C$ , then the rate of profit  $\frac{s}{C}$  is replaced by the smaller rate of profit  $\frac{s}{C + \Delta C}$ . The industrial capitalist endeavours, therefore, to cut these expenses of circulation down to a minimum, just as his expenses for constant capital. Hence, industrial capital does not maintain the same attitude to its commercial wage labourers as it does to its productive wage labourers. The more productive wage labourers it employs under otherwise equal circumstances, the greater the output, and the greater the surplus value, or profit. Conversely, however, the larger the scale of production, the greater the quantity of value and surplus value to be realised, the greater the produced commodity capital, the greater are the absolute, if not relative, office costs, giving rise to a kind of division of labour. To what extent profit is the precondition for these outlays, is seen, among other things, from the fact that with the increase of commercial salaries, a part of them is frequently paid by a share in the profit. It is in the nature of things that labour consisting merely of intermediate operations connected partly with calculating values, partly with realising them, and partly with reconverting the realised money into means of production, is a labour whose magnitude therefore depends on the quantity of the produced values that have to be realised, and does not act as the cause, like directly productive labour, but rather as an effect, of the respective magnitudes and masses of these values. The same applies to the other costs of circulation. To do much measuring, weighing, packing, and

transporting, much must be on hand. The amount of packing, transporting, etc., depends on the quantity of commodities which are the objects of this activity, not vice versa.

The commercial worker produces no surplus value directly. But the price of his labour is determined by the value of his labour power, hence by its costs of production, while the application of this labour power, its exertion, expenditure of energy, and wear and tear, is as in the case of every other wage labourer by no means limited by its value. His wage, therefore, is not necessarily proportionate to the mass of profit which he helps the capitalist to realise. What he costs the capitalist and what he brings in for him, are two different things. He creates no direct surplus value, but adds to the capitalist's income by helping him to reduce the cost of realising surplus value, inasmuch as he performs partly unpaid labour. The commercial worker, in the strict sense of the term, belongs to the better-paid class of wage workers -to those whose labour is classed as skilled and stands above average labour. Yet the wage tends to fall, even in relation to average labour, with the advance of the capitalist mode of production. This is due partly to the division of labour in the office, implying a one-sided development of the labour capacity, the cost of which does not fall entirely on the capitalist, since the labourer's skill develops by itself through the exercise of his function, and all the more rapidly as division of labour makes it more one-sided. Secondly, because the necessary training, knowledge of commercial practices, languages, etc., is more and more rapidly, easily, universally and cheaply reproduced with the progress of science and public education the more the capitalist mode of production directs teaching methods, etc., towards practical purposes. The universality of public education makes it possible to recruit such labourers from classes that formerly had no access to such trades and were accustomed to a lower standard of living. Moreover, this increases supply, and hence competition. With few exceptions, the labour power of these people is therefore devaluated with the progress of capitalist production. Their wage falls, while their labour capacity increases.<sup>a</sup> The capitalist increases the number of these labourers whenever he has more value and profits to realise. The increase of this labour is always a result, never a cause of more surplus value.<sup>39a)</sup>

<sup>39a:</sup> How well this forecast of the fate of the commercial proletariat, written in 1865, has stood the test of time can be corroborated by hundreds of German clerks, There is duplication, therefore. On the one hand, the functions as commodity capital and money capital (hence further designated as merchant's capital) are general definite forms assumed by industrial capital. On the other hand, specific capitals, and therefore specific groups of capitalists, are exclusively devoted to these functions; and these functions thus develop into specific spheres of self-expansion of capital.<sup>b</sup>

In the case of mercantile capital, the commercial functions and circulation costs are found only in a self-established form. That side of industrial capital which is devoted to circulation, continuously exists not only in the shape of commodity capital and money capital, but also in the office alongside the workshop. But it becomes independent in the case of mercantile capital. In the latter's case, the office is its only workshop. The portion of capital employed in the form of circulation costs appears much larger in the case of the big merchant than in that of the industrialist, because besides their own offices connected with every industrial workshop, that part of capital which would have to be so applied by the entire class of industrial capitalists is concentrated in the hands of a few merchants, who in carrying out the functions of circulation also provide for the growing expenses incidental to their continuation.

To industrial capital the costs of circulation appear as unproductive expenses, and so they are. To the merchant they appear as a source of his profit, proportional, given the general rate of profit, to their size. The outlay to be made for these circulation costs is, therefore, a productive investment of mercantile capital. And for this reason, the commercial labour which it buys is likewise immediately productive for it.<sup>c</sup>

who are trained in all commercial operations and acquainted with three or four languages, and offer their services in vain in London City at 25 shillings per week, which is far below the wages of a skilled fitter. A blank of two pages in the manuscript indicates that this point was to have been treated at greater length. For the rest, we refer the reader to Book II (Kap. VI, S. 105-13)<sup>a</sup> ("The Costs of Circulation"), where various matters belonging under this head have already been discussed.— F. E.

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 36, pp. 133-39. - <sup>b</sup> Ibid., Vol. 33, p. 48. - <sup>c</sup> Ibid., pp. 163-66.

### Chapter XVIII

# THE TURNOVER OF MERCHANT'S CAPITAL. PRICES

The turnover of industrial capital is a combination of its period of production and time of circulation, and therefore embraces the entire process of production. The turnover of merchant's capital, on the other hand, being in reality nothing but an independent movement of commodity capital, represents only the first phase in the metamorphosis of a commodity, C-M, as the refluent movement of a specific capital; M-C, C-M, is, from the mercantile point of view, the turnover of merchant's capital. The merchant buys, converting his money into commodities, then sells, converting the latter back into money, and so forth in constant repetition. Within circulation, the metamorphosis of industrial capital always presents itself in the form of  $C_1 - M - C_2$ ; the money realised by the sale of the produced commodity  $C_1$  is used to purchase new means of production,  $C_2$ . This amounts to a practical exchange of  $C_1$  for  $C_2$ , and the same money thus changes hands twice. Its movement mediates the exchange of two different kinds of commodities, C1 and C2, But in the case of the merchant, it is, conversely, the same commodity which changes hands twice in M - C - M'. It merely promotes the reflux of his money.

If, for example, a certain merchant's capital is  $\pounds 100$ , and for these  $\pounds 100$  the merchant buys commodities and sells them for  $\pounds 110$ , then his capital of  $\pounds 100$  has completed one turnover, and the number of such turnovers per year depends on the number of times this movement M - C - M' is repeated.

We here leave entirely out of consideration the costs which may be concealed in the difference between the purchase price and the selling price, since these do not alter in any way the form, which we are now analysing.

The number of turnovers of a given merchant's capital, therefore, is analogous in this case to the repeated cycles of money as a mere medium of circulation. Just as the same thaler buys ten times its value in commodities in making ten cycles, so the same money capital of the merchant, when turned over ten times, buys ten times its value in commodities, or realises, a total commodity capital of ten times its value; a merchant's capital of 100, for instance, a ten-fold value = 1,000. But there is this difference: In the cycle of money as a medium of circulation it is the same piece of money that passes through different hands, thus repeatedly performing the same function and hence making up for the mass of the circulating pieces of money by its velocity. But in the merchant's case it is the same money capital, the same money value, regardless of what pieces of money it may be composed, which repeatedly buys and sells commodity capital to the amount of its value and which therefore returns to the same hands, the same point of departure as  $M + \Delta M$ , i. e., value plus surplus value.<sup>a</sup> This characterises its turnover as a capital turnover. It always withdraws more money from circulation than it throws in. It is selfevident, at any rate, that an accelerated turnover of merchant's capital (given a developed credit system, the function of money as a means of payment predominates) implies a more rapid circulation of the same quantity of money.

A repeated turnover of commercial capital, however, never connotes more than repeated buying and selling; while a repeated turnover of industrial capital connotes the periodicity and renovation of the entire reproduction process (which includes the process of consumption). For merchant's capital, on the other hand, this appears merely as an external condition. Industrial capital must continually bring commodities to the market and withdraw them from it, in order that rapid turnover of merchant's capital may remain possible. If the process of reproduction is slow, then so is the turnover of merchant's capital. True, merchant's capital promotes the turnover of productive capital, but only in so far as it shortens its time of circulation. It has no direct influence on the time of production, which is also a barrier to the period of turnover of industrial capital. This is the first barrier for the turnover of merchant's capital. Secondly, aside from the barrier formed by reproductive consumption, the turnover of merchant's capital is ultimately limited by the velocity and volume of the total individual consumption, since the entire part of the commodity capital which enters the consumption fund depends on it.

However (aside from the turnovers in the world of commerce, in which one merchant always sells the same commodity to another, and this sort of circulation may appear highly prosperous in times of speculation), the merchant's capital, in the first place, curtails phase C - M for productive capital. Secondly, under the modern credit sys-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 48-49.

tem it disposes of a large portion of the total social money capital, so that it can repeat its purchases even before it has definitely sold what has previously been purchased. And it is immaterial in this case, whether our merchant sells directly to the ultimate consumer, or there are a dozen other intermediate merchants between them. Owing to the immense elasticity of the reproduction process, which may always be pushed beyond any given bounds, it does not encounter any obstacle in production itself, or at best a very elastic one. Aside from the separation of C - M and M - C, which follows from the nature of the commodities, a fictitious demand is then created. In spite of its independent status, the movement of merchant's capital is never more than the movement of industrial capital within the sphere of circulation. But by virtue of its independent status it moves, within certain limits, independently of the bounds of the reproduction process and thereby even drives the latter beyond its bounds. This internal dependence and external independence push merchant's capital to a point where the internal connection is violently restored through a crisis.

Hence the phenomenon that crises do not come to the surface, do not break out, in the retail business first, which deals with direct consumption, but in the spheres of wholesale trade, and of banking, which places the money capital of society at the disposal of the former.

The manufacturer may actually sell to the exporter, and the exporter, in his turn, to his foreign customer; the importer may sell his raw materials to the manufacturer, and the latter may sell his products to the wholesale merchant, etc. But at some particular imperceptible point the goods lie unsold, or else, again, all producers and middlemen may gradually become overstocked. Consumption is then generally at its highest, either because one industrial capitalist sets a succession of others in motion; or because the labourers employed by them are fully employed and have more to spend than usual. The capitalists' expenditures increase together with their growing income. Besides, as we have seen (Book II, Part III<sup>a</sup>), continuous circulation takes place between constant capital and constant capital (even regardless of accelerated accumulation). It is at first independent of individual consumption because it never enters the latter. But this consumption definitely limits it nevertheless, since constant capital is never produced for its own sake but solely because more of it is needed

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 36, pp. 427-32.

in spheres of production whose products go into individual consumption. However, this may go on undisturbed for some time, stimulated by prospective demand, and in such branches, therefore, the business of merchants and industrialists goes briskly forth. The crisis occurs when the returns of merchants who sell in distant markets (or whose supplies have also accumulated on the home market) become so slow and meagre that the banks press for payment, or promissory notes for purchased commodities become due before the latter have been resold. Then forced sales take place, sales in order to meet payments. Then comes the crash, which brings the illusory prosperity to an abrupt end.

But the superficiality and meaninglessness of the turnover of merchant's capital are still greater, because the turnover of one and the same merchant's capital may simultaneously or successively promote the turnovers of several productive capitals.

The turnover of merchant's capital does not just promote the turnovers of several industrial capitals, it can also mediate the opposite phases of the metamorphosis of commodity capital. For instance, the merchant buys linen from the manufacturer and sells it to the bleacher. In this case therefore the turnover of the same merchant's capital—in fact, the same C - M, a realisation of the linen— represents two opposite phases for two different industrial capitals. Inasmuch as the merchant sells for productive consumption, his C - M is always M - C for one industrial capitalist, and his M - C always C - M for another industrial capitalist.

If we leave out K, the circulation costs, as we do in this chapter, if, in other words, we leave aside that portion of capital which the merchant advances along with the money required to purchase commodities, it follows that we also omit  $\Delta K$ , the additional profit made on this additional capital. This is thus the strictly logical and mathematically correct mode of analysis if we want to see how profit and turnover of merchant's capital affect prices.

If the price of production of 1 lb. of sugar were £1, the merchant could buy 100 lbs of sugar with £100. If he buys and sells this quantity in the course of the year, and if the average annual rate of profit is 15%, he would add £15 to the £100, and 3s. to £1, the price of production of 1 lb. of sugar. That is, he would sell 1 lb. of sugar at £1 3s. But if the price of production of 1 lb. of sugar should fall to ls., the merchant could buy 2,000 lbs of sugar with £100, and sell the sugar at ls.  $1\frac{4}{5}$  d. per lb. The annual profit on capital invested in the sugar business would still be  $f_{15}$  on each  $f_{100}$ . But the merchant has to sell 100 lbs in the first case, and 2,000 lbs in the second. The high or low level of the price of production has nothing to do with the rate of profit. But it would greatly and decisively affect that aliquot part of the selling price of each lb. of sugar, which resolves itself in mercantile profit, i. e., the addition to the price which the merchant makes on a certain quantity of commodities or products. If the price of production of a commodity is small, so, too, the amount the merchant advances in its purchase price, i. e., for a certain quantity of it. Hence, with a given rate of profit, the amount of profit he makes on this quantity of cheap commodities is small as well. Or, what amounts to the same, he can then buy with a certain amount of capital, say, 100, a larger quantity of these cheap commodities, and the total profit of 15, which he makes per 100, breaks up into small fractions over each individual piece or portion of this mass of commodities. If the opposite takes place, then the reverse is true. This depends entirely on the greater or smaller productivity of the industrial capital in whose products he trades. If we except the cases in which the merchant is a monopolist and simultaneously monopolises production, as did the Dutch East India Company <sup>36</sup> in its day, nothing can be more ridiculous than the current idea that it depends on the merchant whether he sells many commodities at a small profit or few commodities at a large profit on each individual piece of the commodities. The two limits of his selling price are: on the one hand, the price of production of the commodities, over which he has no control; on the other hand, the average rate of profit, over which he has just as little control. The only thing up to him to decide is whether he wants to deal in dear or in cheap commodities, and even here the size of his available capital and other circumstances also have their effect. Therefore, it depends wholly on the degree of development of the capitalist mode of production, not on the merchant's goodwill, what course he shall follow. A purely commercial company like the old Dutch East India Company, which had a monopoly of production, believed that it could continue a method adapted at best to the beginnings of capitalist production, under entirely changed conditions.<sup>40</sup>

The following circumstances, among others, help to maintain that

 $<sup>^{(40)}</sup>$  "Profit, on the general principle, is always the same, whatever be price; keeping its place like an incumbent body on the swelling or sinking tide. As, therefore, prices rise, a tradesman raises price; as prices fall, a tradesman lowers price" (Corbet, An In-

popular prejudice, which, like all false conceptions of profit, etc., arises from the observation of pure commerce and merchants' prejudice:

*First*: phenomena of competition, which, however, apply merely to the distribution of mercantile profit among individual merchants, the shareholders of the total merchant's capital; if one, for example, sells cheaper, in order to drive his competitors off the field.

Secondly: an economist of the calibre of Professor Roscher may still imagine in Leipzig that it was "common sense and humanitarian"<sup>b</sup> grounds, which produced the change in selling prices, and that it was not a result of a revolutionised mode of production.

Thirdly: if production prices fall due to greater productive power of labour, and selling prices fall for the same reason, the demand, and with it the market prices, often rise even faster than the supply, so that selling prices yield more than the average profit.

*Fourthly*: a merchant may reduce his selling price (which is never more than a reduction of the usual profit that he adds to the price) so as to turn over a larger capital more rapidly. All these are matters that only concern competition between the merchants themselves.

We have already shown in Book I that high or low commodity prices do not determine either the mass of surplus value produced by a given capital, or the rate of surplus value; although the unit price of a commodity, and with it the share of surplus value in this price, are greater or smaller, depending on the relative quantity of commodities produced by a given quantity of labour.<sup>c</sup> The prices of every specified quantity of a commodity are, so far as they correspond to the values, determined by the total quantity of labour objectified in this commodity. If little labour is objectified in much commodity, the unit price of the commodity is low and the surplus value in it is small. How this labour incorporated in a commodity breaks up into paid and unpaid labour and what portion of its price, therefore, represents surplus value, has nothing to do with this total quantity of labour, nor, conse-

quiry into the Causes and Modes of the Wealth of Individuals..., London, 1841, p. 20.<sup>a</sup>) — Here, as in the text generally, it is only a matter of ordinary commerce, not of speculation. The analysis of speculation, as well as everything else pertaining to the division of mercantile capital, falls outside the field of our inquiry. "The profit of trade is a value added to capital which is independent of price, the second" (speculation profit) "is founded on the variation in the value of capital or in price itself" (1. c., p. 128).

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, p. 242. - <sup>b</sup> W. Roscher, *Die Grundlagen der Nationalökonomie...*, p. 192. - <sup>c</sup> See present edition, Vol. 34, pp. 369-70.

quently, with the price of the commodity. But the rate of surplus value does not depend on the absolute magnitude of the surplus value contained in the unit price of the commodity. It depends on its relative magnitude, its proportion to the wages contained in the same commodity. The rate of surplus value may therefore be large, while the absolute magnitude of surplus value in each unit of the commodity is small. This absolute magnitude of surplus value in each piece of the commodity depends primarily on the productivity of labour, and only secondarily on its division into paid and unpaid labour.

Now, in the case of the commercial selling price, the price of production is a given external precondition.

The high commercial commodity prices in former times were due 1) to the high prices of production, i. e., the unproductiveness of labour; 2) to the absence of a general rate of profit, with merchant's capital absorbing a much larger quota of surplus value than would have fallen to its share if capitals enjoyed greater general mobility. The ending of this situation, in both its aspects, is therefore the result of the development of the capitalist mode of production.

The turnovers of merchant's capital vary in duration, their annual number consequently being greater or smaller, in different branches of commerce. Within the same branch the turnover is more or less rapid in the different phases of the economic cycle. Yet there is an average number of turnovers, determined by experience.

We have already seen that the turnover of merchant's capital differs from that of industrial capital. This is in the nature of things. One single phase in the turnover of industrial capital appears as a complete turnover of an independently constituted merchant's capital, or yet of its part. It also stands in a different relation to the determination of profit and price.

In the case of industrial capital, its turnover expresses, on the one hand, the periodicity of reproduction, and, therefore, the mass of commodities thrown on the market in a certain period depends on it. On the other hand, its time of circulation creates a barrier, an extensible one, and exerts more or less of a restraint on the creation of value and surplus value, because it affects the volume of the production process. The turnover, therefore, acts as a determining element on the mass of annually produced surplus value, and hence on the formation of the general rate of profit, but it acts as a limiting, rather than positive, element. For merchant's capital, on the contrary, the average rate of profit is a given magnitude. The merchant's capital does not directly participate in creating profit or surplus value, and joins in shaping the general rate of profit only in so far as it draws a dividend proportionate to its share in the total capital, out of the mass of profit produced by industrial capital.

The greater the number of turnovers of an industrial capital under conditions described in Book II, Part II, the greater the mass of profit it creates. True, through the formation of a general rate of profit, the total profit is distributed among the different capitals not in proportion to their actual part in its production, but in proportion to the aliquot part they make up of the total capital, i.e., in proportion to their magnitude. But this does not alter the essence of the matter. The greater the number of turnovers of the total industrial capital, the greater the mass of profit, the mass of annually produced surplus value, and, therefore, other circumstances remaining unchanged, the rate of profit. It is different with merchant's capital. The rate of profit is a given magnitude with respect to it, determined on the one hand by the mass of profit produced by industrial capital, and on the other by the relative magnitude of the total merchant's capital, by its quantitative relation to the sum of capital advanced in the processes of production and circulation. The number of its turnovers does, indeed, decisively affect its relation to the total capital, or the relative magnitude of merchant's capital required for the circulation, for it is evident that the absolute magnitude of the required merchant's capital and the velocity of its turnovers stand in inverse proportion. But, all other conditions remaining equal, the relative magnitude of merchant's capital, or the part it makes up of the total capital, is determined by its absolute magnitude. If the total capital is 10,000, and the merchant's capital  $\frac{1}{10}$  of that sum, it is = 1,000; if the total capital is 1,000 then  $\frac{1}{10}$  of it = 100. The absolute magnitude of merchant's capital varies, depending on the magnitude of the total capital, although its relative magnitude remains the same. But here we assume that its relative magnitude, say,  $\frac{1}{10}$  of the total capital, is given. This relative magnitude, however, is again determined by the turnover. If it is turned over rapidly, its absolute magnitude, for example, will = = £1,000 in the first case, = 100 in the second, and hence its relative magnitude =  $\frac{1}{10}$ . With a slower turnover its absolute magnitude is, say, = 2,000 in the first case, and = 200 in the second. Its relative magnitude will then have increased from  $\frac{1}{10}$  to  $\frac{1}{5}$  of the total capital. Circumstances which reduce the average turnover of merchant's cap-

ital, like the development of means of transportation, for instance, reduce pro tanto the absolute magnitude of merchant's capital, and thereby increase the general rate of profit. If the opposite takes place, then the reverse is true. A developed capitalist mode of production, compared with earlier conditions, exerts a two-fold influence on merchant's capital. On the one hand, the same quantity of commodities is turned over with a smaller mass of actually functioning merchant's capital; owing to the more rapid turnover of merchant's capital, and the more rapid reproduction process, on which this depends, the relation of merchant's capital to industrial capital diminishes. On the other hand, with the development of the capitalist mode of production all production becomes the production of commodities, which places all products into the hands of agents of circulation. It is to be added that under the previous mode of production, which produced on a small scale, a very large portion of the producers sold their goods directly to the consumers, or worked on their personal orders, save for the mass of products consumed directly, in natura, by the producer himself, and the mass of services performed in natura. While, therefore, under former modes of production commercial capital was greater in relation to the commodity capital which it turned over, it was:

1) absolutely smaller, because a disproportionately smaller part of the total product was produced as commodities, and passed as commodity capital into circulation, falling into the hands of merchants. It was smaller, because the commodity capital was smaller. But at the same time it was proportionately larger, not only because its turnover was slower and not only in relation to the mass of commodities turned over by it. It was larger also because the price of this mass of commodities, and hence the merchant's capital to be advanced for it, were greater than under capitalist production on account of a lower productivity of labour, so that the same value was incorporated in a smaller mass of commodities.

2) It is not only that a larger mass of commodities is produced on the basis of the capitalist mode of production (taking into account also the reduced value of this mass of commodities), but the same mass of products, for instance, of corn, also forms a greater commodity mass, i. e., more and more of it becomes an object of commerce. As a consequence, there is an increase not only of the mass of merchant's capital, but of all capital applied in circulation, such as in marine shipping, railways, telegraph, etc. 3) However, and this is an aspect which belongs to the discussion of "competition among capitals" <sup>1</sup>: idle or only half-functioning merchant's capital grows with the progress of the capitalist mode of production, with the ease of entering retail trade, with speculation, and the redundance of released capital.

But, assuming the relative magnitude of merchant's capital to total capital to be given, the difference of turnovers in the various branches of commerce does not affect either the magnitude of the total profit falling to the share of merchant's capital, or the general rate of profit. The merchant's profit is not determined by the mass of commodity capital turned over by him, but by the dimensions of the money capital advanced by him to promote this turnover. If the general annual rate of profit is 15%, and the merchant advances £100, which he turns over once a year, he will sell his commodities at 115. If his capital turns over five times a year, he will sell a commodity capital he bought at 100 at 103 five times a year, hence in a year a commodity capital of 500 at 515. This gives the same annual profit of 15 on his advanced capital of 100. If this were not so, merchant's capital would yield a much higher profit, proportionate to the number of its turnovers, than industrial capital, which would be in conflict with the law of the general rate of profit.

Hence, the number of turnovers of merchant's capital in the various branches of commerce has a direct influence on the mercantile prices of commodities. The amount added to the mercantile price, the aliquot part of mercantile profit of a given capital, which falls upon the price of production of an individual commodity, is in inverse proportion to the number of turnovers, or the velocity of turnover, of merchants' capitals in the various branches of commerce. If a certain merchant's capital is turned over five times a year, it will add to a commodity capital of equal value but  $\frac{1}{5}$  of what another merchant's capital, which turns over just once a year, adds to a commodity capital of equal value.

The modification of selling prices by the average period of turnover of capitals in different branches of commerce amounts to this: The same mass of profits, determined for any given magnitude of merchant's capital by the general annual rate of profit, hence determined independently of the specific character of the commercial operations of this capital, is differently distributed — proportionately to the velocity of turnover — over masses of commodities of equal value, so that, for instance, if a merchant's capital is turned over five times a year,  $\frac{15}{5} = 3\%$ , and if once a year, 15%, is added to the price of the commodities.

The same percentage of commercial profit in different branches of commerce, therefore, increases the selling prices of commodities by quite different percentages of their values, all depending on their periods of turnover.

On the other hand, in the case of industrial capital, the period of turnover does not in any way affect the magnitude of the value of individual commodities produced, although it does affect the mass of values and surplus values produced in a given time by a given capital, because it affects the mass of exploited labour. This is concealed, to be sure, and seems to be otherwise as soon as one turns to prices of production. But this is due solely to the fact that, according to previously analysed laws, the prices of production of various commodities deviate from their values. If we look upon the process of production as a whole, and upon the mass of commodities produced by the total industrial capital, we shall at once find the general law vindicated.

While, therefore, a closer inspection of the influence of the period of turnover on the formation of values by industrial capital leads us back to the general law and to the basis of political economy, that the values of commodities are determined by the labour time contained in them, the influence of the turnovers of merchant's capital on mercantile prices reveals phenomena which, without benefit of a very farreaching analysis of the connecting links, seem to point to a purely arbitrary determination of prices; namely, that they are fixed by a capital simply bent upon pocketing a certain quantity of profit in a year. Due particularly to this influence of turnovers, it appears that within certain limits the process of circulation as such determines commodity prices independently of the process of production. All superficial and false conceptions of the process of reproduction as a whole are derived from examinations of merchant's capital and from the conceptions which its peculiar movements call forth in the minds of circulation agents.

If, as the reader will have realised to his great dismay, the analysis of the actual intrinsic relations of the capitalist process of production is a very complicated matter and a very extensive work; if it is a work of science to resolve the visible, merely external movement into the true intrinsic movement, it is self-evident that conceptions which arise about the laws of production in the minds of agents of capitalist production and circulation will diverge drastically from these real laws and will merely be the conscious expression of the apparent movement. The conceptions of the merchant, stockbroker, and banker, are necessarily quite distorted. Those of the manufacturers are vitiated by the acts of circulation to which their capital is subject, and by the levelling of the general rate of profit.<sup>41)</sup> Competition likewise assumes a completely distorted role in their minds. If the limits of value and surplus value are given, it is easy to grasp how competition of capitals transforms values into prices of production and further into mercantile prices, and surplus value into average profit. But without these limits, it is absolutely unintelligible why competition should reduce the general rate of profit to one level instead of another, e. g., make it 15% instead of 1,500%. Competition can at best only reduce the general rate of profit to one level. But it contains no element by which it could determine this level itself.

From the standpoint of merchant's capital, therefore, it is the turnover which appears to determine prices. On the other hand, while the velocity of turnover of industrial capital, in so far as it enables a certain capital to exploit more or less labour, exerts a determining and limiting influence on the mass of profit, and thus on the general rate of profit, this rate of profit obtains for merchant's capital as an external fact, its internal connection with the production of surplus value being entirely obliterated. If, under otherwise equal circumstances and particularly the same organic composition, the same industrial capital is turned over four times a year instead of twice, it produces twice as much surplus value and, consequently, profit. And this is apparent as soon, and as long, as this capital has a monopoly on an improved method of production, which makes this accelerated turnover possible. Conversely, differences in the periods of turnover in different branches of commerce manifest themselves in the fact that profit made on the turnover of a given commodity capital is in inverse proportion to the number of times the money capital turns over this commodity capital. Small profits and quick returns appear to the shop-KEEPER to be the principle which he follows out of sheer principle.

For the rest, it is self-evident that regardless of alternating, mutually compensating, speedier and slower turnovers, this law of turnover of

<sup>&</sup>lt;sup>41)</sup> This is a very naive, but also a very correct remark: "Surely the fact that one and the same commodity may be had from different sellers at considerably different prices is frequently due to mistakes of calculation" (Feller and Odermann, *Das Ganze der kaufmännischen Arithmetik*, 7th ed., 1859, [p. 451]). This shows how purely theoretical, that is, abstract, becomes the determination of prices.

merchant's capital holds good in each branch of commerce only for the average turnovers made by the entire merchant's capital invested in each particular branch. The capital of A, who deals in the same branch as B, may make more or less than the average number of turnovers. In this case the others make less or more. This does not alter the turnover of the total mass of merchant's capital invested in this branch. But it is of decisive moment for the individual merchant or shopkeeper. In this case he makes an extra profit, just as industrial capitalists make extra profits if they produce under better than average conditions. If competition compels him, he can sell cheaper than his companions without lowering his profit below the average. If the conditions which would enable him to turn over his capital more rapidly, are themselves for sale, such as a favourable shop location, he can pay extra rent for it, i.e., convert a portion of his surplus profit into ground rent.

### Chapter XIX

### MONEY-DEALING CAPITAL

The purely technical movements performed by money in the circulation process of industrial, and, as we may now add, of commercial capital (since it takes over a part of the circulation movement of industrial capital as its own, peculiar movement), if individualised as a function of some particular capital performing just these, and only these, operations as its specific operations, convert this capital into money-dealing capital. A portion of industrial capital, and, more precisely, also of commercial capital, not only obtains all the time in the form of money, as money capital in general, but as money capital, engaged precisely in these technical functions. A definite part of the total capital dissociates itself from the rest and stands apart in the form of money capital, whose capitalist function consists exclusively in performing these operations for the entire class of industrial and commercial capitalists. As in the case of commercial capital, a portion of industrial capital engaged in the circulation process in the form of money capital separates from the rest and performs these operations of the reproduction process for all the other capital. The movements of this money capital are, therefore, once more merely movements of an individualised part of industrial capital engaged in the reproduction process.

## 314 Part IV.-Conversion of Commodity Capital and Money Capital

It is only when, and in so far as, capital is newly invested — which also applies to accumulation — that capital in money form appears as the starting-point and the end result of the movement. But for all capitals already engaged in the process, these first and last points appear merely as points of transit. Since, as already seen in the case of simple commodity circulation, from the moment of leaving the sphere of production to the moment of its re-entry industrial capital undergoes the metamorphosis C' - M - C, M in fact represents the end result of one phase of the metamorphosis, just to become the startingpoint of the reverse phase, which supplements it. And although the C-M of industrial capital is always M-C-M for merchant's capital, the actual process for the latter is continually also C - M - Conce it has begun to function. But merchant's capital performs the acts C-M and M-C simultaneously. This is to say that there is not just one capital in the stage C-M while another is in the stage M-C, but that the same capital buys continually and sells continually at one and the same time because of the continuity of the production process. It is to be found always in both stages at one and the same time. While one of its parts turns into money, later to be reconverted into commodities, another turns simultaneously into commodities, to be reconverted into money.

It all depends on the form of the commodity exchange whether the money serves here as a means of circulation or of payment. In both cases the capitalist has to pay out money constantly to many persons, and to receive money continually from many persons. This purely technical operation of disbursing and receiving money is in itself labour which, as long as the money serves as a means of payment, necessitates drawing up payment balances and acts of balancing accounts. This labour is a cost of circulation, i. e., not labour creating value. It is shortened in being carried out by a special section of agents, or capitalists, for the rest of the capitalist class.

A definite portion of the capital must be on hand constantly as a hoard, as potential money capital — a reserve of means of purchase, a reserve of means of payment, and idle capital in the form of money waiting to be put to work. Another portion streams back continually in this form. Aside from collecting, paying, and book-keeping, this entails safekeeping the hoard, which is an operation all in itself. It is, indeed, a continuous conversion of the hoard into means of circulation and means of payment, and its restoration by means of money secured through sales and from payments due. This constant movement of the part of capital existing as money, dissociated from the function of capital itself, this purely technical function, causes its own labour and expense, classified as costs of circulation.

The division of labour brings it about that these technical operations, dependent upon the functions of capital, should be performed for the entire capitalist class as much as possible by a special section of agents or capitalists as their exclusive function - or that these operations should be concentrated in their hands. We have here, as in merchant's capital, division of labour in a twofold sense. It becomes a specialised business, and because performed as a specialised business for the money mechanism of the whole class, it is concentrated and conducted on a large scale. A further division of labour takes place within it, both through division into various independent branches, and through segmentation of work within these branches (large offices, numerous book-keepers and cashiers, and far-reaching division of labour). Paving and receiving money, settling accounts, keeping current accounts, storing money, etc.--all this, dissociated from the acts necessitating these technical operations, makes money-dealing capital of the capital advanced for these functions.<sup>a</sup>

The various operations, whose individualisation into specific businesses gives rise to the money trade, spring from the different purposes of money itself and from its functions, which capital in its money form must therefore likewise carry out.

I have pointed out earlier that finance developed originally from the exchange of products between different communities.<sup>42</sup>

Trading in money, commerce in the money commodity, first developed therefore out of international commerce. Even since different national coins have existed merchants buying in foreign countries have had to exchange their national coins for local coins, and vice versa, or to exchange different coins for uncoined pure silver or gold — the world money. Hence the exchange business which is to be regarded as one of the natural foundations of modern finance.<sup>43)</sup> Out of it devel-

<sup>42</sup> Zur Kritik der politischen Oekonomie, S. 27.<sup>b</sup>

<sup>43</sup>. "The great differences among coins as concerns their grain and coinage by many princes and towns that were privileged to coin money, necessitated the creation of business establishments to enable merchants to use local money wherever compensation for the different coins was required. To be able to make cash payments, merchants who travelled to a foreign market provided themselves with uncoined pure silver, or

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 166-68. - <sup>b</sup> Ibid., Vol. 29, pp. 282-83.

oped banks of exchange, in which silver (or gold) serves as world money—now called bank money or commercial money—as distinct from currency. Exchange transactions, in the sense of mere notes of payment to travellers from a money changer in one country to a changer in another country, developed back in Rome and Greece out of the actual money-changing.

Trading in gold and silver as commodities (raw materials for the making of luxury articles) is the natural basis of the BULLION TRADE,<sup>a</sup> or the trade which acts as a medium for the functions of money as world money. These functions, as previously explained (Buch I, Kap. III, 3, c<sup>b</sup>), are two-fold: currency movement back and forth between the various national spheres of circulation in order to balance international payments and in connection with the migrations of capital in quest of interest; simultaneously, flow of precious metals from their sources of production via the world market and their distribution among the various national spheres of circulation. Goldsmiths acted as bankers still during the greater part of the 17th century in England. We shall completely disregard the way in which the balancing of international accounts developed further in the bill jobbing, etc., and everything referring to transactions in valuable papers; in short, we shall leave

gold. In the same way they exchanged money received in local markets for uncoined silver or gold when returning home. The business of exchanging money, the exchange of uncoined precious metals for local coins, and vice versa, thus became a widespread and paying business" (Hüllmann, Städtewesen des Mittelalters, Bonn, 1826-29, I, S. 437-38). "Banks of exchange do not owe their name to the fact that they issue bills of exchange ... but to the fact that they used to exchange coins. Long before the establishment of the Amsterdam Bank of Exchange in 1609, there existed in the Dutch merchant towns money changers and exchange houses, even exchange banks.... The business of these money changers consisted in exchanging the numerous varieties of coin brought into the country by foreign traders for the currency of the realm. Gradually their circle of activity extended.... They became the bankers and cashiers of their times. But the government of Amsterdam viewed as dangerous the combination of cashier and exchange businesses, and to meet this danger it was resolved to establish a large chartered institution able to perform both the cashier and exchange operations. This institution was the famous Amsterdam Bank of Exchange of 1609. In like manner, the exchange banks of Venice, Genoa, Stockholm, Hamburg, owe their origin to the continual necessity of changing money. Of all these, the Hamburg Exchange is the only one today still doing business, because the need for such an institution is still felt in that merchants' town, which has no Mint of its own, etc." (S. Vissering, Handboek van Praktische Staathuishoudkunde, Amsterdam, 1860-61, I. 247-48).

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent. - <sup>b</sup> See present edition, Vol. 35.
out of consideration all special forms of the credit system, which do not as yet concern us here.<sup>a</sup>

National money discards its local character in the capacity of world money; one national currency is expressed in another, and thus all of them are reduced to their content of gold or silver, while the latter, being the two commodities circulating as world money, are simultaneously reduced to their reciprocal value ratio, which changes continually. It is this intermediate operation which the money trader makes his special occupation. Money-changing and the bullion trade are thus the original forms of the money trade, and spring from the two-fold functions of money — as national money and world money.<sup>b</sup>

The capitalist process of production, just as commerce in general, even under precapitalist methods, imply:

First, the accumulation of money as a hoard, i. e., here as that part of capital which must always be on hand in the form of money as a reserve fund of means of payment and purchase. This is the first form of a hoard, as it reappears under the capitalist mode of production, and as it appears generally with the development of merchant's capital, at least for the purposes of this capital. Both remarks apply to national, as well as international, circulation. The hoard is in continuous flux, pours ceaselessly into circulation, and returns ceaselessly from it. The second form of a hoard is that of idle, temporarily unemployed capital in the shape of money, including newly accumulated and not yet invested money capital. The functions entailed by this formation of a hoard are primarily those of safekeeping, bookkeeping, etc.<sup>c</sup>

Secondly, however, this involves outlays of money for purchases, collecting money from sales, making and receiving payments, balancing payments, etc. The money dealer performs all these services at first as a simple *cashier* of the merchants and industrial capitalists.<sup>44</sup>

<sup>44)</sup> "The institution of cashier has probably nowhere preserved its original independent character so pure as in the Dutch merchant towns (cf. on the origin of the cashier business in Amsterdam, E. Luzac, *Holland's Rijkdom*, Part III). Its functions coincide in part with those of the old Amsterdam Bank of Exchange. The cashier receives from the merchants, who employ his services, a certain amount of money, for which he opens a 'credit' for them in his books. Later, they send him their claims, which he collects for them and credits to their account. At the same time, he makes payments on their drafts (*kassiers briefjes*) and charges the amounts to their account. He makes a small charge for these receipts and payments, which yields him a remuneration for his labours only corresponding to the size of the turnover accomplished between the two

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 33, pp. 169-70. - <sup>b</sup> Ibid., p. 46. - <sup>c</sup> Ibid., p. 43.

The money trade becomes fully developed, even in its first stages, as soon as its ordinary functions are supplemented by lending and borrowing and by credit. Of this more in the next part, which deals with interest-bearing capital.

The bullion trade itself, the transfer of gold or silver from one country to another, is merely the result of trading in commodities. It is determined by the rate of exchange which expresses the standing of international payments and the interest rates in the different markets. The bullion trader as such acts merely as an intermediary of the results.

In discussing money and the way its movements and forms develop out of simple commodity circulation, we saw (Buch I, Kap. III) that the movements of the mass of money circulating as means of purchase and payment depend on the metamorphosis of commodities, on the volume and velocity of this metamorphosis, which we now know to be but a phase in the entire process of reproduction. As for securing the money materials-gold and silver-from their sources of production, this resolves itself into a direct exchange of commodities, an exchange of gold and silver as commodities for other commodities. Hence, it is itself as much a phase of the exchange of commodities as the securing of iron or other metals. However, so far as the movement of precious metals on the world market is concerned (we here leave aside movements expressing the transfer of capital by loans — a type of transfer which also obtains in the shape of commodity capital), it is quite as much determined by the international exchange of commodities as the movement of money as a national means of purchase and

parties. If payments are to be balanced between two merchants, who both deal with the same cashier, such payments are settled very simply by mutual entries in the books, for the cashiers balance their mutual claims from day to day. The cashier's actual business thus consists basically of this mediation in payments. Therefore, it excludes industrial enterprises, speculation, and opening of unlimited credits; for it must be the rule in this business that the cashier makes no payment over and above the credit of any one keeping an account with him" (Vissering, l. c., p. 243-244). Re the banking associations of Venice: "The requirements and locality of Venice, where carrying bullion was less convenient than in other places, induced the large merchants of that city to found banking associations under due safeguards, supervision and management. Members of such associations deposited certain sums, on which they drew drafts for their creditors, whereupon the paid sum was deducted from the debtor's account on the page of the book reserved for that purpose and added to the sum credited in the same book to the creditor. This is the earliest beginning of the so-called giro banks. These associations are indeed old. But if attributed to the 12th century, they are being confounded with the State Loan Institute established in 1171" (Hüllmann, l. c., pp. 453-54). payment is determined by the exchange of commodities in the home market. The inflow and outflow of precious metals from one national sphere of circulation to another, inasmuch as this is caused merely by a depreciation of the national currency, or by a double standard,<sup>10</sup> are alien to money circulation as such and merely represent corrections of deviations brought about arbitrarily by state decrees. Finally, as concerns the formation of hoards which constitute reserve funds for means of purchase and payment, be it for home or foreign trade, and which also merely represent a form of temporarily idle capital, they are in both cases necessary precipitates of the circulation process.

If the entire circulation of money is in volume, form and movement purely a result of commodity circulation, which, in its turn, from the capitalist point of view, is only the circulation process of capital (also embracing the exchange of capital for revenue, and of revenue for revenue, so far as outlay of revenue is effected through retail trade), it is self-evident that dealing in money does not merely promote the circulation of money, a mere result and phenomenon of commodity circulation. This circulation of money itself, a phase in commodity circulation, is taken for granted in money-dealing. What the latter promotes is merely the technical operations of money circulation which it concentrates, shortens, and simplifies. Dealing in money does not form the hoards. It provides the technical means by which the formation of hoards may, so far as it is voluntary (hence, not an expression of unemployed capital or of disturbances in the reproduction process), be reduced to its economic minimum because, if managed for the capitalist class as a whole, the reserve funds of means of purchase and payment need not be as large as they would have to be if each capitalist were to manage his own. The money dealers do not buy the precious metals. They merely handle their distribution as soon as the commodity trade has bought them. They facilitate the settling of balances, inasmuch as money serves as the means of payment, and reduce through the artificial mechanism of these settlements the amount of money required for this purpose. But they do not determine either the connections, or the volume, of the mutual payments. The bills of exchange and the cheques, for instance, which are exchanged for one another in banks and CLEARING HOUSES, represent quite independent transactions and are the results of given operations, and it is merely a question of a better technical settlement of these results. So far as money circulates as a means of purchase, the volume and number of purchases and sales have no connection whatever with moneydealing. The latter can do no more than shorten the technical operations that go with buying and selling, and thus reduce the amount of cash money required to turn over the commodities.

Money-dealing in its pure form, which we consider here, i. e., set apart from the credit system, is thus concerned only with the technique of a certain phase of commodity circulation, namely, that of money circulation and the different functions of money arising in its circulation.

This substantially distinguishes dealing in money from the dealing in commodities, which promotes the metamorphosis of commodities and their exchange, or even gives this process of the commodity capital the appearance of a process of a capital set apart from industrial capital. While, therefore, commercial capital has its own form of circulation, M - C - M, in which the commodity changes hands twice and thus provides a reflux of money, as distinct from C - M - C, in which money changes hands twice and thus promotes commodity exchange, there is no such special form in the case of money-dealing capital.

In so far as money capital is advanced by a separate class of capitalists in this technical promotion of money circulation—a capital which on a reduced scale represents the additional capital the merchants and industrial capitalists would otherwise have to advance themselves for these purposes—the general form of capital, M - M', occurs here as well. By advancing M, the advancing capitalist secures  $M + \Delta M$ . But promotion of M - M' does not here concern the material, but only the technical, processes of the metamorphosis.

It is evident that the mass of money capital with which the money dealers operate is the money capital of merchants and industrialists in the process of circulation, and that the money dealers' operations are actually operations of merchants and industrialists, in which they act as mediators.

It is equally evident that the money dealers' profit is nothing but a deduction from the surplus value, since they operate with already realised values (even when realised in the form of creditors' claims).

Just as in the commodity trade, there is a duplication of functions, because a part of the technical operations connected with money circulation must be carried out by the dealers and producers of commodities themselves.

## Chapter XX

# HISTORICAL FACTS ABOUT MERCHANT'S CAPITAL

The particular form in which commercial and money-dealing capitals accumulate money will be discussed in the next part.

It is self-evident from what has gone before that nothing could be more absurd than to regard merchant's capital, whether in the shape of commercial or of money-dealing capital, as a particular variety of industrial capital, such as, say, mining, agriculture, cattle-raising, manufacturing, transport, etc., which are side lines of industrial capital occasioned by the division of social labour, and hence different spheres of investment. The simple observation that in the circulation phase of its reproduction process every industrial capital performs as commodity capital and as money capital the very functions which appear as the exclusive functions of the two forms of merchant's capital, should rule out such a crude notion. On the other hand, in commercial and money-dealing capital the differences between industrial capital as productive capital and the same capital in the sphere of circulation are individualised through the fact that the definite forms and functions which capital assumes for the moment appear as independent forms and functions of a separate portion of the capital and are exclusively bound up with it. The converted form of industrial capital and the material differences between productive capitals applied in different branches of industry, which arise from the nature of these various branches, are worlds apart.<sup>2</sup>

Aside from the crudity with which the economist generally considers distinctions of form, which really concern him only from their material side, this misconception by the vulgar economist is explained on two additional counts. First, his inability to explain the peculiar nature of mercantile profit; and, secondly, his apologetic endeavours to deduce commodity capital and money capital, and later commercial capital and money-dealing capital as forms arising necessarily from the process of production as such, whereas they are due to the specific form of the capitalist mode of production, which above all presupposes the circulation of commodities, and hence of money, as its basis.

If commercial capital and money-dealing capital do not differ from

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 47-48.

grain production any more than this differs from cattle-raising and manufacturing, it is plain as day that production and capitalist production are altogether identical, and that, among other things, the distribution of the social products among the members of a society, be it for productive or individual consumption, must just as consistently be handled by merchants and bankers as the consumption of meat by cattle-raising and that of clothing by their manufacture.<sup>45)</sup>

The great economists, such as Smith, Ricardo, etc., are perplexed over mercantile capital being a special variety, since they consider the basic form of capital, capital as industrial capital, and circulation capital (money capital and commodity capital) solely because it is a phase in the reproduction process of every capital. The rules concerning the formation of value, profit, etc., immediately deduced by them from their study of industrial capital, do not extend directly to merchant's capital. For this reason, they leave merchant's capital entirely aside and mention it only as a kind of industrial capital. Wherever they make a special analysis of it, as Ricardo<sup>b</sup> does in dealing with foreign trade, they seek to demonstrate that it creates no value (and consequently no surplus value). But whatever is true of foreign trade, is also true of home trade.<sup>c</sup>

### Hitherto we have considered merchant's capital merely from the

<sup>45)</sup> The sage Mr. Roscher has figured out <sup>a</sup> that, since certain people designate trade as "mediation" between producers and consumers, "one" might just as well designate production itself as "mediation" of consumption (between whom?), and this implies, of course, that merchant's capital is as much a part of productive capital as agricultural and industrial capital. In other words, because I can say, that man can mediate his consumption only by means of production (and he has to do this even without getting his education at Leipzig), or that labour is required for the appropriation of the products of Nature (which might be called "mediation"), it follows, of course, that so-cial "mediation" arising from a specific social form of production — *because* mediation" settles everything. By the way, the merchants are not mediators between producers and consumers (consumers as distinct from producers, consumers, that is, who do not produce, are left aside for the moment), but mediators in the exchange of the products of these producers among themselves. They are but middlemen in an exchange, which in thousands of cases proceeds without them.

<sup>&</sup>lt;sup>a</sup> Die Grundlagen der Nationalökonomie, § 60, S. 103. - <sup>b</sup> See D. Ricardo, On the Principles of Political Economy..., 3rd ed., p. 413; cf. also present edition, Vol. 32, pp. 70-72. - <sup>c</sup> Ibid., Vol. 33, p. 64.

standpoint, and within the limits, of the capitalist mode of production. However, not commerce alone, but also merchant's capital, is older than the capitalist mode of production, is, in fact, historically the oldest free mode of existence of capital.

Since we have already seen that money-dealing and the capital advanced for it require nothing more for their development than the existence of wholesale commerce, and further of commercial capital, it is only the latter which we must occupy ourselves with here.

Since merchant's capital is penned in the sphere of circulation, and since its function consists exclusively in promoting the exchange of commodities, it requires no other conditions for its existence - aside from the undeveloped forms arising from direct barter — outside those necessary for the simple circulation of commodities and money. Or rather, the latter is the condition of *its* existence. No matter what the basis on which products are produced, which are thrown into circulation as commodities --- whether the basis of the primitive community, of slave production, of small peasant and petty bourgeois, or the capitalist basis, the character of products as commodities is not altered, and as commodities they must pass through the process of exchange and its attendant changes of form. The extremes between which merchant's capital acts as mediator exist for it as given, just as they are given for money and for its movements. The only necessary thing is that these extremes should be on hand as commodities, regardless of whether production is wholly a production of commodities, or whether only the surplus of the independent producers' immediate needs, satisfied by their own production, is thrown on the market. Merchant's capital promotes only the movements of these extremes, of these commodities, which are preconditions of its own existence.

The extent to which products enter trade and go through the merchants' hands depends on the mode of production, and reaches its maximum under the full development of capitalist production, where the product is produced solely as a commodity, and not as a direct means of subsistence. On the other hand, on the basis of every mode of production, trade facilitates the production of surplus products destined for exchange, in order to increase the enjoyments, or the wealth, of the producers (here meant are the owners of the products). Hence, commerce imparts to production a character directed more and more towards exchange value.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 29, pp. 233-34 and 480-81.

The metamorphosis of commodities, their movement, consists 1) materially, of the exchange of different commodities for one another, and 2) formally, of the conversion of commodities into money by sale, and of money into commodities by purchase. And the function of merchant's capital resolves itself into these very acts of buying and selling commodities. It therefore merely promotes the exchange of commodities; yet this exchange is not to be conceived at the outset as a bare exchange of commodities between direct producers. Under slavery, feudalism and vassalage (so far as primitive communities are concerned) it is the slave-owner, the feudal lord, the tribute-collecting state, who are the owners, hence sellers, of the products. The merchant buys and sells for many. Purchases and sales are concentrated in his hands and consequently are no longer bound to the direct requirements of the buyer (as merchant).

But whatever the social organisation of the spheres of production whose commodity exchange the merchant promotes, his wealth exists always in the form of money, and his money always serves as capital. Its form is always M - C - M'. Money, the independent form of exchange value, is the point of departure, and increasing the exchange value an end in itself. Commodity exchange as such and the operations effecting it - separated from production and performed by nonproducers—are just a means of increasing wealth not as mere wealth, but as wealth in its most universal social form, as exchange value. The compelling motive and determining purpose are the conversion of M into  $M + \Delta M$ . The transactions M - C and C - M'. which promote M-M', appear merely as stages of transition in this conversion of M into  $M + \Delta M$ . This M - C - M', the characteristic movement of merchant's capital, distinguishes it from C - M - C, trade in commodities directly between producers, which has for its ultimate end the exchange of use values.

The less developed the production, the more wealth in money is concentrated in the hands of merchants or appears in the specific form of merchants' wealth.

Within the capitalist mode of production — i. e., as soon as capital has established its sway over production and imparted to it a wholly changed and specific form — merchant's capital appears merely as a capital with a *specific* function. In all previous modes of production, and all the more, wherever production ministers to the immediate wants of the producer, merchant's capital appears to perform the function *par excellence* of capital.

There is, therefore, not the least difficulty in understanding why merchant's capital appears as the historical form of capital long before capital established its own domination over production. Its existence and development to a certain level are in themselves historical premisses for the development of capitalist production 1) as a precondition for the concentration of money wealth, and 2) because the capitalist mode of production presupposes production for trade, selling on a large scale, and not to the individual customer, hence also a merchant who does not buy to satisfy his personal wants but concentrates the purchases of many buyers in his one purchase. On the other hand, all development of merchant's capital tends to give production more and more the character of production for exchange value and to turn products more and more into commodities. Yet its development, as we shall presently see, is incapable by itself of promoting and explaining the transition from one mode of production to another.

Within capitalist production merchant's capital is reduced from its former independent existence to a special phase in the investment of capital in general, and the levelling of profits reduces its rate of profit to the general average. It functions only as an agent of productive capital. The special social conditions that take shape with the development of merchant's capital, are here no longer paramount. On the contrary, wherever merchant's capital still predominates we find obsolete conditions. This is true even within one and the same country, in which, for instance, the specifically merchant towns present far more striking analogies with past conditions than manufacturing towns.<sup>46</sup>

The independent and predominant development of capital as mer-

<sup>46</sup>) Herr W. Kiesselbach (in his *Der Gang des Welthandels im Mittelalter*, 1860) is indeed still enwrapped in the ideas of a world, in which merchant's capital is the general form of capital. He has not the least idea of the modern meaning of capital, any more than Herr Mommsen when he speaks in his *Römische Geschichte* of "capital" and the rule of capital. In modern English history, the commercial estate proper and the merchant towns are also politically reactionary and in league with the landed and financial aristocracy against industrial capital. Compare, for instance, the political role of Liverpool with that of Manchester and Birmingham. The complete rule of industrial capital was not acknowledged by English merchant's capital and MONEYED INTEREST<sup>a</sup> until after the abolition of the corn duties,<sup>22</sup> etc.

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

chant's capital is tantamount to the non-subjection of production to capital, and hence to capital developing on the basis of an alien social mode of production which is also independent of it. The independent development of merchant's capital, therefore, stands in inverse proportion to the general economic development of society.

Independent mercantile wealth as a predominant form of capital represents the separation of the circulation process from its extremes, and these extremes are the exchanging producers themselves. These extremes remain independent of the circulation process, just as the latter remains independent of them. The product becomes a commodity by way of commerce. It is commerce which here turns products into commodities, not the produced commodity which by its movements gives rise to commerce. Thus, capital appears here first as capital in the process of circulation. It is in the circulation process that money develops into capital. It is in circulation that products first develop as exchange values, as commodities and as money. Capital can, and must, form in the process of circulation, before it learns to control its extremes — the various spheres of production between which circulation mediates. Money and commodity circulation can mediate between spheres of production of widely different organisation, whose internal structure is still chiefly adjusted to the output of use values. This individualisation of the circulation process, in which spheres of production are interconnected by means of a third, has a two-fold significance. On the one hand, that circulation has not as yet established a hold on production, but is related to it as to a given premiss. On the other hand, that the production process has not as yet absorbed circulation as a mere phase of production. Both, however, are the case in capitalist production. The production process rests wholly upon circulation, and circulation is a mere transitional phase of production, in which the product created as a commodity is realised and its elements of production, likewise created as commodities, are replaced. That form of capital-merchant's capital-which developed directly out of circulation appears here merely as one of the forms of capital occurring in its reproduction process.<sup>a</sup>

The law that the independent development of merchant's capital is inversely proportional to the degree of development of capitalist production is particularly evident in the history of the CARRYING TRADE,<sup>b</sup> as

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 14-15. - <sup>b</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

among the Venetians, Genoese, Dutch, etc., where the principal gains were not thus made by exporting domestic products, but by promoting the exchange of products of commercially and otherwise economically undeveloped societies, and by exploiting both producing countries.<sup>47)</sup> Here, merchant's capital is in its pure form, separated from the extremes-the spheres of production between which it mediates. This is the main source of its formation. But this monopoly of the carrying trade disintegrates, and with it this trade itself, proportionately to the economic development of the peoples, whom it exploits at both ends of its course, and whose lack of development was the basis of its existence. In the case of the carrying trade this appears not only as the decline of a special branch of commerce, but also that of the predominance of the purely trading nations, and of their commercial wealth in general, which rested upon the carrying trade. This is but a special form, in which is expressed the subordination of commercial to industrial capital with the advance of capitalist production. The behaviour of merchant's capital wherever it directly rules over production is strikingly illustrated not only by the colonial economy (the so-called colonial system) in general, but quite specifically by the methods of the old Dutch East India Company.<sup>36</sup>

Since the movement of merchant's capital is  $\dot{M} - C - M'$ , the merchant's profit is made, first, in acts which occur only within the circulation process, hence in the two acts of buying and selling; and, secondly, it is realised in the last act, the sale. It is therefore PROFIT UPON ALIENATION.<sup>b 35</sup> Prima facie, a pure and independent commercial profit seems impossible so long as products are sold at their value. To buy cheap in order to sell dear is the rule of trade. Hence, not the exchange of equivalents. The conception of value is included in it in so

<sup>47)</sup> "The inhabitants of trading cities, by importing the improved manufactures and expensive luxuries of richer countries afforded some food to the vanity of the great proprietors, who eagerly purchased them with great quantities of the rude produce of their own lands. The commerce of a great part of Europe in those times, accordingly consisted chiefly, in the exchange of their own rude produce for the manufactured produce of more civilised nations.... When this taste became so general as to occasion a considerable demand, the merchants, in order to save the expense of carriage, naturally endeavoured to establish some manufactures of the same kind in their own country" (Adam Smith, Book III, Ch. III).<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. I, London, 1776, pp. 489 and 490; cf. also present edition, Vol. 33, p. 19. - <sup>b</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

far as the various commodities are all values, and therefore money. In respect to quality they are all expressions of social labour. But they are not values of equal magnitude. The quantitative ratio in which products are exchanged is at first quite arbitrary. They assume the form of commodities inasmuch as they are exchangeables, i. e., expressions of one and the same third. Continued exchange and more regular reproduction for exchange reduces this arbitrariness more and more. But at first not for the producer and consumer, but for their go-between, the merchant, who compares money prices and pockets the difference. It is through his own movements that he establishes equivalence.

Merchant's capital is originally merely the intervening movement between extremes which it does not control, and between premisses which it does not create.

Just as money originates from the bare form of commodity circulation, C - M - C, not only as a measure of value and a medium of circulation, but also as the absolute form of commodity, and hence of wealth, as hoard, so that its conservation and accumulation as money becomes an end in itself, so, too, does money, the hoard, as something that preserves and increases itself through mere alienation, originate from the bare form of the circulation of merchant's capital, M - C - M'.<sup>a</sup>

The trading nations of ancient times existed like the gods of Epicurus in the intermediate worlds of the universe,<sup>37</sup> or rather like the Jews in the pores of Polish society. The trade of the first independent flourishing merchant towns and trading nations rested as a pure carrying trade upon the barbarism of the producing nations, between whom they acted the middleman.

In the precapitalist stages of society commerce ruled industry. In modern society the reverse is true. Of course, commerce will have more or less of a countereffect on the communities between which it is carried on. It will subordinate production more and more to exchange value by making luxuries and subsistence more dependent on sale than on the immediate use of the products. Thereby it dissolves the old relationships. It multiplies money circulation. It encompasses no longer merely the surplus of production, but bites deeper and deeper into the latter, and makes entire branches of production dependent upon it. Nevertheless this disintegrating effect depends very much on the nature of the producing community.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, pp. 9-10. - <sup>b</sup> Ibid., p. 20.

So long as merchant's capital promotes the exchange of products between undeveloped societies, commercial profit not only appears as outbargaining and cheating, but also largely originates from them. Aside from the fact that it exploits the difference between the prices of production of various countries (and in this respect it tends to level and fix the values of commodities), those modes of production bring it about that merchant's capital appropriates an overwhelming portion of the surplus product partly as a mediator between communities which still substantially produce for use value, and for whose economic organisation the sale of the portion of their product entering circulation, or for that matter any sale of products at their value, is of secondary importance; and partly, because under those earlier modes of production the principal owners of the surplus product with whom the merchant dealt, namely, the slave-owner, the feudal lord, and the state (for instance, the oriental despot) represent the consuming wealth and luxury which the merchant seeks to trap, as Adam Smith correctly scented in the passage on feudal times quoted earlier. Merchant's capital, when it holds a position of dominance, stands everywhere for a system of robbery,<sup>48)</sup> so that its development among the

<sup>(8)</sup> "Now there is among merchants much complaint about the nobles, or robbers, because they must trade under great danger and run the risk of being kidnapped, beaten, blackmailed, and robbed. If they would suffer these things for the sake of justice, the merchants would be saintly people .... But since such great wrong and unchristian thievery and robbery are committed all over the world by merchants, and even among themselves, is it any wonder that God should procure that such great wealth, gained by wrong, should again be lost or stolen, and they themselves be hit over the head or made prisoner?... And the princes should punish such unjust bargains with due rigour and take care that their subjects shall not be so outrageously abused by merchants. Because they fail to do so, God employs knights and robbers, and punishes the merchants through them for the wrongs they committed, and uses them as his devils, just as he plagues Egypt and all the world with devils, or destroys through enemies. He thus pits one against the other, without thereby insinuating that knights are any the less robbers than merchants, although the merchants daily rob the whole world, while a knight may rob one or two once or twice a year." "Go by the word of Isaiah a: Thy princes have become the companions of robbers. For they hang the thieves, who have stolen a gulden or a half gulden, but they associate with those, who rob all the world and steal with greater assurance than all others, so that the proverb remains true: Big thieves hang little thieves; and as the Roman senator Cato said: Mean thieves lie in prisons and stocks, but public thieves are clothed in gold and silks. But what will God say finally? He will do as he said to Ezekiel<sup>b</sup>; he will amalgamate princes and merchants, one thief with another, like lead and iron, as when a city burns down, leaving neither princes nor merchants" (Martin Luther, Von Kauffshandlung und Wucher, 1524, S. 296-97).c

<sup>\*</sup> Isaiah 1 : 23. - b Ezekiel 22 : 18-22. - c Cf. present edition, Vol. 32, pp. 531-32.

trading nations of old and modern times is always directly connected with plundering, piracy, kidnapping slaves, and colonial conquest; as in Carthage, Rome, and later among the Venetians, Portuguese, Dutch, etc.

The development of commerce and merchant's capital gives rise everywhere to the tendency towards production of exchange values, increases its volume, multiplies it, makes it cosmopolitan, and develops money into world money. Commerce, therefore, has a more or less dissolving influence everywhere on the producing organisation, which it finds at hand and whose different forms are mainly carried on with a view to use value. To what extent it brings about a dissolution of the old mode of production depends on its solidity and internal structure. And whither this process of dissolution will lead, in other words, what new mode of production will replace the old, does not depend on commerce, but on the character of the old mode of production itself. In the ancient world the effect of commerce and the development of merchant's capital always resulted in a slave economy: depending on the point of departure, only in the transformation of a patriarchal slave system devoted to the production of immediate means of subsistence into one devoted to the production of surplus value. However, in the modern world, it results in the capitalist mode of production. It follows therefrom that these results spring in themselves from circumstances other than the development of merchant's capital.

It is in the nature of things that as soon as urban industry as such separates from agricultural industry, its products are from the outset commodities and thus require the mediation of commerce for their sale. The leaning of commerce towards the development of towns. and, on the other hand, the dependence of towns upon commerce, are so far natural. However, it depends on altogether different circumstances to what measure industrial development will go hand in hand with this development. Ancient Rome, in its later republican days, developed merchant's capital to a higher degree than ever before in the ancient world, without showing any progress in the development of crafts, while in Corinth and other Grecian towns in Europe and Asia Minor the development of commerce was accompanied by highly developed crafts. On the other hand, quite contrary to the growth of towns and attendant conditions, the trading spirit and the development of merchant's capital occur frequently among unsettled nomadic peoples.

There is no doubt — and it is precisely this fact which has led to wholly erroneous conceptions — that in the 16th and 17th centuries the great revolutions, which took place in commerce with the geographical discoveries <sup>38</sup> and speeded the development of merchant's capital, constitute one of the principal elements in furthering the transition from feudal to capitalist mode of production. The sudden expansion of the world market, the multiplication of circulating commodities, the competitive zeal of the European nations to possess themselves of the products of Asia and the treasures of America, and the colonial system - all contributed materially toward destroying the feudal fetters on production. However, in its first period - the manufacturing period — the modern mode of production developed only where the conditions for it had taken shape within the Middle Ages. Compare, for instance, Holland with Portugal.<sup>49</sup> And when in the 16th, and partially still in the 17th, century the sudden expansion of commerce and emergence of a new world market overwhelmingly contributed to the fall of the old mode of production and the rise of capitalist production, this was accomplished conversely on the basis of the already existing capitalist mode of production. The world market itself forms the basis for this mode of production. On the other hand, the immanent necessity of this mode of production to produce on an ever-enlarged scale tends to extend the world market continually, so that it is not commerce in this case which revolutionises industry, but industry which constantly revolutionises commerce. Commercial supremacy itself is now linked with the prevalence to a greater or lesser degree of conditions for a large industry. Compare, for instance, England and Holland. The history of the decline of Holland as the ruling trading nation is the history of the subordination of

<sup>49</sup> How predominant fishery, manufacture and agriculture, aside from other circumstances, were as the basis for Holland's development, has already been explained by 18th-century writers, such as Massie.<sup>a</sup> In contradistinction to the former view, which underrated the volume and importance of commerce in Asia, in Antiquity, and in the Middle Ages, it has now come to be the custom to extremely overrate it. The best antidote against this conception is to study the imports and exports of England in the early 18th century and to compare them with modern imports and exports. And yet they were incomparably greater than those of any former trading nation. (See Anderson, *History of Commerce.*)<sup>b</sup>

<sup>&</sup>lt;sup>a</sup>[J. Massie,] An Essay on the Governing Causes of the Natural Rate of Interest..., London, 1750, p. 60; cf. also present edition, Vol. 34, pp. 91-93. - <sup>b</sup> [A. Anderson,] An Historical and Chronological Deduction of the Origin of Commerce..., Vol. 1, London, 1764, p. 261.

merchant's capital to industrial capital. The obstacles presented by the internal solidity and organisation of precapitalistic, national modes of production to the corrosive influence of commerce are strikingly illustrated in the intercourse of the English with India and China. The broad basis of the mode of production here is formed by the unity of small-scale agriculture and home industry, to which in India we should add the form of village communities resting upon the common ownership of land, which, incidentally, was the original form in China as well. In India the English lost no time in exercising their direct political and economic power, as rulers and landlords, to disrupt these small economic communities.<sup>50</sup> English commerce exerted here a revolutionising influence on the mode of production only in so far as the low prices of its goods served to destroy the spinning and weaving industries, which were an ancient integrating element of this unity of industrial and agricultural production, and thus tore the community apart. And even so this work of dissolution proceeds very gradually. And still more slowly in China, where it is not reinforced by direct political power. The substantial economy and saving in time afforded by the association of agriculture with manufacture put up a stubborn resistance to the products of the big industries, whose prices include the faux frais a of the circulation process which pervades them. Unlike the English, Russian commerce, on the other hand, leaves the economic groundwork of Asiatic production untouched.<sup>51</sup>

The transition from the feudal mode of production is two-fold. The producer becomes merchant and capitalist, in contrast to the natural agricultural economy and the guild-bound handicrafts of the medieval urban industries. This is the really revolutionising path. Or else, the merchant establishes direct sway over production. However much this serves historically as a stepping-stone — witness the English 17th-century CLOTHIER, who brings the weavers, independent as they

<sup>50</sup> If any nation's history is a string of futile and really absurd (in practice infamous) economic experiments, then it is the history of the English management in India. In Bengal they created a caricature of large-scale English landed estates; in southeastern India a caricature of small parcelled property; in the north-west they did all they could to transform the Indian economic community with common ownership of the soil into a caricature of itself.

<sup>51</sup> Since Russia has been making frantic exertions to develop its own capitalist production, which is exclusively dependent upon its domestic and the neighbouring Asiatic market, this is also beginning to change.—F. E.

<sup>&</sup>lt;sup>a</sup> overhead costs

are, under his control by selling their wool to them and buying their cloth-it cannot by itself contribute to the overthrow of the old mode of production, but tends rather to preserve and retain it as its precondition. The manufacturer in the French silk industry and in the English hosiery and lace industries, for example, was thus mostly but nominally a manufacturer until the middle of the 19th century. In point of fact, he was merely a merchant, who let the weavers carry on in their old unorganised way and exerted only a merchant's control, for that was for whom they really worked.<sup>52</sup> This system presents everywhere an obstacle to the real capitalist mode of production and goes under with its development. Without revolutionising the mode of production, it only worsens the condition of the direct producers, turns them into mere wage workers and proletarians under conditions worse than those under the immediate control of capital, and appropriates their surplus labour on the basis of the old mode of production. The same conditions exist in somewhat modified form in part of the London handicraft furniture industry. It is practised notably in the Tower Hamlets on a very large scale. The whole production is divided into very numerous separate branches of business independent of one another. One establishment makes only chairs, another only tables, a third only bureaus, etc. But these establishments themselves are run more or less like handicrafts by a single minor master and a few journeymen. Nevertheless, production is too large to work directly for private persons. The buyers are the owners of furniture stores. On Saturdays the master visits them and sells his product, the transaction being closed with as much haggling as in a pawnshop over a loan. The masters depend on this weekly sale, if for no other reason than to be able to buy raw materials for the following week and to pay out wages. Under these circumstances, they are really only middlemen between the merchant and their own labourers. The merchant is the actual capitalist who pockets the lion's share of the surplus value.<sup>53)</sup> Almost the same applies in the transition to manufacture of branches formerly carried on as handicrafts or side lines to

<sup>&</sup>lt;sup>52)</sup> The same is true of the ribbon and basting makers and the silk weavers of the Rhine. Even a railway has been built near Krefeld for the intercourse of these rural hand-weavers with the town "manufacturers". But this was later put out of business, together with the hand-weavers, by the mechanical weaving industry.—F. E.

<sup>&</sup>lt;sup>53)</sup> This system has been developed since 1865 on a still larger scale. For details see the First Report of the Select Committee of the House of Lords on the Sweating System, London, 1888.—F. E.

rural industries. The transition to large-scale industry depends on the technical development of these small owner-operated establishments — wherever they employ machinery that admits of a handicraft-like operation. The machine is driven by steam, instead of by hand. This is of late the case, for instance, in the English hosiery industry.<sup>a</sup>

There is, consequently, a three-fold transition. *First*, the merchant becomes directly an industrialist. This is true in crafts based on trade, especially crafts producing luxuries, which are imported by merchants together with the raw materials and labourers from foreign lands, as in Italy from Constantinople in the 15th century. *Second*, the merchant turns the small masters into his MIDDLEMEN,<sup>b</sup> or buys directly from the independent producer, leaving him nominally independent and his mode of production unchanged. *Third*, the industrialist becomes merchant and produces directly for the wholesale market.

In the Middle Ages, the merchant was merely one who, as Poppe rightly says, "transferred" the goods produced by guilds or peasants.<sup>c</sup> The merchant becomes industrialist, or rather, makes craftsmen, particularly the small rural producers, work for him. Conversely, the producer becomes merchant. The master weaver, for instance, buys his wool or yarn himself and sells his cloth to the merchant, instead of receiving his wool from the merchant piecemeal and working for him together with his journeymen. The elements of production pass into the production process as commodities bought by himself. And instead of producing for some individual merchant, or for specified customers, he produces for the world of trade. The producer is himself a merchant. Merchant's capital does no more than carry on the process of circulation. Originally, commerce was the precondition for the transformation of the crafts, the rural domestic industries, and feudal agriculture, into capitalist enterprises. It develops the product into a commodity, partly by creating a market for it, and partly by introducing new commodity equivalents and supplying production with new raw and auxiliary materials, thereby opening new branches of production based from the first upon commerce, both as concerns production for the home and world-market, and as concerns conditions of production originating in the world market. As soon as manufacture gains sufficient strength, and particularly large-scale industry,

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 33, p. 369. - <sup>b</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent. - <sup>c</sup> J. H. M. Poppe, *Geschichte der Technologie...*, Band I, Göttingen, 1807, S. 70.

it creates in its turn a market for itself, by capturing it through its commodities. At this point commerce becomes the servant of industrial production, for which continued expansion of the market becomes a vital necessity. Ever more extended mass production floods the existing market and thereby works continually for a still greater expansion of this market, for breaking out of its limits. What restricts this mass production is not commerce (in so far as it expresses the existing demand), but the magnitude of employed capital and the level of development of the productive power of labour. The industrial capitalist always has the world market before him, compares, and must constantly compare, his own cost prices with the market prices at home, and throughout the world. In the earlier period such comparison fell almost entirely to the merchants, and thus secured the predominance of merchant's capital over industrial capital.<sup>a</sup>

The first theoretical treatment of the modern mode of production — the mercantile system — proceeded necessarily from the superficial phenomena of the circulation process as individualised in the movement of merchant's capital, and therefore grasped only the appearance of matters. Partly because merchant's capital is the first free state of existence of capital in general. And partly because of the overwhelming influence which it exerted during the first revolutionising period of feudal production — the genesis of modern production. The real science of modern economy only begins when the theoretical analysis passes from the process of circulation to the process of production. Interest-bearing capital is, indeed, likewise a very old form of capital. But we shall see later why mercantilism does not take it as its point of departure, but rather carries on a polemic against it.

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 465-66.

# Part V

# DIVISION OF PROFIT INTO INTEREST AND PROFIT OF ENTERPRISE. INTEREST-BEARING CAPITAL

### Chapter XXI

#### INTEREST-BEARING CAPITAL

In our first discussion of the general, or average, rate of profit (Part II of this book) we did not have this rate before us in its complete form, the equalisation of profit appearing only as equalisation between industrial capitals invested in different spheres. This was supplemented in the preceding part, which dealt with the participation of merchant's capital in this equalisation, and also commercial profit. The general rate of profit and the average profit now appeared in narrower limits than before. It should be remembered in the course of our analysis that in any future reference to the general rate of profit or to average profit we mean this latter connotation, hence only the final form of average rate. And since this rate is the same for mercantile, as well as industrial, capital, it is no longer necessary, so far as this average profit is concerned, to make a distinction between industrial and commercial profit. Whether industrially invested in the sphere of production, or commercially in the sphere of circulation, capital yields the same average annual profit pro rata a to its magnitude.

Money—here taken as the independent expression of a certain amount of value existing either actually as money or as commodities—may be converted into capital on the basis of capitalist production, and may thereby be transformed from a given value to a selfexpanding, or increasing, value. It produces profit, i. e., it enables the capitalist to extract a certain quantity of unpaid labour, surplus product and surplus value, from the labourers, and to appropriate it. In this way, aside from its use value as money, it acquires an additional

a in proportion to

use value, namely that of serving as capital. Its use value then consists precisely in the profit it produces when converted into capital. In this capacity of potential capital, of a means of producing profit, it becomes a commodity, but a commodity *sui generis*. Or, what amounts to the same, capital as capital becomes a commodity.<sup>54</sup>

Suppose the annual average rate of profit is 20%. In that case a machine valued at  $f_{100}$ , employed as capital under average conditions and an average amount of intelligence and purposive effort, would yield a profit of  $f_{20}$ . A man in possession of  $f_{100}$ , therefore, possesses the power to make  $f_1120$  out of  $f_2100$ , or to produce a profit of  $f_{20}$ . He possesses a potential capital of  $f_{100}$ . If he gives these  $f_{100}$  to another for one year, so the latter may use them as real capital, he gives him the power to produce a profit of  $f_{20}$  — a surplus value which costs this other nothing, and for which he pays no equivalent. If this other should pay, say,  $f_{,5}$  at the close of the year to the owner of the  $\pounds$  100 out of the profit produced, he would thereby pay the use value of the  $f_1100$  — the use value of its function as capital, the function of producing a profit of  $f_{20}$ . The part of the profit paid to the owner is called interest, which is just another name, or special term, for a part of the profit given up by capital in the process of functioning to the owner of the capital, instead of putting it into its own pocket.

It is plain that the possession of £100 gives their owner the power to pocket the interest—that certain portion of profit produced by means of his capital. If he had not given the £100 to the other person, the latter could not have produced any profit, and could not at all have acted as a capitalist with reference to these £100.<sup>55</sup>

To speak here of natural justice, as Gilbart does (see note), is nonsense. The justice of the transactions between agents of production rests on the fact that these arise as natural consequences out of the production relationships. The juristic forms in which these economic transactions appear as wilful acts of the parties concerned, as expressions of their common will and as contracts that may be enforced by

<sup>&</sup>lt;sup>54</sup>) At this point certain passages may be quoted, in which the economists so conceive the matter.—"You" (the Bank of England): "are very large dealers in the *commodity of capital*?" is the question posed to a director of this bank when he was interrogated for the Report on Bank Acts on the witness stand. (H. of C. 1857, [p. 104].)

<sup>&</sup>lt;sup>55</sup> "That a man who borrows money with a view of making a profit by it, should give some portion of his profit to the lender, is a self-evident principle of natural justice" (Gilbart, *The History and Principles of Banking*, London, 1834, p. 163).

law against some individual party, cannot, being mere forms, determine this content. They merely express it. This content is just whenever it corresponds, is appropriate, to the mode of production. It is unjust whenever it contradicts that mode. Slavery on the basis of capitalist production is unjust; likewise fraud in the quality of commodities.

The £100 produce the profit of £20 because they function as capital, be it industrial or mercantile. But the sine qua non <sup>a</sup> of this function as capital is that they are expended as capital, i. e., are expended in purchasing means of production (in the case of industrial capital) or commodities (in the case of mercantile capital). But to be expended, they must be available. If A, the owner of the £100, were either to spend them for personal consumption, or to keep them as a hoard, they could not have been invested as capital by B in his capacity of functioning capitalist. B does not expend his own capital, but A's; however, he cannot expend A's capital without A's consent. Therefore, it is really A who originally expends the £100 as capital, albeit his function as capitalist is limited to this outlay of £100 as capital. In respect to these £100, B acts as capitalist only because A lends him the £100, thus expending them as capital.

Let us first consider the singular circulation of interest-bearing capital. We shall then secondly have to analyse the peculiar manner in which it is sold as a commodity, namely loaned instead of relinquished once and for all.

The point of departure is the money which A advances to B. This may be done with or without security. The first-named form, however, is the more ancient, save advances on commodities or paper, such as bills of exchange, shares, etc. These special forms do not concern us at this point. We are dealing here with interest-bearing capital in its usual form.

In B's possession the money is actually converted into capital, passes through M - C - M' and returns to A as M', as  $M + \Delta M$ , where  $\Delta M$  represents the interest. For the sake of simplicity we shall not consider here the case, in which capital remains in B's possession for a longer term and interest is paid at regular intervals.

The movement, therefore, is

$$\mathbf{M} - \mathbf{M} - \mathbf{C} - \mathbf{M}' - \mathbf{M}'.$$

<sup>&</sup>lt;sup>a</sup> the indispensable condition

What appears duplicated here, is 1) the outlay of money as capital, and 2) its reflux as realised capital, as M' or  $M + \Delta M$ .

In the movement of merchant's capital, M-C-M', the same commodity changes hands twice, or more than twice, if merchant sells to merchant. But every such change of place of the same commodity indicates a metamorphosis, a purchase or sale of the commodity, no matter how often the process may be repeated, until it finally enters consumption.

On the other hand, the same money changes hands twice in C - M - C, but this indicates the complete metamorphosis of the commodity, which is first converted into money and then from money back into another commodity.

But in interest-bearing capital the first time M changes hands is by no means a phase either of the commodity metamorphosis, or of reproduction of capital. It first becomes one when it is expended a second time, in the hands of the functioning capitalist who carries on trade with it, or transforms it into productive capital. M's first change of hands does not express anything here, beyond its transfer from A to B - a transfer which usually takes place under certain legal forms and stipulations.

This double outlay of money as capital, of which the first is merely a transfer from A to B, is matched by its double reflux. As M', or  $M + \Delta M$ , it flows back out of the process to B, the person acting as capitalist. The latter then transfers it back to A, but together with a part of the profit, as realised capital, as  $M + \Delta M$ , in which  $\Delta M$  is not the entire profit, but only a portion of the profit—the interest. It flows back to B only as what he had expended, as functioning capital, but as the property of A. To make its reflux complete, B must consequently return it to A. But in addition to the capital, B must also turn over to A a portion of the profit, a part which goes under the name of interest, which he had made with this capital since A had given him the money only as a capital, i. e., as value which is not only preserved in its movement, but also creates surplus value for its owner. It remains in B's hands only so long as it is functioning capital. And with its reflux - on the stipulated date - it ceases to function as capital. When no longer acting as capital, however, it must again be returned to A, who had never ceased being its legal owner.

The form of lending, which is peculiar to this commodity, to capital as commodity, and which also occurs in other transactions, instead of that of sale, follows from the simple definition that capital obtains here as a commodity, or that money as capital becomes a commodity.

A distinction should be made here.

We have seen (Book II, Chap. I),<sup>a</sup> and recall briefly at this point, that in the process of circulation capital serves as commodity capital and money capital. But in neither form does capital become a commodity as capital.

As soon as productive capital turns into commodity capital it must be placed on the market to be sold as a commodity. There it acts simply as a commodity. The capitalist then appears only as the seller of commodities, just as the buyer is only the buyer of commodities. As a commodity the product must realise its value, must assume its converted form, the form of money, in the process of circulation by its sale. It is also quite immaterial for this reason whether this commodity is bought by a consumer as a necessity of life, or by a capitalist as means of production, i. e., as a component part of his capital. In the act of circulation commodity capital acts only as a commedity, not as a capital. It is commodity *capital*, as distinct from an ordinary commodity, 1) because it is weighted with surplus value, the realisation of its value, therefore, being simultaneously the realisation of surplus value, but this alters nothing about its simple existence as a commodity, as a product with a certain price; 2) because its function as a commodity is a phase in its process of reproduction as capital, and therefore its movement as a commodity being only a partial movement of its process, is simultaneously its movement as capital. Yet it does not become that through the sale as such, but only through the connection of the sale with the whole movement of this specific quantity of value in the capacity of capital.

In the same way as money capital it really acts simply as money, i. e., as a means of buying commodities (the elements of production). The fact that this money is simultaneously money capital, a form of capital, does not emerge from the act of buying, the actual function which it here performs as money, but from the connection of this act with the total movement of capital, since this act, performed by capital as money, initiates the capitalist production process.

But in so far as they actually function, actually play a role in the process, commodity capital acts here only as a commodity and money capital only as money. At no time during the metamorphosis, viewed

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36.

by itself, does the capitalist sell his commodities as *capital* to the buyer, although to him they represent capital; nor does he give up money as capital to the seller. In both cases he gives up his commodities simply as commodities, and money simply as money, as a means of purchasing commodities.

It is only in connection with the entire process, at the moment where the point of departure appears simultaneously as the point of return, in  $\dot{M} - M'$  or  $\dot{C} - C'$ , that capital in the process of circulation appears as capital (whereas in the process of production it appears as capital through the subordination of the labourer to the capitalist and the production of surplus value). In this moment of return, however, the connection disappears. What we have then is M', or  $M + \Delta M$ , a sum of money equal to the sum originally advanced plus an increment — the realised surplus value (regardless of whether the amount of value increased by  $\Delta \dot{M}$  exists in the form of money, or commodities, or elements of production). And it is precisely at this point of return where capital exists as realised capital, as an expanded value, that it never enters the circulation in this form — in so far as this point is fixed as a point of rest, whether real or imaginary - but rather appears to have been withdrawn from circulation as a result of the whole process. Whenever it is again expended, it is never given up to another as capital, but is sold to him as an ordinary commodity, or given to him as ordinary money in exchange for commodities. It never appears as capital in its process of circulation, only as commodity or money, and at this point this is the only form of its existence for others. Commodities and money are here capital not because commodities change into money, or money into commodities, not in their actual relations to sellers or buyers, but only in their ideal relations to the capitalist himself (subjectively speaking), or as phases in the process of reproduction (objectively speaking). Capital exists as capital in actual movement, not in the process of circulation, but only in the process of production, in the process by which labour power is exploited.

The matter is different with interest-bearing capital, however, and it is precisely this difference which lends it its specific character. The owner of money who desires to enhance his money as interest-bearing capital, turns it over to a third person, throws it into circulation, turns it into a commodity as *capital*; not just capital for himself, but also for others. It is not capital merely for the man who gives it up, but is from the very first given to the third person as capital, as a value endowed with the use value of creating surplus value, of creating profit; as a value which preserves itself in its movement and returns to its original owner, in this case the owner of money, after performing its function. Hence it leaves him only for a specified time, passes but temporarily out of the possession of its owner into the possession of a functioning capitalist; it is therefore neither given up in payment nor sold, but merely loaned, merely relinquished with the understanding that, first, it shall return to its point of departure after a definite time interval, and, second, that it shall return as realised capital—a capital having realised its use value, its power of creating surplus value.

Commodities loaned out as capital are loaned either as fixed or as circulating capital, depending on their properties. Money may be loaned out in either form. It may be loaned as fixed capital, for instance, if it is paid back in the form of an annuity, whereby a portion of the capital always flows back together with the interest. Certain commodities, such as houses, ships, machines, etc., can be loaned out only as fixed capital by the nature of their use values. Yet all loaned capital, whatever its form, and no matter how the nature of its use value may modify its return, is always only a specific form of money capital. Because what is loaned out here is always a definite sum of money, and it is this sum on which interest is calculated. Should whatever is loaned out be neither money nor circulating capital, it is also paid back in the way fixed capital returns. The lender periodically receives interest and a portion of the consumed value of the fixed capital itself, this being an equivalent for the periodic wear and tear. And at the end of the stipulated term the unconsumed portion of the loaned fixed capital is returned in kind. If the loaned capital is circulating capital, it is likewise returned to the lender in the manner peculiar to circulating capital.<sup>a</sup>

The *manner* of reflux is, therefore, always determined by the actual circuit described by capital in the act of reproduction and by its specific varieties. But as for loaned capital, its reflux assumes the *form* of return payments, because its advance, by which it is alienated, possesses the form of a loan.

In this chapter we treat only of actual money capital, from which the other forms of loaned capital are derived.

The loaned capital flows back in two ways. In the process of repro-

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, p. 522.

duction it returns to the functioning capitalist, and then its return repeats itself once more as transfer to the lender, the money capitalist, as return payment to the real owner, its legal point of departure.

In the actual process of circulation, capital appears always as a commodity or as money, and its movement is broken up into a series of purchases and sales. In short, the process of circulation resolves itself into the metamorphosis of commodities. It is different, when we consider the process of reproduction as a whole. If we start out with monev (and the same is true if we start out with commodities, since in this case we begin with their value, hence view them sub specie as money), we shall see that a certain sum of money is expended and returns after a certain period with an increment. The advanced sum of monev returns together with a surplus value. It has preserved and expanded itself in making a certain cycle. But now, being loaned out as capital, money is loaned as just a sum of money which preserves and expands itself, which returns after a certain period with an increment, and is always ready to perform the same process over again. It is expended neither as money nor as a commodity, thus, neither exchanged against a commodity when advanced in the form of money, nor sold in exchange for money when advanced as a commodity; rather, it is expended as capital. This relation to itself, in which capital presents itself when the capitalist production process is viewed as a whole and a totality, and in which capital appears as money that begets money, is here embodied in it as its character, its designation, without any intermediary movement. And it is alienated in this designation when loaned out as money capital.

A queer conception of the role of money capital is held by Proudhon (Gratuité du Crédit. Discussion entre M. Fr. Bastiat et M. Proudhon, Paris, 1850).<sup>a</sup> Loaning seems an evil to Proudhon because it is not selling.

Loaning for an interest

"is the ability of selling the same object over and over again, and receiving the price of it, over and over again, without ever giving up the ownership of what is sold" (p, 9).<sup>b</sup>

The object — money, a house, etc. — does not change owners as in selling and buying. But Proudhon does not see that no equivalent is

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 32, pp. 529-30 and Vol. 29, pp. 219-21. - <sup>b</sup> Gratuité du crédit, First Letter of Chevé, one of the editors of La Voix du peuple. Marx is quoting in French. Below, when analysing Proudhon's views, he uses quite a few French expressions.

received in return for money given away in the form of interestbearing capital. True, the object is given away in every act of buying and selling, so far as there are processes of exchange at all. Ownership of the sold article is always relinquished. But its value is not given up. In a sale the commodity is given away, but not its value, which is returned in the form of money, or in what is here just another form of it — promissory notes, or titles of payment. When purchasing, the money is given away, but not its value, which is replaced in the form of commodities. The industrial capitalist retains the same value in his hands throughout the process of reproduction (excluding surplus value), but in different forms.

Inasmuch as there is an exchange, i. e., an exchange of articles, there is no change in the value. The same capitalist always retains the same value. But so long as surplus value is produced by the capitalist, there is no exchange. As soon as an exchange occurs, the surplus value is already incorporated in the commodities. If we view the entire circuit made by capital, M-C-M', rather than individual acts of exchange, we shall see that a definite amount of value is continually advanced, and that this same amount plus surplus value, or profit, is withdrawn from circulation. The simple acts of exchange do not, at any rate, reveal how this process is promoted. And it is precisely this process of M as capital, on which the interest of the moneylending capitalist rests, and from which it is derived.

"Actually," says Proudhon, "the hatter who sells hats... obtains the value of them, neither more nor less. But the capitalist who loans out his capital ... not merely gets his capital back in full; he gets back more than his capital, more than he brought to the exchange; over and above his capital, he gets an interest" (p. 69).

Here the hatter represents the productive capitalist as distinct from the loan capitalist. Proudhon has obviously failed to grasp the secret of how the productive capitalist can sell commodities at their value (equalisation through prices of production is here immaterial to his conception) and precisely by doing so receive a profit over and above the capital he flings into exchange. Suppose the price of production of 100 hats = £115, and that this price of production happens to coincide with the value of the hats, which means that the capital producing the hats is of the same composition as the average social capital. Should the profit = 15%, the hatter makes a profit of £15 by selling his commodities at their value of £115. They cost him only £100. If he produced them with his own capital, he pockets the entire surplus of  $\pounds 15$  but if with borrowed capital, he may have to give up  $\pounds 5$  as interest. This alters nothing in the value of the hats, only in the distribution among different persons of the surplus value already contained in this value. Since, therefore, the value of the hats is not affected by the payment of interest, it is nonsense on Proudhon's part to say:

"It is impossible, with interest on capital being added in commerce to the workers' wages to make up the price of the commodity, for the worker to be able to buy back what he himself has produced. *Vivre en travaillant*<sup>a</sup> is a principle which, under the rule of interest, is implicitly self-contradictory" (p. 105).<sup>56</sup>

How little Proudhon understood the nature of capital is shown in the following statement, in which he describes the movement of capital in general as a movement peculiar to interest-bearing capital:

"As, by the accumulation of interest, capital-money, from exchange to exchange, always returns to its source, it follows that the re-lending, always done by the same hand, always profits the same person" [p. 154].<sup>c</sup>

What is it that still puzzles him in the peculiar movement of interest-bearing capital? The categories: buying, price, giving up articles, and the immediate form in which surplus value appears here; in short, the phenomenon that capital as such has become a commodity, that selling, consequently, has turned into lending and price into a share of the profit.

The return of capital to its point of departure is generally the characteristic movement of capital in its total circuit. This is by no means a feature of interest-bearing capital alone. What singles it out is rather the external form of its return without the intervention of any circuit. The loaning capitalist gives away his capital, transfers it to the industrial capitalist, without receiving any equivalent. His transfer is not an act belonging to the real circulation process of capital at all. It serves merely to introduce this circuit, which is effected by the

<sup>56)</sup> "A house", "money", etc., are not to be loaned as "capital" if Proudhon is to have his way, but are to be sold as "commodities ... at cost price" (pp. 43, 44). Luther stood somewhat above Proudhon. He knew that profit-making does not depend on the manner of lending or buying: "They also make a usury out of buying and selling. But this is too much to deal with in one single bite. We must deal with one thing now, with usury as regards loans; when we have put a stop to this (as on the Day of Judgement), then we will surely read the lesson with regard to *usurious trade*" (Martin Luther, *An die Pfarrherrn wider den Wucher zu predigen*, Wittenberg, 1540).<sup>b</sup>.

 $<sup>^{\</sup>rm a}$  To live by working -  $^{\rm b}$  See present edition, Vol. 32, p. 536. -  $^{\rm c}$  Marx is quoting Proudhon in French.

industrial capitalist. This first change of position of money does not express any act of the metamorphosis - neither buying nor selling. Ownership is not relinquished, because there is no exchange and no equivalent is received. The return of the money from the hands of the industrial capitalist to those of the loaning capitalist merely supplements the first act of giving away the capital. Advanced in the form of money, the capital again returns to the industrial capitalist through the circular process in the form of money. But since it did not belong to him when he invested it, it cannot belong to him on its return. Passing through the process of reproduction cannot by any means turn the capital into his property. He must therefore restore it to the lender. The first expenditure, which transfers the capital from the lender to the borrower, is a legal transaction which has nothing to do with the actual process of reproduction of capital. It is merely a prelude to this process. The return payment, which again transfers the capital that has flowed back from the borrower to the lender, is another legal transaction, a supplement of the first. One introduces the actual process, the other is an act supplementary to this process. Point of departure and point of return, the giving away and the recovery of the loaned capital, thus appear as arbitrary movements promoted by legal transactions, which take place before and after the actual movement of capital and have nothing to do with it as such. It would have been all the same as concerns this actual movement if the capital had from the first belonged to the industrial capitalist and had returned to him, therefore, as his own.<sup>a</sup>

In the first introductory act the lender gives his capital to the borrower. In the supplemental and closing act the borrower returns the capital to the lender. As concerns the transaction between these two—and aside from the interest for the present—as concerns the movement of the loaned capital between lender and borrower, therefore, the two acts (separated by a longer or shorter time interval, during which the actual reproduction process of the capital takes place) embrace the entire movement. And this movement, disposing on condition of returning, constitutes *per se* the movement of lending and borrowing, that specific form of conditionally alienating money or commodities.

The characteristic movement of capital in general, the return of the money to the capitalist, i. e., the return of capital to its point of

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 453-54.

departure, assumes in the case of interest-bearing capital a wholly external appearance, separated from the actual movement, of which it is a form. A gives away his money not as money, but as capital. No transformation occurs in the capital. It merely changes hands. Its real transformation into capital does not take place until it is in the hands of B. But for A it becomes capital as soon as he gives it to B. The actual reflux of capital from the processes of production and circulation takes place only for B. But for A the reflux assumes the same form as the alienation. The capital returns from B to A. Giving away, i. e., loaning money for a certain time and receiving it back with interest (surplus value) is the complete form of the movement peculiar to interest-bearing capital as such. The actual movement of loaned money as capital is an operation lying outside the transactions between lender and borrower. In these transactions the intermediate act is obliterated, invisible, not directly included. A special sort of commodity, capital has its own peculiar mode of alienation. Neither does its return, therefore, express itself as the consequence and result of some definite series of economic processes, but as the effect of a specific legal agreement between buyer and seller. The time of return depends on the progress of the process of reproduction; in the case of interest-bearing capital, its return as capital seems to depend on the mere agreement between lender and borrower. So that in regard to this transaction the return of capital no longer appears as a result arising out of the process of production; it appears as if the loaned capital never lost the form of money. To be sure, these transactions are really determined by the actual reproductive returns. But this is not evident in the transaction itself.<sup>a</sup> Nor is it by any means always the case in practice. If the actual return does not take place in due time, the borrower must look for other resources to meet his obligations vis-à-vis the lender. The bare form of capital-money expended as a certain sum, A, which returns as sum  $A + \frac{1}{2}A$  after a given lapse of time without any other intermediate act save this lapse of time - is only a meaningless form of the actual movement of capital.

In the actual movement of capital its return is a phase in the process of circulation. The money is first converted into means of production; the production process converts it into commodities; through the sale of the commodities it is reconverted into money and returns

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 453-54.

in this form into the hands of the capitalist who had originally advanced the capital in the form of money. But in the case of interestbearing capital, the return, like alienation, is merely the result of a legal transaction between the owner of the capital and a second party. We see only the alienation and the return payment. Whatever passes in the interim is obliterated.

But since money advanced as capital has the property of returning to the person who advanced it, to the one who expended it as capital, and since M - C - M' is the immanent form of the movement of capital, the owner of the money can, for this very reason, loan it out as capital, as something that has the property of returning to its point of departure, of preserving, and increasing, its value in the course of its movement. He gives it away as capital, because it returns to its point of departure after having been employed as capital, hence can be restored by the borrower after a certain period precisely because it has come back to him.

Loaning money as capital—its alienation on the condition of it being returned after a certain time—presupposes, therefore, that it will be actually employed as capital, and that it actually flows back to its starting-point. The real cycle made by money as capital is, therefore, the premise for the legal transaction by which the borrower must return the money to the lender. If the borrower does not use the money as capital, that is his own business. The lender loans it as capital, and as such it is supposed to perform the functions of capital, which include the circuit of money capital until it returns to its starting-point in the form of money.

The acts of circulation, M - C and C - M', in which a certain amount of value functions as money or as commodities, are but intermediate processes, mere phases of the total movement. As capital, it performs the entire movement M - M'. It is advanced as money or a sum of values in one form or another, and returns as a sum of values. The lender of money does not expend it in purchasing commodities, or, if this sum of values is in commodity form, does not sell it for money. He advances it as capital, as M - M', as a value, which returns to its point of departure after a certain term. He lends instead of buying or selling. This lending, therefore, is the appropriate form of alienating value as *capital*, instead of alienating it as money or commodities. It does not follow, however, that lending cannot also take the form of transactions which have nothing to do with the capitalist process of reproduction. We have so far only considered the movements of loaned *capital* between its owner and the industrial capitalist. Now we must inquire into *interest*.

The lender expends his money as capital; the amount of value, which he relinquishes to another, is capital, and consequently returns to him. But the mere return of it would not be the reflux of the loaned sum of value as capital, but merely the return of a loaned sum of value. To return as capital, the advanced sum of value must not only be preserved in the movement but must also expand, must increase in value, i. e., must return with a surplus value, as  $M + \Delta M$ , the latter being interest or a portion of the average profit, which does not remain in the hands of the functioning capitalist, but falls to the share of the money capitalist.

The fact that the latter has relinquished it as capital implies that it must be restored to him as  $M + \Delta M$ . Later, we shall also have to turn our attention to the form in which interest is paid in the meantime at fixed intervals, but without the capital, whose return follows at the end of a lengthy period.

What does the money capitalist give to the borrower, the industrial capitalist? What does he really turn over to him? It is only this act of alienating money which changes lending money into alienation of money as capital, i. e., alienation of capital as a commodity.

It is only by this act of alienating that capital is loaned by the money lender as a commodity, or that the commodity at his disposal is given to another as capital.

What is alienated in an ordinary sale? Not the value of the sold commodity, for this merely changes its form. The value exists ideally in a commodity as its price before it actually passes as money into the hands of the seller. The same value and the same amount of value merely change their form here. In the one instance they exist in commodity form, in the other in the form of money. What is really alienated by the seller, and, therefore, passes into the individual or productive consumption of the buyer, is the use value of the commodity — the commodity as a use value.

What, now, is the use value which the money capitalist gives up for the period of the loan and relinquishes to the productive capitalist—the borrower? It is the use value which the money acquires by being capable of becoming capital, of performing the functions of capital, and creating a definite surplus value, the average profit (whatever is above or below it appears here as a mere accident) during its process, besides preserving its original magnitude of value. In the case of the other commodities the use value is ultimately consumed. Their substance disappears, and with it their value. In contrast, the commodity capital is peculiar in that its value and use value not only remain intact but also increase, through consumption of its use value.

It is this use value of money as capital — this faculty of producing an average profit — which the money capitalist relinquishes to the industrial capitalist for the period, during which he places the loaned capital at the latter's disposal.

Money thus loaned has in this respect a certain similarity with labour power in its relation to the industrial capitalist. With the difference that the latter pays for the value of labour power, whereas he simply pays back the value of the loaned capital. The use value of labour power for the industrial capitalist is that labour power creates more value (profit) in its consumption than it possesses itself, and than it costs. This additional value is use value of loaned capital capitalist. And in like manner the use value of loaned capital appears as its faculty of begetting and increasing value.

The money capitalist, in fact, alienates a use value, and thus whatever he gives away is given as a commodity. It is to this extent that the analogy with a commodity per se is complete. In the first place, it is a value which passes from one hand to another. In the case of an ordinary commodity, a commodity as such, the same value remains in the hands of the buyer and seller, only in different forms; both have the same value which they had before and after the transaction, and which they had alienated — the one in the form of a commodity, the other in the form of money. The difference is that in a loan the money capitalist is the only one in the transaction who gives away value; but he preserves it through the prospective return. In the loan transaction just one party receives value, since only one party relinquishes value.— In the second place, a real use value is alienated on the one side, and received and consumed on the other. But in contrast to ordinary commodities this use value is value in itself, namely the excess over the original value realised through the use of money as capital. The profit is this use value.

The use value of the loaned money lies in its being able to serve as capital and, as such, to produce the average profit under average conditions.<sup>57</sup>

<sup>&</sup>lt;sup>57</sup>: "The equitableness of taking interest depends not upon a man's making or not

What, now, does the industrial capitalist pay, and what is, therefore, the price of the loaned capital?

\*"That which men pay as interest for the use of what they borrow"\* is, according to Massic, \*"a part of the profit it is capable of producing."\* <sup>58</sup>

What the buyer of an ordinary commodity buys is its use value; what he pays for is its value. What the borrower of money buys is likewise its use value as capital; but what does he pay for? Surely not its price, or value, as in the case of other commodities. No change of form occurs in the value passing between borrower and lender, as occurs between buyer and seller when it exists in one instance in the form of money, and in another in the form of a commodity. The sameness of the given away and returned value is revealed here in an entirely different way. The sum of value, i. e., the money, is given away without an equivalent, and is returned after a certain period. The lender always remains the owner of the same value, even after it passes from his hands into those of the borrower. In an ordinary exchange of commodities money always comes from the buyer's side; but in a loan it comes from the side of the seller. He is the one who gives away money for a certain period, and the buyer of capital is the one who receives it as a commodity. But this is only possible as long as the money acts as capital and is therefore advanced. The borrower borrows money as capital, as a value producing more value. But at the moment when it is advanced it is still only potential capital, like any other capital at its starting-point, the moment it is advanced. It is only through its employment that it expands its value and realises itself as capital. However, it has to be returned by the borrower as realised capital, hence as value plus surplus value (interest). And the latter can only be a portion of the realised profit. Only a portion, not all of it. For the use value of the loaned capital to the borrower consists in producing profit for him. Otherwise there would not have been any alienation of use value on the lender's part. On the other hand, not all the profit can fall to the borrower's share. Otherwise he

making profit, but upon its" (the borrowed) "being capable of producing profit if rightly employed" (An Essay on the Governing Causes of the Natural Rate of Interest, wherein the sentiments of Sir W. Petty and Mr. Locke, on that head, are considered, London, 1750, p. 49. The author of this anonymous work is J. Massie).

<sup>&</sup>lt;sup>58</sup> [Ibid., p. 49.] "Rich people, instead of employing their money themselves ... let it out to other people for them to make profit of, reserving for the owners a proportion of the profits so made" (1. c., pp. 23, 24).

would pay nothing for the alienated use value, and would return the advanced money to the lender as ordinary money, not as capital, as realised capital, for it is realised capital only as  $M + \Delta M$ .

Both of them, lender and borrower, expend the same sum of money as capital. But it is only in the hands of the latter that it serves as capital. The profit is not doubled by the double existence of the same sum of money as capital for two persons. It can serve as capital for both of them only by dividing the profit. The portion which falls to the lender is called interest.

The entire transaction, as assumed, takes place between two kinds of capitalists—the money capitalist and the industrial or merchant capitalist.

It must always be borne in mind that here capital as capital is a commodity, or that the commodity here discussed is capital. All the relations in evidence here would therefore be irrational from the standpoint of an ordinary commodity, or from that of capital in so far as it acts as a commodity capital in the process of reproduction. Lending and borrowing, instead of selling and buying, is a distinction which here springs from the specific nature of the commodity—capital. Similarly, the fact that it is interest, not the price of the commodity, which is paid here. If we want to call interest the price of money capital, then it is an irrational form of price quite at variance with the conception of the price of commodities.<sup>59</sup> The price is here reduced to its purely abstract and meaningless form, signifying that it is a certain sum of money paid for something serving in one way or another as a use value; whereas the conception of price really signifies the value of some use value expressed in money.

Interest, signifying the price of capital, is from the outset quite an irrational expression. The commodity in question has a double value, first a value, and then a price different from this value, while price represents the expression of value in money. Money capital is nothing

<sup>59</sup> "The term 'VALUE',<sup>a</sup> when applied to CURRENCY, has three meanings ... 2) CUR-RENCY ACTUALLY IN HAND... compared with the same amount of CURRENCY to be received upon a future day. In this case the value of currency is measured by the rate of interest, and the rate of interest being determined BY THE RATIO BETWEEN THE AMOUNT OF LOANABLE CAPITAL AND THE DEMAND FOR IT" (Colonel R. Torrens, On the Operation of the Bank Charter Act of 1844, etc., 2nd ed., 1847, [pp. 5, 6]).

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.
but a sum of money, or the value of a certain quantity of commodities fixed in a sum of money. If a commodity is loaned out as capital, it is only a disguised form of a sum of money. Because what is loaned out as capital is not so and so many pounds of cotton, but so much and so much money existing in the form of cotton as its value. The price of capital, therefore, refers to it as to a sum of money, even if not currency, as Mr. Torrens thinks (see Footnote 59). How, then, can a sum of value have a price besides its own price, besides the price expressed in its own money form? Price, after all, is the value of a commodity (this is also true of the market price, whose difference from value is not one of quality, but only one of quantity, referring only to the magnitude of value) as distinct from its use value. A price which differs from value in quality is an absurd contradiction.<sup>60</sup>

Capital manifests itself as capital through self-expansion. The degree of its self-expansion expresses the quantitative degree in which it realises itself as capital. The surplus value or profit produced by it—its rate or magnitude—is measurable only by comparison with the value of the advanced capital. The greater or lesser self-expansion of interest-bearing capital is, therefore, likewise only measurable by comparing the amount of interest, its share in the total profits, with the value of the advanced capital. If, therefore, price expresses the value of the commodity, then interest expresses the self-expansion of money capital and thus appears as the price paid for it to the lender. This shows how absurd it is from the very first to apply hereto the simple relations of exchange through the medium of money in buying and selling, as Proudhon does. The basic premise is precisely that money functions as capital and may thus be transferred as such, i. e., as potential capital, to a third person.

Capital, however, appears here as a commodity, inasmuch as it is offered on the market, and the use value of money is actually alienated as capital. Its use value, however, lies in producing profit. The value of money or of commodities employed as capital does not depend on their value as money or as commodities, but on the quantity of surplus value they produce for their owner. The product of capital is profit. On the basis of capitalist production it is merely a dif-

<sup>60</sup>. "The ambiguity of the term 'value of money' or 'of the currency', when employed indiscriminately as it is, to signify both value in exchange for commodities and value in use of capital, is a constant source of confusion" (Tooke, *Inquiry into the Currency Principle*, p. 77). The main confusion (implied in the matter itself) that value as such (interest) becomes the use value of capital, has escaped Tooke. ferent use of money — whether it is expended as money, or advanced as capital. Money, or commodities, is in itself potentially capital, just as labour power is potential capital. Because, 1) money may be converted into elements of production and is, as is, merely an abstract expression of them — their existence as value; 2) the material elements of wealth have the property of potentially becoming capital, because their supplementary opposite, which makes them into capital, namely wage labour, is available on the basis of capitalist production.

The antithetical social features of material wealth—its antagonism to labour as wage labour—are already expressed in capitalist property as such, independently of the production process. This particular moment—separated from the capitalist production process itself of which it is the constant result, and as its constant result it is also its constant prerequisite—manifests itself in the fact that money, commodities are as such, latently, potentially capital, that they can be sold as capital, and that in this form they command the labour of others, claim to appropriate the labour of others, and therefore represent self-expanding values. It also becomes clearly apparent that this relationship, and not the labour offered as an equivalent on the part of the capitalist, supplies the title and the means to appropriate the labour of others.<sup>a</sup>

Furthermore, capital appears as a commodity, inasmuch as the division of profit into interest and profit proper is regulated by supply and demand, that is, by competition, just as the market prices of commodities. But the difference here is just as apparent as the analogy. If supply and demand coincide, the market price of commodities corresponds to their price of production, i. e., their price then appears to be regulated by the immanent laws of capitalist production, independently of competition, since the fluctuations of supply and demand explain nothing but deviations of market prices from prices of production. These deviations mutually balance one another, so that in the course of certain longer periods the average market prices equal the prices of production. As soon as supply and demand coincide, these forces cease to operate, i. e., compensate one another, and the general law determining prices then also comes to apply to individual cases. The market price then corresponds even in its immediate form, and not only as the average of market price movements, to the price of production, which is regulated by the immanent laws of the mode of

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, p. 474.

production itself. The same applies to wages. If supply and demand coincide, they neutralise each other's effect, and wages equal the value of labour power. But it is different with the interest on money capital. Competition does not, in this case, determine the deviations from the rule. There is rather no law of division except that enforced by competition, because, as we shall later see, no such thing as a "natural" rate of interest exists. By the natural rate of interest people merely mean the rate fixed by free competition. There are no "natural" limits for the rate of interest. Whenever competition does not merely determine the deviations and fluctuations, whenever, therefore, the neutralisation of opposing forces puts a stop to any and all determination, the thing to be determined becomes something arbitrary and lawless. More on this in the next chapter.

In the case of interest-bearing capital everything appears superficial: the advance of capital as mere transfer from lender to borrower; the reflux of realised capital as mere transfer back, as a return payment with interest, by borrower to lender. The same is true of the fact, immanent in the capitalist mode of production, that the rate of profit is not only determined by the relation of profit made in one single turnover to advanced capital value, but also by the length of this period of turnover, hence determined as profit yielded by industrial capital within definite spans of time. In the case of interest-bearing capital this likewise appears on the surface to mean that a definite interest is paid to the lender for a definite time span.

With his usual insight into the internal connection of things, the romantic Adam Müller says (*Elemente der Staatskunst*, Berlin, 1809, [Dritter Theil,] S. 138):

"In determining the prices of things, time is not considered; while in determining interest, time is the principal factor."

He does not see how the time of production and the time of circulation enter into the determination of commodity prices, and how this is just what determines the rate of profit for a given period of turnover of capital, whereas interest is determined by precisely this determination of profit for a given period. His sagacity here, as elsewhere, consists in observing the clouds of dust on the surface and presumptuously declaring this dust to be something mysterious and important.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 33, pp. 225-26.

# Chapter XXII

# DIVISION OF PROFIT. RATE OF INTEREST. "NATURAL" RATE OF INTEREST

The subject of this chapter, like all the other phenomena of credit we shall come across later on, cannot be analysed here in detail. The competition between lenders and borrowers and the resultant minor fluctuations of the money market fall outside the scope of our inquiry. The circuit described by the rate of interest during the industrial cycle requires for its presentation the analysis of this cycle itself, but this likewise cannot be given here. The same applies to the greater or lesser approximate equalisation of the rate of interest in the world market. We are here concerned with the independent form of interest-bearing capital and the individualisation of interest, as distinct from profit.

Since interest is merely a part of profit paid, according to our earlier assumption, by the industrial capitalist to the money capitalist, the maximum limit of interest is the profit itself, in which case the portion pocketed by the functioning capitalist would = 0. Aside from exceptional cases, in which interest might actually be larger than profit, but then could not be paid out of the profit, one might consider as the maximum limit of interest the total profit minus the portion (to be subsequently analysed) which resolves itself into wAGES OF SUPERIN-TENDENCE.<sup>a</sup> The minimum limit of interest is altogether indeterminable. It may fall to any level. Yet in that case there will always be counteracting influences to raise it again above this relative minimum.

"The relation between the sum paid for the use of capital and the capital itself expresses the rate of interest as measured in money."—"The rate of interest depends 1) on the rate of profit; 2) on the proportion in which the entire profit is divided between the lender and borrower" (*Economist*, January 22, 1853, [p. 89]). "If that which men pay as interest for the use of what they borrow, be a part of the profits it is capable of producing, this interest must always be governed by those profits" (Massie, 1. c., p. 49).

Let us first assume that there is a fixed relation between the total profit and that part of it which has to be paid as interest to the money capitalist. It is then clear that the interest will rise or fall with the total profit, and the latter is determined by the general rate of profit

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

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and its fluctuations. For instance, if the average rate of profit were = 20% and the interest =  $\frac{1}{4}$  of the profit, the rate of interest would = 5%; if the average rate of profit were = 16%, the rate of interest would = 4%. With the rate of profit at 20%, the rate of interest might rise to 8%, and the industrial capitalist would still make the same profit as he would at a rate of profit = 16% and a rate of interest =  $4\%_0$ , namely  $12\%_0$ . Should the interest rise only to  $6\%_0$  or  $7\%_0$ , he would still keep a larger share of the profit. If the interest amounted to a constant quota of the average profit, it would follow that the higher the general rate of profit, the greater the absolute difference between the total profit and the interest, and the greater the portion of the total profit pocketed by the functioning capitalist, and vice versa. Take it that the interest  $=\frac{1}{5}$  of the average profit. One-fifth of 10 is 2; the difference between the total profit and the interest = 8. Onefifth of 20 = 4; difference = 20 - 4 = 16;  $\frac{1}{5}$  of 25 = 5; difference = 25 - 5 = 20;  $\frac{1}{5}$  of 30 = 6; difference = 30 - 6 = 24;  $\frac{1}{5}$  of 35 = 7; difference = 35 - 7 = 28. The different rates of interest of 4, 5, 6, 7% would here always represent no more than  $\frac{1}{5}$ , or 20% of the total profit. If the rates of profit are different, therefore, different rates of interest may represent the same aliquot parts of the total profit, or the same percentage of the total profit. With such constant proportions of interest, the industrial profit (the difference between the total profit and the interest) would rise proportionately to the general rate of profit, and conversely.

All other conditions taken as equal, i. e., assuming the proportion between the interest and the total profit to be more or less constant, the functioning capitalist is able and willing to pay a higher or lower interest directly proportional to the level of the rate of profit.<sup>61)</sup> Since we have seen that the rate of profit is inversely proportional to the development of capitalist production, it follows that the higher or lower rate of interest in a country is in the same inverse proportion to the degree of industrial development, at least in so far as the difference in the rate of interest actually expresses the difference in the rates of profit. It shall later develop that this need not always be the case. In this sense it may be said that interest is regulated through profit, or, more precisely, the general rate of profit. And this mode of regulating interest applies even to its average.

 $^{61}$  "The natural rate of interest is governed by the profits of trade to particulars" (Massie, l. c., p. 51).

In any event the average rate of profit is to be regarded as the ultimate determinant of the maximum limit of interest.

The fact that interest is to be related to average profit will be considered presently at greater length. Whenever a specified entity, such as profit, is to be divided between two parties, the matter naturally hinges above all on the magnitude of the entity which is to be divided, and this, the magnitude of profit, is determined by its average rate. Suppose the general rate of profit, hence the magnitude of profit, for a capital of given size, say, = 100, is assumed as given. Then the variations of interest will obviously be inversely proportional to those of the part of profit remaining in the hands of the producing capitalist, working with a borrowed capital. And the circumstances determining the amount of profit to be distributed, of the value produced by unpaid labour, differ widely from those which determine its distribution between these two kinds of capitalists, and frequently produce entirely opposite effects.<sup>6 2</sup>

If we observe the cycles in which modern industry moves — state of inactivity, mounting revival, prosperity, overproduction, crisis, stagnation, state of inactivity, etc., cycles which fall beyond the scope of our analysis — we shall find that a low rate of interest generally corresponds to periods of prosperity or extra profit, a rise in interest separates prosperity and its reverse, and a maximum of interest up to a point of extreme usury corresponds to the period of crisis.<sup>63)</sup> The summer of 1843 ushered in a period of remarkable prosperity; the rate of interest, still  $4\frac{1}{2}$ % in the spring of 1842, fell to 2% in the spring and summer of 1843 <sup>64</sup>; in September it fell as low as  $1\frac{1}{2}$ % (Gilbart, 1. c., I, p. 166); whereupon it rose to 8% and higher during the crisis of 1847.

<sup>62)</sup> At this point the manuscript contains the following remark: "The course of this chapter shows that it is preferable, before analysing the laws of the distribution of profits, to ascertain first the way in which the division of quantity becomes one of quality. To make a transition from the previous chapter, we need but assume that interest is a certain indefinite portion of profit." [*F. E.*]

<sup>63</sup> "In the first period, immediately after pressure, money is abundant without speculation; in the second period, money is abundant and speculations abound; in the third period, speculation begins to decline and money is in demand; in the fourth period, money is searce and a pressure arrives" (Gilbart, *A Practical Treatise on Banking*, 5th ed., Vol. I, London, 1849, p. 149).

<sup>64</sup> Tooke explains this "by the accumulation of surplus capital necessarily accompanying the scarcity of profitable employment for it in previous years, by the release of hoards, and by the revival of confidence in commercial prospects" (*History of Prices from 1839 to 1847*, London, 1848, p. 54). It is possible, however, for low interest to go along with stagnation, and for moderately rising interest to go along with revived activity.

The rate of interest reaches its peak during crises, when money is borrowed to meet payments at any cost. Since a rise in interest implies a fall in the price of securities, this simultaneously offers a fine opportunity to people with available money capital, to acquire at ridiculously low prices such interest-bearing securities as must, in the regular course of things, at least regain their average price as soon as the rate of interest falls again.<sup>65</sup>

However, the rate of interest also has a tendency to fall quite independently of the fluctuations in the rate of profit. And, indeed, due to two main causes:

I. "Were we even to suppose that capital was never borrowed with any view but to productive employment, I think it very possible that interest might vary without any change in the rate of gross profits. For, as a nation advances in the career of wealth, a class of mcn springs up and increases more and more, who by the labours of their ancestors find themselves in the possession of funds sufficiently ample to afford a handsome maintenance from the interest alone. Very many also who during youth and middle age were actively engaged in business, retire in their latter days to live quietly on the interest of the sums they have themselves accumulated. This class, as well as the former, has a tendency to increase with the increasing riches of the country, for those who begin with a tolerable stock are likely to make an independence sooner than they who commence with little. Thus it comes to pass, that in old and rich countries, the amount of national capital belonging to those who are unwilling to take the trouble of employing it themselves, bears a larger proportion to the whole productive stock of the society, than in newly settled and poorer districts. How much more numerous in proportion to the population is the class of rentiers ... in England! As the class of rentiers increases, so also does that of lenders of capital, for they are one and the same" (Ramsay, An Essay on the Distribution of Wealth, pp. 201, 202).

II. The development of the credit system and the attendant evergrowing control of industrialists and merchants over the money savings of all classes of society that is effected through the bankers, and the progressive concentration of these savings in amounts which can serve as money capital, must also depress the rate of interest. More about this later.

With reference to the determination of the rate of interest, Ramsay says that it

<sup>63</sup> "An old customer of a banker was refused a loan upon a £200,000 bond; when about to leave to make known his suspension of payment, he was told there was no necessity for the step, under the circumstances the banker would buy the bond at £150,000" ([H. Roy], *The Theory of the Exchanges. The Bank Charter Act of 1844, etc.*, London, 1864, p. 80). "depends partly upon the rate of gross profits, partly on the proportion in which these are separated into PROFITS of capital and those OF ENTERPRISE.<sup>a</sup> This proportion again depends upon the competition between the lenders of capital and the borrowers; which competition is influenced, though by no means entirely regulated, by the rate of gross profits expected to be realised.<sup>66</sup> And the reason why competition is not exclusively regulated by this cause, is, because, on the one hand, many borrow without any view to productive employment; and, on the other, because the proportion of the whole capital to be lent, varies with the riches of the country independently of any change in gross profits" (Ramsay, l. c., pp. 206-07).

To determine the average rate of interest we must 1) calculate the average rate of interest during its variations in the major industrial cycles; and 2) find the rate of interest for investments which require long-term loans of capital.

The average rate of interest prevailing in a certain country — as distinct from the continually fluctuating market rates — cannot be determined by any law. In this sphere there is no such thing as a natural rate of interest in the sense in which economists speak of a natural rate of profit and a natural rate of wages. Massie has rightly said in this respect:

\*"The only thing which any man can be in doubt about on this oceasion, is, what proportion of these profits do of right belong to the borrower, and what to the lender; and this there is no other method of determining than by the opinions of borrowers and lenders in general; for right and wrong, in this respect, are only what common consent makes so"\* (Massic, l. c., p. 49).

Equating supply and demand — assuming the average rate of profit as given — is of no consequence at all here. Wherever else this formula is resorted to (and this is then practically correct), it serves as a formula to find the fundamental rule (the regulating limits or limiting magnitudes) which is independent of, and rather determines, competition; notably as a formula for those who are held captive by the practice of competition, and by its phenomena and the conceptions arising out of them, to arrive at what is again but a superficial idea of the inner connection of economic relations obtaining within competi-

<sup>66</sup> Since the rate of interest is on the whole determined by the average rate of profit, inordinate swindling is often bound up with a low rate of interest. For instance, the railway swindle in the summer of 1844. The rate of interest of the Bank of England was not raised to 3% until 16th October, 1844.

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition the term "profits of enterprise" is given in parentheses after its German equivalent.

tion. It is a method to pass from the variations that go with competition to the limits of these variations. This is not the case with the average rate of interest. There is no good reason why average conditions of competition, the balance between lender and borrower, should give the lender an interest rate of 3, 4, 5%, etc., or else a certain percentage of the gross profits, say 20% or 50%, on his capital. Where competition as such is the determining factor, the particular rate fixed is accidental, purely empirical, and only pedantry or fantasy would seek to represent this accident as a necessity.<sup>67</sup> Nothing is more amusing in the reports of Parliament for 1857 and 1858 concerning bank legislation and commercial crises than to hear of "the REAL RATE PROpuced" as the directors of the Bank of England, London bankers, country bankers, and professional theorists chatter back and forth, never getting beyond such commonplaces as that "the price paid for the use of loanable capital should vary with the supply of such capital", that "a high rate and a low profit cannot permanently exist", and similar platitudes.<sup>68)</sup> Customs, juristic tradition, etc., have as much to do with determining the average rate of interest as competition itself, in so far as it exists not merely as an average, but rather as actual magnitude. In many law disputes, where interest has to be calculated, an average rate of interest has to be assumed as the legal rate. If we

67: J.G. Opdyke, for instance, in his Treatise on Political Economy, New York, 1851, [pp. 86-87], makes a very unsuccessful attempt to explain the universality of a 5% rate of interest by eternal laws. Mr. Karl Arnd is still more naive in Die naturgemässe Volkswirtschaft, gegenüber dem Monopoliengeist und dem Kommunismus, etc., Hanau, 1845.It is stated there: "In the natural course of goods production there is just one phenomenon, which, in the fully settled countries, seems in some measure to regulate the rate of interest; this is the proportion in which the timber in European forests is augmented through their annual growth. This new growth occurs quite independently of their exchange value, at the rate of 3 or 4 to 100." (How queer that trees should see to their new growth independently of their exchange value!) "According to this a drop in the rate of interest below its present level in the richest countries cannot be expected" (pp. 124-25). (He means, because the new growth of the trees is independent of their exchange value, however much their exchange value may depend on their new growth.) This deserves to be called "the primordial forest rate of interest". Its discoverer makes a further laudable contribution in this work to "our science" as the "philosopher of the dog tax".39

<sup>68</sup> The Bank of England raises and lowers the rate of its discount, always, of course, with due consideration to the rate prevailing in the open market, in accordance with imports and exports of gold. "By which gambling in discounts, by anticipation of the alterations in the bank rate, has now become half the trade of the great heads of the money centre"—i. e., of the London money market. ([H. Roy], *The Theory of the Exchanges, etc.*, p. 113.)

inquire further as to why the limits of an average rate of interest cannot be deduced from general laws, we find the answer lies simply in the nature of interest. It is merely a part of the average profit. The same capital appears in two roles — as loanable capital in the lender's hands and as industrial, or commercial, capital in the hands of the functioning capitalist. But it functions just once, and produces profit just once. In the production process itself the nature of capital as loanable capital plays no role. How the two parties who have claim to it divide the profit is in itself just as purely empirical a matter belonging to the realm of accident as the distribution of percentage shares of a common profit in a business partnership. Two entirely different elements-labour power and capital-act as determinants in the division between surplus value and wages, which division essentially determines the rate of profit; these are functions of two independent variables, which limit one another; and it is their qualitative difference that is the source of the quantitative division of the produced value. We shall see later that the same occurs in the division of surplus value into rent and profit. Nothing of the kind occurs in the case of interest. Here the qualitative differentiation, as we shall presently see, proceeds rather from the *purely quantitative division* of the same sum of surplus value.

It follows from the aforesaid that there is no such thing as a "natural" rate of interest. But if, on the one hand, unlike in the case of the general rate of profit, there is no general law to determine the limits of the average interest, or average rate of interest, as distinct from the continually fluctuating market rates of interest, because it is merely a question of dividing the gross profit between two owners of capital under different titles, the rate of interest, be it the average or the market rate prevalent in each particular case, on the other hand, appears as a uniform, definite and tangible magnitude in a quite different way from the general rate of profit.<sup>69)</sup>

The rate of interest is similarly related to the rate of profit as the market price of a commodity is to its value. In so far as the rate of interest is determined by the rate of profit, this is always the general rate

<sup>69)</sup> "The price of commodities fluctuates' continually; they are all made for different uses; the money serves for all purposes. The commodities, even those of the same kind, differ according to quality; cash money is always of the same value, or at least is assumed to be so. Thus it is that the price of money, which we designate by the term interest, has a greater stability and uniformity than that of any other thing" (J. Steuart, *Principles of Political Economy*, French translation, 1789, IV, p. 27). of profit and not any specific rate of profit prevailing in some particular branch of industry, and still less any extra profit which an individual capitalist may make in a particular sphere of business.<sup>70</sup> It is a fact, therefore, that the general rate of profit appears as an empirical, given reality in the average rate of interest, although the latter is not a pure or reliable expression of the former.

It is indeed true that the rate of interest itself varies continually in accordance with the different classes of securities offered by borrowers, and in accordance with the length of time for which the money is borrowed; but it is uniform in each of these classes at a given moment. This distinction, then, does not militate against a fixed and uniform appearance of the rate of interest.<sup>71</sup>

The average rate of interest appears in every country over fairly long periods as a constant magnitude, because the general rate of profit varies only at longer intervals—in spite of constant variations in specific rates of profit, in which a change in one sphere is offset by an opposite change in another. And its relative constancy is revealed

<sup>70</sup>. "This rule of dividing profits is not, however, to be applied particularly to every lender and borrower, but to lenders and borrowers in general ... remarkably great and small gains are the reward of skill and the want of understanding, which lenders have nothing at all to do with; for as they will not suffer by the one, they ought not to benefit by the other. What has been said of particular men in the same business is applicable to particular sorts of business; if the merchants and tradesmen employed in any one branch of trade get more by what they borrow than the common profits made by other merchants and tradesmen of the same country, the extraordinary gain is theirs, though it required only common skill and understanding to get it; and not the lenders', who supplied them with money ... for the lenders would not have lent their money to carry on any branch of trade upon lower terms than would admit of paying so much as the common rate of interest; and therefore they ought not to receive more than that, whatever advantages may be made by their money" (Massie, 1. c., pp. 50, 51).

7.1 }

*	Bank rate	5%
	Market rate of discount, 60 days'drafts	3 5/8%
	Ditto, 3 months'	3 1/2%
	Ditto, 6 months'	3 5/16%
	Loans to bill-brokers, day to day	1 to 2%
	Ditto, for one week	3%
	Last rate for fortnight, loans to stockbrokers	4 3/+ to 5%
	Deposit allowance (banks)	3 1/2%
	Ditto (discount houses)	-3 to 3¹/₄%

How large this difference may be for one and the same day is shown in the preceding figures of the rate of interest of the London money market on December 9, 1889, taken from the City article of the *Daily News* of December 10. The minimum is 1%, the maximum 5%. [F. E.] precisely in this more or less constant nature of the average, or common, rate of interest.  $^{\rm a}$ 

As concerns the perpetually fluctuating market rate of interest, however, it exists at any moment as a fixed magnitude, just as the market price of commodities, because in the money market all loanable capital continually faces functioning capital as an aggregate mass, so that the relation between the supply of loanable capital on one side, and the demand for it on the other, decides the market level of interest at any given time. This is all the more so, the more the development, and the attendant concentration, of the credit system gives to loanable capital a general social character and throws it all at once on the money market. On the other hand, the general rate of profit is never anything more than a tendency, a movement to equalise specific rates of profit. The competition between capitalists-which is itself this movement toward equilibrium-consists here of their gradually withdrawing capital from spheres in which profit is for an appreciable length of time below average, and gradually investing capital into spheres in which profit is above average. Or it may also consist in additional capital distributing itself gradually and in varying proportions among these spheres. It is continual variation in supply and withdrawal of capital in regard to these different spheres, and never a simultaneous mass effect, as in the determination of the rate of interest.

We have seen that interest-bearing capital, although a category which differs absolutely from a commodity, becomes a commodity *sui* generis,<sup>b</sup> so that interest becomes its price, fixed at all times by supply and demand like the market price of an ordinary commodity. The market rate of interest, while fluctuating continually, appears therefore at any given moment just as constantly fixed and uniform as the market price of a commodity prevailing in each individual case. Money capitalists supply this commodity, and functioning capitalists buy it, creating the demand for it. This does not occur when equalisation creates a general rate of profit. If prices of commodities in one sphere are below or above the price of production (wherein we leave aside the fluctuations attendant upon the various phases of the industrial cycle in each and every enterprise) equalisation occurs through the expansion or curtailment of production, i. e., the expansion or

 $<sup>^{\</sup>rm a}$  In the 1894 German edition this English term is given in parentheses after its German equivalent. -  $^{\rm b}$  peculiar

curtailment of the masses of commodities thrown on the market by industrial capitals-caused by inflow or outflow of capital to and from individual spheres of production. It is by this equalisation of the average market prices of commodities to prices of production that deviations of specific rates of profit from the general, or average, rate of profit are corrected. It cannot be that in this process industrial or mercantile capital as such should ever assume the appearance of commodities vis-à-vis the buyer, as in the case of interest-bearing capital. If perceptible at all, this process is so only in the fluctuations and equalisations of market prices of commodities to prices of production, not as a direct fixation of the average profit. The general rate of profit is, indeed, determined 1) by the surplus value produced by the total capital, 2) by the proportion of this surplus value to the value of the total capital, and 3) by competition, but only in so far as this is a movement whereby capitals invested in particular production spheres seek to draw equal dividends out of this surplus value in proportion to their relative magnitudes. The general rate of profit, therefore, derives actually from causes far different and far more complicated than the market rate of interest, which is directly and immediately determined by the proportion between supply and demand, and hence is not as tangible and obvious a fact as the rate of interest. The specific rates of profit in various spheres of production are themselves more or less uncertain; but in so far as they appear, it is not their uniformity but their differences which are perceptible. The general rate of profit, however, appears only as the lowest limit of profit, not as an empirical, directly visible form of the actual rate of profit.

In emphasising this difference between the rate of interest and the rate of profit, we still omit the following two points, which favour consolidation of the rate of interest: 1) the historical preexistence of interest-bearing capital and the existence of a traditional general rate of interest; 2) the far greater direct influence exerted by the world market on establishing the rate of interest, irrespective of the economic conditions of a country, as compared with its influence on the rate of profit.

The average profit does not appear as a directly established fact, but rather is to be determined as an end result of the equalisation of opposite fluctuations. Not so with the rate of interest. It is a thing fixed daily in its general, at least local, validity—a thing which serves industrial and mercantile capitals even as a prerequisite and a factor in the calculation of their operations. It becomes the general endowment of every sum of money of £100 to yield 2, 3, 4, 5%. Meteorological reports never denote the readings of the barometer and thermometer with greater accuracy than stock exchange reports denote the rate of interest, not for one or another capital, but for capital in the money market, i.e., for loanable capital generally.<sup>a</sup>

In the money market only lenders and borrowers face one another. The commodity has the same form-money. All specific forms of capital in accordance with its investment in particular spheres of production or circulation are here obliterated. It exists in the undifferentiated homogeneous form of independent value-money. The competition of individual spheres does not affect it. They are all thrown together as borrowers of money, and capital confronts them all in a form in which it is as yet indifferent to the particular manner of its employment. Here, in the supply and demand of capital, it appears most emphatically as essentially the common capital of a classsomething industrial capital does only in the movement and competition between the individual spheres. On the other hand, money capital in the money market actually possesses the form, in which, indifferent to its specific employment, it is divided as a common element among the various spheres, among the capitalist class, as the requirements of production in each individual sphere may dictate. Moreover, with the development of large-scale industry money capital, so far as it appears on the market, is not represented by some individual capitalist, not the owner of one or another fraction of the capital in the market, but assumes the nature of a concentrated, organised mass, which, quite different from actual production, is subject to the control of bankers, i. e., the representatives of social capital. So that, as concerns the form of demand, loanable capital is confronted by the class as a whole, whereas in the province of supply it is loanable capital which obtains en masse.

These are some of the reasons why the general rate of profit appears blurred and hazy alongside the definite interest rate, which may fluctuate in magnitude, but always confronts borrowers as given and fixed because it varies uniformly for all of them. Just as variations in the value of money do not prevent it from having the same value vis-à-vis all commodities. Just as the daily fluctuations in market prices of commodities do not prevent them from being daily reported in

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 459-60.

the papers. So the rate of interest is regularly reported as "the price of money". It is so, because capital itself is being offered here in the form of money as a commodity. The fixation of its price is thus a fixation of its market price, as with all other commodities. The rate of interest, therefore, always appears as the general rate of interest, as so much money for so much money, as a definite quantity. The rate of profit, on the other hand, may vary even within the same sphere for commodities with the same market prices, depending on different conditions under which individual capitals produce the same commodity, because the rate of profit of an individual capital is not determined by the market price of a commodity, but rather by the difference between market price and cost price. And these different rates of profit can strike a balance — first within the same sphere and then between different spheres — only through continual fluctuations.<sup>a</sup>

(Note for later elaboration.) A specific form of credit: It is known that when money serves as a means of payment instead of a means of purchase, the commodity is alienated, but its value is realised only later. If payment is not made until after the commodity has again been sold, this sale does not appear as the result of the purchase; rather it is through this sale that the purchase is realised. In other words, the sale becomes a means of purchase. Secondly: titles to debts, bills of exchange, etc., become means of payment for the creditor. Thirdly: the compensation of titles to debts replaces money.

### Chapter XXIII

### INTEREST AND PROFIT OF ENTERPRISE

Interest, as we have seen in the two preceding chapters, appears originally, is originally, and remains in fact merely a portion of the profit, i. e., of the surplus value, which the functioning capitalist, industrialist or merchant has to pay to the owner and lender of money capital whenever he uses loaned capital instead of his own. If he employs only his own capital, no such division of profit takes place; the latter is then entirely his. Indeed, as long as the owners of the capital employ it on their own in the reproduction process, they do not compete in determining the rate of interest. This alone shows that the

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 461-62.

category of interest—impossible without determining the rate of interest—is alien to the movements of industrial capital as such.

\* The rate of interest may be defined to be that proportional sum which the lender is content to receive, and the borrower to pay, for a year or for any longer or shorter period, for the use of a certain amount of moneyed capital.... When the owner of a capital employs it actively in reproduction, he does not come under the head of those capitalists, the proportion of whom, to the number of borrowers, determines the rate of interest"\* (Th. Tooke, *A History of Prices*, London, 1838, II, pp. 355-56.)

It is indeed only the division of capitalists into money capitalists and industrial capitalists that transforms a portion of the profit into interest, that generally creates the category of interest; and it is only the competition between these two kinds of capitalists which creates the rate of interest.

As long as capital functions in the process of reproduction-even assuming that it belongs to the industrial capitalist and he has no need of paying it back to a lender—the capitalist, as a private individual, does not have at his disposal this capital itself, but only the profit, which he may spend as revenue. As long as his capital functions as capital, it belongs to the process of reproduction, is tied up in it. He is, indeed, its owner, but this ownership does not enable him to dispose of it in any other way, so long as he uses it as capital for the exploitation of labour. The same is true of the money capitalist. So long as his capital is loaned out and thereby serves as money capital, it brings him interest, a portion of the profit, but he cannot dispose of the principal. This is evident whenever he loans out his capital for, say, a year, or more, and receives interest at certain stipulated times without the return of his principal. But even the return of the principal makes no difference here. If he gets it back, he must always loan it out again, so long as it is to function for him as capital-here as money capital. As long as he keeps it in his own hands, it does not collect interest and does not act as capital; and as long as it does gather interest and does serve as capital, it is out of his hands. Hence the possibility of loaning out capital for all time. The following remarks by Tooke directed against Bosanquet are, therefore, entirely wrong. He quotes Bosanquet (Metallic, Paper, and Credit Currency, p. 73):

"Were the rate of interest reduced as low as 1%, capital borrowed would be placed nearly ON A PAR<sup>a</sup> with capital possessed."

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English expression is given in parentheses after its German equivalent.

### To this Tooke adds the following marginal note:

"That a capital borrowed at that, or even a lower rate, should be considered nearly on a par with capital possessed, is a proposition so strange as hardly to warrant serious notice were it not advanced by a writer so intelligent, and, on some points of the subject, so well informed. Has he overlooked the circumstance, or does he consider it of little consequence, that there must, by the supposition, be a condition of repayment?" (Th. Tooke, *An Inquiry into the Currency Principle*, 2nd ed., London, 1844, p. 80.)

If interest were = 0, the industrial capitalist operating on borrowed capital would stand on a par with a capitalist using his own capital. Both would pocket the same average profit, and capital, whether borrowed or owned, serves as capital only as long as it produces profit. The condition of return payment would alter nothing. The nearer the rate of interest approaches zero, falling, for instance, to 1%, the nearer borrowed capital is to being on a par with owner's capital. So long as money capital is to exist as money capital, it must always be loaned out, and indeed at the prevailing rate of interest, say of 1%, and always to the same class of industrial and commercial capitalists. So long as these function as capitalists, the sole difference between the one working with borrowed capital and the other with his own is that the former must pay interest and the latter must not; the one pockets the entire profit p, and the other p-i, the profit minus the interest. The nearer interest approaches zero, the nearer p-i approaches p, and hence the nearer the two capitals are to being on a par. The one must pay back the capital and borrow anew; yet the other must likewise advance it again and again to the production process, so long as his capital is to function, and cannot dispose of it freely, independent of this process. The sole remaining difference between the two is the obvious difference that one is the owner of his capital, and the other is not.

The question which now arises is this. How does this purely quantitative division of profit into net profit and interest turn into a qualitative one? In other words, how is it that a capitalist who employs solely his own, not borrowed capital, classifies a portion of his gross profit under the specific category of interest and as such calculates it separately? And, furthermore, how is it that all capital, whether borrowed or not, is differentiated as interest-bearing capital from itself as capital producing a net profit?

It is understood that not every accidental quantitative division of profit turns in this manner into a qualitative one. For instance, some industrial capitalists join hands to operate a business and then divide the profit among themselves in accordance with some legal agreement. Others do their business, each on his own, without any partners. These last do not calculate their profit under two heads — one part as individual profit, and the other as company profit for their non-existent partners. In this case the quantitative division therefore does not become a qualitative one. This occurs whenever ownership happens to be vested in several juridical persons. It does not occur whenever this is not the case.

In order to answer this question, we must dwell somewhat longer on the actual point of departure in the formation of interest; that is, we must proceed from the assumption that the money capitalist and the productive capitalist really confront one another not just as legally different persons, but as persons playing entirely different roles in the reproduction process, or as persons in whose hands the same capital really performs a two-fold and wholly different movement. The one merely loans it, the other employs it productively.

For the productive capitalist who works on borrowed capital, the gross profit falls into two parts - the interest, which he is to pay the lender, and the surplus over and above the interest, which makes up his own share of the profit. If the general rate of profit is given, this latter portion is determined by the rate of interest; and if the rate of interest is given, then by the general rate of profit. And furthermore: no matter how the gross profit, the actual value of the total profit, may diverge in each individual case from the average profit, the portion which belongs to the functioning capitalist is determined by the interest, since this is fixed by the general rate of interest (leaving aside any special legal stipulations) and assumed to be given beforehand, before the process of production begins, hence before its result, the gross profit, is achieved. We have seen that the actual specific product of capital is surplus value, or, more precisely, profit. But for the capitalist working on borrowed capital it is not profit, but profit minus interest, that portion of profit which remains to him after paying interest. This portion of the profit, therefore, necessarily appears to him to be the product of a capital as long as it is operative; and this it is, as far as he is concerned, because he represents capital only as functioning capital. He is its personification as long as it functions, and it functions as long as it is profitably invested in industry or commerce and such operations are undertaken with it through its employer as are prescribed by the branch of industry concerned. As distinct from

interest, which he has to pay to the lender out of the gross profit, the portion of profit which falls to his share necessarily assumes the form of industrial or commercial profit, or, to use a German term embracing both, the form of Unternehmergewinn (profit of enterprise). If the gross profit equals the average profit, the size of the profit of enterprise is determined exclusively by the rate of interest. If the gross profit deviates from the average profit, its difference from the average profit (after interest is deducted from both) is determined by all the circumstances which cause a temporary deviation, be it of the rate of profit in any particular sphere of production from the general rate of profit, or the profit of some individual capitalist in a certain sphere from the average profit of this particular sphere. We have seen however that the rate of profit within the production process itself does not depend on surplus value alone, but also on many other circumstances, such as purchase prices of the means of production, methods more productive than the average, savings of constant capital, etc. And aside from the price of production, it depends on special circumstances, and in every single business transaction on the greater or lesser shrewdness and industry of the capitalist, whether, and to what extent, he buys or sells above or below the price of production and thus appropriates a greater or smaller portion of the total surplus value in the process of circulation. In any case, the quantitative division of the gross profit turns here into a qualitative one, and all the more so because the quantitative division itself depends on what is to be divided, the manner in which the active capitalist manages his capital, and what gross profit it yields to him as a functioning capital, i.e., in consequence of his functions as an active capitalist. The functioning capitalist is here assumed as a non-owner of capital. Ownership of the capital is represented in relation to him by the money capitalist, the lender. The interest he pays to the latter thus appears as that portion of gross profit which is due to the ownership of capital as such. As distinct from this, that portion of profit which falls to the active capitalist appears now as profit of enterprise, deriving solely from the operations, or functions, which he performs with the capital in the process of reproduction, hence particularly those functions which he performs as entrepreneur in industry or commerce. In relation to him interest appears therefore as the mere fruit of owning capital, of capital as such abstracted from the reproduction process of capital, inasmuch as it does not "work", does not function; while profit of enterprise appears to him as the exclusive fruit of the functions which he performs

with the capital, as the fruit of the movement and performance of capital, of a performance which appears to him as his own activity, as opposed to the inactivity, the non-participation of the money capitalist in the production process. This qualitative distinction between the two portions of gross profit that interest is the fruit of capital as such, of the ownership of capital irrespective of the production process, and that profit of enterprise is the fruit of performing capital, of capital functioning in the production process, and hence of the active role played by the employer of the capital in the reproduction process --- this qualitative distinction is by no means merely a subjective notion of the money capitalist, on the one hand, and the industrial capitalist, on the other. It rests upon an objective fact, for interest flows to the money capitalist, to the lender, who is the mere owner of capital, hence represents only ownership of capital before the production process and outside of it; while the profit of enterprise flows to the functioning capitalist alone, who is non-owner of the capital.

The merely quantitative division of the gross profit between two different persons who both have different legal claims to the same capital, and hence to the profit produced by it, thus turns into a qualitative division for both the industrial capitalist in so far as he is operating on borrowed capital, and for the money capitalist, in so far as he does not himself apply his capital. One portion of the profit appears now as fruit due as such to capital in one form, as interest; the other portion appears as a specific fruit of capital in an opposite form, and thus as profit of enterprise. One appears exclusively as the fruit of owning the capital, the other as the fruit of operating with the capital, the fruit of performing capital, or of the functions performed by the active capitalist. And this ossification and individualisation of the two parts of the gross profit in respect to one another, as though they originated from two essentially different sources, must now take firm shape for the entire capitalist class and the total capital. And, indeed, regardless of whether the capital employed by the active capitalist is borrowed or not, and whether the capital belonging to the money capitalist is employed by himself or not. The profit of every capital, and consequently also the average profit established by the equalisation of capitals, splits, or is separated, into two qualitatively different, mutually independent and self-established parts, to wit-interest and profit of enterprise -- both of which are determined by particular laws. The capitalist operating with his own capital, like the one operating with borrowed capital, divides the gross profit into interest due to himself as owner, as his own lender, and into profit of enterprise due to him as to an active capitalist performing his function. As concerns this division, therefore, as a qualitative one, it is immaterial whether the capitalist really has to share with another, or not. The employer of capital, even when working with his own capital, splits into two personalities—the owner of capital and the employer of capital; with reference to the categories of profit which it yields, his capital also splits into capital-*property*, capital *outside* the production process, yielding interest of itself, and capital *in* the production process which yields a profit of enterprise through its function.

Interest, therefore, becomes firmly established in a way that it no longer appears as a division of gross profit of indifference to production, which occurs occasionally when the industrial capitalist operates with someone else's capital. His profit splits into interest and profit of enterprise even when he operates with his own capital. A merely quantitative division thus turns into a qualitative one. It occurs regardless of the fortuitous circumstance whether the industrial capitalist is, or is not, the owner of his capital. It is not only a matter of different quotas of profit assigned to different persons, but two different categories of profit which are differently related to the capital, hence related to different aspects of the capital.

Now that this division of gross profit into interest and profit of enterprise has become a qualitative one, it is very easy to discover the reasons why it acquires this character of a qualitative division for the total capital and the entire class of capitalists.<sup>a</sup>

Firstly, this follows from the simple empirical circumstance that the majority of industrial capitalists, even if in different numerical proportions, work with their own and with borrowed capital, and that at different times the proportion between one's own and borrowed capital changes.

Secondly, the transformation of a portion of the gross profit into the form of interest converts its other portion into profit of enterprise. The latter is, indeed, but the opposite form assumed by the excess of gross profit over interest as soon as this exists as a special category. The entire analysis of the problem how gross profit is differentiated into interest and profit of enterprise, resolves itself into the inquiry of

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, p. 493.

how a portion of the gross profit becomes universally ossified and individualised as interest. Yet historically interest-bearing capital existed as a completed traditional form, and hence interest as a completed subdivision of surplus value produced by capital, long before the capitalist mode of production and its attendant conceptions of capital and profit. Thus it is that to the popular mind money capital, or interest-bearing capital, is still capital as such, as capital par excellence. Thus it is, on the other hand, that up to the time of Massie the notion prevailed that it is money as such which is paid in interest. The fact that loaned capital yields interest whether actually employed as capital or not-even when borrowed only for consumption-lends strength to the idea that this form of capital exists independently. The best proof of the independence which interest possessed during the early periods of the capitalist mode of production in reference to profit, and which interest-bearing capital possessed in reference to industrial capital, is that it was discovered (by Massie and after him by Hume<sup>a</sup>) as late as the middle of the 18th century, that interest is but a portion of the gross profit, and that such a discovery was at all necessary.

Thirdly, whether the industrial capitalist operates with his own or with borrowed capital does not alter the fact that the class of money capitalists confronts him as a special kind of capitalists, money capital as an independent kind of capital, and interest as an independent form of surplus value peculiar to this specific capital.

Qualitatively speaking, interest is surplus value yielded by the mere ownership of capital; it is yielded by capital as such, even though its owner remains outside the reproduction process. Hence it is surplus value yielded by capital outside of its process.

Quantitatively speaking, that portion of profit which forms interest does not seem to be related to industrial or commercial capital as such, but to money capital, and the rate of this portion of surplus value, the rate of interest, reinforces this relation. Because, in the first place, the rate of interest is independently determined despite its dependence upon the general rate of profit, and, in the second place, like the market price of commodities, it appears in contrast to the intangible rate of profit as a fixed, uniform, tangible and always given

<sup>&</sup>lt;sup>a</sup> [J. Massie,] An Essay on the Governing Causes of the Natural Rate of Interest... D. Hume, "Of Interest" in: D. Hume, Essays and Treatises on Several Subjects, Vol. I, London, 1764. See also present edition, Vol. 34, pp. 89-92.

relation for all its variations. If all capital were in the hands of the industrial capitalists there would be no such thing as interest and rate of interest. The independent form assumed by the quantitative division of gross profit creates the qualitative one. If the industrial capitalist were to compare himself with the money capitalist, it would be his profit of enterprise alone, the excess of his gross profit over the average interest— the latter appearing to be empirically given by virtue of the rate of interest— that would distinguish him from the other person. If, on the other hand, he compares himself with the industrial capitalist working with his own, instead of borrowed, capital, the latter differs from him only as a money capitalist in pocketing the interest instead of paying it to someone else. The portion of gross profit distinguished from interest appears to him in either case as profit of enterprise, and interest itself as a surplus value yielded by capital as such, which it would yield even if not applied productively.

This is correct in the practical sense for the individual capitalist. He has the choice of making use of his capital by lending it out as interest-bearing capital, or of expanding its value on his own by using it as productive capital, regardless of whether it exists as money capital from the very first, or whether it still has to be converted into money capital. But to apply it to the total capital of society, as some vulgar economists do, and to go so far as to define it as the cause of profit, is, of course, preposterous.<sup>a</sup> The idea of converting all the capital into money capital, without there being people who buy and put to use means of production, which make up the total capital outside of a relatively small portion of it existing in money, is, of course, sheer absurdity. It would be still more absurd to presume that capital would yield interest on the basis of the capitalist mode of production without performing any productive function, i.e., without creating surplus value, of which interest is just a part; that the capitalist mode of production would run its course without capitalist production. If an untowardly large section of capitalists were to convert their capital into money capital, the result would be a frightful depreciation of money capital and a frightful fall in the rate of interest; many would at once face the impossibility of living on their interest, and would hence be compelled to reconvert into industrial capitalists. But we repeat that it is a fact for the individual capitalist. For this reason, even when operating with his own capital, he necessarily considers the part

<sup>&</sup>lt;sup>a</sup> Ibid., p. 475.

of his average profit which equals the average interest as fruit of his capital as such, set apart from the process of production; and as distinct from this portion singled out as interest, he considers the excess of the gross profit as mere profit of enterprise.

Fourthly: [A blank in the manuscript.]

We have seen, therefore, that the portion of profit which the functioning capitalist has to pay to the owner of borrowed capital is transformed into an independent form for a portion of the profit, which all capital as such, whether borrowed or not, yields under the name of interest. How large this portion is depends on the average rate of interest. Its origin is only revealed in the fact that the functioning capitalist, when owner of his capital, does not compete - at least not actively - in determining the interest rate. The purely quantitative division of the profit between two persons who have different legal titles to it has turned into a qualitative division, which seems to spring from the very nature of capital and profit. Because, as we have seen, as soon as a portion of profit universally assumes the form of interest, the difference between average profit and interest, or the portion of profit over and above the interest, assumes a form opposite to interest - the form of profit of enterprise. These two forms, interest and profit of enterprise, exist only as opposites. Hence, they are not related to surplus value, of which they are but parts placed under different categories, heads or names, but rather to one another. It is because one portion of profit turns into interest, that the other appears as profit of enterprise.

By profit we here always mean average profit, since variations do not concern us in this analysis, be they of individual profits or of profits in different spheres of production — hence variations caused by the competitive struggle and other circumstances affecting the distribution of the average profit, or surplus value. This applies generally to this entire inquiry.

Interest is then net profit, as Ramsay calls it,<sup>a</sup> which the ownership of capital yields as such, either simply to the lender, who remains outside the reproduction process, or to the owner who employs his capital productively. But in the latter's case, too, capital yields this net profit to him not in his capacity of functioning capitalist, but of money capitalist, of lender of his own capital as interest-bearing capital to himself as to a functioning capitalist. Just as the conversion of mon-

<sup>&</sup>lt;sup>a</sup> See this volume, pp. 360 and 377.

ey, and of value in general, into capital is the constant result of capitalist production, so is its existence as capital its constant precondition. By its ability to be transformed into means of production it continually commands unpaid labour and thereby transforms the processes of production and circulation of commodities into the production of surplus value for its owner. Interest is, therefore, the expression of the fact that value in general -- objectified labour in its general social form-value which assumes the form of means of production in the actual process of production, confronts living labour power as an independent power, and is a means of appropriating unpaid labour; and that it is such a power because it confronts the labourer as the property of another. But on the other hand, this antithesis to wage labour is obliterated in the form of interest, because interest-bearing capital as such has not wage labour, but productive capital for its opposite. The lending capitalist as such faces the capitalist performing his actual function in the process of reproduction, not the wage worker, who, precisely under capitalist production, is expropriated of the means of production. Interest-bearing capital is capital as property as distinct from capital as a function. But so long as capital does not perform its function, it does not exploit labourers and does not come into opposition to labour.

On the other hand, profit of enterprise is not related as an opposite to wage labour, but only to interest.

*Firstly*, assuming the average profit to be given, the rate of the profit of enterprise is not determined by wages, but by the rate of interest. It is high or low in inverse proportion to it.<sup>72</sup>

Secondly, the functioning capitalist derives his claim to profits of enterprise, hence the profit of enterprise itself, not from his ownership of capital, but from the function of capital, as distinct from the definite form in which it is only inert property. This stands out as an immediately apparent contrast whenever he operates with borrowed capital, and interest and profit of enterprise therefore go to two different persons. The profit of enterprise springs from the function of capital in the reproduction process, hence as a result of the operations, the acts by which the functioning capitalist promotes these functions of industrial and commercial capital. But to represent functioning capi-

<sup>&</sup>lt;sup>72) \*</sup> "The profits of enterprise depend upon the net profits of capital, not the latter upon the former." \* (Ramsay, *Essay on the Distribution of Wealth*, p. 214. For Ramsay net profits always mean interest.)

tal is not a sinecure, like representing interest-bearing capital. On the basis of capitalist production, the capitalist directs the processes of production and circulation. Exploiting productive labour entails exertion, whether he exploits it himself or has it exploited by someone else on his behalf. Therefore, as distinct from interest, his profit of enterprise appears to him as independent of the ownership of capital, but rather as the result of his functions as a non-proprietor—a *labourer*.

He necessarily conceives the idea for this reason that his profit of enterprise, far from being counterposed to wage labour and far from being the unpaid labour of others, is itself rather a wage or wAGES OF SU-PERINTENDENCE OF LABOUR,<sup>a</sup> higher than a common labourer's, 1) because the work is far more complicated, and 2) because he pays them to himself. The fact that his function as a capitalist consists in creating surplus value, i. e., unpaid labour, and creating it under the most economical conditions, is entirely lost sight of in the contrast that interest falls to the share of the capitalist even when he does not perform the function of a capitalist and is merely the owner of capital; and that, on the other hand, profit of enterprise does fall to the share of the functioning capitalist even when he is not the owner of the capital with which he operates. He forgets, due to the antithetical form of the two parts into which profit, hence surplus value, is divided, that both are merely parts of the surplus value, and that this division alters nothing in the nature, origin, and way of existence of surplus value.

In the process of reproduction the functioning capitalist represents capital as the property of another vis-à-vis the wage labourers, and the money capitalist, represented by the functioning capitalist, takes a hand in exploiting labour. The fact that the investing capitalist can perform his function of making the labourers work for him, or of employing means of production as capital, only as the personification of the means of production vis-à-vis the labourers, is forgotten over the contradiction between the function of capital in the reproduction process and the mere ownership of capital outside of the reproduction process.

In fact, the form of interest and profit of enterprise assumed by the two parts of profit, i. e., of surplus value, expresses no relation to labour, because this relation exists only between labour and profit, or

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

rather the surplus value as a sum, a whole, the unity of these two parts. The proportion in which the profit is divided, and the different legal titles by which this division is sanctioned, are based on the assumption that profit is already in existence. If, therefore, the capitalist is the owner of the capital with which he operates, he pockets the whole profit, or surplus value. It is absolutely immaterial to the labourer whether the capitalist does this, or whether he has to pay a part of it to a third person as its legal proprietor. The reasons for dividing the profit among two kinds of capitalists thus turn imperceptibly into the reasons for the existence of the profit, the surplus value, that is to be divided, and which capital as such derives from the reproduction process regardless of any subsequent division. Since interest is opposed to profit of enterprise, and profit of enterprise to interest, and since they are both counterposed to one another, but not to labour, it follows that profit of enterprise plus interest, i.e., profit, and further surplus value, are derived --- from what? From the antithetical form of its two parts! But profit is produced before its division is undertaken, and before there can be any thought of it.

Interest-bearing capital remains as such only so long as the loaned money is actually converted into capital and a surplus is produced with it, of which interest is a part. But this does not rule out that drawing interest, regardless of the process of production, is its organic property. So does labour power preserve its property of producing value only so long as it is employed and realised in the labour process; yet this does not argue against the fact that it is potentially, as a power, an activity which creates value, and that as such it does not spring from the process of production, but rather antecedes it. It is bought as such a capacity for creating value. One might also buy it without setting it to work productively; for purely personal ends, for instance, for personal services, etc. The same applies to capital. It is the borrower's affair whether he employs it as capital, hence actually sets in motion its inherent property of producing surplus value. What he pays for, is in either case the potential surplus value inherently contained in capital as a commodity.<sup>a</sup>

Let us now consider profit of enterprise in greater detail. Since the specific social attribute of capital under the capitalist mode

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, pp. 487-89.

of production — that of being property commanding the labour power of another — becomes fixed, so that interest appears as a part of surplus value produced by capital in this interrelation, the other part of surplus value — profit of enterprise — must necessarily appear as coming not from capital as such, but from the process of production, separated from its specific social attribute, whose distinct mode of existence is already expressed by the term interest on capital. But the process of production, separated from capital, is simply a labour process. Therefore, the industrial capitalist, as distinct from the owner of capital, does not appear as operating capital, but rather as a functionary irrespective of capital, or, as a simple agent of the labour process in general, as a labourer, and indeed as a wage labourer.<sup>a</sup>

Interest as such expresses precisely the existence of the conditions of labour as capital, in their social antithesis to labour, and in their transformation into personal power vis-à-vis and over labour. It represents the ownership of capital as a means of appropriating the products of the labour of others. But it represents this characteristic of capital as something which belongs to it outside the production process and by no means is the result of the specifically capitalist attribute of this production process itself. Interest represents this characteristic not as directly counterposed to labour, but rather as unrelated to labour, and simply as a relationship of one capitalist to another. Hence, as an attribute outside of and irrelevant to the relation of capital to labour. In interest, therefore, in that specific form of profit in which the antithetical character of capital assumes a selfestablished form, this is done in such a way that the antithesis is completely obliterated and abstracted. Interest is a relationship between two capitalists, not between capitalist and labourer.

On the other hand, this form of interest lends the other portion of profit the qualitative form of profit of enterprise, and further of wages of superintendence. The specific functions which the capitalist as such has to perform, and which fall to him as distinct from and opposed to the labourer, are presented as mere functions of labour. He creates surplus value not because he works as a capitalist, but because he *also* works, regardless of his capacity of capitalist. This portion of surplus value is thus no longer surplus value, but its opposite, an equiv-

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 492-93.

alent for labour performed. Due to the estranged character of capital, its antithesis to labour, being relegated to a place outside the actual process of exploitation, namely to the interest-bearing capital, this process of exploitation itself appears as a simple labour process in which the functioning capitalist merely performs a different kind of labour than the labourer. So that the labour of exploiting and the exploited labour both appear identical as labour. The labour of exploiting is just as much labour as exploited labour.<sup>a</sup> The social form of capital falls to interest, but expressed in a neutral and indifferent form. The economic function of capital falls to profit of enterprise, but abstracted from the specific capitalist character of this function.

The same thing passes through the mind of the capitalist in this case as in the case of the reasons indicated in Part II of this book for compensation in the equalisation to average profit. These reasons for compensation which enter the distribution of surplus value as determinants are distorted in a capitalist's mind to appear as bases of origin and the (subjective) justifications of profit itself.

The conception of profit of enterprise as the wages of superintendence, arising from the antithesis of profit of enterprise to interest, is further strengthened by the fact that a portion of profit may, indeed, be separated, and is separated in reality, as wages, or rather the reverse, that a portion of wages appears under the capitalist mode of production as integral part of profit. This portion, as Adam Smith correctly deduced,<sup>b</sup> presents itself in pure form, independently and wholly separated from profit (as the sum of interest and profit of enterprise), on the one hand, and on the other, from that portion of profit which remains, after interest is deducted, as profit of enterprise in the salary of management of those branches of business whose size, etc., permits of a sufficient division of labour to justify a special salary for a manager.<sup>c</sup>

The labour of superintendence and management is naturally required wherever the direct process of production assumes the form of a combined social process, and not of the isolated labour of independent producers.<sup>73</sup> However, it has a double nature.

<sup>73)</sup> "Superintendence is here" (in the case of the farm owner) "completely dispensed with" (J. E. Cairnes, *The Slave Power*, London, 1862, pp. 48, 49).

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 32, p. 495. - <sup>b</sup> A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, Book I, Ch. VI. - <sup>c</sup> Cf. present edition, Vol. 32, pp. 495-96.

On the one hand, all labour in which many individuals cooperate necessarily requires a commanding will to coordinate and unify the process, and functions which apply not to partial operations but to the total activity of the workshop, much as that of an orchestra conductor. This is a productive job, which must be performed in every combined mode of production.

On the other hand — quite apart from any commercial department — this supervision work necessarily arises in all modes of production based on the antithesis between the labourer, as the direct producer, and the owner of the means of production. The greater this antithesis, the greater the role played by supervision. Hence it reaches its peak in the slave system.<sup>74</sup>) But it is indispensable also in the capitalist mode of production, since the production process in it is simultaneously a process by which the capitalist consumes labour power. Just as in despotic states, supervision and all-round interference by the government involves both the performance of common activities arising from the nature of all communities, and the specific functions arising from the antithesis between the government and the mass of the people.

In the works of ancient writers, who had the slave system before them, both sides of the work of supervision are as inseparably combined in theory as they were in practice. Likewise in the works of modern economists, who regard the capitalist mode of production as absolute. On the other hand, as I shall presently illustrate with an example, the apologists of the modern slave system utilise the work of supervision quite as much as a justification of slavery, as the other economists do to justify the wage system.

The villicus in Cato's time:

"At the head of the estate with slave economy (*familia rustica*) stands the manager (*villicus*, derived from *villa*), who receives and expends, buys and sells, takes instructions from the master, in whose absence he gives orders and metes out punishment.... The manager naturally had more freedom of action than the other slaves; the Magonian books advise that he be permitted to marry, raise children, and have his own funds, and Cato recommends that he be married to the female manager; he alone probably had the prospect of winning his freedom from the master in the event of good behaviour. As for the rest, all formed a common household.... Every slave, including the

<sup>74)\*</sup> "If the nature of the work requires that the workmen" (viz., the slaves) "should be dispersed over an extended area, the number of overseers, and, therefore, the cost of the labour which requires this supervision, will be proportionately increased"\* (Cairnes, l. c., p. 44).

manager himself, was supplied his necessities at his master's expense at definite intervals and fixed rates, and had to get along on them...The quantity varied in accordance with labour, which is why the manager, for example, whose work was lighter than the other slaves', received a smaller ration than they" (Mommsen, *Römische Geschichte*, 2nd ed., 1856, I, pp. 809-10).

### Aristotle:

"Ο γὰρ δεσπότης ούχ ἐν τῶ χτᾶσθαι τοὺς δούλους, ἀλλ'ἐν τῶ χρῆσθαι δούλους." ("For the master" — the capitalist — "proves himself such not by obtaining slaves" — ownership of capital which gives him power to buy labour power — "but in employing slaves" — using labourers, nowadays wage labourers, in the production process.) "Εστί δε αὐτῆ ἡ ἐπιστὴμη οὐδὲν μέγα ἔχουσα οὐδὲ σεμνόν" ("But there is nothing great or sublime about this science") "ἅ γὰρ τὸν δοῦλον ἐπίστασθαι δεἰ ποιείν, ἐχεῖνον δεἰ ταῦτα επίστασθαι ἐπιτάττειν." ("But whatever the slave must be able to perform, the master must be able to order." "Διδ ὅσοις ἑξουσία μὴ αὐτοὺς χαχοπαθείν, ἐπίτροπος λαμβάνει ταυτήν τὴν τιμήν, αὐτοὶ δὲ πολιτεὐονται ἡ φίλοσοφοῦσιν." ("Whenever the masters are not compelled to plague themselves with supervision, the manager assumes this honour, while the masters attend to affairs of state or study philosophy." (Aristotle, *De republica*, Bekker edition, Book I, 7.).

Aristotle says in just so many words that supremacy in the political and economic fields imposes the functions of government upon the ruling powers, and hence that they must, in the economic field, know the art of consuming labour power. And he adds that this supervisory work is not a matter of great moment and that for this reason the master leaves the "honour" of this drudgery to an overseer as soon as he can afford it.

The labour of management and superintendence — so far as it is not a special function determined by the nature of all combined social labour, but rather by the antithesis between the owner of means of production and the owner of mere labour power, regardless of whether this labour power is purchased by buying the labourer himself, as it is under the slave system, or whether the labourer himself sells his labour power, so that the production process also appears as a process by which capital consumes his labour — this function arising out of the servitude of the direct producers has all too often been quoted to justify this relationship. And exploitation, the appropriation of the unpaid labour of others, has quite as often been represented as the reward justly due to the owner of capital for his work; but never better than by a champion of slavery in the United States, a lawyer named O'Connor, at a meeting held in New York on December 19, 1859, under the slogan of "Justice for the South".

<sup>&</sup>quot;NOW, GENTLEMEN," he said amid thunderous applause, "to that condition of

bondage the Negro is assigned by Nature... He has strength, and has the power to labour; but the Nature which created the power denied to him either the intellect to govern, or willingness to work." (Applause.) "Both were denied to him. And that Nature, which deprived him of the will to labour, gave him a master to coerce that will, and to make him a useful... servant in the clime in which he was capable of living useful for himself and for the master who governs him... I maintain that it is not injustice to leave the Negro in the condition in which Nature placed him, to give him a master to govern him ... nor is it depriving him of any of his rights to compel him to labour in return, and afford to that master just compensation for the labour and talent employed in governing him and rendering him useful to himself and to the society."<sup>a</sup>

Now, the wage labourer, like the slave, must have a master who puts him to work and rules over him. And assuming the existence of this relationship of lordship and servitude, it is quite proper to compel the wage labourer to produce his own wages and also the wages of supervision, as compensation for the labour of ruling and supervising him, or

"just compensation for the labour and talent employed in governing him and rendering him useful to himself and to the society".

The labour of superintendence and management, arising as it does out of an antithesis, out of the supremacy of capital over labour, and being therefore common to all modes of production based on class contradictions like the capitalist mode, is directly and inseparably connected, also under the capitalist system, with productive functions which all combined social labour assigns to individuals as their special tasks. The wages of an *epitropos*, or *régisseur*, as he was called in feudal France, are entirely divorced from profit and assume the form of wages for skilled labour whenever the business is operated on a sufficiently large scale to warrant paying for such a MANAGER,<sup>b</sup> although, for all that, our industrial capitalists are far from "attending to affairs of state or studying philosophy".

It has already been remarked by Mr. Ure<sup>75</sup> that it is not the industrial capitalists, but the industrial MANAGERS who are "the soul of our industrial system". Whatever concerns the commercial part of an

<sup>&</sup>lt;sup>75</sup> A. Ure, *Philosophy of Manufactures*, French translation, 1836, I, p. 67, where this Pindar of the manufacturers at the same time testifies that most manufacturers have not the slightest understanding of the mechanism which they set in motion.<sup>c</sup>

<sup>&</sup>lt;sup>a</sup> New-York Daily Tribune, No. 5852, December 20, 1859, pp. 7-8. - <sup>b</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent. - <sup>c</sup> Cf. present edition, Vol. 33, pp. 495 and 501.

establishment we have already said all that is necessary in the preceding part.<sup>a</sup>

The capitalist mode of production itself has brought matters to a point where the labour of superintendence, entirely divorced from the ownership of capital, is always readily obtainable. It has, therefore, come to be useless for the capitalist to perform it himself. An orchestra conductor need not own the instruments of his orchestra, nor is it within the scope of his duties as conductor to have anything to do with the "wages" of the other musicians. Cooperative factories furnish proof that the capitalist has become no less redundant as a functionary in production as he himself, looking down from his high perch, finds the big landowner redundant. Inasmuch as the capitalist's labour does not originate in the purely capitalistic process of production, and hence does not cease on its own when capital ceases; inasmuch as it does not confine itself solely to the function of exploiting the labour of others; inasmuch as it therefore originates from the social form of the labour process, from combination and cooperation of many in pursuance of a common result, it is just as independent of capital as that form itself as soon as it has burst its capitalistic shell. To say that this labour is necessary as capitalistic labour, or as a function of the capitalist. only means that the vulgus is unable to conceive the forms developed in the lap of the capitalist mode of production, separate and free from their antithetical capitalist character.<sup>b</sup> The industrial capitalist is a worker, compared to the money capitalist, but a worker in the sense of capitalist, i. e., an exploiter of the labour of others. The wage which he claims and pockets for this labour is exactly equal to the appropriated quantity of another's labour and depends directly upon the rate of exploitation of this labour, in so far as he undertakes the effort required for exploitation; it does not, however, depend on the degree of exertion that such exploitation demands, and which he can shift to a manager for moderate pay. After every crisis there are enough ex-manufacturers in the English factory districts who will supervise, for low wages, what were formerly their own factories in the capacity of managers of the new owners, who are frequently their creditors.<sup>76</sup>

<sup>76</sup>: In a case known to me, following the crisis of 1868, a bankrupt manufacturer became the paid wage labourer of his own former labourers. The factory was operated after the bankruptcy of its owner by a labourers' cooperative, and its former owner was employed as manager.—F. E.

<sup>&</sup>lt;sup>a</sup> See this volume, pp. 287-89. - <sup>b</sup> Cf. present edition, Vol. 32, pp. 497-98 and 504.

The wages of management both for the commercial and industrial manager are completely isolated from the profits of enterprise in the cooperative factories of labourers, as well as in capitalist stock companies. The separation of wages of management from profits of enterprise, purely accidental at other times, is here constant. In a cooperative factory the antagonistic nature of the labour of supervision disappears, because the manager is paid by the labourers instead of representing capital counterposed to them. Stock companies in general-developed with the credit system-have an increasing tendency to separate this work of management as a function from the ownership of capital, be it self-owned or borrowed. Just as the development of bourgeois society witnessed a separation of the functions of judges and administrators from landownership, whose attributes they were in feudal times. But since, on the one hand, the mere owner of capital, the money capitalist, has to face the functioning capitalist, while money capital itself assumes a social character with the advance of credit, being concentrated in banks and loaned out by them instead of by its direct owners, and since, on the other hand, the mere manager who has no title whatever to the capital, whether through borrowing it or otherwise, performs all the real functions pertaining to the functioning capitalist as such, only the functionary remains and the capitalist disappears as superfluous from the production process.

It is manifest from the public accounts of the cooperative factories in England <sup>77</sup>) that — after deducting the manager's wages, which form a part of the invested variable capital much the same as wages of other labourers — the profit was higher than the average profit, although at times they paid a much higher interest than did private manufacturers. The source of greater profits in all these cases was greater economy in the application of constant capital. What interests us in this, however, is the fact that here the average profit (= interest + profit of enterprise) presents itself actually and palpably as a magnitude wholly independent of the wages of management. Since the profit was higher here than average profit, the profit of enterprise was also higher than usual.

The same situation is observed in relation to some capitalist stock

 $<sup>^{77)}</sup>$  The accounts quoted here go no further than 1864, since the above was written in 1865.—F. E.

companies, such as JOINT-STOCK BANKS<sup>a</sup>. The London and Westminster Bank paid an annual dividend of 30% in 1863, while the Union Bank of London and others paid 15%. Aside from the directors' salary the interest paid for deposits is here deducted from gross profit. The high profit is to be explained here by the moderate proportion of paid-in capital to deposits. For instance, in the case of the London and Westminster Bank, in 1863: paid-in capital, £1,000,000; deposits, £14,540,275. As for the Union Bank of London, in 1863: paid-in capital, £600,000; deposits, £.12,384,173.

Profit of enterprise and wages of supervision, or management, were confused originally due to the antagonistic form assumed in respect to interest by the excess of profit. This was further promoted by the apologetic aim of representing profit not as a surplus value derived from unpaid labour, but as the capitalist's wages for work performed by him. This was met on the part of socialists by a demand to reduce profit actually to what it pretended to be theoretically, namely, mere wages of superintendence.<sup>b</sup> And this demand was all the more obnoxious to theoretical embellishment, the more these wages of superintendence, like any other wage, found their definite level and definite market price, on the one hand, with the development of a numerous class of industrial and commercial managers,<sup>78</sup> and the more they fell, on the other, like all wages for skilled labour, with the general development which reduces the cost of production of specially trained labour power.<sup>79</sup> With the development of cooperation on the part of the labourers, and of stock enterprises on the part of the bourgeoisie, even the last pretext for the confusion of profit of enterprise and wages of management was removed, and profit appeared also in practice

<sup>781</sup> "Masters are labourers as well as their journeymen. In this character their interest is precisely the same as that of their men. But they are also either capitalists, or the agents of the capitalists, and in this respect their interest is decidedly opposed to the interests of the workmen" (p. 27). "The wide spread of education among the journeymen mechanics of this country diminishes daily the value of the labour and skill of almost all masters and employers by increasing the number of persons who possess their peculiar knowledge" (p. 30, Hodgskin, *Labour Defended Against the Claims of Capital, etc.*, London, 1825).

<sup>79</sup>) "The general relaxation of conventional barriers, the increased facilities of education tend to bring down the wages of skilled labour instead of raising those of the unskilled" (J. St. Mill, *Principles of Political Economy*, 2nd ed., London, 1849, I, p. 479).

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent. - <sup>b</sup> Cf. present edition, Vol. 32, p. 497.

as it undeniably appeared in theory, as mere surplus value, a value for which no equivalent was paid, as realised unpaid labour. It was then seen that the functioning capitalist really exploits labour, and that the fruit of his exploitation, when working with borrowed capital, was divided into interest and profit of enterprise, an excess of profit over interest.

On the basis of capitalist production a new swindle develops in stock enterprises with respect to wages of management, in that boards of numerous managers or directors are placed next and above the actual director, for whom supervision and management serve only as a pretext to plunder the stockholders and amass wealth. Very curious details concerning this are to be found in *The City or the Physiology of London Business; with Sketches on 'Change, and the Coffee Houses*, London, 1845.

What bankers and merchants gain by the direction of eight or nine different companies, may be seen from the following illustration: The private balance sheet of Mr. Timothy Abraham Curtis, presented to the Court of Bankruptcy when that gentleman failed, exhibited a sample of the income netted from directorship ... between £800 and £900 a year. Mr. Curtis having been associated with the Courts of the Bank of England, and the East India House, it was considered quite a plum for a public company to acquire his services in the boardroom" (pp. [81,] 82).

The remuneration of the directors of such companies for each weekly meeting is at least one guinea. The proceedings of the Court of Bankruptcy show that these wages of supervision were, as a rule, inversely proportional to the actual supervision performed by these nominal directors.

#### Chapter XXIV

# EXTERNALISATION OF THE RELATIONS OF CAPITAL IN THE FORM OF INTEREST-BEARING CAPITAL

The relations of capital assume their most external and most fetishlike form in interest-bearing capital. We have here M - M', money creating more money, self-expanding value, without the process that mediates these two extremes. In merchant's capital, M - C - M', there is at least the general form of the capitalistic movement, although it confines itself solely to the sphere of circulation, so that profit appears merely as profit derived from alienation; but it is at least seen to be the product of a social *relation*, not the product of a mere
thing. The form of merchant's capital at least presents a process, a unity of opposing phases, a movement that breaks up into two opposite actions — the purchase and the sale of commodities. This is obliterated in M - M', the form of interest-bearing capital. For instance, if  $\pounds 1,000$  are loaned out by a capitalist at a rate of interest of 5%, the value of  $\pounds 1,000$  as a capital for one year = C + Ci'; where C is the capital and i' the rate of interest. Hence,  $5\% = \frac{5}{100} = \frac{1}{20}$ , and  $1,000 + 1,000 \times \frac{1}{20} = \pounds 1,050$ . The value of  $\pounds 1,000$  as capital is not a simple magnitude. It is a relationship of magnitudes, a relationship of the principal sum, as a given value, to itself as a self-expanding value, as a principal sum which has produced a surplus value.<sup>a</sup> And capital as such, as we have seen, assumes this form of a directly self-expanding value for all active capitalists, whether they operate with their own or borrowed capital.

M-M'. We have here the original starting-point of capital, money in the formula M - C - M' reduced to its two extremes M - M', in which  $M' = M + \Delta M$ , money creating more money. It is the primary and general formula of capital reduced to a meaningless condensation. It is ready capital, a unity of the process of production and the process of circulation, and hence capital yielding a definite surplus value in a particular period of time. In the form of interest-bearing capital this appears directly, unassisted by the processes of production and circulation. Capital appears as a mysterious and self-creating source of interest - the source of its own increase. The thing (money, commodity, value) is now capital even as a mere thing, and capital appears as a mere thing. The result of the entire process of reproduction appears as a property inherent in the thing itself. It depends on the owner of the money, i. e., of the commodity in its continually exchangeable form, whether he wants to spend it as money or loan it out as capital. In interest-bearing capital, therefore, this automatic fetish, self-expanding value, money generating money, is brought out in its pure state and in this form it no longer bears the birthmarks of its origin. The social relation is consummated in the relation of a thing, of money, to itself.<sup>b</sup> Instead of the actual transformation of money into capital, we see here only form without content. As in the case of labour power, the use value of money here is its capacity of creating value — a value greater than it contains. Money as

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 32, pp. 476-77. - <sup>b</sup> Ibid., p. 451.

money is potentially self-expanding value and is loaned out as such which is the form of sale for this singular commodity. It becomes a property of money to generate value and yield interest, much as it is an attribute of pear-trees to bear pears. And the money lender sells his money as just such an interest-bearing thing. But that is not all. The actually functioning capital, as we have seen, presents itself in such a light, that it seems to yield interest not as a functioning capital, but as capital in itself, as money capital.<sup>a</sup>

This, too, becomes distorted. While interest is only a portion of the profit, i. e., of the surplus value, which the functioning capitalist squeezes out of the labourer, it appears now, on the contrary, as though interest were the typical product of capital, the primary matter, and profit, in the shape of profit of enterprise, were a mere accessory and by-product of the process of reproduction. Thus we get the fetish form of capital and the conception of fetish capital. In M - M' we have the meaningless form of capital, the perversion and materialisation of production relations in their highest degree, the interest-bearing form, the simple form of capital, in which it antecedes its own process of reproduction. It is the capacity of money, or of a commodity, to expand its own value independently of reproduction — which is a mystification of capital in its most flagrant form.

For vulgar political economy, which seeks to represent capital as an independent source of value, of value creation, this form is naturally a veritable find, a form in which the source of profit is no longer discernible, and in which the result of the capitalist process of production — divorced from the process — acquires an independent existence.<sup>b</sup>

It is not until capital is money capital that it becomes a commodity, whose capacity for self-expansion has a definite price quoted in every prevailing rate of interest.

As interest-bearing capital, and particularly in its direct form of interest-bearing money capital (the other forms of interest-bearing capital, which do not concern us here, are derivatives of this form and presuppose its existence), capital assumes its pure fetish form, M - M' being the subject, the saleable thing. *Firstly*, through its continual existence as money, a form, in which all its specific attributes are obliterated and its real elements invisible. For money is precisely that form in which the distinctive features of commodities as use

<sup>&</sup>lt;sup>a</sup> Ibid., p. 457. - <sup>b</sup> Ibid., p. 458.

values are obscured, and hence also the distinctive features of the industrial capitals which consist of these commodities and conditions of their production. It is that form, in which value — in this case capital — exists as an independent exchange value. In the reproduction process of capital, the money form is but transient — a mere point of transit. But in the money market capital always exists in this form. Secondly, the surplus value produced by it, here again in the form of money, appears as an inherent part of it. As the growing process is to trees, so generating money  $(\tau \delta x \mathbf{o} \varsigma)^a$  appears innate in capital in its form of money capital.<sup>b</sup>

In interest-bearing capital the movement of capital is contracted. The intervening process is omitted. In this way, a capital = 1,000 is fixed as a thing, which in itself = 1,100, and which is transformed after a certain period into 1,100 just as wine stored in a cellar improves its use value after a certain period. Capital is now a thing, but as a thing it is capital. Money now has love in its body.<sup>c</sup> As soon as it is loaned out, or invested in the reproduction process (inasmuch as it yields interest to the functioning capitalist as its owner, separate from profit of enterprise), interest on it grows, no matter whether it is awake or asleep, is at home or abroad, by day or by night. Thus interest-bearing money capital (and all capital is money capital in terms of its value, or is considered as the expression of money capital) fulfils the most fervent wish of the hoarder.

It is this ingrown existence of interest in money capital as in a thing (this is how the production of surplus value through capital appears here), which occupies Luther's attention so thoroughly in his naïve onslaught against usury.<sup>d</sup> After demonstrating that interest may be demanded if the failure to repay a loan on a definite date caused a loss to a lender, who himself required it to make some payment, or resulted in his missing an opportunity to make a profit on a bargain, for instance, in buying a garden, Luther continues:

"But since I lent you the hundred guilders, you have caused me to suffer two-fold damage because I cannot pay on the one hand and cannot buy on the other and thus must suffer loss on both sides. This is called *duplex interesse, damni emergentis et lucri cessantis...*<sup>e</sup> Having heard that Hans has suffered loss on the hundred guilders which he

<sup>&</sup>lt;sup>a</sup> Tokos — to bear, produce, product; figuratively: interest on money lent. - <sup>b</sup> Cf. present edition, Vol. 32, pp. 462-63. - <sup>c</sup> Allusion to a passage in Goethe's Faust, Part I, Scene 5, "Auerbach's Cellar in Leipzig"; cf. present edition, Vol. 30, p.112 and Vol. 32, p. 526. - <sup>d</sup> Ibid., pp. 535-38. - <sup>c</sup> Twofold compensation, for the loss incurred and for the gain missed.

lent and demands just recompense for this loss, they rush in and charge such double compensation on every 100 guilders, namely, for expenses incurred and for the inability to buy the garden, just as though every hundred guilders could grow double interest naturally, so that whenever they have a hundred guilders, they loan them out and charge for two such losses which however they have not incurred at all... Therefore thou art a usurer, who makes good thine own imagined losses with your neighbour's money, losses which no one has caused thee and which thou canst neither prove nor calculate. The lawyers call such losses non verum, sed phantasticum interesse.<sup>a</sup> A loss which each man dreams up for himself... It will not do to say I might incur a loss because I might not have been able to pay or buy. That would mean ex contingente necessarium, b making something that must be out of something which is not, to turn a thing which is uncertain into a thing which is absolutely sure. Would such usury not eat up the world in a few years?... If the lender accidentally incurs a loss through no fault of his own, he must be recompensed, but it is different in such deals and just the reverse. There he seeks and invents losses to the detriment of his needy neighbours; thus he wants to maintain himself and get rich, to be lazy and idle and to live in luxury and splendour on other people's labour and worry, danger and loss. So that I sit behind the stove and let my hundred guilders gather wealth for me throughout the land, and, because they are only loaned, I keep them safely in my purse without any risk or worry; my friend, who would not like that?" (Martin Luther, An die Pfarrherrn wider den Wucher zu predigen, etc., Wittenberg, 1540).

The conception of capital as a self-reproducing and self-expanding value, lasting and growing eternally by virtue of its innate properties — hence by virtue of the hidden quality of scholasticists — has led to the fabulous fancies of Dr. Price, which outdo by far the fantasies of the alchemists; fancies, in which Pitt<sup>c</sup> believed in all earnest, and which he used as pillars of his financial administration in his laws concerning the sinking fund.<sup>40</sup>

"Money bearing compound interest increases at first slowly. But, the rate of increase being continually accelerated, it becomes in some time so rapid, as to mock all the powers of the imagination. One penny, put out at our Saviour's birth to 5 per cent compound interest, would, before this time, have increased to a greater sum, than would be contained in a hundred and fifty millions of earths, all solid gold. But if put out to simple interest, it would, in the same time, have amounted to no more than seven shillings and four pence half-penny. Our government has hitherto chosen to improve money in the last, rather than the first of these ways."<sup>80</sup>

<sup>80</sup> Richard Price, An Appeal to the Public on the Subject of the National Debt, London, 1772, [pp. 18-19]. He cracks the naïve joke: "It is borrowing money at simple interest, in order to improve it at compound interest" (R. Hamilton, An Inquiry Concerning the Rise and Progress of the National Debt of Great Britain, 2nd ed., Edinburgh, 1814, [p. 133]). According to this, borrowing would be the safest means also for private people to gather wealth. But if I borrow  $\pounds 100$  at 5% annual interest, I have to pay  $\pounds 5$  at

<sup>&</sup>lt;sup>a</sup> not real but imagined losses. - <sup>b</sup> making a necessity out of accident. - <sup>c</sup> See present edition, Vol. 33, pp. 222-24.

His fancy flies still higher in his Observations on Reversionary Payments, etc., London, 1772.

"A shilling put out to 6% compound interest at our Saviour's birth" (presumably in the Temple of Jerusalem) "would ... have increased to a greater sum than the whole solar system could hold, supposing it a sphere equal in diameter to the diameter of Saturn's orbit." "A state need never therefore be under any difficulties; for with the smallest savings it may in as little time as its interest can require pay off the largest debts" [pp. XIII, XIV].

What a pretty theoretical introduction to the national debt of England!

Price was simply dazzled by the gargantuan dimensions obtained in a geometrical progression. Since he took no note of the conditions of reproduction and labour, and regarded capital as a self-regulating automaton, as a mere number that increases itself (just as Malthus did with respect to population in his geometrical progression),<sup>a</sup> he was struck by the thought that he had found the law of its growth in the formula  $s = c(1 + i)^n$ , in which s = the sum of capital + compound interest, c = advanced capital, i = rate of interest (expressed in aliquot parts of 100) and n stands for the number of years in which this process takes place.

Pitt takes Dr. Price's mystification quite seriously. In 1786 the House of Commons had resolved to raise  $\pounds 1$  million for the public weal. According to Price, in whom Pitt believed, there was, of course, no better way than to tax the people, so as to "accumulate" this sum after raising it, and thus to spirit away the national debt through the mystery of compound interest. The above resolution of the House of

the end of the year, and even if the loan lasts for 100 million years, I have meanwhile only £100 to loan every year and £5 to pay every year. I can never manage by this process to loan £105 when borrowing £100. And how am I going to pay 5%? By new loans, or, if it is the state, by new taxes. Now, if the industrial capitalist borrows money, and his profit amounts to, say, 15%, he may pay 5% interest, spend 5% for his private expenses (although his appetite grows with his income), and capitalise 5%. In this case, 15% is the precondition for paying continually 5% interest. If this process continues, the rate of profit, for the reasons indicated in former chapters, will fall from 15% to, say, 10%. But Price entirely forgets that the interest of 5% presupposes a rate of profit of 15%, and assumes it to continue with the accumulation of capital. He has nothing whatsoever to do with the actual process of accumulation, but rather only with lending money and getting it back with compound interest. How that is accomplished is immaterial to him, since it is the innate property of interest-bearing capital.

<sup>&</sup>lt;sup>a</sup> [Th. R. Malthus], An Essay on the Principle of Population ..., London, 1798, pp. 25-26.

Commons was soon followed up by Pitt with a law which ordered the accumulation of  $\pounds 250,000$ 

"until, with the expired annuities, the fund should have grown to £4,000,000 annually" (Act 26, George III, Chap. 31).<sup>a</sup>

In his speech of 1792, in which Pitt proposed that the amount devoted to the sinking fund be increased, he mentioned machines, credit, etc., among the causes of England's commercial supremacy, but as

"the most wide-spread and enduring cause, that of accumulation. This principle, he said, was completely developed in the work of Smith, that genius ... and this accumulation, he continued, was accomplished by laying aside at least a portion of the annual profit for the purpose of increasing the principal, which was to be employed in the same manner the following year, and which thus yielded a continual profit" [pp. 178-79].

With Dr. Price's aid Pitt thus converts Smith's theory of accumulation into enrichment of a nation by means of accumulating debts, and thus arrives at the pleasant progression of an infinity of loans—loans to pay loans.<sup>b</sup>

It had already been noted by Josiah Child, the father of modern banking, that " $\pounds 100$  at 10% would produce in 70 years by compound interest  $\pounds 102,400$ ". (*Traités sur le commerce, etc.*, par J. Child, traduit, etc., Amsterdam et Berlin, 1754, p. 115. Written in 1669.)<sup>41</sup>

How thoughtlessly Dr. Price's conception is applied by modern economists, is shown in the following passage from the *Economist*:

\*Capital, with compound interest on every portion of capital saved, is so allengrossing that all the wealth in the world from which income is derived, has long ago become the interest of capital... All rent is now the payment of interest on capital previously invested in the land."\* (*Economist*, July 19, 1851.)

In its capacity of interest-bearing capital, capital claims the ownership of all wealth which can ever be produced, and everything it has received so far is but an instalment for its all-engrossing appetite. By its innate laws, all surplus labour which the human race can ever perform belongs to it. Moloch.

In conclusion, the following hodge-podge by the romantic Müller:

"Dr. Price's enormous increase of compound interest, or of the self-accelerating

<sup>&</sup>lt;sup>a</sup> "An Act for vesting certain sums in commissioners, at the end of every quarter of a year, to be by them applied to the reduction of the national debt" (Anno 26 Georgii III, Regis, cap. 31). - <sup>b</sup> Cf. present edition, Vol. 33, pp. 223-24.

forces of man, presupposes, if it is to produce such enormous effects, an undivided, or uninterrupted, uniform order for several centuries. As soon as capital is divided, cut up into several independently growing shoots, the total process of accumulating forces begins anew. Nature has distributed over a span of about 20 to 25 years the progression of energy which falls on an average to the share of every labourer (!). After the lapse of this time the labourer leaves his career and must transfer the capital accumulated by the compound interest of labour to a new labourer, mostly distributing it among several labourers or children. These must first learn to activate and apply their share of capital, before they can draw any actual compound interest on it. Furthermore, an enormous quantity of capital gained by civil society even in the most restless communities, is gradually accumulated over many years and not employed for any immediate expansion of labour. Instead, as soon as an appreciable sum is gathered together, it is transferred to another individual, a labourer, bank or state, under the head of a loan. And the receiver then sets the capital into actual motion and draws compound interest on it, so that he can easily pledge to pay simple interest to the lender. Finally, the law of consumption, greed, and waste opposes those huge progressions, in which man's powers and their products would multiply if the law of production, or thrift, were alone effective" (A. Müller, Elemente der Staatskunst, 1809, Part III, pp. 147-49).

It is impossible to concoct a more hair-raising absurdity in so few lines. Leaving aside the droll confusion of labourer and capitalist, value of labour power and interest on capital, etc., the charging of compound interest is supposed to be explained by the fact that capital is "loaned out" to bring in "compound interest". The method employed by our Müller is characteristic of the romanticism in all walks of life. It is made up of current prejudices, skimmed from the most superficial semblance of things. This incorrect and trite content should then be "exalted" and rendered sublime through a mystifying mode of expression.<sup>a</sup>

The process of accumulation of capital may be conceived as an accumulation of compound interest in the sense that the portion of profit (surplus value) which is reconverted into capital, i. e., serves to absorb more surplus labour, may be called interest. But:

1) Aside from all incidental interference, a large part of available capital is constantly more or less depreciated in the course of the reproduction process, because the value of commodities is not determined by the labour time originally expended in their production, but by the labour time expended in their reproduction, and this decreases continually owing to the development of the social productivity of labour. On a higher level of social productivity, all available capital appears, for this reason, to be the result of a relatively short period

<sup>&</sup>lt;sup>a</sup> Ibid., pp. 225-26.

of reproduction, instead of a long process of accumulation of capital.  $^{8\,1)}$ 

2) As demonstrated in Part III of this book, the rate of profit decreases in proportion to the mounting accumulation of capital and the correspondingly increasing productivity of social labour, which is expressed precisely in the relative and progressive decrease of the variable as compared to the constant portion of capital. To produce the same rate of profit after the constant capital set in motion by one labourer increases ten-fold, the surplus labour time would have to increase ten-fold, and soon the total labour time, and finally the entire 24 hours of a day, would not suffice, even if wholly appropriated by capital. The idea that the rate of profit does not shrink is, however, the basis of Price's progression and in general the basis of "ALL-ENGROSSING CAPITAL, WITH COMPOUND INTEREST".<sup>82)</sup>

The identity of surplus value and surplus labour imposes a qualitative limit upon the accumulation of capital. This consists of the *total working day*, and the prevailing development of the productive forces and of the population, which limits the number of simultaneously exploitable working days. But if one conceives of surplus value in the meaningless form of interest, the limit is merely quantitative and defies all fantasy.

Now, the conception of capital as a fetish reaches its height in interest-bearing capital, being a conception which attributes to the accumulated product of labour, and at that in the fixed form of money, the inherent secret power, as an automaton, of creating surplus value in geometrical progression, so that the accumulated product of labour, as the *Economist* thinks, has long discounted all the wealth of the world for all time as belonging to it and rightfully coming to it. The

<sup>81</sup> See Mill and Carey, and Roscher's mistaken commentary on this score.<sup>a</sup>

<sup>821</sup> "It is clear that no labour, no productive power, no ingenuity, and no art, can answer the overwhelming demands of compound interest. But all saving is made from the revenue of the capitalist, so that actually these demands are constantly made and as constantly the productive power of labour refuses to satisfy them. A sort of balance is, therefore, constantly struck" (*Labour Defended Against the Claims of Capital*, p. 23. By Hodgskin).<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Marx, presumably, refers to the following works: J. St. Mill, *Principles of Political Economy*, Vol. I, London, 1849, pp. 91-92; H. Ch. Carey, *Principles of Social Science*, Vol. III, Philadelphia, London, Paris, 1859, pp. 71-73; W. Roscher, *Die Grundlagen der Nationalö konomie*, Stuttgart und Augsburg, 1858, pp. 77-79. - <sup>b</sup> Cf. present edition, Vol. 32, p. 431.

product of past labour, the past labour itself, is here pregnant in itself with a portion of present or future living surplus labour. We know, however, that in reality the preservation, and to that extent also the reproduction of the value of products of past labour is *only* the result of their contact with living labour; and secondly, that the domination of the products of past labour over living surplus labour lasts only as long as the relations of capital, which rest on those particular social relations in which past labour independently and overwhelmingly dominates over living labour.

## Chapter XXV

## CREDIT AND FICTITIOUS CAPITAL

An exhaustive analysis of the credit system and of the instruments which it creates for its own use (credit money, etc.) lies beyond our plan.<sup>1</sup> We merely wish to dwell here upon a few particular points, which are required to characterise the capitalist mode of production in general. We shall deal only with commercial and bank credit. The connection between the development of this form of credit and that of public credit will not be considered here.

I have shown earlier (Buch I, Kap. III, 3, b<sup>a</sup>) how the function of money as a means of payment, and therewith a relation of creditor and debtor between the producer and trader of commodities, develop from the simple circulation of commodities. With the development of commerce and of the capitalist mode of production, which produces solely with an eye to circulation, this natural basis of the credit system is extended, generalised, and worked out. Money serves here, by and large, merely as a means of payment, i.e., commodities are not sold for money, but for a written promise to pay for them at a certain date. For brevity's sake, we may put all these promissory notes under the general head of bills of exchange. Such bills of exchange, in their turn, circulate as means of payment until the day on which they fall due; and they form the actual commercial money. Inasmuch as they ultimately neutralise one another through the balancing of claims and debts, they act absolutely as money, although there is no eventual transformation into actual money. Just as these mutual advances of producers and merchants make up the real foundation of credit, so

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35.

does the instrument of their circulation, the bill of exchange, form the basis of credit money proper, of banknotes, etc. These do not rest upon the circulation of money, be it metallic or government-issued paper money, but rather upon the circulation of bills of exchange.

W. Leatham (banker of Yorkshire) writes in his Letters on the Currency, 2nd ed., London, 1840:

"I find, then, the amount for the whole of the year of 1839 ... to be £528,493,842" (he assumed that the foreign bills of exchange made up about one-fifth of the total) "and the amount of bills out at one time in the above year, to be £132,123,460" (pp. 55, 56). The bills of exchange make up "one component part greater in amount than all the rest put together" (pp. 3, 4). "This enormous superstructure of bills of exchange rests (!) upon the base formed by the amount of banknotes and gold, and when, by events, this base becomes too much narrowed, its solidity and very existence is endangered" (p. 8). "If I estimate the whole currency"

#### //he means the banknotes//

"and the amount of the liabilities of the Bank and country bankers, payable on demand, I find a sum of 153 million, which, by law, can be converted into gold ... and the amount of gold to meet this demand only 14 million" (p. 11). "The bills of exchange are not ... placed under any control, except by preventing the abundance of money, and low rates of interest or discount, which create a part of them, and encourage their great and dangerous expansion. It is impossible to decide what part arises out of real *bonâ fide* transactions, such as actual bargain and sale, or what part is FICTITIOUS<sup>a</sup> and mere accommodation paper, that is, where one bill of exchange is drawn to take up another running, in order to raise a fictitious capital, by creating so much currency. In times of abundance and cheap money this I know reaches an enormous amount" (pp. 43-44).

## J. W. Bosanquet, Metallic, Paper, and Credit Currency, London, 1842:

"An average amount of payments to the extent of upwards of £3,000,000 is settled through the CLEARING HOUSE

//where the London bankers exchange due bills and filed cheques//

every day of business in the year, and the daily amount of money required for the purpose is little more than  $\pounds 200,000$ " (p. 86).

//In 1889, the total turnover of the CLEARING HOUSE amounted to  $\pounds$ 7,618  $\frac{3}{4}$  million, which, in roughly 300 business days, averages  $\pounds$ 25  $\frac{1}{2}$  million daily. — F. E.//

"Bills of exchange act undoubtedly as CURRENCY,<sup>a</sup> independent of money, inasmuch as they transfer property from hand to hand by endorsement" (pp. 92-93). "It

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.

may be assumed that upon an average there are two endorsements upon every bill in circulation, and ... each bill performs two payments before it becomes due. Upon this assumption it would appear, that by endorsement alone property changed hands, by means of bills of exchange, to the value of twice five hundred and twenty-eight million, or  $\pounds 1,056,000,000$ , being at the rate of more than  $\pounds 3,000,000$  per day, in the course of the year 1839. We may safely therefore conclude, that deposits and bills of exchange together, perform the functions of money, by transferring property from hand to hand without the aid of money, to an extent daily of not less than  $\pounds 18,000,000$ " (p. 93).

## Tooke says the following about credit in general:

"Credit, in its most simple expression, is the confidence which, well, or ill-founded, leads a person to entrust another with a certain amount of capital, in money, or in goods computed at a value in money agreed upon, and in each case payable at the expiration of a fixed term. In the case where the capital is lent in money, that is whether in banknotes, or in a cash credit, or in an order upon a correspondent, an addition for the use of the capital of so much upon every  $\pounds 100$  is made to the amount to be repaid. In the case of goods the value of which is agreed in terms of money, constituting a sale, the sum stipulated to be repaid includes a consideration for the use of the capital and for the risk, till the expiration of the period fixed for payment. Written obligations of payment at fixed dates mostly accompany these credits, and the obligations or promissory notes after date being transferable, form the means by which the lenders, if they have occasion for the use of their capital, in the shape whether of money or goods, before the expiration of the bills they hold, are mostly enabled to borrow or to buy on lower terms, by having their own credit strengthened by the names on the bills in addition to their own" (*Inquiry into the Currency Principle*, p. 87).

# Ch. Coquelin, Du Crédit et des Banques dans l'Industrie, Revue des deux Mondes, 1842, tome 31 [p. 797]:

"In every country the majority of credit transactions takes place within the circle of industrial relations... The producer of the raw material advances it to the processing manufacturer, and receives from the latter a promise to pay on a certain day. The manufacturer, having completed his share of the work, in his turn advances his product on similar terms to another manufacturer, who has to process it further, and in this way credit stretches on and on, from one to the other, right up to the consumer. The wholesale dealer gives the retailer commodities on credit, while receiving credit from a manufacturer or commission agent. All borrow with one hand and lend with the other, sometimes money, but more frequently products. In this manner an incessant exchange of advances, which combine and intersect in all directions, takes place in industrial relations. The development of credit consists precisely in this multiplication and growth of mutual advances, and therein is the real seat of its power."

The other side of the credit system is connected with the development of money-dealing, which, of course, keeps step under capitalist production with the development of dealing in commodity. We have seen in the preceding part (Chap. XIX) how the care of the reserve funds of businessmen, the technical operations of receiving and dis-

bursing money, of international payments, and thus of the bullion trade, are concentrated in the hands of the money dealers. The other side of the credit system - the management of interest-bearing capital, or money capital, develops alongside this money-dealing as a special function of the money dealers. Borrowing and lending money becomes their particular business. They act as middlemen between the actual lender and the borrower of money capital. Generally speaking, this aspect of the banking business consists of concentrating large amounts of the loanable money capital in the bankers' hands, so that, in place of the individual money lender, the bankers confront the industrial and commercial capitalists as representatives of all money lenders. They become the general managers of money capital. On the other hand by borrowing for the entire world of commerce, they concentrate all the borrowers vis-à vis all the lenders. A bank represents a centralisation of money capital, of the lenders, on the one hand, and on the other a centralisation of the borrowers. Its profit is generally made by borrowing at a lower rate of interest than it receives in loaning.

The loanable capital which the banks have at their disposal streams to them in various ways. In the first place, being the cashiers of the industrial capitalists, all the money capital which every producer and merchant keeps as a reserve fund, or receives in payment, is concentrated in their hands. These funds are thus converted into loanable money capital. In this way, the reserve fund of the commercial world, because it is concentrated in a common treasury, is reduced to its necessary minimum, and a portion of the money capital which would otherwise have to lie slumbering as a reserve fund, is loaned out and serves as interest-bearing capital. In the second place, the loanable capital of the banks is formed by the deposits of money capitalists who entrust them with the business of loaning them out. Furthermore, with the development of the banking system, and particularly as soon as banks come to pay interest on deposits, money savings and the temporarily idle money of all classes are deposited with them. Small amounts, each in itself incapable of acting in the capacity of money capital, merge together into large masses and thus form a money power. This aggregation of small amounts must be distinguished as a specific function of the banking system from its mediatory activities between the money capitalists proper and the borrowers. In the final analysis, the revenues, which are but gradually consumed, are also deposited with the banks.

The loan is made (we refer here strictly to commercial credit) by discounting bills of exchange — by converting bills of exchange into money before they come due — and by advances of various kinds: direct advances on personal credit, loans against securities, such as interest-bearing paper, government paper, stocks of all sorts, and, notably, overdrafts against bills of lading, DOCK WARRANTS, and other certified titles of ownership of commodities and overdrawing deposits, etc.

The credit given by a banker may assume various forms, such as bills of exchange on other banks, cheques on them, credit accounts of the same kind, and finally, if the bank is entitled to issue notes banknotes of the bank itself. A banknote is nothing but a draft upon a banker, payable at any time to the bearer, and given by the banker in place of private drafts. This last form of credit appears particularly important and striking to the layman, first, because this form of credit money breaks out of the confines of mere commercial circulation into general circulation, and serves there as money; and because in most countries the principal banks issuing notes, being a peculiar mixture of national and private banks, actually have the national credit to back them, and their notes are more or less legal tender; because it is apparent here that the banker deals in credit itself, a banknote being merely a circulating token of credit. But the banker also deals in credit in all its other forms, even when he advances the cash money deposited with him. In fact, a banknote simply represents the coin of wholesale trade, and it is always the deposit which carries the most weight with banks. The best proof of this is furnished by the Scottish banks.

Special credit institutions, like special forms of banks, need no further consideration for our purpose.

"The business of bankers ... may be divided into two branches... One branch of the banker's business is to collect capital from those who have not immediate employment for it, and to distribute or transfer it to those who have. The other branch is to receive deposits of the incomes of their customers, and to pay out the amount, as it is wanted for expenditure by the latter in the objects of their consumption... The former being a circulation of *capital*, the latter of CURRENCY.<sup>av</sup>—"One relates to the concentration of capital on the one hand and the distribution of it on the other, the other is employed in administering the circulation for local purposes of the district." Tooke, *An Inquiry into the Currency Principle*, pp. 36, 37.

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

//We shall revert to this passage later, in Chapter XXVIII.<sup>a</sup>//

Reports of Committees, Vol. VIII. Commercial Distress, Vol. II, Part I, 1847-48, Minutes of Evidence. (Further quoted as Commercial Distress, 1847-48.) In the forties, when discounting bills of exchange in London, 21-day drafts of one bank on another were often accepted in lieu of banknotes. (Testimony of J. Pease, country banker, Nos. 4636 and 4645.) According to the same report, bankers were in the habit of giving such bills of exchange regularly in payment to their customers whenever money was tight. If the receiver wanted banknotes, he had to rediscount this bill. For the banks this amounted to a privilege of coining money. Messrs. Jones, Loyd and Co. made payments in this way "from time immemorial", as soon as money was scarce and the rate of interest rose above 5%. The customer was glad to get such banker's bills because bills from Jones, Loyd and Co. were easier discounted than his own; besides, they often passed through twenty to thirty hands (Ibid., Nos. 901 to 905, 992).

All these forms serve to make the payments claim transferable.

"There is scarcely any shape into which credit can be cast, in which it will not at times be called to perform the functions of money; and whether that shape be a banknote, or a bill of exchange, or a banker's cheque, the process is in every essential particular the same, and the result is the same." Fullarton, On the Regulation of Currencies, 2nd ed., London, 1845, p. 38.— "Banknotes are the small change of credit" (p. 51).

The following from J. W. Gilbart's The History and Principles of Banking, London, 1834:

"The trading capital of a bank may be divided into two parts: the invested capital, and the borrowed BANKING CAPITAL<sup>b</sup>" (p. 117). "There are three ways of raising a banking or borrowed capital. First, by receiving deposits; secondly, by the issuing of notes; thirdly, by the drawing of bills. If a person will lend me £100 for nothing, and I lend that £100 to another person at four per cent interest, then, in the course of a year, I shall gain £4 by the transaction. Again, if a person will take my 'promise to pay'" ("I PROMISE TO PAY" is the usual formula for English banknotes) "and bring it back to me at the end of the year, and pay me four per cent for it, just the same as though I had lent him 100 sovereigns, then I shall gain £4 by that transaction; and again, if a person in a country town brings me £100 on condition that, twenty-one days afterwards, I shall pay the same amount to a person in London, then whatever interest I can make of the money during the twenty-one days, will be my profit. This is a fair representation of the operations of banking, and of the way in which a banking capital is created by means of deposits, notes, and bills" (p. 117). "The profits of a banker are generally in proportion to the amount of his banking or borrowed capital... To ascertain the real

<sup>&</sup>lt;sup>a</sup> See this volume, p. 439. - <sup>b</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

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profit of a bank, the interest upon the invested capital should be deducted from the gross profit, and what remains is the banking profit" (p. 118). "The advances of bankers to their customers are made with other people's money" (p. 146). "Precisely those bankers who do not issue notes, create a banking capital by the discounting of bills. They render their discounts subservient to the increase of their deposits. The London bankers will not discount except for those houses who have deposit accounts with them" (p. 119). "A party who has had bills discounted, and has paid interest on the whole amount, must leave some portion of that amount in the hands of the banker without interest. By this means the banker obtains more than the current rate of interest on the money actually advanced, and raises a banking capital to the amount of the balance left in his hands" (p. 120).

#### Economising on reserve funds, deposits, cheques:

"Banks of deposit serve to economise the use of the circulating medium. This is done upon the principle of transfer of titles.... Thus it is that banks of deposit ... are enabled to settle a large amount of transactions with a small amount of money. The money thus liberated, is employed by the banker in making advances, by discount or otherwise, to his customers. Hence the principle of transfer gives additional efficiency to the deposit system..." (p. 123). "It matters not whether the two parties, who have dealings with each other, keep their accounts with the same banker or with different bankers; for, as the bankers exchange their cheques with each other at the clearing house.... The deposit system might thus, by means of transfers, be carried to such an extent as wholly to supersede the use of a metallic currency. Were every man to keep a deposit account at a bank, and make all his payments by cheques... cheques become the sole circulating medium. In this case, however, it must be supposed that the banker has the money in his hands, or the cheques would have no value" (p. 124).

## Centralisation of local transactions in the hands of the banks is effected 1) through branch banks. Country banks have branch establishments in the smaller towns of their district, and London banks in different districts of the city. 2) Through agencies.

"Each country banker employs a London agent to pay his notes or bills ... and to receive sums that may be lodged by parties residing in London for the use of parties residing in the country" (p. 127). "Each banker accepts the notes of others, but does not reissue them. In all larger cities they come together once or twice a week and exchange their notes. The balance is paid by a draft on London" (p. 134). "It is the object of banking to give facilities to trade, and whatever gives facilities to trade gives facilities to speculation. Trade and speculation are in some cases so nearly allied, that it is impossible to say at what precise point trade ends and speculation begins.... Wherever there are banks, capital is more readily obtained, and at a cheaper rate. The cheapness of capital gives facilities to speculation, just in the same way as the cheapness of beef and of beer gives facilities to gluttony and drunkenness" (pp. 137, 138). "As banks of circulation always issue their own notes, it would seem that their discounting business was carried on exclusively with this last description of capital, but it is not so. It is very possible for a banker to issue his own notes for all the bills he discounts, and yet nine-tenths of the bills in his possession shall represent real capital. For, although in the first instance, the banker's notes are given for the bill, yet these notes may not stay in circulation until

the bill becomes due— the bill may have three months to run, the notes may return in three days" (p. 172). "The overdrawing of a cash credit account is a regular matter of business; it is, in fact, the purpose for which the cash credit has been granted.... Cash credits are granted not only upon personal security, but also upon the security of the Public Funds" (pp. 174, 175). "Capital advanced, by way of loan, on the securities of merchandise, would produce the same effects as if advanced in the discounting of bills. If a party borrows £100 on the security of his merchandise, it is the same as though he had sold his merchandise for a £100 bill, and got it discounted with the banker. By obtaining this advance he is enabled to hold over this merchandise for a better market, and avoids a sacrifice which, otherwise, he might be induced to make, in order to raise the money for urgent purposes" (pp. 180-81).

## The Currency Theory Reviewed, etc., pp. 62-63:

"It is unquestionably true that the  $\pounds 1,000$  which you deposit at A today may be reissued tomorrow, and form a deposit at B. The day after that, reissued from B, it may form a deposit at C ... and so on to infinitude; and that the same  $\pounds 1,000$  in money may thus, by a succession of transfers, multiply itself into a sum of deposits absolutely indefinite. It is possible, therefore, that *nine-tenths of all the deposits in the United Kingdom may have no existence beyond their record in the books of the bankers* .... Thus in Scotland, for instance, currency //mostly paper money at that!// has never exceeded  $\pounds 3$  million, the deposits in the banks are estimated at  $\pounds 27$  million.... Unless A RUN ON THE BANKS<sup>a</sup> be made, the same  $\pounds 1,000$  would, if sent back upon its travels, cancel with the same facility a sum equally indefinite. As the same  $\pounds 1,000$  with which you cancel your debt to a tradesman today, may cancel his debt to the merchant tomorrow, the merchant's debt to the bank the day following, and so on without end; so the same  $\pounds 1,000$  may pass from hand to hand, and bank to bank, and cancel any conceivable sum of deposits."

//We have seen that Gilbart knew even in 1834 that

"whatever gives facilities to trade gives facilities to speculation. Trade and speculation are in some cases so nearly allied, that it is impossible to say at what precise point trade ends and speculation begins".

The easier it is to obtain advances on unsold commodities, the more such advances are taken, and the greater the temptation to manufacture commodities, or dump already manufactured commodities in distant markets, just to obtain advances of money on them. To what extent the entire business world of a country may be seized by such swindling, and what it finally comes to, is amply illustrated by the history of English trade during 1845-47. It shows us what credit can accomplish. Before passing on to the following examples, a few preliminary remarks.

At the close of 1842 the pressure which English industry suffered almost uninterruptedly since 1837, began to abate. During the follow-

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English expression is given in parentheses after its German equivalent.

ing two years foreign demand for English manufactured goods increased still more; 1845 and 1846 marked a period of greatest prosperity., In 1843 the Opium War had opened China to English commerce.<sup>42</sup> The new market gave a new impetus to the further expansion of industry, particularly the cotton industry. "How can we ever produce too much? We have to clothe 300 million people," a Manchester manufacturer said to this writer at the time. But all the newly erected factory buildings, steam-engines, and spinning and weaving machines did not suffice to absorb the surplus value pouring in from Lancashire. With the same zeal as was shown in expanding production, people engaged in building railways. The thirst for speculation of manufacturers and merchants at first found gratification in this field, and as early as in the summer of 1844. Stock was fully underwritten. i.e., so far as there was money to cover the initial payments. As for the rest, time would show! But when further payments were due-Ouestion 1059, C. D. 1848/57, indicates that the capital invested in railways in 1846-47 amounted to  $f_{...,75}$  million — recourse had to be taken to credit, and in most cases the basic enterprises of the firm had also to bleed.

And in most cases these basic enterprises were already overburdened. The enticingly high profits had led to far more extensive operations than justified by the available liquid resources. Yet there was credit — easy to obtain and cheap. The bank discount rate stood low:  $1\frac{3}{4}$  to  $2\frac{3}{4}$  % in 1844, less than 3% until October 1845, rising to 5% for a while (February 1846), then dropping again to  $3\frac{1}{4}$  % in December 1846. The Bank of England had an unheard-of supply of gold in its vaults. All inland quotations were higher than ever before. Why then allow this splendid opportunity to escape? Why not go in for all one was worth? Why not send all one could manufacture to foreign markets which pined for English goods? And why should not the manufacturer himself pocket the double gain arising from selling yarn and fabrics in the Far East, and the return cargo in England?

Thus arose the system of mass consignments to India and China against advance payments, and this very soon developed into a system of consignments purely for the sake of getting advances, as described in greater detail in the following notes, which led inevitably to overflooding the markets and a crash.

The crash was precipitated by the crop failure of 1846. England, and particularly Ireland, required enormous imports of foodstuffs,

notably corn and potatoes. But the countries which supplied them could be paid with the products of English industry only to a very limited extent. Precious metals had to be given out. Gold worth at least nine million was sent abroad. Of this amount no less than seven and a half million came from the treasury of the Bank of England, whose freedom of action on the money market was thereby considerably impaired. Other banks, whose reserves were deposited with the Bank of England and were practically identical with those of that Bank, were thus also compelled to curtail accommodation of money. The rapid and easy flow of payments was obstructed, first here and there, then generally. The banking discount rate, still 3 to  $3\frac{1}{2}$ % in January 1847, rose to 7% in April, when the first panic broke out. The situation eased somewhat in the summer  $(6\frac{1}{2}\%, 6\%)$ , but when the new crop failed as well panic broke out afresh and even more violently. The official minimum bank discount rose in October to 7 and in November to 10%; i. e., the overwhelming mass of bills of exchange was discountable only at outrageous rates of interest, or no longer discountable at all. The general cessation of payments caused the failure of several leading and very many medium-sized and small firms. The Bank itself was in danger due to the limitations imposed by the artful Bank Act of 1844.<sup>a</sup> The government yielded to the general clamour and suspended the Bank Act on October 25, thereby eliminating the absurd legal fetters imposed on the Bank. Now it could throw its supply of banknotes into circulation without hindrance. The credit of these banknotes being in practice guaranteed by the credit of the nation, and thus unimpaired, the money stringency was thus instantly and decisively relieved. Naturally, guite a number of hopelessly enmeshed large and small firms failed nevertheless, but the peak of the crisis was overcome, the banking discount dropped to 5% in December, and in the course of 1848 a new wave of business activity began which took the edge off the revolutionary movements on the continent in 1849, and which inaugurated in the fifties an unprecedented industrial prosperity, but then ended again — in the crash of 1857.— F. E.//

I. A document issued by the House of Lords in 1848 deals with the colossal depreciation of government paper and bonds during the 1847 crisis. According to it the depreciation of October 23, 1847, compared with the level in February of the same year, amounted to:

<sup>&</sup>lt;sup>a</sup> See this volume, Chapter XXXIV.

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On	English	governm	ient bo	onds .	 £93,824,217
On	dock and	canal s	tock		 £1,358,288
On	railway	stock			 £19,579,820

## Total .....£114,762,325

II. With reference to the swindle in East Indian trade, in which drafts were no longer drawn because commodities were being bought, but rather commodities were bought to be able to make out discountable drafts convertible into money, the *Manchester Guardian* of November 24, 1847, remarks:

Mr. A in London instructs a Mr. B. to buy from the manufacturer C in Manchester commodities for shipment to a Mr. D in East India. B pays C in six months' drafts to be made out by C on B. B secures himself by six months' drafts on A. As soon as the goods are shipped A makes out six months' drafts on D against the mailed bill of lading.

"The shipper and the co-signee were thus both put in possession of funds - months before they actually paid for the goods; and, very commonly, these bills were renewed at maturity, on pretence of affording time for the returns in a 'long trade'. Unfortunately, losses by such a trade, instead of leading to its contraction, led directly to its increase. The poorer men became, the greater need they had to purchase, in order to make up, by new advances, the capital they had lost on the past adventures. Purchases thus became, not a question of supply and demand, but the most important part of the finance operations of a firm labouring under difficulties. But this is only one side of the picture. What took place in reference to the export of goods at home, was taking place in the purchase and shipment of produce abroad. Houses in India, who had credit to pass their bills, were purchasers of sugar, indigo, silk, or cotton - not because the prices advised from London by the last overland mail promised a profit on the prices current in India, but because former drafts upon the London house would soon fall due, and must be provided for. What was so simple as to purchase a cargo of sugar, pay for it in bills upon the London house at ten months' date, transmit the shipping documents by the overland mail; and, in less than two months the goods on the high seas...were pawned in Lombard Street --- putting the London house in funds eight months before the drafts against those goods fell due. And all this went on without interruption or difficulty, as long as bill-brokers had abundance of money 'at call,' to advance on bills of lading and dock warrants, and to discount, without limit, the bills of India houses drawn upon the eminent firms in Mincing Lane."

//This fraudulent procedure remained in vogue so long as goods to and from India had to round the Cape in sailing vessels. But ever since they are being shipped in steamboats via the Suez Canal this method of fabricating fictitious capital has been deprived of its basis — the long freight voyage. And ever since the telegraph informs the English businessman about the Indian market and the Indian merchant about the English market, on the same day this method has become totally impracticable.— F. E.//

## III. The following is taken from the quoted Report on Commercial Distress, 1847-48:

"In the last week of April 1847, the Bank of England advised the Royal Bank of Liverpool that it would thereafter reduce its discount business with the latter bank by one-half. The announcement operated with peculiar hardship on this account, that the payments into Liverpool had latterly been much more in bills than in cash; and the merchants who generally brought to the Bank a large proportion of cash with which to pay their acceptances, had latterly been able to bring only bills which they had received for their cotton and other produce, and that increased very rapidly as the difficulties increased.... The acceptances ... which the Bank had to pay for the merchants, were acceptances drawn chiefly upon them from abroad, and they have been accustomed to meet those acceptances by whatever payment they received for their produce.... The bills that the merchants brought ... in lieu of cash... were of various dates, and of various descriptions; a considerable number of them were bankers' bills, of three months' date, the large bulk being cotton bills. These bills of exchange, when bankers' bills, were accepted by London bankers, and by merchants in every trade that we could mention - the Brazilian, the American, the Canadian, the West Indian.... The merchants did not draw upon each other; but the parties in the interior, who had purchased produce from the merchants, remitted to the merchants bills on London bankers, or bills on various parties in London, or bills upon anybody. The announcement of the Bank of England caused a reduction of the maturity terms of bills drawn against sales of foreign products, frequently extending to over three months" (pp. 26, 27).

The period of prosperity in England from 1844 to 1847, was, as described above, connected with the first great railway swindle. The above-named report makes the following reference to the effect of this swindle on business in general:

In April 1847 "almost all mercantile houses had begun TO STARVE THEIR BUSINESS<sup>a</sup> more or less ... by taking part of their commercial capital for railways" (p. 42). "Loans were made on railway shares at a high rate of interest, say, 8%, by private individuals, by bankers and by fire-offices" (p. 66). "Loans to so great an extent by commercial houses to railways induced them to lean too much upon banks by the discount of paper, whereby to carry on their commercial operations" (p. 67). (Question:) "Should you say that the railway calls had had a great effect in producing the pressure which there was" //on the money market// "in April and October" //1847//? — (Answer:) "I should say that they had had hardly any effect at all in producing the pressure in April; I should imagine that up to April, and up, perhaps, to the summer, they had increased the power of bankers in some respects rather than diminished it; for the expenditure had not been nearly so rapid as the calls; the consequence was, that most of the banks had rather a large amount of railway money in their hands in the beginning of the year."

//This is corroborated in numerous statements made by bankers in C. D. 1848-57.//

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English expression is given in parentheses after its German equivalent.

"In the summer that melted gradually away, and on the 31st of December it was materially less. One cause ... of the pressure in October was the gradual diminution of the railway money in the bankers' hands; between the 22nd of April and the 31st of December the railway balances in our hands were reduced one-third; and the railway calls have also had this effect ... throughout the Kingdom; they have been gradually draining the deposits of bankers" (pp. 43, 44).

Samuel Gurney //head of the ill-famed firm of Overend, Gurney and Co.// similarly says:

"During the year 1846 ... there had been a considerable demand for capital, for the establishment of railways ... but it did not increase the value of money.... There was a condensation of small sums into large masses, and those large masses were used in our market; so that, upon the whole, the effect was to throw more money into the money market of the City than to take it out" [p. 159].

## A. Hodgson, Director of the Liverpool Joint-Stock Bank, shows how much bills of exchange may constitute a reserve for bankers:

"It has been our habit to keep at least nine-tenths of all our deposits, and all money we have of other persons, in our bill case, in bills that are falling due from day to day... so much so, that during the time of the run, the bills falling due were almost equal to the amount of the run upon us day by day" (p. 53).

#### Speculative bills.

"5092. Who were those bills" (against sold cotton) generally accepted by?" — //R.Gardner, the cotton manufacturer repeatedly mentioned in this work:// "Produce brokers: a person buys cotton, and places it in the hands of a broker, and draws upon that broker, and gets the bills discounted." — "5094. And they are taken to the banks at Liverpool, and discounted? — Yes, and in other parts besides.... I believe if it had not been for the accommodation thus granted, and principally by the Liverpool banks, cotton would never have been so high last year as it was by  $1\frac{1}{2}$  d. or 2d. a pound." — "600. You have stated that a vast amount of bills were put in circulation, drawn by speculators upon cotton brokers in Liverpool; does that system extend to your advance on acceptances upon colonial and foreign produce as well as on cotton?" //A. Hodgson, a Liverpool banker:// "It refers to all kinds of colonial produce, but to cotton most especially." — "601. Do you, as a banker, discourage as far as you can that description of paper? — We do not; we consider it a very legitimate description of paper, when kept in moderation. This description of paper is frequently renewed."

## Swindling in the East Indian and Chinese Market, 1847.— Charles Turner (head of one of the leading East Indian houses in Liverpool):

"We are all aware of the events which have taken place as regards the Mauritius trade, and other trades of that kind. The brokers have been in the habit ... not only of advancing upon goods after their arrival to meet the bills drawn against those goods, which is perfectly legitimate, and upon the bills of lading ... but ... they have advanced upon the produce before it was shipped, and in some cases before it was manufactured. Now, to speak of my own individual instance: I have bought bills in Calcutta to the ex-

tent of six or seven thousand pounds in one particular instance; the proceeds of the bills went down to the Mauritius, to help in the growth of sugar; those bills came to England, and above half of them were protested; for when the shipments of sugar came forward, instead of being held to pay those bills, it had been mortgaged to third parties... before it was shipped, in fact almost before it was boiled" (p. 78). "Now manufacturers are insisting upon cash but it does not amount to much, because if a buyer has any credit in London, he can draw upon the house, and get the bill discounted; he goes to London, where discounts now are cheap; he gets the bill discounted, and pays cash to the manufacturer.... It takes twelve months, at least, for the shipper of goods to get his return from India ... a man with ten or fifteen thousand pounds would go into the Indian trade; he would open a credit with a house in London, to a considerable extent, giving that house one per cent; he, drawing upon the house in London, on the understanding that the proceeds of the goods that go out are to be returned to the house in London, but it being perfectly understood by both parties that the man in London is to be kept out of a cash advance; that is to say, in other words, the bills are to be renewed till the proceeds come home. The bills were discounted at Liverpool, Manchester ... or in London ... many of them lie in the Scotch banks" (p. 79) .-- "786. There is one house which failed in London the other day, and in examining their affairs, a transaction of this sort was proved to have taken place; there is a house of business at Manchester, and another at Calcutta; they opened a credit account with a house in London to the extent of  $f_{200,000}$ ; that is to say, the friends of this house in Manchester, who consigned goods to the East India House from Glasgow and from Manchester, had the power of drawing upon the house in London to the extent of  $f_{200,000}$ ; at the same time, there was an understanding that the corresponding house in Calcutta were to draw upon the London house to the extent of  $\pounds 200,000$ ; with the proceeds of those bills sold in Calcutta, they were to buy other bills, and remit them to the house in London, to take up the first bills drawn from Glasgow or Manchester ... There would have been  $f_{,600,000}$  of bills created upon that transaction." — "971. At present, if a house in Calcutta purchase a cargo" //for England//, "and give their own bills upon their correspondent in London in payment, and they send the bills of lading home to this country, those bills of lading ... immediately become available to them in Lombard Street for advances, and they have eight months' use of the money before their correspondents are called upon to pay."

IV. In 1848 a secret committee of the House of Lords investigated the causes of the 1847 crisis. The evidence given to the committee was not published, however, until 1857 (Minutes of Evidence, taken before the Secret Committee of the H. of L. appointed to inquire into the Causes of Distress, etc., 1857; quoted as C. D. 1848/57). Here Mr. Lister, Director of the Union Bank of Liverpool, testified, among other things, to the following:

"2444. In the spring of 1847 there was an undue extension of credit... because a man transferred property from business into railways and was still anxious to carry on the same extent of business. He probably first thought that he could sell the railway shares at a profit and replace the money in his business. Perhaps he found that could not be done, and he then got credit in his business where formerly he paid in cash. There was an extension of credit from that circumstance." "2500. Were those bills ... upon which the banks had sustained a loss by holding them, principally bills upon corn or bills upon cotton?" — "They were bills upon all kinds of produce, corn and cotton and sugar, all foreign produce of all descriptions. There was scarcely any thing perhaps with the exception of oil, that did not go down." — "2506. A broker who accepts a bill will not accept it without a good margin as to the value."

"2512. There are two kinds of bills drawn against produce; the first is the original bill drawn abroad upon the merchant, who imports it.... The bills which are drawn against produce frequently fall due before the produce arrives. The merchant, therefore, when it arrives, if he has not sufficient capital, has to pledge that produce with the broker till he has time to sell that produce. Then a new species of bill is immediately drawn by the merchant in Liverpool upon the broker, on the security of that produce.... Then it is the business of the banker to ascertain from the broker whether he has the produce, and to what extent he has advanced upon it. It is his business to see that the broker has property to protect himself if he makes a loss."

"2516. We also receive bills from abroad.... A man buys a bill abroad on England, and sends it to a house in England; we cannot tell whether that bill is drawn prudently or imprudently, whether it is drawn for produce or for wind."

"2533. You said that almost every kind of foreign produce was sold at a great loss. Do you think that that was in consequence of undue speculation in that produce?—It arose from a very large import, and there not being an equal consumption to take it off. It appears that consumption fell off a great deal."— "2534. In October produce was almost unsaleable."

How a general sauve qui peut<sup>a</sup> develops at the height of a crisis is revealed in the same report by a first-rate expert, the esteemed crafty Quaker, Samuel Gurney, of Overend, Gurney and Co.:

"1262. ... When a panic exists a man does not ask himself what he can get for his banknotes, or whether he shall lose one or two per cent by selling his exchequer bills, or three per cent. If he is under the influence of alarm he does not care for the profit or loss, but makes himself safe and allows the rest of the world to do as they please."

V. Concerning the mutual satiation of the two markets Mr. Alexander, a merchant in the East India trade, testifies before the Committee of the Lower House on the Bank Act of 1857 (quoted as B. C. 1857):

"4330. At the present moment, if I lay out 6s. in Manchester, I get 5s. back in India; if I lay out 6s. in India, I get 5s. back in London."

So that the Indian market is, therefore, drugged by England, and the English by India. This was, indeed, the case in the summer of 1857, barely ten years after the bitter experience of 1847!

<sup>&</sup>lt;sup>a</sup> save yourself if you can

## Chapter XXVI

#### ACCUMULATION OF MONEY CAPITAL. ITS INFLUENCE ON THE INTEREST RATE

"In England there takes place a steady accumulation of additional wealth, which has a tendency ultimately to assume the form of money. Now next in urgency, perhaps, to the desire to acquire money, is the wish to part with it again for some species of investment that shall yield either interest or profit; for money itself, as money, yields neither. Unless, therefore, concurrently with this ceaseless influx of surplus capital, there is a gradual and sufficient extension of the field for its employment, we must be subject to periodical accumulations of money seeking investment, of more or less volume, according to the movement of events. For a long series of years, the grand absorbent of the surplus wealth of England was our public debt.... As soon as in 1816 the debt reached its maximum, and operated no longer as an absorbent, a sum of at least sevenand-twenty million per annum was necessarily driven to seek other channels of investment. What was more, various return payments of capital were made.... Enterprises which entail a large capital and create an opening from time to time for the excess of unemployed capital ... are absolutely necessary, at least in our country, so as to take care of the periodical accumulations of the superfluous wealth of society, which is unable to find room in the usual fields of application" (The Currency Theory Reviewed, Edinburgh, 1845, pp. 32-34).

### Of 1845 the same work says:

"Within a very recent period prices have sprung upwards from the lowest point of depression.... Consols touch par.... The bullion in the vaults of the Bank of England has ... exceeded in amount the treasure held by that establishment since its institution. Shares of every description range at prices on the average wholly unprecedented, and interest has declined to rates which are all but nominal. If these be not evidences that another heavy accumulation of unemployed wealth exists at this hour in England, that another period of speculative excitement is at hand" (ibid., p. 36).

"Although ... the import of bullion is no sure sign of gain upon the foreign trade, yet, in the absence of any explanatory cause, it does *prima facie* represent a portion of it" (J. G. Hubbard, *The Currency and the Country*, London, 1843, p. 41). "Suppose ... that at a period of steady trade, fair prices ... and full, but not redundant circulation, a deficient harvest should give occasion for an import of corn, and an export of gold to the value of five million. The circulation"

# //meaning, as we shall presently see, idle money capital rather than means of circulation — F. E.//

"would of course be reduced by the same amount. An equal quantity of the circulation might still be held by individuals, but the deposits of merchants at their bankers, the balances of bankers with their money brokers, and the reserve in their till, will all be diminished, and the immediate result of this reduction in the amount of unemployed capital will be a rise in the rate of interest. I will assume from 4 per cent to 6. Trade being in a sound state, confidence will not be shaken, but credit will be more highly valued" (ibid., p. 42). "But imagine ... that all prices fall.... The superfluous currency returns to the bankers in increased deposits — the abundance of unemployed capital lowers the rate of interest to a minimum, and this state of things lasts until either a return of higher prices or a more active trade call the dormant currency into service, or until it is absorbed by investments in foreign stocks or foreign goods" (p. 68).

The following extracts are also taken from the Parliamentary Report on Commercial Distress, 1847-48.—Owing to the crop failure and famine of 1846-47 large-scale imports of foodstuffs became necessary.

"These circumstances caused the imports of the country to be very largely in excess over ... exports ... a considerable drain upon the banks, and an increased application to the discount brokers ... for the discount of bills.... They began to scrutinise the bills. ...The facilities of houses then began to be very seriously curtailed, and the weak houses began to fail. Those houses which ... relied upon their credit... went down. This increased the alarm that had been previously felt; and the bankers and others finding that they would not rely with the same degree of confidence that they had previously done upon turning their bills and other money securities into banknotes, for the purpose of meeting their engagements, still further curtailed their facilities, and in many cases refused them altogether; they locked up their banknotes, in many instances to meet their own engagements; they were afraid of parting with them.... The alarm and confusion were increased daily; and unless Lord John Russell .... had issued the letter to the Bank ... universal bankruptcy would have been the issue" (pp. 74-75).

Russell's letter suspended the Bank Act.— The previously mentioned Charles Turner testifies:

"Some houses had large means, but not available. The whole of their capital was locked up in estates in the Mauritius, or indigo factories, or sugar factories. Having incurred liabilities to the extent of £500,000 or £600,000 they had no available assets to pay their bills, and eventually it proved that to pay their bills they were entirely dependent upon their credit" (p. 81).

#### The aforementioned S. Gurney said:

[1664]: "At present" (1848) "there is a limitation of transaction and a great superabundance of money."—"1763. I do not think it was owing to the want of capital; it was owing to THE ALARM<sup>a</sup> that existed that the rate of interest got so high."

In 1847 England paid at least £9 million gold to foreign countries of imported foodstuffs. Of this amount  $\pounds 7^{\frac{1}{2}}$  million came from the Bank of England and  $1^{\frac{1}{2}}$  million from other sources (p. 245). — Morris, Governor of the Bank of England:

"The public stocks in the country and canal and railway shares had already by the 23rd of October 1847 been depreciated in the aggregate to the amount of  $\pounds$ 114,752,225" (p. 312).

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

## Again Morris, when questioned by Lord G. Bentinck:

"Are you not aware that all property invested in stocks and produce of every description was depreciated in the same way; that raw cotton, raw silk and unmanufactured wool were sent to the continent at the same depreciated price... and that sugar, coffee and tea were sacrificed as at forced sales? — It was ... inevitable that the country should make a considerable sacrifice for the purpose of meeting the efflux of bullion which had taken place in consequence of the large importation of food." — [3848] "Do not you think it would have been better to trench upon the £8,000,000 lying in the coffers of the Bank than to have endeavoured to get the gold back again at such a sacrifice? — No, I do not." —

Now to the commentaries on such heroism. Disraeli questions Mr. W. Cotton, a Director and former Governor of the Bank of England:

"What was the rate of dividend paid to the Bank proprietors in 1844? — It was 7 per cent for the year." — "What is the dividend ... for 1847? — Nine per cent." — "Does the Bank pay the income tax for its proprietors in this year? — It does." — "Did it do so in 1844? — It did not."  $^{03}$ ... "Then this Bank Act" (of 1844) "has worked very well for the proprietors?... The result is, that since the passing of the Act, the dividend to the proprietors has been raised from 7 per cent to 9 per cent, and the income tax, that previously to the Act was paid by the proprietors, is now paid by the Bank? — It is so." (Nos. 4356-61).

Mr. Pease, a country banker, had the following to say concerning hoarding in banks during the crisis of 1847:

"4605. As the Bank was obliged still to raise its rate of interest, every one seemed apprehensive; country bankers increased the amount of bullion in their hands, and increased their reserve of notes, and many of us who were in the habit of keeping, perhaps, a few hundred pounds of gold and banknotes, immediately laid up thousands in our desks and drawers, as there was an uncertainty about discounts, and about our bills being current in the market, a general hoarding ensued."

A member of the Committee remarks:

"4691. Then, whatever may have been the cause during the last 12 years, the result has been rather in favour of the Jew and money dealer, than the productive classes generally."

How much a money dealer takes advantage of times of crisis is revealed by Tooke:

<sup>83:</sup> In other words, formerly they first fixed the dividend, and then deducted the income tax as the dividend was paid to the individual stockholder; after 1844, however, the Bank first paid the income tax on its total profit, and then paid the dividend "FREE OF INCOME TAX". The same nominal percentages are, therefore, higher in the latter case by the amount of the tax.—F. E.

"In the hardware districts of Warwickshire and Staffordshire, a great many orders for goods were declined to be accepted in 1847, because the rate of interest which the manufacturer had to pay for discounting his bills more than absorbed all his profit" (No. 5451).

Let us now take another parliamentary report cited earlier: Report from the Select Committee on Bank Acts, communicated from the Commons to the Lords, 1857 (quoted further as B. C. 1857). In it Mr. Norman, Director of the Bank of England and a leading figure among the champions of the CURRENCY PRINCIPLE,<sup>43</sup> is interrogated as follows:

"3635. You stated, that you consider that the rate of interest depends, not upon the amount of notes, but upon the supply and demand of capital. Will you state what you include in 'capital', besides notes and coin? - I believe that the ordinary definition of 'capital' is commodities or services used in production."-"3636. Do you mean to include all commodities in the word 'capital' when you speak of the rate of interest?---All commodities used in production." -- "3637. You include all that in the word 'capital', when you speak of what regulates the rate of interest? — Yes. Supposing a cotton manufacturer to want cotton for his factory, the way in which he goes to work to obtain it is, probably, by getting an advance from his banker, and with the notes so obtained he goes to Liverpool, and makes a purchase. What he really wants is the cotton; he does not want the notes or the gold, except as a means of getting the cotton. Or he may want the means of paying his workmen; then again, he borrows the notes, and he pays the wages of the workmen with the notes; and the workmen, again, require food and lodging, and the money is the means of paying for those."-"3638. But interest is paid for the money? - It is, in the first instance; but take another case. Supposing he buys the cotton on credit, without going to the bank for an advance, then the difference between the ready-money price and the credit price at the time at which he is to pay for it is the measure of the interest. Interest would exist if there was no money at all."

This self-complacent rubbish is quite fitting for this pillar of the CURRENCY PRINCIPLE. First, the brilliant discovery that banknotes or gold are means of buying something, and that they are not borrowed for their own sake. And this is advanced to explain that the rate of interest is regulated — but by what? By the demand and supply of commodities, which heretofore were known to regulate only the market prices of commodities. However, very different rates of interest are compatible with the same market prices of commodities.— But now this cunning. He is confronted with the correct remark: "But interest is paid for the money," which, of course, contains the implication: "What has interest received by the banker, who does not deal in commodities at all, to do with these commodities? And do not manufacturers receive money at the same rate of interest, although they invest it in widely different markets, hence in markets with widely different

conditions of demand and supply for the commodities used in production?" All that this celebrated genius has to say in reply to these questions is that if the manufacturer buys cotton on credit "the difference between the price and the credit price at the time at which he is to pay for it is the measure of the interest". Quite the contrary. The prevailing rate of interest whose regulation the great intellect Norman was asked to explain is the measure of the difference between the cash price and the credit price until payment is due. First the cotton is to be sold at its cash price, and this is determined by the market price, itself regulated by the state of supply and demand. Say the price  $= f_{1,000}$ . This concludes the transaction between the manufacturer and the cotton broker so far as buying and selling is concerned. Now comes a second transaction. This is one between lender and borrower. The value of  $f_{1,000}$  is advanced to the manufacturer in cotton, and he has to repay it in money, say, in three months. And three months' interest for  $\pounds 1,000$ , determined by the market rate of interest, makes up the extra charge over and above the cash price. The price of cotton is determined by supply and demand. But the price of the advanced value of cotton, of  $f_{1,000}$  advanced for three months, is determined by the rate of interest. And this fact, that cotton is thus transformed into money capital, proves to Mr. Norman that interest would exist even if there had been no money. If there were no money at all, there would certainly be no general rate of interest.

There is, to begin with, a vulgar conception of capital as "commodities used in production". In so far as these commodities serve as capital, their value as *capital*, as distinct from their value as *commodities*, is expressed in the profit which is derived from their productive or mercantile employment. And the rate of profit under all circumstances has something to do with the market price of the purchased commodities and with their supply and demand, but is determined by entirely different circumstances. And there is no doubt that the interest rate is generally limited by the rate of profit. But Mr. Norman should tell us just how this limit is determined. And it is determined by the supply and demand of money capital as distinguished from the other forms of capital. It could be further asked: How are demand and supply of money capital determined? It is doubtlessly true that a tacit connection exists between the supply of material capital and the supply of money capital, and, likewise, that the demand of industrial capitalists for money capital is determined by conditions of actual production. Instead of enlightening us on this point, Norman offers us the sage opinion that the demand for money capital is not identical with the demand for money as such; and this sagacity alone, because he, Overstone, and the other CURRENCY prophets, constantly have pricks of conscience since they are striving to make capital out of means of circulation as such through the artificial intervention of legislation, and to raise the interest rate.

Now to Lord Overstone, alias Samuel Jones Loyd, as he is asked to explain why he takes 10% for his "money" because "capital" is so scarce in his country.

"3653. The fluctuations in the rate of interest arise from one of two causes: an alteration in the value of capital"

(excellent! Value of capital, generally speaking, signifies precisely the rate of interest! A change in the rate of interest is thus made to spring from a change in the rate of interest. "Value of capital", as we have shown elsewhere, is never conceived otherwise in theory. Or else, if Lord Overstone means the rate of profit by the phrase value of capital, then the profound thinker returns to the notion that the interest rate is regulated by the rate of profit!)

"or an alteration in the amount of money in the country. All great fluctuations of interest, great either in their duration or in the extent of the fluctuation, may be distinctly traced to alterations in the value of capital. Two more striking practical illustrations of that fact cannot be furnished than the rise in the rate of interest in 1847 and during the last two years (1855-56); the minor fluctuations in the rate of interest, which arise from an alteration in the quantity of money, are small both in extent and in duration. They are frequent, and the more rapid and frequent they are, the more effectual they are for accomplishing their destined purpose",

which is to enrich bankers like Overstone. Friend Samuel Gurney expresses it very naïvely before the Committee of Lords, C. D. 1848 [1857]:

"1324. Do you think that the great fluctuations in the rate of interest which have taken place in the last year are advantageous or not to bankers or dealers in money?—I think they are advantageous to dealers in money. All fluctuations in trade are advantageous TO THE KNOWING MAN."<sup>a</sup>

"1325. May not the banker suffer eventually from the high rates of interest, by impoverishing his best customers? — No; I do not think it has that effect perceptibly."

Voilà ce que parler veut dire.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition these English words are given in parentheses after their German equivalents. - <sup>b</sup> This is what had to be said.

We shall eventually return to the influence of the quantity of available money on the rate of interest. But it is to be noted right here that Overstone again makes a quid pro quo.<sup>a</sup> The demand for money capital in 1847 (before October there was no anxiety over money stringency, or the "quantity of money", as he called it) increased for various reasons, such as rising prices for corn and cotton, lack of buyers of sugar due to overproduction, railway speculation and the crash, overcrowding of foreign markets with cotton goods, and the forced export to, and import from, India for the purpose of speculation in bills of exchange, which was described above.<sup>b</sup> All these things, overproduction in industry and underproduction in agriculture-in other words, greatly differing causes - gave rise to an increased demand for money capital, i. e., for credit and money. The increased demand for money capital had its origin in the course of the production process itself. But whatever may have been the cause, it was the demand for money capital which made the interest rate, the value of money capital, climb. If Overstone means to say that the value of money capital rose because it rose, then it is tautology. But if, by "value of capital", he means a rise in the rate of profit as the cause of the rise in the rate of interest, we shall immediately see that this is wrong. The demand for money capital, and consequently the "value of capital", may rise even though the profit may decrease; as soon as the relative supply of money capital shrinks, its "value" increases. What Overstone wished to prove is that the crisis of 1847, and the attendant high interest rate, had nothing to do with the "quantity of money", i. e., with the regulations of the Bank Act of 1844 which he had inspired; although it was, indeed, connected with them, inasmuch as the fear of exhausting the bank reserve — a creation of Overstone — contributed a money panic to the crisis of 1847-48. But this is not the issue here. There was a dearth of money capital, caused by the excessive volume of operations compared to the available means and precipitated by the disturbance in the reproduction process due to a crop failure. overinvestment in railways, overproduction, particularly of cotton goods, swindling operations in trade with India and China, speculation, superfluous sugar imports, etc. What the people, who had bought corn at 120 shillings per quarter, lacked when it fell to 60 shillings, were the 60 shillings which they had overpaid and the corresponding credit for that amount in Lombard Street advances on the

<sup>&</sup>lt;sup>a</sup> takes one thing for another - <sup>b</sup> See this volume, pp. 409-10.

corn. It was by no means a lack of banknotes that prevented them from converting their corn into money at its old price of 120 shillings. The same applied to those who had imported an excess of sugar, which became almost unsaleable. It applied likewise to the gentlemen who had tied up their FLOATING CAPITAL<sup>a</sup> in railways and relied on credit to replace it in their "legitimate" business. To Overstone all this signifies "A MORAL SENSE OF THE ENHANCED VALUE OF HIS MONEY". a But this enhanced value of money capital corresponded directly on the other hand to the depreciated money value of real capital (commodity capital and productive capital). The value of capital in the one form rose because the value of capital in the other fell. Overstone, however, seeks to identify these two values of different sorts of capital in a single value of capital in general, and he tries to do so by opposing both of them to a scarcity of the medium of circulation, of available money. But the same amount of money capital may be loaned with very different quantities of the circulation medium.

Take his example of 1847. The official bank rate of interest stood at 3 to  $3\frac{1}{2}$ % in January; 4 to  $4\frac{1}{2}$ % in February. In March it was generally 4%. April (panic) 4 to  $7\frac{1}{2}$ %. May 5 to  $5\frac{1}{2}$ %, June, on the whole, 5%. July 5%. August 5 to  $5\frac{1}{2}$ %. September 5% with trifling variations of  $5\frac{1}{4}$ ,  $5\frac{1}{2}$ , 6%. October 5,  $5\frac{1}{2}$ , 7%. November 7-10%. December 7 to 5%.—In this case the interest rose because profits decreased and the money values of commodities fell enormously. If, therefore, Overstone says here that the rate of interest rose in 1847 because the value of capital rose, he cannot mean anything by value of capital but the value of money capital, and the value of money capital is the rate of interest, and nothing else. But later he showed the cloven hoof and identified the value of capital with the rate of profit.

As for the high rate of interest paid in 1856, Overstone was indeed ignorant of the fact that this was partially a symptom that the credit jobbers were coming to the fore, who paid interest not from their profit, but with the capital of others; he maintained just a few months before the crisis of 1857 that "business is quite sound".

He testified furthermore:

"3722. That idea of the profits of trade being destroyed by a rise in the rate of interest is most erroneous. In the first place, a rise in the rate of interest is seldom of any long

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition these English phrases are given in parentheses after their German equivalents.

duration; in the second place, if it is of long duration, and of great extent, it is really a rise in the value of capital, and why does value of capital rise? Because the rate of profit is increased."

Here, then, we learn, at last, what the meaning of "value of capital" is. Furthermore, the rate of profit may be high for a lengthy period, and yet the profit of enterprise may fall and the rate of interest rise to a point where it swallows the greater portion of the profit.

"3724. The rise in the rate of interest has been in consequence of the great increase in the trade of the country, and the great rise in the rate of profits; and to complain of the rise in the rate of interest as being destructive of the two things, which have been its own cause, is a sort of logical absurdity, which one does not know how to deal with."

This is just as logical as if he were to say: The rise in the rate of profit has been in consequence of the rise in commodity prices by speculation, and to complain that the rise in prices destroys its own cause, namely, speculation, is a logical absurdity, etc. That anything can ultimately destroy its own cause is a logical absurdity only for the usurer enamoured of the high interest rate. The greatness of the Romans was the cause of their conquests, and their conquests destroyed their greatness. Wealth is the cause of luxury and luxury has a destructive effect on wealth. The wiseacre! The idiocy of the present-day bourgeois world cannot be better described than by the respect, which the "logic" of the millionaire — the DUNGHILL ARISTOCRAT — inspired in all England. Furthermore, if a high rate of profit and an expansion of business may be causes of a high interest rate, a high rate of interest is, therefore, by no means a cause of high profit. The question is precisely whether such a high interest (as was actually discovered during the crisis) continued or, what is more, reached its climax after the high rate of profit had long gone the way of all flesh.

"3718. With regard to a great rise in the rate of discount, that is a circumstance entirely arising from the increased value of capital, and the cause of that increased value of capital I think any person may discover with perfect clearness. I have already alluded to the fact that during the 13 years this Act has been in operation, the trade of this country has increased from £45,000,000 to £120,000,000. Let any person reflect upon all the events which are involved in that short statement; let him consider the enormous demand upon capital for the purpose of carrying on such a gigantic increase of trade, and let him consider at the same time that the natural source from which that great demand should be supplied, namely, the annual savings of this country, has for the last three or four years been consumed in the unprofitable expenditure of war. I confess that my surprise is, that the rate of interest is not much higher than it is; or, in other words, my surprise is, that the pressure for capital to carry on these gigantic operations, is not far more stringent than you have found it to be."

What an amazing jumble of words by our logician of usury! Here he comes again with his increased value of capital! He seems to think that this enormous expansion of the reproduction process, hence accumulation of real capital, took place on one side, and that on the other there existed a "capital", for which there arose an "enormous demand", in order to accomplish this gigantic increase of commerce! Was not this enormous increase of production an increase of capital itself, and if it created a demand, did it not also create the supply, and, simultaneously, an increased supply of money capital? If the interest rate rose very high, then merely because the demand for money capital increased still more rapidly than its supply, which implies, in other words, that with the expansion of industrial production its operation on a credit basis expanded as well. That is to say, the actual industrial expansion caused an increased demand for "accommodation", and the latter demand is evidently what our banker means by the "enormous demand for capital". It was surely not the expansion of this *demand* for capital alone, which raised the export business from  $f_{45}$  to  $f_{120}$  million. And furthermore, what does Overstone mean when he says that the country's annual savings swallowed by the Crimean War form the natural source of supply for this big demand? In the first place, how did England achieve accumulation in 1792-1815, which was a far different war from the little Crimean one 44? In the second place, if the natural source was dry, from what source did capital flow at all? It is well known that England did not request loans from foreign countries. Yet if there is an artificial source besides the natural one, it would have been best for a nation to utilise the natural source in war and the artificial one in business. But if only the old money capital was available, could it double its effectiveness through a high rate of interest? Mr. Overstone evidently thinks that the country's annual savings (which, however, were supposed to have been consumed in this case) are converted only into money capital. But if no real accumulation, i. e., expansion of production and augmentation of the means of production, had taken place, what good would there be from the accumulation of debtor's money claims on this production?

The increase in the "value of capital" springing from a high rate of profit is identified by Overstone with an increase caused by a greater demand for money capital. This demand may climb for reasons quite independent of the rate of profit. He himself cites the example of its rise in 1847 as a result of the depreciation of real capital. Depending on what suits his purpose, he ascribes the value of capital to real capital or money capital.

The dishonesty of our banking lord, and his narrow-minded banker's point of view with its didactic flavouring are further revealed in the following:

3728. (Question:) "You have stated that the rate of discount is of no material moment you think to the merchant; will you be kind enough to state what you consider the ordinary rate of profit?"

Mr. Overstone declares that it is "impossible" to answer this question.

"3729. Supposing the average rate of profit to be, say, from 7 to 10%, a variation of from 2 to 7 or 8% in the rate of discount must materially affect the rate of profit, must it not?"

(This question itself lumps together the rate of profit of enterprise with the rate of profit, and passes over the fact that the rate of profit is the common source of interest and profit of enterprise. The interest rate may leave the rate of profit untouched, but not the profit of enterprise. Overstone replied:)

"In the first place parties will not pay a rate of discount which seriously interrupts their profits; they will discontinue their business rather than do that."

(Yes, if they can do so without ruining themselves. So long as their profit is high, they pay the discount because they wish to, and when it is low, because they have to.)

"What is the meaning of discount? Why does a person discount a bill?... Because he wants to obtain the command of a greater quantity of capital."

(Halte-là! \* Because he wants to anticipate the return in money of his tied-up capital and to prevent his business from stopping; because he must meet payments due. He demands more capital only when business is good, or when he speculates on another's capital, though business may be bad. The discount is by no means simply a device to expand business.)

"And why does he want to obtain the command of a greater quantity of capital? Because he wants to employ that capital; and why does he want to employ that capital? Because it is profitable to him to do so; it would not be profitable to him to do so if the discount destroyed his profit."

<sup>&</sup>lt;sup>a</sup> Hold on!

This smug logician assumes that bills of exchange are discounted only for the purpose of expanding business, and that business is expanded because it is profitable. The first assumption is wrong. The ordinary businessman discounts, in order to anticipate the money form of his capital and thereby to keep his process of reproduction in flow; not in order to expand his business or secure additional capital, but in order to balance the credit he gives by the credit he receives. And if he wants to expand his business on credit, discounting bills will do him little good because it is merely conversion of the money capital which he already has in his hands from one form into another; he will rather take a direct loan for a longer period. The credit swindler will get his accommodation bills discounted to expand his business activity, to cover one squalid business deal by another; not to make profits but to obtain possession of another's capital.

After Mr. Overstone has thus identified discounting with borrowing additional capital (instead of with converting bills representing capital into hard cash), he beats an instant retreat as soon as the screws are applied to him.

3730. (Question:) "Merchants being engaged in business, must they not for a certain period carry on their operations in spite of any temporary increase in the rate of discount?" — (Overstone:) "There is no doubt that in any particular transaction, if a person can get his command of capital at a low rate of interest rather than at a high rate of interest, taken in that limited view of the matter, that is convenient to him."

But it is a very unlimited point of view, on the other hand, which enables Mr. Overstone quite suddenly to understand only his, banker's capital, as "capital", and to assume that the man who discounts a bill of exchange with him is a man without capital, just because his capital exists in the form of commodities, or because the money form of his capital is a bill of exchange, which Mr. Overstone converts into another money form.

"3732. With reference to the Act of 1844, can you state what has been about the average rate of interest in proportion to the amount of bullion in the Bank; would it be a fact that when the amount of bullion has been about  $\pounds$ 9,000,000 or  $\pounds$ 10,000,000 the rate of interest has been 6 or 7 per cent, and that when it has been  $\pounds$ 16,000,000, the rate of interest has been, say, from 3 to 4 per cent?"

(The examiner wishes to press him to explain the rate of interest, so far as it is influenced by the amount of bullion in the Bank, on the basis of the rate of interest, so far as it is influenced by the value of capital.)

"I do not apprehend that that is so... but if it is, then I think we must take still more stringent measures than those adopted by the Act of 1844, because if it be true that the greater the store of bullion, the lower the rate of interest, we ought to set to work, according to that view of the matter, to increase the store of bullion to an indefinite amount, and then we should get the interest down to nothing."

The examiner, Cayley, unmoved by this poor joke, continues:

"3733. If that be so, supposing that  $\pounds 5,000,000$  of bullion was to be restored to the Bank, in the course of the next six months the bullion then would amount, say, to  $\pounds 16,000,000$ , and supposing that the rate of interest was thus to fall to 3 or 4 per cent, how could it be stated that that fall in the rate of interest arose from a great decrease of the trade of the country? — I said that the recent rise in the rate of interest, not that the fall in the rate of interest, was closely connected with the great increase in the trade of the country."

But what Cayley says is this: If a rise of interest rate together with a contraction of the gold reserve, is an indication of an expansion in business, then a fall of the interest rate together with an expansion of the gold reserve, must be an indication of a contraction of business. Overstone has no answer to this.

3736. (Question:) "I observed you" (in the text always "YOUR LORDSHIP") "to say that money was the instrument for obtaining capital."

(Precisely this is the mistake, to conceive money as an instrument; it is a form of capital.)

"Under a drain of bullion//of the Bank of England//is not the great strain, on the contrary, for *capitalists* to obtain money?" —//Overstone://"No, it is not the capitalists, it is those who are not capitalists, who want to obtain money and why do they want to obtain money?... Because through the money they obtain the command of the capital of the capitalist to carry on the business of the persons who are not capitalists."

Here he declares point-blank that manufacturers and merchants are not capitalists, and that the capitalist's capital is only money capital.

"3737. Are not the parties who draw bills of exchange capitalists? — The parties who draw bills of exchange may be, and may not be, capitalists."

Here he is stuck.

He is then asked whether merchants' bills of exchange represent commodities which have been sold or shipped. He denies that these bills represent the value of commodities in the same way that a banknote represents gold (3740, 3741). This is somewhat insolent.
"3742. Is it not the merchant's object to get money? — No; getting money is not the object in drawing the bill; getting money is the object in discounting the bill."

Drawing bills of exchange is converting commodities into a form of credit money, just as discounting bills of exchange is converting this credit money into another, namely banknotes. At any rate, Mr. Overstone admits here that the purpose of discounting is to obtain money. A while ago he said that discounting was a way not of converting capital from one form into another, but of obtaining additional capital.

"3743. What is the great desire of the mercantile community under pressure of panic, such as you state to have occurred in 1825, 1837 and 1839; is their object to get possession of capital or the legal tender? — Their object is to get the command of capital to support their business."

Their purpose is to obtain means of payment for due bills of exchange on themselves, on account of the prevailing lack of credit, so that they will not have to let their commodities go below price. If they have no capital at all themselves, they receive it, naturally, along with the means of payment, because they receive value without an equivalent. The urge to obtain money as such consists always in the wish to convert value from the form of commodities or creditor's claims into the form of money. Hence, even aside from the crises, the great difference between borrowing capital and discount, the latter being a mere conversion of money claims from one form into another, or into real money.

//I take the liberty at this point in my capacity of editor to interpolate a few remarks.

With respect to Norman, as well as Loyd-Overstone, the banker is always the one who "advances capital" to others, and his customers are those who demand "capital" from him. Thus, Overstone says that people have bills of exchange discounted through him, "because they wish to obtain the command of *capital*" (3729), and that it is pleasant for such people if they can "get *command of capital* at a low rate of interest" (3730). "Money is the instrument for obtaining *capital*" (3736), and during a panic the great desire of the mercantile community is to "get the command of *capital*" (3743). For all of Loyd-Overstone's confusion over what capital is, it is at least clear that he designates what the banker gives to his client as capital, as a capital which the client did not formerly possess, but which was advanced to him to supplement what he already possessed. The banker has become so accustomed to act as distributor (through loans) of the social capital available in money form that he considers every function whereby he hands out money, as loaning. All the money he pays out appears to him as a loan. If the money is directly loaned, this is literally true. If it is invested in the billdiscounting business, it is in fact advanced by himself until the bill becomes due. The notion thus grows on him that all the payments he makes are advances; furthermore, that they are advances not merely in the sense that every investment of money with the object of deriving interest or profit, is economically considered an advance of money which the owner of money concerned, in his capacity of private individual, makes to himself in his capacity as entrepreneur, but advances in the definite sense that the banker lends his client a sum of money which augments the capital already at the latter's disposal.

It is this conception, which, transferred from the banker's office to political economy, has created the confusing controversy, whether that which the banker places at his client's disposal in hard cash is capital or mere money, a medium of circulation, or CURRENCY. To decide this — fundamentally simple — controversy, we must put ourselves in the place of a bank client. It all depends on what this customer requests and receives.

If the bank allows its client a loan simply on his personal credit, without any security on his part, then the matter is clear. He then certainly receives an advance of definite value as a supplement to the capital he has already invested. He receives it in the form of money; hence, not merely money, but also money *capital*.

If, on the other hand, he receives the advance against securities, etc., then it is an advance in the sense of money paid to him on condition that he pay it back. But it is not an advance of capital. For the securities also represent capital, and a larger amount at that than the advance. The recipient therefore receives less capital value than he deposits as security; this represents for him no acquisition of additional capital. He does not enter into the transaction because he needs capital—he has that in his securities—but because he needs money. Here we, therefore, have an advance of *money*, not of capital.

If the loan is granted by discounting bills, then even the *form* of an advance disappears. Then it is purely a matter of buying and selling. The bill passes by endorsement into the possession of the bank, while the money passes into the possession of the client; there is no question of any return payment on his part. If the client buys hard cash with a

bill of exchange or some similar instrument of credit, it is no more and no less an advance than were he to buy cash money with his other commodities, such as cotton, iron, or corn. Still less can this be called an advance of *capital*. Every purchase and sale between one merchant and another is a transfer of capital. But an advance occurs only when the transfer of capital is not reciprocal, but unilateral and for a period of time. An advance of capital through discount can, therefore, only occur when a bill is a speculative one, which does not represent any sold commodities, and no banker will take such a bill if he is aware of its nature. In the regular discounting business the bank client does not, therefore, receive an advance, either of capital or of money.What he receives is money for sold commodities.

The cases in which the customer demands and receives capital from a bank are thus clearly distinguished from those, in which he merely receives an advance of money, or buys money from the bank. And since least of all Mr. Loyd-Overstone ever advanced his funds without collateral except on the rarest occasions (he was the banker of my firm<sup>a</sup> in Manchester), it is likewise evident that his lyric descriptions of the great quantities of capital loaned by generous bankers to manufacturers in need of capital are gross inventions.

By the way, in Chapter XXXII Marx says essentially the same thing: "The demand for means of payment is a mere demand for *convertibility into money*, so far as merchants and producers have good securities to offer; it is a demand for *money capital* whenever there is no collateral, so that an advance of means of payment gives them not only the *form of money*, but also the *equivalent* they lack, whatever its form, with which to make payment." <sup>b</sup>— And again in Chapter XXXIII: "Under a developed system of credit, with the money concentrated in the hands of bankers, it is they, *at least nominally*, who advance it. This advance refers only to money in circulation. It is an advance of *circulation*, not an advance of capitals which it circulates." <sup>c</sup> Mr. Chapman, who should know, likewise corroborates this conception of the discounting business, B. C. 1857:

"The banker has the bill, the banker has bought the bill." Evid. Question 5139.

We shall, however, return to this subject in Chapter XXVIII.<sup>d</sup>—F. E.//

<sup>&</sup>lt;sup>a</sup> A reference to Ermen and Engels firm. - <sup>b</sup> See this volume, p. 513. - <sup>c</sup> Ibid., p. 528. - <sup>d</sup> Ibid., pp. 452-54.

"3744. Will you be good enough to describe what you actually mean by the term 'capital'?" -//Overstone://"CAPITAL CONSISTS OF VARIOUS COMMODITIES; BY THE MEANS OF WHICH TRADE IS CARRIED ON <sup>a</sup>; there is fixed capital and there is circulating capital. Your ships, your docks, your wharves ... are fixed capital; your provisions, your clothes, etc., are circulating capital."

"3745. Is the country oppressed under a drain of bullion? - Not in the rational sense of the word."

(Then comes the old Ricardian theory of money.<sup>b</sup>)

"In the natural state of things the money of the world is distributed amongst the different countries of the world in certain proportions, those proportions being such that under that distribution//of money//the intercourse between any one country and all the other countries of the world jointly will be an intercourse of barter; but disturbing circumstances will arise from time to time to affect that distribution, and when those arise, a certain portion of the money of any given country passes to other countries."-"3746. Your Lordship now uses the term 'money'. I understood you before to say that it was a loss of capital.— That what was a loss of capital?"—"3747. The export of bullion? - No, I did not say so. If you treat bullion as capital, no doubt it is a loss of capital; it is parting with a certain proportion of those precious metals which constitute the money of the world."-"3748. I understood Your Lordship to say that an alteration in the rate of discount was a mere sign of an alteration in the value of capital?—I did."—"3749. And that the rate of discount generally alters with the state of the store of bullion in the Bank of England? - Yes, but I have already stated that the fluctuations in the rate of interest, which arise from an alteration in the quantity of money" (what he therefore means here is the quantity of actually existing gold) "in a country, are very small..."

"3750. Then, does Your Lordship mean that there is less capital than there was, when there is a more continuous yet temporary increase in the rate of discount than usual? — Less, in one sense of the word. The proportion between capital and the demand for it is altered; it may be by an increased demand, not by a diminution of the quantity of capital."

(But a moment ago it was capital = money or gold, and a little before that he had explained the rise in interest rate by a high rate of profit, due to an expansion rather than a contraction of business or capital.)

"3751. What is the capital which you particularly allude to? — That depends entirely upon what the capital is which each person wants. It is the capital which the country has at its command for conducting its business, and when that business is doubled, there must be a great increase in the demand for the capital with which it is to be carried on."

(This shrewd banker doubles first the business activity and then the

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English phrase is given in parentheses after its German equivalent. - <sup>b</sup> See present edition, Vol. 29, pp. 400-09.

demand for capital with which it is to be doubled. All he sees is his client, who asks Mr. Loyd for more capital by which to double the volume of his business.)

"Capital is like any other commodity" (but according to Mr. Loyd capital is nothing but the totality of commodities), "it will vary in its price" (hence, commodities change their price twice, one time as commodities and the second as capital), "according to the supply and demand."

"3752. The changes in the rate of discount are generally connected with the changes in the amount of gold which there is in the coffers of the Bank. Is it that capital to which Your Lordship refers? — No." — "3753. Can Your Lordship point to any instance in which there has been a large store of capital in the Bank of England connected with a high rate of discount? — The Bank of England is not a place for the deposit of capital, it is a place for the deposit of money." — "3754. Your Lordship has stated that the rate of interest depends upon the amount of capital; will you be kind enough to state what capital you mean, and whether you can point to any instance in which there has been a large store of bullion in the Bank and at the same time a high rate of interest? — It is very probable" (aha!) "that the accumulation of bullion in the Bank may be coincident with a low rate of interest, because a period in which there is a diminished demand for capital"

(namely, money capital; the period to which reference is made here, 1844 and 1845, was a period of prosperity)

"is a period, during which, of course, the means or instrument through which you command capital may accumulate."—"3755. Then you think that there is no connection between the rate of discount and the amount of bullion in the coffers of the Bank?—There may be a connection, but it is not a connection of principle" (his Bank Act of 1844, however, made it a principle of the Bank of England to regulate the interest rate by the quantity of bullion in its possession), "THERE MAY BE A COINCIDENCE OF TIME." a—"3758. Do I rightly understand you to say, that the difficulty of merchants in this country, under a state of pressure, in consequence of a high rate of discount, is in getting capital, and not in getting money?—You are putting two things together which I do not join in that form; their difficulty is in getting capital, and their difficulty of getting money and the difficulty of getting capital is the same difficulty taken in two successive stages of its progress."

Here the fish is caught in the net again. The first difficulty is to discount a bill of exchange, or to obtain a loan against the security of commodities. It is the difficulty of converting capital, or a commercial token of capital, into money. And this difficulty is manifested, among other things, in a high rate of interest. But as soon as the money is obtained, what is the second difficulty? Does anyone ever find any difficulty in getting rid of his money when it is merely a matter of

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English phrase is given in parentheses after its German equivalent.

paying? And if it is a matter of buying, has anyone ever had any difficulty in purchasing during times of crisis? And, for the sake of argument, should this refer to a specific dearth in corn, cotton, etc., this difficulty could only appear in the price of these commodities, not in the value of money capital, i. e., not in the rate of interest; and this difficulty is overcome, in the final analysis, by the fact that our man now has the money to buy them."

"3760. But a higher rate of discount is an increased difficulty of getting money? — It is an increased difficulty of getting money, but it is not because you want to have the money; it is only the form" (and this form brings profit into the banker's pocket) "in which the increased difficulty of getting capital presents itself according to the complicated relations of a civilised state."

"3763.//Overstone's reply://The banker is the go-between who receives deposits on the one side, and on the other applies those deposits, entrusting them, in the form of capital, to the hands of persons, who, etc."

At last we have what he means by capital. He converts money into capital by "entrusting" it, less euphemistically, by loaning it at interest.

After Mr. Overstone has stated that a change in the rate of discount is not essentially connected with a change in quantity of the gold reserve in a bank, or in the quantity of available money, but that there is at best only a coincidence in time, he repeats:

"3805. When the money in the country is diminished by a drain, its value increases, and the Bank of England must conform to that alteration in the value of money"

(hence, the value of money *as capital*; in other words, the rate of interest, for the value of money *as money*, compared with commodities, remains the same),

"which is meant by the technical term of raising the rate of interest." "3819. I never confound those two."

Meaning money and capital, and for the simple reason that he never differentiates between them.

"3834. The very large sum, which had to be paid" (for corn in 1847), "which was in point of fact capital, for the supply of the necessary provisions of the country."

"3841. The variations in the rate of discount have no doubt a very close relation to the state of the reserve"//of the Bank of England//"because the state of the reserve is the indicator of the increase or the decrease of the quantity of money in the country; and in proportion as the money in the country increases or decreases, the value of that money will increase or decrease, and the bankrate of discount will conform to that change." Thus, Overstone admits here what he emphatically denied in No. 3755.

"3842. There is an intimate connection between them."

Meaning the quantity of bullion in the ISSUE DEPARTMENT, on the one hand, and the reserve of notes in the BANKING DEPARTMENT, on the other. Here he explains the change in the rate of interest by the change in the quantity of money. But this statement is wrong. The reserve may shrink because the circulating money in the country increases. This is the case when the public takes more notes and the hoard of metal does not decrease. But in such case the interest rate rises, because then the banking capital of the Bank of England is limited by the Act of 1844. But he dare not mention this, because due to this law the two departments have nothing to do with one another.

"3859. A high rate of profit will always create a great demand for capital; a great demand for capital will raise the value of it."

Here, at last, we have the connection between a high rate of profit and a demand for capital as Overstone conceives it. Now, a high rate of profit prevailed in, for example, 1844-45 in the cotton industry, because raw cotton was cheap, and remained so, whereas the demand for cotton goods was strong. The value of capital (and in an earlier statement Overstone calls capital that which everyone needs in his business), in this case therefore the value of raw cotton, was not increased for the manufacturer. The high rate of profit may have induced some cotton manufacturer to obtain money on credit for the purpose of expanding his business. Thereby his demand rose for *money* capital, but for nothing else.

"3889. Bullion may or may not be money, just as paper may or may not be a banknote."

"3896. Do I correctly understand Your Lordship that you give up the argument, which you used in 1840, that the fluctuations in the notes out of the Bank of England ought to conform to the fluctuations in the amount of bullion? — I give it up so far as this... that now with the means of information which we possess, the notes out of the Bank of England must have added to them the notes which are in the banking reserve of the Bank of England."

This is superlative. The arbitrary provision that the Bank may make out as many paper notes as it has gold in the treasury and 14 million more, implies, of course, that its issue of notes fluctuates with the fluctuations of the gold reserve. But since the present "means of information which we possess" clearly showed that the mass of notes, which the Bank can thus manufacture (and which the ISSUE DEPARTMENT transfers to the BANKING DEPARTMENT) — that this circulation between the two departments of the Bank of England, fluctuating with the fluctuations of the gold reserve, does not determine the fluctuations in the circulation of banknotes outside the Bank of England, then the latter — the real circulation — becomes a matter of indifference to the bank administration, and the circulation between the two departments of the Bank, whose difference from the real circulation is mirrored in the reserve, alone becomes decisive. To the outside world this circulation is significant only because the reserve indicates how close the Bank is approaching the legal maximum of its note issue, and how much its clients can still receive from the BANKING DEPARTMENT.

The following is a brilliant example of Overstone's mala fides a:

"4243. Does the quantity of capital, do you think, oscillate from month to month to such a degree as to alter its value in the way exhibited of late years in the oscillations in the rate of discount? — The relation between the demand and the supply of capital may undoubtedly fluctuate, even within short periods.... If France tomorrow put out a notice that she wishes to borrow a very large loan, there is no doubt that it would immediately cause a great alteration in the value of money, that is to say, in the value of capital, in this country."

"4245. If France announces, that she wants suddenly, for any purpose, 30 million's worth of commodities there will be a great demand for *capital*, to use the more scientific and the simpler term."

"4246. The *capital*, which France would wish to buy with her loan, is *one* thing, and the *money* with which she buys it is *another*, is it the *money*, which alters in value, or not? — We seem to be reviving the old question, which I think is more fit for the chamber of a student than for this committee room."

And with this he retires, but not into the chamber of a student.84)

### Chapter XXVII

#### THE ROLE OF CREDIT IN CAPITALIST PRODUCTION

The general remarks, which the credit system so far elicited from us, were the following:

I. Its necessary development to effect the equalisation of the rate of

 $^{84_1}$  More on Overstone's confusion of terms in matters concerning capital at the close of Chapter XXXII.<sup>b</sup>

<sup>&</sup>lt;sup>a</sup> dishonesty - <sup>b</sup> See this volume, p. 517.

profit, or the movements of this equalisation, upon which the entire capitalist production rests.

II. Reduction of the costs of circulation.

1) One of the principal costs of circulation is money itself, being value in itself. It is economised through credit in three ways.

A. By dropping it away entirely in a great many transactions.

B. By the accelerated circulation of the circulating medium.<sup>85)</sup> This corresponds in part with what is to be said under 2). On the one hand, the acceleration is technical; i. e., with the same magnitude and number of actual turnovers of commodities for consumption, a smaller quantity of money or money tokens performs the same service. This is bound up with the technique of banking. On the other hand, credit accelerates the velocity of the metamorphosis of commodities and thereby the velocity of money circulation.

C. Substitution of paper for gold money.

2) Acceleration, by means of credit, of the individual phases of circulation or of the metamorphosis of commodities, later the metamorphosis of capital, and with it an acceleration of the process of reproduction in general. (On the other hand, credit helps to keep the acts of buying and selling longer apart and serves thereby as a basis for speculation.) Contraction of reserve funds, which may be viewed in two ways: as a reduction of the circulating medium, on the one hand, and, on the other, as a reduction of that part of capital which must always exist in the form of money.<sup>86</sup>

<sup>85</sup><sup>1</sup> "The average of notes in circulation during the year was, in 1812, 106,538,000 francs; in 1818, 101,205,000 francs; whereas the movement of the currency, or the annual aggregate of disbursements and receipts upon all accounts, was, in 1812, 2,837,712,000 francs; in 1818, 9,665,030,000 francs. The activity of the currency in France, therefore, during the year 1818, as compared with its activity in 1812, was in the proportion of three to one. The great regulator of the velocity of circulation is credit.... This explains, why a severe pressure upon the money market is generally coincident with a full circulation" (*The Currency Theory Reviewed, etc.*, p. 65).— "Between September 1833 and September 1843 nearly 300 banks were added to the various issuers of notes throughout the United Kingdom; the result was a reduction in the circulation to the extent of two million and a half; it was  $\pounds 36,035,244$  at the close of September 1833, and  $\pounds 33,518,554$  at the close of September 1843" (l. c., p. 53).— "The prodigious activity of Scottish circulation enables it, with  $\pounds 100$ , to effect the same quantity of monetary transactions, which in England it requires  $\pounds 420$  to accomplish" (l. c., p. 55. This last refers only to the technical side of the operation).

<sup>86)</sup> "Before the establishment of the banks ... the amount of capital withdrawn for the purposes of currency was greater, at all times, than the actual circulation of commodities required" (*Economist*, [March 15,] 1845, p. 238). III. Formation of stock companies. Thereby:

1) An enormous expansion of the scale of production and of enterprises, that was impossible for individual capitals. At the same time, enterprises that were formerly government enterprises, become public.

2) The capital, which in itself rests on a social mode of production and presupposes a social concentration of means of production and labour power, is here directly endowed with the form of social capital (capital of directly associated individuals) as distinct from private capital, and its undertakings assume the form of social undertakings as distinct from private undertakings. It is the abolition of capital as private property within the framework of the capitalist mode of production itself.

3) Transformation of the actually functioning capitalist into a mere manager, administrator of other people's capital, and of the owner of capital into a mere owner, a mere money capitalist. Even if the dividends which they receive include the interest and the profit of enterprise, i. e., the total profit (for the salary of the manager is, or should be, simply the wage of a specific type of skilled labour, whose price is regulated in the labour market like that of any other labour), this total profit is henceforth received only in the form of interest, i. e., as mere compensation for owning capital that now is entirely divorced from the function in the actual process of reproduction, just as this function in the person of the manager is divorced from ownership of capital. Profit thus appears (no longer only that portion of it, the interest, which derives its justification from the profit of the borrower) as a mere appropriation of the surplus labour of others, arising from the conversion of means of production into capital, i. e., from their estrangement vis-à-vis the actual producer, from their antithesis as another's property to every individual actually at work in production, from manager down to the last day labourer. In stock companies the function is divorced from capital ownership, hence also labour is entirely divorced from ownership of means of production and surplus labour. This result of the ultimate development of capitalist production is a necessary transitional phase towards the reconversion of capital into the property of producers, although no longer as the private property of the individual producers, but rather as the property of associated producers, as direct social property. On the other hand, the stock company is a transition toward the conversion of all functions in the reproduction process which still remain linked with

capitalist property, into mere functions of associated producers, into social functions.

Before we go any further, there is still the following economically important fact to be noted: Since profit here assumes the pure form of interest, undertakings of this sort are still possible if they yield bare interest, and this is one of the causes, stemming the fall of the general rate of profit, since such undertakings, in which the ratio of constant capital to the variable is so enormous, do not necessarily enter into the equalisation of the general rate of profit.

//Since Marx wrote the above, new forms of industrial enterprises have developed, as we know, representing the second and third degree of stock companies. The daily growing speed with which production may be enlarged in all fields of large-scale industry today, is offset by the ever-greater slowness with which the market for these increased products expands. What the former turns out in months, can scarcely be absorbed by the latter in years. Add to this the protective tariff policy, by which every industrial country shuts itself off from all others, particularly from England, and also artificially increases domestic production capacity. The results are a general chronic overproduction, depressed prices, falling and even wholly disappearing profits; in short, the old boasted freedom of competition has reached the end of its tether and must itself announce its obvious, scandalous bankruptcy. And in every country this is taking place through the big industrialists of a certain branch joining in a cartel for the regulation of production. A committee fixes the quantity to be produced by each establishment and is the final authority for distributing the incoming orders. Occasionally even international cartels were established, as between the English and German iron industries. But even this form of association in production did not suffice. The antagonism of interests between the individual firms broke through it only too often, restoring competition. This led in some branches, where the scale of production permitted, to the concentration of the entire production of that branch of industry in one big joint-stock company under single management. This has been repeatedly effected in America; in Europe the biggest example so far is the United Alkali Trust, which has brought all British alkali production into the hands of a single business firm. The former owners of the more than thirty individual plants have received shares for the appraised value of their entire establishments, totalling about  $f_{15}$  million, which represent the fixed capital of the trust. The technical management remains in the same hands as

before, but business control is concentrated in the hands of the general management. The FLOATING CAPITAL,<sup>a</sup> totalling about £1 million, was offered to the public for subscription. The total capital is, therefore, £6 million. Thus, in this branch, which forms the basis of the whole chemical industry, competition has been replaced by monopoly in England, and the road has been paved, most gratifyingly, for future expropriation by the whole of society, the nation.— F. E.//

This is the abolition of the capitalist mode of production within the capitalist mode of production itself, and hence a self-dissolving contradiction, which *prima facie* represents a mere phase of transition to a new form of production. It manifests itself as such a contradiction in its effects. It establishes a monopoly in certain spheres and thereby requires state interference. It reproduces a new financial aristocracy, a new variety of parasites in the shape of promoters, speculators and simply nominal directors; a whole system of swindling and cheating by means of corporation promotion, stock issuance, and stock speculation. It is private production without the control of private property.

IV. Aside from the stock-company business, which represents the abolition of capitalist private industry on the basis of the capitalist system itself and destroys private industry as it expands and invades new spheres of production, credit offers to the individual capitalist, or to one who is regarded a capitalist, absolute control within certain limits over the capital and property of others, and thereby over the labour of others.<sup>87</sup> The control over social capital, not the individual

<sup>87)</sup> See, for instance, in the *Times* the list of business bankruptcies in a crisis year such as 1857 and compare the private property of those bankrupt with the amount of their debts. "The truth is that the power of purchase by persons having capital and credit is much beyond anything that those who are unacquainted practically with speculative markets have any idea of" (Tooke, *An Inquiry into the Currency Principle*, p. 79). "A person having the reputation of capital enough for his regular business, and enjoying good credit in his trade, if he takes a sanguine view of the prospect of a rise of price of the article in which he deals, and is favoured by circumstances in the outset and progress of his speculation, may effect purchases to an extent perfectly enormous compared with his capital" (ibid, p. 136). "Merchants, manufacturers, etc., carry on operations much beyond these which the use of their own capital alone would enable them to do.... Capital is rather the foundation upon which a good credit is built than the limit of the transactions of any commercial establishment" (*Economist*, [November 20,] 1847, p. 1333).

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

capital of his own, gives him control over social labour. The capital itself, which a man really owns or is supposed to own in the opinion of the public, becomes purely a basis for the superstructure of credit. This is particularly true of wholesale commerce, through which the greatest portion of the social product passes. All standards of measurement, all excuses more or less still justified under capitalist production, disappear here. What the speculating wholesale merchant risks is social property, not his own. Equally sordid becomes the phrase relating the origin of capital to savings, for what he demands is that others should save for him. [[Just as all France recently saved up one and a half billion francs for the Panama Canal swindlers.<sup>45</sup> In fact, a description of the entire Panama swindle is here correctly anticipated, fully twenty years before it occurred.— F. E.// The other phrase concerning abstention is squarely refuted by his luxury, which is now itself a means of credit. Conceptions which have some meaning on a less developed stage of capitalist production, become quite meaningless here. Success and failure both lead here to a centralisation of capital, and thus to expropriation on the most enormous scale. Expropriation extends here from the direct producers to the smaller and the medium-sized capitalists themselves. It is the point of departure for the capitalist mode of production; its accomplishment is the goal of this production. In the last instance, it aims at the expropriation of the means of production from all individuals. With the development of social production the means of production cease to be means of private production and products of private production, and can thereafter be only means of production in the hands of associated producers, i. e., the latter's social property, much as they are their social products. However, this expropriation appears within the capitalist system in a contradictory form, as appropriation of social property by a few; and credit lends the latter more and more the aspect of pure adventurers. Since property here exists in the form of stock, its movement and transfer become purely a result of gambling on the stock exchange, where the little fish are swallowed by the sharks and the lambs by the stock-exchange wolves. There is antagonism against the old form in the stock companies, in which social means of production appear as individual property; but the conversion to the form of stock still remains ensnared in the trammels of capitalism; hence, instead of overcoming the antithesis between the character of wealth as social and as private wealth, the stock companies merely develop it in a new form.

The cooperative factories of the labourers themselves represent within the old form the first sprouts of the new, although they naturally reproduce, and must reproduce, everywhere in their actual organisation all the shortcomings of the prevailing system. But the antithesis between capital and labour is overcome within them, if at first only by way of making the associated labourers into their own capitalist, i. e., by enabling them to use the means of production for the employment of their own labour. They show how a new mode of production naturally grows out of an old one, when the development of the material forces of production and of the corresponding forms of social production have reached a particular stage. Without the factory system arising out of the capitalist mode of production there could have been no cooperative factories. Nor could these have developed without the credit system arising out of the same mode of production. The credit system is not only the principal basis for the gradual transformation of capitalist private enterprises into capitalist stock companies, but equally offers the means for the gradual extension of cooperative enterprises on a more or less national scale. The capitalist stock companies, as much as the cooperative factories, should be considered as transitional forms from the capitalist mode of production to the associated one, with the only distinction that the antagonism is resolved negatively in the one and positively in the other.

So far we have considered the development of the credit system and the implicit latent abolition of capitalist property — mainly with reference to industrial capital. In the following chapters we shall consider credit with reference to interest-bearing capital as such, and to its effect on this capital, and the form it thereby assumes; and there are generally a few more specifically economic remarks still to be made.

But first this:

The credit system appears as the main lever of overproduction and overspeculation in commerce solely because the reproduction process, which is elastic by nature, is here forced to its extreme limits, and is so forced because a large part of the social capital is employed by people who do not own it and who consequently tackle things quite differently than the owner, who anxiously weighs the limitations of his private capital in so far as he handles it himself. This simply demonstrates the fact that the self-expansion of capital based on the contradictory nature of capitalist production permits an actual free development only up to a certain point, so that in fact it constitutes an immanent fetter and barrier to production, which are continually broken through by the credit system.<sup>88)</sup> Hence, the credit system accelerates the material development of the productive forces and the establishment of the world market. It is the historical mission of the capitalist mode of production to raise these material foundations of the new form of production to a certain degree of perfection. At the same time credit accelerates the violent eruptions of this contradiction—crises—and thereby the elements of disintegration of the old mode of production.

The two characteristics immanent in the credit system are, on the one hand, to develop the incentive of capitalist production, enrichment through exploitation of the labour of others, to the purest and most colossal form of gambling and swindling, and to reduce more and more the number of the few who exploit the social wealth; on the other hand, to constitute the form of transition to a new mode of production. It is this ambiguous nature, which endows the principal spokesmen of credit from Law to Isaac Péreire with the pleasant character mixture of swindler and prophet.

## Chapter XXVIII

#### MEDIUM OF CIRCULATION AND CAPITAL; VIEWS OF TOOKE AND FULLARTON

The distinction between currency and capital, as Tooke,<sup>89</sup> Wilson, and others draw it, whereby the differences between medium of circu-

<sup>88</sup> Th. Chalmers.<sup>a</sup>

<sup>89)</sup> We here give the related passage from Tooke in the original, which was cited in German on p. 390<sup>b</sup>: \* "The business of bankers, setting aside the issue of promissory notes payable on demand, may be divided into two branches, corresponding with the distinction pointed out by Dr. (Adam) Smith of the transactions between dealers and dealers, and between dealers and consumers. One branch of the bankers' business is to collect *capital* from those who have not immediate employment for it, and to distribute or transfer it to those who have. The other branch is to receive deposits of the *incomes* of their customers, and to pay out the amount, as it is wanted for expenditure by the latter in the objects of their consumption ... the former being a circulation of *capital*, the latter of *currency*" \* (Tooke, *Inquiry into the Currency Principle*, p. 36). The first is

<sup>&</sup>lt;sup>a</sup> On Political Economy etc., Glasgow, 1832, Ch. V. "On the Possibility of Overproduction or of a General Glut." - <sup>b</sup> See this volume, p. 401.

lation as money, as money capital generally, and as interest-bearing capital (MONEYED CAPITAL in the English sense) are thrown together pellmell, comes down to two things.

Currency circulates on the one hand as coin (money), so far as it promotes the expenditure of revenue, hence the traffic between the individual consumers and the retail merchants, to which category belong all merchants who sell to the consumers - to the individual consumers as distinct from productive consumers or producers. Here money circulates in the function of coin, although it continually replaces capital. A certain portion of money in a particular country is continually devoted to this function, although this portion consists of perpetually changing individual coins. In so far as money promotes the transfer of capital, however, either as a means of purchase (medium of circulation) or as a means of payment, it is *capital*. It is, therefore, neither its function as a means of purchase, nor that as a means of payment, which distinguishes it from coin, for it may also act as a means of purchase between one dealer and another so far as they buy from one another in hard cash, and also as a means of payment between dealer and consumer so far as credit is given and the revenue consumed before it is paid. The difference is, therefore, that in the second case this money not only replaces the capital for one side, the seller, but is expended, advanced, by the other side, the buyer, as capital. The difference, then, is in fact that between the money form of revenue

<sup>\* &</sup>quot;the concentration of capital on the one hand and the distribution of it on the other"; \* the latter is \* "administering the circulation for local purposes of the district" \* (ibid., p. 37). A far more correct conception is outlined in the following passage by Kinnear: "Money ... is employed to perform two operations essentially distinct.... As a medium of exchange between dealers and dealers, it is the instrument by which transfers of capital are effected; that is, the exchange of a certain amount of capital in money for an equal amount of capital in commodities. But money employed in the payment of wages and in purchase and sale between dealers and consumers is not capital, but income; that portion of the incomes of the community, which is devoted to daily expenditure. It circulates in constant daily use, and is that alone which can, with strict propriety, be termed CURRENCY.<sup>a</sup> Advances of capital depend entirely on the will of the Bank and other possessors of capital, for borrowers are always to be found; but the amount of the currency depends on the wants of the community, among whom the money circulates, for the purposes of daily expenditure" (J. G. Kinnear, *The Crisis and the Currency*, London, 1847, [pp. 3-4]).

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.

and the money form of capital, but not that between currency and capital, for a certain quantity of money *circulates* in the transactions between dealers as well as in the transactions between consumers and dealers. It is, therefore, equally *currency* in *both* functions. Tooke's conception introduces confusion into this question in various ways:

1) by confusing the functional distinctions;

2) by introducing the question of the quantity of money circulating together in both functions;

3) by introducing the question of the relative proportions of the quantities of currency circulating in both functions and thus in both spheres of the reproduction process.

Ad 1) Confusing the functional distinctions that money in one form is CURRENCY,<sup>a</sup> and capital in the other. In so far as money serves in one or another function, be it to realise revenue or transfer capital, it functions in buying and selling, or in paying, as a means of purchase or a means of payment, and, in the wider sense of the word, as currency. The further purpose which it has in the calculations of its spender or recipient, of being capital or revenue for him, alters absolutely nothing, and this is doubly demonstrated. Although the kinds of money circulating in the two spheres are different, the same piece of money, for instance a five-pound note, passes from one sphere into the other and alternately performs both functions; which is inevitable, if only because the retail merchant can give his capital the form of money only in the shape of the coin which he receives from his customers. It may be assumed that the actual small change has its circulation centre of gravity in the domain of retail trade; the retail dealer needs it continually to make change and receives it back continually in payment from his customers. But he also receives money, i. e., coin, in that metal which serves as a standard of value, hence in England one-pound coins, or even banknotes, particularly notes of small denominations, such as five- and ten-pound notes. These gold coins and notes, with whatever small change he has to spare, are deposited by the retail dealer every day, or every week, in his bank, and he pays for his purchases by drawing cheques on his bank deposit. But the same gold coins and banknotes are just as continually withdrawn from the bank, directly or indirectly (for instance, small change by manufac-

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.

turers for the payment of wages), as the money form of its revenue by the entire public in its capacity of consumer, and flow continually back to the retail dealers, for whom they thus again realise a portion of their capital, but at the same time also a portion of their revenue. This last circumstance is important, and is wholly overlooked by Tooke. Only where money is expended as money capital, early in the reproduction process (Book II, Part I<sup>a</sup>), does capital value exist purely as such. For the produced commodities contain not merely capital, but also surplus value; they are not only capital in themselves, but already capital realised as capital, capital with the source of revenue incorporated in it. What the retail dealer gives away for the money returning to him, his commodities, therefore, is for him capital plus profit, capital plus revenue.

Furthermore, in returning to the retailer, circulating money restores the money form of his capital.

To reduce the difference between circulation as circulation of revenue and circulation of capital into a difference between currency and capital is, therefore, altogether wrong. This mode of expression is in Tooke's case due to his simply assuming the standpoint of a banker issuing his own banknotes. Those of his notes which are continually in the public's hands (even if consisting of ever different notes) and serving as currency cost him nothing, save the cost of the paper and the printing. They are circulating certificates of indebtedness (bills of exchange) made out in his own name, but they bring him money and thus serve as a means of expanding his capital. They differ from his capital, however, whether it be his own or borrowed. That is why there is a special distinction for him between currency and capital, which, however, has nothing to do with the definition of these terms as such, least of all with that made by Tooke.

The distinct attribute — whether it serves as the money form of revenue or of capital — changes nothing in the character of money as a medium of circulation; it retains this character no matter which of the two functions it performs. True, money serves more as an actual medium of circulation (coin, means of purchase) when acting as the money form of revenue, due to the dispersion of purchases and sales, and because the majority of disbursers of revenue, the labourers, can buy relatively little on credit; whereas in the traffic of the business world, where the medium of circulation is the money form of capital, money

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36, pp. 31-40.

serves mainly as a means of payment, partly on account of the concentration, and partly on account of the prevailing credit system. But the distinction between money as a means of payment and money as a means of purchase (medium of circulation) is a distinction that refers to the money itself. It is not a distinction between money and capital. More copper and silver circulate in the retail business, and more gold in the wholesale business. Yet the distinction between silver and copper on the one hand, and gold on the other, is not the distinction between currency and capital.

Ad 2) Introducing the question of the quantity of money circulating together in both functions: So far as money circulates, be it as a means of purchase or as a means of payment — no matter in which of the two spheres and independently of its function of realising revenue or capital — the quantity of its circulating mass comes under the laws developed previously in discussing the simple circulation of commodities (Book I, Chap. III, 2, b<sup>a</sup>). The velocity of circulation, hence the number of repetitions of the same function as means of purchase and means of payment by the same pieces of money in a given term, the mass of simultaneous purchases and sales, or payments, the sum of the prices of the circulating commodities, and finally the balances of payments to be settled in the same period, determine in either case the mass of circulating money, of CURRENCY. Whether money so employed represents capital or revenue for the payer or receiver, is immaterial, and in no way alters the matter. Its mass is simply determined by its function as a means of purchase and payment.

Ad 3) On the question of the relative proportions of the quantities of currency circulating in both functions and thus in both spheres of the reproduction process. Both spheres of circulation are connected internally, for, on the one hand, the mass of revenues to be spent expresses the volume of consumption, and, on the other, the magnitude of the masses of capital circulating in production and commerce expresses the volume and velocity of the reproduction process. Nevertheless, the same circumstances have a different effect, working even in opposite directions, upon the quantities of money circulating in both functions or spheres, or on the amount of currency, as the English put it in banking parlance. And this gives new cause for Tooke's vulgar distinction between capital and currency. The fact that the

<sup>&</sup>lt;sup>a</sup> Ibid., Vol. 35.

gentlemen of the CURRENCY Theory <sup>43</sup> confuse two different things is no reason to present them as two different concepts.

In times of prosperity, intense expansion, acceleration and vigour of the reproduction process, labourers are fully employed. Generally, there is also a rise in wages which makes up in some measure for their fall below average during other periods of the commercial cycle. At the same time, the revenues of the capitalists grow considerably. Consumption increases generally. Commodity prices also rise regularly. at least in the various vital branches of business. Consequently, the quantity of circulating money grows at least within definite limits, since the greater velocity of circulation, in turn, sets up certain barriers to the growth of the amount of currency. Since that portion of the social revenue which consists of wages is originally advanced by the industrial capitalist in the form of variable capital, and always in money-form, it requires more money for its circulation in times of prosperity. But we must not count this twice-first as money required for the circulation of variable capital, and then as money required for the circulation of the labourers' revenue. The money paid to the labourers as wages is spent in retail trade and returns about once a week to the banks as the retailers' deposits, after negotiating miscellaneous intermediary transactions in smaller cycles. In times of prosperity the reflux of money proceeds smoothly for the industrial capitalists, and thus the need for money accommodation does not increase because more wages have to be paid and more money is required for the circulation of their variable capital.

The total result is that the mass of circulating medium serving the expenditure of revenue grows decidedly in periods of prosperity.

As concerns the circulation required for the transfer of capital, hence required exclusively between capitalists, a period of brisk business is simultaneously a period of the most elastic and easy credit. The velocity of circulation between capitalist and capitalist is regulated directly by credit, and the mass of circulating medium required to settle payments, and even in cash purchases, decreases accordingly. It may increase in absolute terms, but decreases relatively under all circumstances compared to the expansion of the reproduction process. On the one hand, greater mass payments are settled without the mediation of money; on the other, owing to the vigour of the process, there is a quicker movement of the same amounts of money, both as means of purchase and of payment. The same quantity of money promotes the reflux of a greater number of individual capitals. On the whole, the circulation of money in such periods appears FULL<sup>a</sup> although its Department II (transfer of capital) is, at least relatively, contracted, while its Department I (expenditure of revenue) expands in absolute terms.

The refluxes express the reconversion of commodity capital into money, M - C - M', as we have seen in the discussion of the reproduction process, Book II, Part I. Credit renders the reflux in money form independent of the time of actual reflux both for the industrial capitalist and the merchant. Both of them sell on credit; their commodities are thus alienated before they are reconverted into money for them, hence before they flow back to them in money form. On the other hand, they buy on credit, and in this way the value of their commodities is reconverted, be it into productive capital or commodity capital, even before this value has really been transformed into money, i. e., before the commodity price is due and paid for. In such times of prosperity the reflux passes off smoothly and easily. The retailer securely pays the wholesaler, the wholesaler pays the manufacturer, the manufacturer pays the importer of raw materials, etc. The appearance of rapid and reliable refluxes always keeps up for a longer period after they are over in reality by virtue of the credit that is under way, since credit refluxes take the place of the real ones. The banks scent danger as soon as their clients deposit more bills of exchange than money. See the above-mentioned testimony of the Liverpool bank director, p. 398.<sup>b</sup>

To insert what I have noted earlier: "In periods of expanding credit the velocity of currency increases faster than the prices of commodities, whereas in periods of contracting credit the velocity of currency declines faster than the prices of commodities." (Zur Kritik der politischen Oekonomie, 1859, S. 83, 84.)<sup>c</sup>

The reverse is true in a period of crisis. Circulation No. I contracts, prices fall, similarly wages; the number of employed labourers is reduced, the mass of transactions decreases. On the contrary, the need for money accommodation increases in circulation No. II with the contraction of credit. We shall examine this point in greater detail immediately.

There is no doubt that with the decrease of credit which goes hand

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent. - <sup>b</sup> See this volume, pp. 410-11. - <sup>c</sup> See present edition, Vol. 29, p. 340.

in hand with stagnation in the reproduction process, the circulation mass required for No. I, the expenditure of revenue, contracts, while that required for No. II, the transfer of capital, expands. But to what extent this statement coincides with what is maintained by Fullarton and others still remains to be analysed:

\* "A demand for capital on loan and a demand for additional circulation are quite distinct things, and not often found associated." \* (Fullarton, I. c., p. 82, title of Chapter 5.) <sup>90</sup>

 $90_1$  "It is a great error, indeed, to imagine that the demand for pecuniary accommodation" (that is, for the loan of capital) "is identical with a demand for additional means of circulation, or even that the two are frequently associated. Each demand originates in circumstances peculiarly affecting itself, and very distinct from each other. It is when everything looks prosperous, when wages are high, prices on the rise, and factories busy, that an additional supply of *currency* is usually required to perform the additional functions inseparable from the necessity of making larger and more numerous payments; whereas it is chiefly in a more advanced stage of the commercial cycle, when difficulties begin to present themselves, when markets are overstocked, and returns delayed, that interest rises, and a pressure comes upon the Bank for advances of capital. It is true that there is no medium through which the Bank is accustomed to advance capital except that of its promissory notes; and that to refuse the notes, therefore, is to refuse the accommodation. But the accommodation once granted, everything adjusts itself in conformity with the necessities of the market; the loan remains, and the currency, if not wanted, finds its way back to the issuer. Accordingly, a very slight examination of the Parliamentary Returns may convince any one, that the securities in the hands of the Bank of England fluctuate more frequently in an opposite direction to its circulation than in concert with it, and that the example, therefore, of that great establishment furnishes no exception to the doctrine so strongly pressed by the country bankers, to the effect that no bank can enlarge its circulation, if that circulation be already adequate to the purposes to which a banknote currency is commonly applied; but that every addition to its advances, after that limit is passed, must be made from its capital, and supplied by the sale of some of its securities in reserve, or by abstinence from further investment in such securities. The table compiled from the Parliamentary Returns for the interval between 1833 and 1840, to which I have referred in a preceding page, furnishes continued examples of this truth; but two of these are so remarkable that it will be quite unnecessary for me to go beyond them. On the 3rd of January, 1837, when the resources of the Bank were strained to the uttermost to sustain credit and meet the difficulties of the money market, we find its advances on loan and discount carried to the enormous sum of  $f_{17,022,000}$ , an amount scarcely known since the war, and almost equal to the entire aggregate issues which, in the meanwhile, remain unmoved at so low a point as  $f_{17}$ , 076, 000. On the other hand, we have on the 4th of June, 1833, a circulation of  $f_1$ 18,892,000, with a return of private securities in hand, nearly, if not the very lowest on record for the last half-century, amounting to no more than £972,000" (Fullarton, l. c., pp. 97, 98). That a DEMAND FOR PECUNIARY AC-COMMODATION need not be identical by any means with a DEMAND FOR GOLD (what Wilson, Tooke and others call capital) is seen from the following testimony of Mr. We-

In the first place it is evident that in the first of the two cases mentioned above, during times of prosperity, when the mass of the circulating medium must increase, the demand for it increases. But it is likewise evident that, when a manufacturer draws more or less of his deposit out of a bank in gold or banknotes because he has to expend more capital in the form of money, his demand for capital does not thereby increase. What increases is merely his demand for this particular form in which he expends his capital. The demand refers only to the technical form, in which he throws his capital into circulation. Just as in the case of a different development of the credit system, the same variable capital, for example, or the same quantity of wages, requires a greater mass of means of circulation in one country than in another; in England more than in Scotland, for instance, and in Germany more than in England. Likewise in agriculture, the same capital active in the reproduction process requires different quantities of money in different seasons for the performance of its function.

But the contrast drawn by Fullarton is not correct. It is by no means the strong demand for loans, as he says, which distinguishes the period of depression from that of prosperity, but the ease with which this demand is satisfied in periods of prosperity, and the difficulties which it meets in periods of depression. It is precisely the enormous development of the credit system during a prosperity period, hence also the enormous increase in the demand for loan capital and the readiness with which the supply meets it in such periods, which brings about a shortage of credit during a period of depression. It is not, therefore, the difference in volume of demand for loans which characterises both periods.

guelin, Governor of the Bank of England: "The discounting of bills to that extent" (one million daily for three successive days) "would not reduce the reserve" (of banknotes), "unless the public demanded a greater amount of active circulation. The notes issued on the discount of bills would be returned through the medium of the bankers and through deposits. Unless these transactions were for the purpose of exporting bullion, and unless there were an amount of internal panic which induced people to lock up their notes, and not to pay them into the hands of the bankers ... the reserve would not be affected by the magnitude of the transactions."—"The Bank may discount a million and a half a day, and that is done constantly, without its reserve being in the slightest degree affected, the notes coming back again as deposits, and no other alteration taking place than the mere transfer from one account to another" (Report on Bank Acts, 1857, Evidence Nos. 241, 500). The notes therefore serve here merely as means of transferring credits. As we have previously remarked, both periods are primarily distinguished by the fact that the demand for currency between consumers and dealers predominates in periods of prosperity, and the demand for currency between capitalists predominates in periods of depression. During a depression the former decreases, and the latter increases.

What strikes Fullarton and others as decisively important is the phenomenon that in such periods when securities in possession of the Bank of England are on the increase, its circulation of notes decreases, and vice versa. The level of the securities, however, expresses the volume of the pecuniary accommodation, the volume of discounted bills of exchange and of advances made against marketable collateral. Thus Fullarton says in the above passage (Footnote 90, p. 435<sup>a</sup>) that the securities<sup>b</sup> in the hands of the Bank of England fluctuate more frequently in an opposite direction to its circulation, and this corroborates the view long held by private banks that no bank can increase its issue of banknotes beyond a certain point determined by the needs of its public; but if a bank wants to make advances beyond this limit, it must make them out of its capital, hence it must either realise on securities or utilise money deposits which it would otherwise have invested in securities.

This, however, reveals also what Fullarton means by capital. What does capital signify here? That the Bank can no longer make advances with its own banknotes, or promissory notes, which, of course, cost it nothing. But what does it make advances with in that case? With the sums realised from the sale of SECURITIES IN RESERVE, i. e., government bonds, stocks, and other interest-bearing paper. And what does it get in payment for the sale of such paper? Money — gold or banknotes, so far as the latter are legal tender, such as those of the Bank of England. What the bank advances, therefore, is under all circumstances money. This money, however, now constitutes a part of its capital. If it advances gold, this is understandable. If it advances notes, then these notes represent capital, because it has given up some actual value for them, such as interest-bearing paper. In the case of private banks the notes secured by them through the sale of securities cannot be anything else, in the main, but Bank of England notes or their own notes, since others would hardly be taken in payment for securities. If it is

<sup>&</sup>lt;sup>a</sup> See this volume, pp. 446-47. - <sup>b</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

the Bank of England itself, then its own notes, which it receives in return, cost it capital, that is, interest-bearing paper. Besides, it thereby withdraws its own notes from circulation. Should it reissue these notes, or issue new notes in their stead to the same amount, they now represent capital. And they do so equally well, when used for advances to capitalists, or when used later, when the demand for such pecuniary accommodation decreases, for reinvestment in securities. In all these cases the term capital is employed only from the banker's point of view, and means that the banker is compelled to loan more than his mere credit.

As is known, the Bank of England makes all its advances in its own notes. Now, if despite this, as a rule, the banknote circulation of the Bank decreases in proportion as the discounted bills of exchange and collateral in its hands, and thus its advances increase — what becomes of the notes thrown into circulation? How do they return to the Bank?

To begin with, if the demand for money accommodation arises from an unfavourable national balance of payments and thereby implies a drain of gold, the matter is very simple. The bills of exchange are discounted in banknotes. The banknotes are exchanged for gold by the Bank itself, in its issue department, and this gold is exported. It is as though the Bank paid out gold directly, without the mediation of notes, on discounting bills. Such an increased demand, which may in certain cases be  $f_{17}$  to  $f_{10}$  million, naturally does not add a single five-pound note to the country's domestic circulation. If it is now said that the Bank advances capital, and not currency, this means two things. First, that it does not advance credit, but actual values, a part of its own capital or of capital deposited with it. Secondly, that it does not advance money for inland, but for international circulation, that it advances world money; and for this purpose money must always exist in its form of a hoard, in its metallic state; in the form in which it is not merely a form of value, but value itself, whose money form it is. Although this gold now represents capital, both for the Bank and for the exporting gold dealer, i. e., banking or merchant's capital, the demand for it arises not as demand for capital, but for the absolute form of money capital. This demand arises precisely at the moment when foreign markets are overcrowded with unsaleable English commodity capital. What is wanted, therefore, is capital, not as capital, but capital as money, in the form in which money serves as a universal worldmarket commodity; and this is its original form of precious metal.

The drain of gold is not, therefore, as Fullarton, Tooke, etc., claim, "A MERE QUESTION OF CAPITAL". Rather, it is "A QUESTION OF MONEY", even if in a specific function. The fact that it is not a question of *inland* circulation, as the advocates of the CURRENCY Theory maintain, does not prove at all, as Fullarton and others think, that it is merely A QUESTION OF CAPITAL. It is A QUESTION OF MONEY in the form in which money is an international means of payment.

\* "Whether that capital" \* (the purchase price for the million of quarters of foreign wheat after a crop failure in the home country) \* "is transmitted in merchandise or in specie, is a point which in no way affects the nature of the transaction" \* (Fullarton, 1 c., p. 131).

But it significantly affects the question, whether there is a drain of gold, or not. Capital is transferred in the form of precious metal, because it either cannot be transferred at all, or only at a great loss in the shape of commodities. The fear which the modern banking system has of gold drain exceeds anything ever imagined by the monetary system, which considered precious metals as the only true wealth.<sup>a</sup> Take, for instance, the following evidence of the Governor of the Bank of England, Morris, before the Parliamentary Committee on the crisis of 1847-48:

3846. //Question.// When I spoke of the depreciation of STOCKS<sup>b</sup> and fixed capital, are you not aware that all property invested in stocks and produce of every description was depreciated in the same way; that raw cotton, raw silk, and unmanufactured wool were sent to the continent at the same depreciated price, and that sugar, coffee and tea were sacrificed as at forced sales?—It was inevitable that the country should make a considerable sacrifice for the purpose of meeting the efflux of bullion which had taken place in consequence of the large importation of food."—"3848. Do not you think it would have been better to trench upon the £8 million lying in the coffers of the Bank, than to have endeavoured to get the gold back again at such a sacrifice?—No, I do not."

It is gold which here stands for the only true wealth. Fullarton quotes the discovery by Tooke that

\*"with only one or two exceptions, and those admitting of satisfactory explanation, every remarkable fall of the exchange, followed by a drain of gold, that has occurred during the last half-century, has been coincident throughout with a comparatively low state of the circulating medium, and vice versa"\* (Fullarton, p. 121).

<sup>&</sup>lt;sup>a</sup> Cf. present edition, Vol. 28, pp. 164-65. - <sup>b</sup> In the 1894 German edition this English word is given in parentheses after its German equivalent.

This discovery proves that such drains of gold occur generally after a period of animation and speculation, as

\* "a signal of a collapse already commenced ... an indication of overstocked markets, of a cessation of the foreign demand for our productions, of delayed returns, and, as the necessary sequel of all these, of commercial discredit, manufactories shut up, artisans starving, and a general stagnation of industry and enterprise" \* (p. 129).

This, naturally, is at once the best refutation of the claim of the advocates of the CURRENCY Theory, that

\*"a full circulation drives out bullion and a low circulation attracts it"\*.

On the contrary, while the Bank of England generally carries a strong gold reserve during a period of prosperity, this hoard is generally formed during the slack period, which follows after a storm.

All this sagacity concerning the drain of gold, then, amounts to saying that the demand for international media of circulation and payment differs from the demand for internal media of circulation and payment (and it goes without saving, therefore, that "THE EXISTENCE OF A DRAIN DOES NOT NECESSARILY IMPLY ANY DIMINUTION OF THE INTERNAL DEMAND FOR CIRCULATION", as Fullarton has it on page 112 of his work) and that the export of precious metal and its being thrown into international circulation is not the same as throwing notes or specie into internal circulation. As for the rest, I have shown on a previous occasion<sup>a</sup> that the movements of a hoard concentrated as a reserve fund for international payments have as such nothing to do with the movements of money as a medium of circulation. At any rate, the question is complicated by the fact that the different functions of a hoard, which I have developed from the nature of money -- such as its function as a reserve fund of means of payment to cover due bills in domestic business: the function of a reserve fund of currency; and finally, the function of a reserve fund of world money - are here attributed to one sole reserve fund. It also follows from this that under certain circumstances a drain of gold from the Bank to the home market may combine with a drain abroad. The question is further complicated, however, by the fact that this hoard is arbitrarily burdened with the additional function of serving as a fund guaranteeing the convertibility of banknotes in countries, in which the credit system and credit money are developed. And in addition to all this comes 1) the concentration of the national reserve fund in one single central bank,

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 29, pp. 382-84.

and 2) its reduction to the smallest possible minimum. Hence, also, Fullarton's complaint (p. 143):

\* "One cannot contemplate the perfect silence and facility with which variations of the exchange usually pass off in continental countries, compared with the state of feverish disquiet and alarm always produced in England whenever the treasure in the Bank seems to be at all approaching to exhaustion, without being struck with the great advantage in this respect which a metallic currency possesses." \*

However, if we now leave aside the drain of gold, how can a bank that issues notes, like the Bank of England, increase the amount of money accommodation granted by it without increasing its issue of banknotes?

So far as the bank itself is concerned, all the notes outside its walls, whether circulating or in private hoards, are in circulation, i.e., are out of its hands. Hence, if the bank extends its discounting and money-lending business, its advances on SECURITIES, all the banknotes issued by it for that purpose must return, for otherwise they would increase the volume of circulation, something which is not supposed to happen. This return may take place in two ways.

First: The bank pays A notes against securities; A uses them to pay for bills of exchange due to B, and B deposits notes once more in the bank. This brings to a close the circulation of these notes, but the loan remains.

\*"The loan remains, and the currency, if not wanted, finds its way back to the issuer" \* (Fullarton, p. 97).

The notes, which the bank advanced to A, have now returned to it; but it is the creditor of A, or whoever may have been the drawer of the bill discounted by A, and the debtor of B for the amount of value expressed in these notes, and B thus disposes of a corresponding portion of the capital of the bank.

Secondly: A pays to B, and B himself, or C, to whom he pays the notes, uses these notes to pay bills due to the bank, directly or indirectly. In that case the bank is paid in its own notes. This concludes the transaction (pending A's return payment to the bank).

To what extent, now, shall the bank's advance to A be regarded as an advance of capital, or as a mere advance of means of payment?<sup>91</sup>

<sup>91)</sup> The passage that follows in the original is unintelligible in this context and has been rewritten by the editor to the end of the oblique lines. In another context this point has already been touched upon in Chapter XXVI.<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> See this volume, pp. 425-27.

//This depends on the nature of the loan itself. Three cases must be distinguished.

First case.— A receives from the bank amounts loaned on his own personal credit, without giving any security for them. In this case he does not merely receive means of payment, but also unquestionably a new capital, which he may employ in his business and realise as an additional capital until the maturity date.

Second case.— A has given to the bank securities, national bonds, or stocks as collateral, and received for them, say, up to two-thirds of their momentary value as a cash loan. In this case he has received the means of payment he needed, but no additional capital, for he entrusted to the bank a larger capital value than he received from it. But this larger capital value was, on the one hand, unavailable for his momentary needs (means of payment), because invested in a particular interest-bearing form; on the other hand, A had his own reasons for not wanting to convert this capital value directly into means of payment by selling it. His securities served, among other things, as a reserve capital, and he set them in motion as such. The transaction between A and the bank, therefore, consists in a temporary mutual transfer of capital, so that A does not receive any additional capital (quite the contrary!) although he receives the desired means of payment. For the bank, on the other hand, this transaction constitutes a temporary lodgement of money capital in the form of a loan, a conversion of money capital from one form into another, and this conversion is precisely the essential function of the banking business.

Third case.— A had the bank discount a bill of exchange and received its value in cash after the deduction of discount. In this case he sold a non-convertible money capital to the bank for the amount of value in convertible form. He sold his still running bill for cash money. The bill is now the property of the bank. It does not alter the matter that A as the last endorser of the bill is responsible for it to the bank in default of payment. He shares this responsibility with the other endorsers and with the drawer of the bill, all of whom are duly responsible to him. In this case, therefore, we do not have a loan, but only an ordinary purchase and sale. For this reason, A has nothing to pay back to the bank. It reimburses itself by cashing the bill when it becomes due. Here, too, a transfer of capital has taken place between A and the bank, and in exactly the same manner as in the sale and purchase of any other commodity, and for this very reason A did not receive any additional capital. What he needed and received were means of payment, and he received them by having the bank convert one form of his money capital—his bill—into another—money.

It is therefore only in the first case that there is any question of a real advance of capital; in the second and third cases, the matter can be so regarded only in the sense that every investment of capital implies an "advance of capital". In this sense the bank advances money capital to A; but for A it is *money capital* at best in the sense that it is a portion of his capital in general. And he requires it and uses it not specifically as capital, but rather as specifically a means of payment. Otherwise, every ordinary sale of commodities by which means of payment are secured might be considered as receiving an advance of capital.—F. E.//

In the case of the private bank which issues its own notes we have this difference, that if its notes remain neither in local circulation, nor return to it in the form of deposits, or in payment for due bills of exchange, they fall into the hands of persons who compel the private bank to cash these notes in gold or in notes of the Bank of England. In this event, therefore, its loan in fact represents an advance of notes of the Bank of England, or, what amounts to the same thing for the private bank, of gold, hence a portion of its banking capital. The same holds good in case the Bank of England itself, or some other bank, which has a fixed legal maximum for its issue of notes, must sell securities to withdraw its own notes from circulation and then issue them once more in the shape of advances; in that case, the bank's own notes represent a portion of its mobilised banking capital.

Even if the circulation were purely metallic, it would be possible 1) for a drain of gold //Marx evidently refers here to a drain of gold that would, at least partially, go abroad — F. E.// to empty the treasury, and 2) since gold would be chiefly wanted by the bank to make payments (in settlement of erstwhile transactions), the advance against collateral could grow considerably, but would flow back to it in the form of deposits or in payment of due bills of exchange; so that, on one side, the total treasure of the bank would decrease with an increase of the securities in its hands, while on the other, it would now be holding the same amount, which it possessed formerly as owner, as debtor of its depositors, and finally the total mass of currency would decrease.

Our assumption so far has been that the loans are made in notes, so that they carry with them at least a fleeting, even if instantly disappearing, increase in the issue of notes. But this is not necessary. Instead of a paper note, the bank may open a credit account for A, in which case this A, the bank's debtor, becomes its imaginary depositor. He pays his creditors with cheques on the bank, and the recipient of these cheques passes them on to his own banker, who exchanges them for the cheques outstanding against him in the CLEARING HOUSE. In this case no mediation of notes takes place at all, and the entire transaction is confined to the fact that the bank settles its own debt with a cheque drawn on itself, and its actual recompense consists in its claim on A. In this case the bank has loaned a portion of its banking capital, because its own debt claims, to A.

In so far as this demand for pecuniary accommodation is a demand for capital, it is so only for money capital; capital from the standpoint of the banker, namely for gold (in the case of gold exports abroad) or notes of the National Bank, which a private bank can obtain only by purchase against an equivalent, and which, therefore, represent capital for it. Or, again, it is a case of interest-bearing papers, government bonds, stocks, etc., which must be sold in order to obtain gold or banknotes. Such papers, however, if in government bonds, are capital only for the buyer, for whom they represent the purchase price, the capital he invested in them. In themselves they are not capital, but merely debt claims. If mortgages, they are mere titles on future ground rent. And if they are shares of stock, they are mere titles of ownership, which entitle the holder to a share in future surplus value. All of these are not real capital. They do not form constituent parts of capital, nor are they values in themselves. By way of similar transactions money belonging to the bank may be transformed into deposits, so that the bank becomes the debtor instead of owner of this money, and holds it under a different title of ownership. However important this may be to the bank itself, it alters nothing in the mass of reserve capital, or even of money capital available in a particular country. Capital, therefore, represents here only money capital, and, if not available in the actual form of money, it represents a mere title on capital. This is very important, since a scarcity of, and pressing demand for, banking capital is confounded with a decrease of actual capital, which, conversely, is in such cases rather abundant in the form of means of production and products, and swamps the markets.

It is, therefore, easy to explain how the mass of securities held by a bank as collateral increases, hence how the growing demand for pecuniary accommodation can be satisfied by the bank, while the total mass of currency remains the same or decreases. This total mass is held in check during such periods of money stringency in two ways: 1) by a drain of gold; 2) by a demand for money in its capacity as a mere means of payment, when the issued banknotes return immediately; or when the transactions take place without the mediation of notes by means of book credit; when, therefore, payments are made simply through a credit transaction, the settlement of these payments being the sole purpose of the operation. It is a peculiarity of money. when it serves merely to settle accounts (and in times of crises loans are taken up to pay, rather than to buy; to wind up previous transactions, not to initiate new ones), that its circulation is no more than fleeting, even where balances are not settled by mere credit operations, without any intervention of money, so that, when there is a strong demand for pecuniary accommodation, an enormous quantity of such transactions can take place without expanding the circulation. But the mere fact that the circulation of the Bank of England remains stable or even decreases simultaneously with an extensive accommodation of money on its part, does not prima facie prove, as Fullarton, Tooke and others assume (owing to their erroneous notion that pecuniary accommodation is identical with receiving CAPITAL ON LOAN as additional capital), that the circulation of money (of banknotes) in its function as a means of payment is not increased and extended. Since the circulation of notes as means of purchase decreases during a business depression, when such extensive accommodation is necessary, their circulation as means of payment may increase, and the aggregate amount of the circulation, the sum of notes functioning as means of purchase and payment, may remain stable or may even decrease. The circulation as a means of payment of banknotes immediately returning to the bank that issues them is simply not circulation in the eyes of those economists.

Should circulation as a means of payment increase at a higher rate than it decreases as a means of purchase, the aggregate circulation would increase, although the money serving as a means of purchase would decrease considerably in quantity. And this actually occurs in certain periods of crisis, namely, when credit collapses completely and when not only commodities and securities are unsaleable but bills of exchange are undiscountable and nothing counts any more but money payment, or, as the merchant puts it, cash. Since Fullarton *et al.* do not understand that the circulation of notes as a means of payment is the characteristic feature of such periods of money shortage, they treat this phenomenon as accidental. \* "With respect again to those examples of eager competition for the possession of banknotes, which characterise seasons of panic and which may sometimes, as at the close of 1825, lead to a sudden, though only temporary, enlargement of the issues, even while the efflux of bullion is still going on, these, I apprehend, are not to be regarded as among the natural or necessary concomitants of a low exchange; the demand in such cases is not for circulation" \* (read circulation as a means of purchase), \*"but for hoarding, a demand on the part of alarmed bankers and capitalists which arises generally in the last act of the crisis" \* (hence, for a reserve of means of payment), \*"after a long continuation of the drain, and is the precursor of its termination" \* (Fullarton, p. 130).

In the discussion of money as a means of payment (Book I, Chap. III, 3,  $b^a$ ) we have already explained, in what manner, when the chain of payments is suddenly interrupted, money turns from its ideal form into a material and, at the same time, absolute form of value visà-vis the commodities. This was illustrated by some examples (foot-notes 100 and 101<sup>b</sup>). This interruption itself is partly an effect, partly a cause of the instability of credit and of the circumstances accompanying it, such as overstocking of markets, depreciation of commodities, interruption of production, etc.

It is evident, however, that Fullarton transforms the distinction between money as a means of purchase and money as a means of payment into a false distinction between CURRENCY and capital. This is again due to the narrow-minded banker's conception of circulation.

It might yet be asked: which is it, capital or money in its specific function as a means of payment, that is in short supply in such periods of stringency? And this is a well-known controversy.

In the first place, so far as the stringency is marked by a drain of gold, it is evidently international means of payment that are demanded. But money in its specific capacity of international means of payment is gold in its metallic actuality, as a valuable substance in itself, as a quantity of value. It is at the same time capital, not capital as commodity capital, but as money capital, capital not in the form of commodities but in the form of money (and, at that, of money in the eminent sense of the word, in which it exists as universal worldmarket commodity). It is not a contradiction here between a demand for money as a means of payment and a demand for capital. The contradiction is rather between capital in its money form and capital in its commodity form; and the form in which it is here demanded and in which alone it can function, is its money form.

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 35. - <sup>b</sup> Ibid., p. 149, notes 1, 2.

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Aside from this demand for gold (or silver) it cannot be said that there is any dearth whatever of capital in such periods of crisis. Under extraordinary circumstances, such as rise in the price of corn, or a cotton famine, etc., this may be the case; but these phenomena are not necessary or regular accompaniments of such periods; and the existence of such a lack of capital cannot be assumed beforehand without further ado from the mere fact that there is a heavy demand for pecuniary accommodation. On the contrary. The markets are overstocked, swamped with commodity capital. Hence, it is not, in any case, a lack of *commodity* capital which causes the stringency. We shall return to this question later.

# BOOK III

## THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

Π
## Part V

### DIVISION OF PROFIT INTO INTEREST AND PROFIT OF ENTERPRISE. INTEREST-BEARING CAPITAL (CONTINUED)

### Chapter XXIX

### COMPONENT PARTS OF BANK CAPITAL

It is now necessary to examine the component parts of bank capital in greater detail.

We have just seen that Fullarton and others transform the distinction between money as a medium of circulation and money as a means of payment—also world money in so far as it concerns a drain of gold—into a distinction between currency<sup>a</sup> and capital.

The peculiar role played by capital in this instance is the reason why bankers' economics teaches that money is indeed capital *par excellence* as insistently as enlightened economics taught that money is not capital.<sup>46</sup>

In subsequent analyses, we shall demonstrate that money capital is being confused here with MONEYED CAPITAL in the sense of interestbearing capital, while in the former sense, money capital is always merely a transient form of capital—in contradistinction to the other forms of capital, namely, commodity capital and productive capital.

Bank capital consists of 1) cash money, gold or notes; 2) securities. The latter can be subdivided into two parts: commercial paper or bills of exchange, which run for a period, become due from time to time, and whose discounting constitutes the essential business of the banker; and public securities, such as government bonds, treasury notes, stocks of all kinds, in short, interest-bearing paper which is however significantly different from bills of exchange. Mortgages may

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

also be included here. The capital composed of these tangible component parts can again be divided into the banker's invested capital and into deposits, which constitute his BANKING CAPITAL, or borrowed capital. In the case of banks which issue notes, these must also be included. We shall leave the deposits and notes out of consideration for the present. It is evident at any rate that the actual component parts of the banker's capital (money, bills of exchange, deposit currency) remain unaffected whether the various elements represent the banker's own capital or deposits, i.e., the capital of other people. The same division would remain, whether he were to carry on his business with only his own capital or only with deposited capital.

The form of interest-bearing capital is responsible for the fact that every definite and regular money REVENUE appears as interest on some capital, whether it arises from some capital or not. The money income is first converted into interest, and from the interest one can determine the capital from which it arises. In like manner, in the case of interest-bearing capital, every sum of value appears as capital as long as it is not expended as REVENUE; that is, it appears as PRINCIPAL<sup>a</sup> in contrast to possible or actual interest which it may yield.

The matter is simple. Let the average rate of interest be 5% annually. A sum of £500 would then yield £25 annually if converted into interest-bearing capital. Every fixed annual income of £25 may then be considered as interest on a capital of £500. This, however, is and remains a purely illusory conception, except in the case where the source of the £25, whether it be a mere title of ownership or claim, or an actual element of production such as real estate, is directly transferable or assumes a form in which it becomes transferable. Let us take the national debt and wages as illustrations.

The state has to annually pay its creditors a certain amount of interest for the capital borrowed from them. In this case, the creditor cannot recall his investment from his debtor, but can only sell his claim, or his title of ownership. The capital itself has been consumed, i. e., expended by the state. It no longer exists. What the creditor of the state possesses is 1) the state's promissory note, amounting to, say,  $\pounds 100; 2$ ) this promissory note gives the creditor a claim upon the annual revenue of the state, that is, the annual tax proceeds, for a certain amount, e. g.,  $\pounds 5$  or 5%; 3) the creditor can sell this promissory

<sup>&</sup>lt;sup>a</sup> In the 1894 German edition this English term is given in parentheses after its German equivalent.

note of  $f_{100}$  at his discretion to some other person. If the rate of interest is 5%, and the security given by the state is good, the owner A can sell this promissory note, as a rule, to B for  $f_1100$ ; for it is the same to B whether he lends  $\pounds 100$  at 5% annually, or whether he secures for himself by the payment of  $f_{100}$  an annual tribute from the state amounting to  $f_{1,5}$ . But in all these cases, the capital, as whose offshoot (interest) state payments are considered, is illusory, fictitious capital. Not only that the amount loaned to the state no longer exists, but it was never intended that it be expended as capital, and only by investment as capital could it have been transformed into a self-preserving value. To the original creditor A, the share of annual taxes accruing to him represents interest on his capital, just as the share of the spendthrift's fortune accruing to the usurer appears to the latter, although in both cases the loaned amount was not invested as capital. The possibility of selling the state's promissory note represents for A the potential means of regaining his principal. As for B, his capital is invested, from his individual point of view, as interest-bearing capital. So far as the transaction is concerned, B has simply taken the place of A by buying the latter's claim on the state's revenue. No matter how often this transaction is repeated, the capital of the state debt remains purely fictitious, and, as soon as the promissory notes become unsaleable, the illusion of this capital disappears. Nevertheless, this fictitious capital has its own laws of motion, as we shall presently see.

We shall now consider labour power in contrast to the capital of the national debt, where a negative quantity appears as capitaljust as interest-bearing capital, in general, is the fountain-head of all manner of insane forms, so that debts, for instance, can appear to the banker as commodities. Wages are conceived here as interest, and therefore labour power as the capital yielding this interest. For example, if the wage for one year amounts to  $f_{,50}$  and the rate of interest is 5%, the annual labour power is equal to a capital of  $f_{1,000}$ . The insanity of the capitalist mode of conception reaches its climax here, for instead of explaining the expansion of capital on the basis of the exploitation of labour power, the matter is reversed and the productivity of labour power is explained by attributing this mystical quality of interest-bearing capital to labour power itself. In the second half of the 17th century, this used to be a favourite conception (for example, of Petty),<sup>47</sup> but it is used even nowadays in all seriousness by some vulgar economists and more particularly by some German statisticians.<sup>1)</sup> Unfortunately two disagreeably frustrating facts mar this thoughtless conception. In the first place, the labourer must work in order to obtain this interest. In the second place, he cannot transform the capital value of his labour power into cash by transferring it. Rather, the annual value of his labour power is equal to his average annual wage, and what he has to give the buyer in return through his labour is this same value plus a surplus value, i. e., the increment added by his labour. Under a slave system, the labourer has a capital value, namely, his purchase price. And when he is hired out, the hirer must pay, in the first place, the interest on this purchase price, and, in addition, replace the annual wear and tear of the capital.

The formation of a fictitious capital is called capitalisation. Every regularly repeated income is capitalised by calculating it on the basis of the average rate of interest, as an income which would be yielded by a capital loaned at this rate of interest. For example, if the annual income = £100 and the rate of interest = 5%, then the £100 would represent the annual interest on £2,000, and the £2,000 is regarded as the capital value of the legal title of ownership on the £100 annually. For the person who buys this title of ownership, the annual income of £100 represents indeed the interest on his capital invested at 5%. All connection with the actual expansion process of capital is thus completely lost, and the conception of capital as something with automatic self-expansion properties is thereby strengthened.

Even when the promissory note — the security — does not represent a purely fictitious capital, as it does in the case of state debts, the capital value of such paper is nevertheless wholly illusory. We have previously seen <sup>a</sup> in what manner the credit system creates associated capital. The paper serves as title of ownership which represents this capital. The stocks of railways, mines, navigation companies, and the like, represent actual capital, namely, the capital invested and functioning in such enterprises, or the amount of money advanced by the stockholders for the purpose of being used as capital in such enterprises. This does not preclude the possibility that these may re-

<sup>11</sup> "The labourer possesses [...] capital value, which is arrived at by considering the money value of his annual wage as income from interest.... Capitalising ... the average daily wage at 4%, we obtain the average value of a male agricultural labourer to be: German Austria, 1,500 taler; Prussia, 1,500; England, 3,750; France, 2,000; inner Russia, 750 taler" (Von Reden, Vergleichende Kultur-Statistik, Berlin, 1848, p. 434).

<sup>&</sup>lt;sup>a</sup> See this volume, pp. 433-34.

# Das Kapital.

# Kritik der politischen Oekonomie.

Von

Karl Marx.

**Drittes Buch** 

Buch III: Der Gesammtprocess der kapitalistischen Produktion. Zweiter Theil.

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present pure swindle. But this capital does not exist twice, once as the capital value of titles of ownership (stocks) and the other time as the actual capital invested, or to be invested, in those enterprises. It exists only in the latter form, and a share of stock is merely a title of ownership to a certain portion of the surplus value to be realised by it. A may sell this title to B, and B may sell it to C. These transactions do not alter anything in the nature of the problem. A or B then has his title in the form of capital, but C has transformed his capital into a mere title of ownership to the anticipated surplus value from the stock capital.

The independent movement of the value of these titles of ownership, not only of government bonds but also of stocks, adds weight to the illusion that they constitute real capital alongside of the capital or claim to which they may have title. For they become commodities, whose price has its own characteristic movement and is established in its own way. Their market value is determined differently from their nominal value, without any change in the value (even though the expansion may change) of the actual capital. On the one hand, their market value fluctuates with the amount and reliability of the proceeds to which they afford legal title. If the nominal value of a share of stock, that is, the invested sum originally represented by this share, is  $f_{100}$ , and the enterprise pays 10% instead of 5%, then its market value, everything else remaining equal, rises to  $\pounds 200$ , as long as the rate of interest is  $5\%_0$ , for when capitalised at  $5\%_0$ , it now represents a fictitious capital of  $\pounds 200$ . Whoever buys it for  $\pounds 200$  receives a revenue of 5% on this investment of capital. The converse is true when the proceeds from the enterprise diminish. The market value of this paper is in part speculative, since it is determined not only by the actual income, but also by the anticipated income, which is calculated in advance. But assuming the expansion of the actual capital as constant, or where no capital exists, as in the case of state debts, the annual income to be fixed by law and otherwise sufficiently secured, the price of these securities rises and falls inversely as the rate of interest. If the rate of interest rises from 5% to 10%, then securities guaranteeing an income of  $\pounds 5$  will now represent a capital of only  $\pounds 50$ . Conversely, if the rate of interest falls to  $2\frac{1}{2}$ %; the same securities will represent a capital of  $f_{200}$ . Their value is always merely capitalised income, that is, the income calculated on the basis of a fictitious capital at the prevailing rate of interest. Therefore, when the money market is tight these securities will fall in price for two reasons: first, because the rate

of interest rises, and secondly, because they are thrown on the market in large quantities in order to convert them into cash. This drop in price takes place regardless of whether the income that this paper guarantees its owner is constant, as is the case with government bonds, or whether the expansion of the actual capital, which it represents, as in industrial enterprises, is possibly affected by disturbances in the reproduction process. In the latter event, there is only still another depreciation added to that mentioned above. As soon as the storm is over, this paper again rises to its former level, in so far as it does not represent a business failure or swindle. Its depreciation in times of crisis serves as a potent means of centralising fortunes.<sup>21</sup>

To the extent that the depreciation or increase in value of this paper is independent of the movement of value of the actual capital that it represents, the wealth of the nation is just as great before as after its depreciation or increase in value.

"The public stocks and canal and railway shares had already by the 23rd of October, 1847, been depreciated in the aggregate to the amount of £114,752,225" (Morris, Governor of the Bank of England, testimony in the Report on Commercial Distress, 1847-48).<sup>b</sup>

Unless this depreciation reflected an actual stoppage of production and of traffic on canals and railways, or a suspension of already initiated enterprises, or squandering capital in positively worthless ventures, the nation did not grow one cent poorer by the bursting of this soap bubble of nominal money capital.

All this paper is actually nothing more than accumulated claims, or legal titles, to future production whose money or capital value represents either no capital at all, as in the case of state debts, or is regulated independently of the value of real capital which it represents.

<sup>21</sup> //Immediately after the February Revolution, when commodities and securities were extremely depreciated and utterly unsaleable in Paris, a Swiss merchant in Liverpool, Mr. R. Zwilchenbart — who told this to my father — cashed all his belongings, travelled with cash in hand to Paris and sought out Rothschild, offering to participate in a joint enterprise with him. Rothschild looked at him fixedly, rushed towards him, grabbed him by his shoulders and asked: "Avez-vous de l'argent sur vous?" — "Oui, M. le baron." — "Alors vous êtes mon homme!" <sup>a</sup>— And they did a thriving business together. — F. E.//

<sup>&</sup>lt;sup>a</sup> "Have you money in your possession?"—"Yes, Baron."—"Then you are my man!" - <sup>b</sup> First Report from the Secret Committee on Commercial Distress with the Minutes of Evidence, p. 288, No. 3800.

In all countries based on capitalist production, there exists in this form an enormous quantity of so-called interest-bearing capital, or MONEYED CAPITAL. And by accumulation of money capital nothing more, in the main, is connoted than an accumulation of these claims on production, an accumulation of the market price, the illusory capital value of these claims.

A part of the banker's capital is now invested in this so-called interest-bearing paper. This is itself a portion of the reserve capital, which does not perform any function in the actual business of banking. The most important portion of this paper consists of bills of exchange, that is, promises to pay made by industrial capitalists or merchants. For the money lender these bills of exchange are interest-bearing papers, in other words, when he buys them, he deducts interest for the time which they still have to run. This is called discounting. It depends on the prevailing rate of interest, how much of a deduction is made from the sum represented by the bill of exchange.

Finally, the last part of the capital of a banker consists of his money reserve in gold and notes. The deposits, unless tied up by agreement for a certain time, are always at the disposal of the depositors. They are in a state of continual fluctuation. But while one depositor draws on his account, another deposits, so that the general average sum total of deposits fluctuates little during periods of normal business.

The reserve funds of the banks, in countries with developed capitalist production, always express on the average the quantity of money existing in the form of a hoard, and a portion of this hoard in turn consists of paper, mere drafts upon gold, which have no value in themselves. The greater portion of banker's capital is, therefore, purely fictitious and consists of claims (bills of exchange), government securities (which represent spent capital), and stocks (drafts on future revenue). And it should not be forgotten that the money value of the capital represented by this paper in the safes of the banker is itself fictitious, in so far as the paper consists of drafts on guaranteed revenue (e.g., government securities), or titles of ownership to real capital (e.g., stocks), and that this value is regulated differently from that of the real capital, which the paper represents at least in part; or, when it represents mere claims on revenue and no capital, the claim on the same revenue is expressed in continually changing fictitious money capital. In addition to this, it must be noted that this fictitious banker's capital represents largely, not his own capital, but that of the public, which makes deposits with him, either interest-bearing or not.

Deposits are always made in money, in gold or notes, or in drafts upon these. With the exception of the reserve fund, which contracts or expands in accordance with the requirements of actual circulation, these deposits are in fact always in the hands of the industrial capitalists and merchants, on the one hand, whose bills of exchange are thereby discounted and who thus receive advances; on the other hand, they are in the hands of dealers in securities (exchange brokers), or in the hands of private parties who have sold their securities, or in the hands of the government (in the case of treasury notes and new loans). The deposits themselves play a double role. On the one hand, as we have just mentioned, they are loaned out as interest-bearing capital and are, therefore, not in the safes of the banks, but figure merely on their books as credits of the depositors. On the other hand, they function merely as such book entries, in so far as the mutual claims of the depositors are balanced by cheques on their deposits and can be written off against each other. In this connection, it is immaterial whether these deposits are entrusted to the same banker, who can thus balance the various accounts against each other, or whether this is done in different banks, which mutually exchange cheques and pay only the balances to one another.

With the development of interest-bearing capital and the credit system, all capital seems to double itself, and sometimes treble itself, by the various modes in which the same capital, or perhaps even the same claim on a debt, appears in different forms in different hands.<sup>3</sup> The greater portion of this "money capital" is purely fictitious. All the deposits, with the exception of the reserve fund, are merely claims

<sup>3</sup> //This doubling and trebling of capital has developed considerably further in recent years, for instance, through FINANCIAL TRUSTS, which already occupy a heading of their own in the report of the London Stock Exchange. A company is organised for the purchase of a certain class of interest-bearing paper, e.g., of foreign government securities, English municipal or American public bonds, railway stocks, etc. The capital, for example, £2 million, is raised by stock subscriptions. The Board of Directors buys up the values in question or speculates more or less actively therein, and after deducting the expenses distributes among the stockholders the annual interest as dividends. Furthermore, some stock companies have adopted the custom of dividing the common stock into two classes, PREFERRED and DEFERRED. The PREFERRED receive a fixed rate of interest, say, 5%, provided that the total profit permits it; if there is anything left after that, the DEFERRED receive it. In this manner, the "solid" investment of capital in PREFERRED shares is more or less separated from actual speculation — with DEFERRED shares. Since a few large enterprises have been unwilling to adopt this new custom, the expedient has been resorted to of organising new companies which invest a million or several million pounds sterling in shares of the former companies and then issue new

on the banker, which, however, never exist as deposits. To the extent that they serve in clearing-house transactions, they perform the function of capital for the bankers — after the latter have loaned them out. They pay one another their mutual drafts upon the non-existing deposits by balancing their mutual accounts.

Adam Smith says with regard to the role played by capital in the loaning of money:

"Even in the moneyed interest, however, the money is, as it were, but the deed of assignment which conveys from one hand to another those capitals which the owners do not care to employ themselves. Those capitals may be greater in almost any proportion than the amount of the money which serves as the instrument of their conveyance, the same pieces of money successively serving for many different loans, as well as for many different purchases. A, for example, lends to W  $\pounds$ 1,000, with which W immediately purchases of B  $f_{1,000}$  worth of goods. B, having no occasion for the money himself, lends the identical pieces to X, with which X immediately purchases of C another £1,000 worth of goods. C, in the same manner, and for the same reason, lends them to Y, who again purchases goods with them of D. In this manner the same pieces, either of coin or of paper, may, in the course of a few days, serve as the instrument of three different loans, and of three different purchases, each of which is, in value, equal to the whole amount of those pieces. What the three moneyed men, A, B and C, assign to the three borrowers, W, X and Y, is the power of making those purchases. In this power consist both the value and the use of the loans. The stock lent by the three moneyed men is equal to the value of the goods which can be purchased with it, and is three times greater than that of the money with which the purchases are made. Those loans, however, may be all perfectly well secured, the goods purchased by the different debtors being so employed, as, in due time, to bring back, with a profit, an equal value either of coin or of paper. And as the same pieces of money can thus serve as the instrument of different loans to three, or for the same reason, to thirty times their value, so they may likewise successively serve as the instrument of repayment" (BOOK II, CHAP. IV),<sup>a</sup>

Since the same piece of money can be used for various purchases, corresponding to its velocity of circulation, it can similarly be used for various loans, since the purchases take it from one person to another, and a loan is but a transfer from one person to another without the mediation of a purchase. To every seller, money represents the converted form of his commodities. Nowadays, when every value is expressed as capital value, it represents in the various loans various ca-

shares amounting to the nominal value of the purchased shares, but half of them are issued as PREFERRED and the other half as DEFERRED. In such cases the original shares are doubled, since they serve as a basis for a new issue of shares.—F. E.//

<sup>&</sup>lt;sup>a</sup> A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. I, pp. 428-29.

pitals in succession. This is simply another way of expressing the earlier statement that it can successively realise various commodity values. At the same time it serves as a medium of circulation, in order to transfer the material capitals from person to person. In the case of loans, it does not pass from person to person as a medium of circulation. As long as it remains in the hands of the lender, it is in his hands not a medium of circulation, but the value existence of his capital. And in this form he transfers it when lending it to a third party. If A had lent the money to B, and B to C, without the mediation of purchases, the same money would not represent three capitals, but only one—a *single* capital value. The number of capitals which it actually represents depends on the number of times that it functions as the value form of various commodity capitals.

The same thing that Adam Smith says about loans in general also applies to deposits, which are merely another name for the loans which the public makes to the bankers. The same pieces of money serve as the instruments for any number of deposits.

"It is unquestionably true that the £1,000 which you deposit at A today may be reissued tomorrow, and form a deposit at B. The day after that, reissued from B, it may form a deposit at C... and so on to infinitude; and that the same £1,000 in money may, thus, by a succession of transfers, multiply itself into a sum of deposits absolutely indefinite. It is possible, therefore, that nine-tenths of all the deposits in the United Kingdom may have no existence beyond their record in the books of the bankers.... Thus in Scotland, for instance, currency has never exceeded £3 million, the deposits in the banks are estimated at £27 million. Unless a run on the banks be made, the same £1,000 would, if sent back upon its travels, cancel with the same facility a sum equally indefinite. As the same £1,000, with which you cancel your debt to a tradesman today, may cancel his debt to the merchant tomorrow, the merchant's debt to the bank the day following, and so on without end; so the same £1,000 may pass from hand to hand, and bank to bank, and cancel any conceivable sum of deposits" (*The Currency Theory Reviewed*, pp. 62-63).

Just as everything in this credit system is doubled and trebled and transformed into a mere phantom of the imagination, so it is with the "reserve fund", where one would at last hope to grasp on to something solid.

Let us listen once more to Mr. Morris, Governor of the Bank of England:

"The reserves of the private bankers are in the hands of the Bank of England in the shape of deposits.... An export of gold acts exclusively, in the first instance, upon the reserve of the Bank of England; but it would also be acting upon the reserves of the bankers, inasmuch as it is a withdrawal of a portion of the reserves which they have in the Bank of England. It would be acting upon the reserves of all the bankers throughout the country" (Commercial Distress, 1847-48).<sup>a</sup>

Ultimately, then, the reserve funds actually merge with the reserve fund of the Bank of England.<sup>4</sup> However, this reserve fund also has a double existence. The reserve fund of the BANKING DEPARTMENT is equal to the surplus of notes which the Bank is authorised to issue over and above the notes in circulation. The legal maximum of the note issue = £14 million (for which no bullion reserve is required; it is the approximate amount owed by the state to the Bank) plus the amount of the Bank's supply of precious metal. If the supply of precious metal in the Bank = £14 million, the Bank can thus issue £28 million in notes, and if £20 million of these are in circulation, the reserve fund of the BANKING DEPARTMENT = £8 million. These £8 million's worth of notes

Name of Bank	Liabilities	Cash Reserves	Percentages
City	£9,317,629	£,746,551	8.01
Capital and Counties	11,392,744	1,307,483	11.47
Imperial	3,987,400	447,157	11.22
Lloyds	23,800,937	2,966,806	12.46
London & Westminster	24,671,559	3,818,885	15.50
London & S. Western	5,570,268	812,353	14.58
London Joint Stock	12,127,993	1,288,977	10.62
London and Midland	8,814,499	1,127,280	12.79
London and County	37,111,035	3,600,374	9.70
National	11,163,829	1,426,225	12.77
National Provincial	41,907,384	4,614,780	11.01
Parrs and the Alliance	12,794,489	1,532,707	11.98
Prescott & Co	4,041,058	538,517	13.07
Union of London	15,502,618	2,300,084	14.84
Williams, Deacon & Manches-			
ter & Co	10,452,381	1,317,628	12.60
Total	£232,655,823	$\pounds 27,845,807$	11.97

1 //To what extent this has intensified since then is shown by the following officient of the state of the	icial
tabulation of the bank reserves of the fifteen largest London banks in November 18	892,
taken from the Daily News of December 15, 1892:	

Of this total reserve of almost 28 million, at least 25 million are deposited in the Bank of England, and at most 3 million are in cash in the safes of the 15 banks themselves. But the cash reserve of the banking department of the Bank of England amounted to less than 16 million during that same month of November 1892!—F. E.//

<sup>&</sup>lt;sup>a</sup> First Report from the Secret Committee on Commercial Distress..., p. 277, Nos 3641 and 3642, testimony of J. Morris and H. Prescott (paraphrased).

are then legally the banker's capital at the disposal of the Bank, and at the same time the reserve fund for its deposits. Now, if a drain of gold takes place, whereby the supply of precious metal in the Bank is reduced by  $f_{.6}$  million — requiring the destruction of an equivalent number of notes - the reserve of the BANKING DEPARTMENT would fall from  $f_{.8}$  million to  $f_{.2}$  million. On the one hand, the Bank would raise its rate of interest considerably; on the other hand, the banks having deposits with it, and the other depositors, would observe a large decrease in the reserve fund covering their own credits in the Bank. In 1857, the four largest stock banks of London threatened to call in their deposits, and thereby bankrupt the BANKING DEPARTMENT, unless the Bank of England would secure a "government letter" suspending the Bank Act of 1844.<sup>5</sup> In this way the BANKING DEPARTMENT could fail, as in 1847, while any number of millions (e.g., 8 million in 1847) are held in its ISSUE DEPARTMENT to guarantee the convertibility of the circulating notes. But this is again illusory.

"That large portion (of deposits) for which the bankers themselves have no immediate demand passes into the hands of the BILL-BROKERS, who give to the banker in return commercial bills already discounted by them for persons in London and in different parts of the country as a security for the sum advanced by the banker. The BILL-BROKER is responsible to the banker for payment of this MONEY AT CALL<sup>a</sup>; and such is the magnitude of these transactions, that Mr. Neave, the present Governor of the Bank //of England//, stated in evidence, 'We know that one BROKER had 5 million, and we were led to believe that another had between 8 and 10 million; there was one with 4, another with  $3\frac{1}{2}$ , and a third with above 8. I speak of deposits with the brokers''' (Report of Committee on Bank Acts, 1857-58, p. V, Section 8).

"The London BILL-BROKERS carried on their enormous transactions without any cash reserve, relying on the run off of their bills falling due, or in extremity, on the power of obtaining advances from the Bank of England on the security of bills under discount" [Ibid., p. VIII, Section 17]. "Two BILL-BROKING houses in London suspended payment in 1847; both afterwards resumed business. In 1857, both suspended again. The liabilities of one house in 1847 were, in round numbers, £2,683,000, with a capital probably not more than one-fourth of what it was in 1847. The liabilities of the other firm were between £3,000,000 and £4,000,000 at each period of stoppage, with a capital not exceeding £45,000" (Ibid., p. XXI, Section 52).

<sup>5</sup>) //The suspension of the Bank Act of 1844<sup>48</sup> permits the Bank to issue any quantity of banknotes regardless of the gold reserve backing in its possession; thus, to create an arbitrary quantity of fictitious paper money capital, and to use it for the purpose of making loans to banks, exchange brokers, and through them to commerce.—F. E.//

<sup>&</sup>lt;sup>a</sup> In 1894 German edition this English term is explained in German in parentheses.

### Chapter XXX

#### MONEY CAPITAL AND REAL CAPITAL. I

The only difficult questions, which we are now approaching in connection with the credit system, are the following:

First: The accumulation of the actual money capital. To what extent is it, and to what extent is it not, an indication of an actual accumulation of capital, i. e., of reproduction on an extended scale? Is the so-called PLETHORA of capital — an expression used only with reference to the interest-bearing capital, i. e., money capital — only a special way of expressing industrial overproduction, or does it constitute a separate phenomenon alongside of it? Does this PLETHORA, or excessive supply of money capital, coincide with the existence of stagnating masses of money (bullion, gold coin and banknotes), so that this superabundance of actual money is the expression and external form of that PLETHORA of loan capital?

Secondly: To what extent does a scarcity of money, i. e., a shortage of loan capital, express a shortage of real capital (commodity capital and productive capital)? To what extent does it coincide, on the other hand, with a shortage of money as such, a shortage of the medium of circulation?

In so far as we have hitherto considered the peculiar form of accumulation of money capital and of money wealth in general, it has resolved itself into an accumulation of claims of ownership upon labour. The accumulation of the capital of the national debt has been revealed to mean merely an increase in a class of state creditors, who have the privilege of a firm claim upon a certain portion of the tax revenue.<sup>6</sup> By means of these facts, whereby even an accumulation of

<sup>6)</sup> "The public fund is nothing but imaginary capital, which represents that portion of the annual revenue, which is set aside to pay the debt. An equivalent amount of capital has been spent; it is this which serves as a denominator for the loan, but it is not this which is represented by the public fund; for the capital no longer exists. New wealth must be created by the work of industry; a portion of this wealth is annually set aside in advance for those who have loaned that wealth which has been spent; this portion is taken by means of taxes from those who produce it, and is given to the creditors of the state, and, according to the customary proportion between capital and interest in the country, an imaginary capital is assumed equivalent to that which could give rise to the annual income which these creditors are to receive" (Sismondi, *Nouveaux principes*, II, p. 230).<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> The footnote is written in French.

debts may appear as an accumulation of capital, the height of distortion taking place in the credit system becomes apparent. These promissory notes, which are issued for the originally loaned capital long since spent, these paper duplicates of consumed capital, serve for their owners as capital to the extent that they are saleable commodities and may, therefore, be reconverted into capital.

Titles of ownership to public works, railways, mines, etc., are indeed, as we have also seen, titles to real capital. But they do not place this capital at one's disposal. It is not subject to withdrawal. They merely convey legal claims to a portion of the surplus value to be obtained by it. But these titles likewise become paper duplicates of the real capital; it is as though a bill of lading were to acquire a value separate from the cargo, both concomitantly and simultaneously with it. They come to nominally represent non-existent capital. For the real capital exists side by side with them and does not change hands as a result of the transfer of these duplicates from one person to another. They assume the form of interest-bearing capital, not only because they guarantee a certain income, but also because, through their sale, their repayment as capital values can be obtained. To the extent that the accumulation of this paper expresses the accumulation of railways, mines, steamships, etc., to that extent does it express the extension of the actual reproduction process -- just as the extension of, for example, a tax list on movable property indicates the expansion of this property. But as duplicates which are themselves objects of transactions as commodities, and thus able to circulate as capital values, they are illusory, and their value may fall or rise quite independently of the movement of value of the real capital for which they are titles. Their value, that is, their quotation on the Stock Exchange, necessarily has a tendency to rise with a fall in the rate of interest — in so far as this fall, independent of the characteristic movements of money capital, is due merely to the tendency for the rate of profit to fall; therefore, this imaginary wealth expands, if for this reason alone, in the course of capitalist production in accordance with the expressed value for each of its aliquot parts of specific original nominal value.<sup>7</sup>)

Gain and loss through fluctuations in the price of these titles of

<sup>&</sup>lt;sup>7</sup>: A portion of the accumulated loanable money capital is indeed merely an expression of industrial capital. For instance, when England, in 1857, had invested £80 million in American railways and other enterprises, this investment was transacted almost completely by the export of English commodities for which the Americans did not have to make payment in return. The English exporter drew bills of exchange for these

ownership, and their centralisation in the hands of railway kings, etc., become, by their very nature, more and more a matter of gamble, which appears to take the place of labour as the original method of acquiring capital wealth and also replaces naked force. This type of imaginary money wealth not only constitutes a very considerable part of the money wealth of private people, but also of banker's capital, as we have already indicated.

In order to quickly settle this question, let us point out that one could also mean by the accumulation of money capital the accumulation of wealth in the hands of bankers (money lenders by profession), acting as middlemen between private money capitalists on the one hand, and the state, communities, and reproducing borrowers on the other. For the entire vast extension of the credit system, and all credit in general, is exploited by them as their private capital. These fellows always possess capital and incomes in money form or in direct claims on money. The accumulation of the wealth of this class may take place completely differently than actual accumulation, but it proves at any rate that this class pockets a good deal of the real accumulation.

Let us reduce the scope of the problem before us. Government securities, like stocks and other securities of all kinds, are spheres of investment for loanable capital -- capital intended for bearing interest. They are forms of loaning such capital. But they themselves are not the loan capital, which is invested in them. On the other hand, in so far as credit plays a direct role in the reproduction process, what the industrialist or merchant needs when he wishes to have a bill discounted or a loan granted is neither stocks nor government securities. What he needs is money. He, therefore, pledges or sells those securities if he cannot secure money in any other way. It is the accumulation of this loan capital with which we have to deal here, and more particularly accumulation of loanable money capital. We are not concerned here with loans of houses, machines, or other fixed capital. Nor are we concerned with the advances industrialists and merchants make to one another in commodities and within the compass of the reproduction process; although we must also investigate this point beforehand in more detail. We are concerned exclusively with money loans, which are made by bankers, as middlemen, to industrialists and merchants.

commodities on America, which the English stock subscribers bought up and which were sent to America for purchasing the stock subscriptions.

### 478 Part V.-Division of Profit into Interest and Profit of Enterprise

Let us then, to begin with, analyse commercial credit, that is, the credit which the capitalists engaged in reproduction give to one another. It forms the basis of the credit system. It is represented by the bill of exchange, a promissory note with a definite term of payment, i.e., a DOCUMENT OF DEFERRED PAYMENT. Everyone gives credit with one hand and receives credit with the other. Let us completely disregard, for the present, banker's credit, which constitutes an entirely different sphere. To the extent that these bills of exchange circulate among the merchants themselves as means of payment again, by endorsement from one to another - without, however, the mediation of discounting-it is merely a transfer of the claim from A to B and does not change the picture in the least. It merely replaces one person by another. And even in this case, the liquidation can take place without the intervention of money. Spinner A, for example, has to pay a bill to cotton broker B, and the latter to importer C. Now, if C also exports yarn, which happens often enough, he may buy yarn from A on a bill of exchange and the spinner A may pay the broker B with the broker's own bill which was received in payment from C. At most, a balance will have to be paid in money. The entire transaction then consists merely in the exchange of cotton and yarn. The exporter represents only the spinner, and the cotton broker, the cotton planter.

Two things are now to be noted in the circuit of this purely commercial credit.

First: The settlement of these mutual claims depends upon the return flow of capital, that is, on C-M, which is merely deferred. If the spinner has received a bill of exchange from a cotton goods manufacturer, the manufacturer can pay if the cotton goods which he has on the market have been sold in the interim. If the corn speculator has a bill of exchange drawn upon his agent, the agent can pay the money if the corn has been sold in the interim at the expected price. These payments, therefore, depend on the fluidity of reproduction, that is, the production and consumption processes. But since the credits are mutual, the solvency of one depends upon the solvency of another; for in drawing his bill of exchange, one may have counted either on the return flow of the capital in his own business or on the return flow of the capital in a third party's business whose bill of exchange is due in the meantime. Aside from the prospect of the return flow of capital, payment can only be possible by means of reserve capital at the disposal of the person drawing the bill of exchange, in

order to meet his obligations in case the return flow of capital should be delayed.

Secondly: This credit system does not do away with the necessity for cash payments. For one thing, a large portion of expenses must always be paid in cash, e.g., wages, taxes, etc. Furthermore, capitalist B. who has received from C a bill of exchange in place of cash payment, may have to pay a bill of his own which has fallen due to D before C's bill becomes due, and so he must have ready cash. A complete circuit of reproduction as that assumed above, i.e., from cotton planter to cotton spinner and back again, can only constitute an exception; it will be constantly interrupted at many points. We have seen in the discussion of the reproduction process (Book II, Part III<sup>a</sup>) that the producers of constant capital exchange, in part, constant capital among themselves. As a result, the bills of exchange can, more or less, balance each other out. Similarly, in the ascending line of production, where the cotton broker draws on the cotton spinner, the spinner on the manufacturer of cotton goods, the manufacturer on the exporter, the exporter on the importer (perhaps of cotton again). But the circuit of transactions, and, therefore, the turn about of the series of claims, does not take place at the same time. For example, the claim of the spinner on the weaver is not settled by the claim of the coal-dealer on the machine-builder. The spinner never has any counter-claims on the machine-builder, in his business, because his product, yarn, never enters as an element in the machine-builder's reproduction process. Such claims must, therefore, be settled by money.

The limits of this commercial credit, considered by themselves, are 1) the wealth of the industrialists and merchants, that is, their command of reserve capital in case of delayed returns; 2) these returns themselves. These returns may be delayed, or the prices of commodities may fall in the meantime or the commodities may become momentarily unsaleable due to a stagnant market. The longer the bills of exchange run, the larger must be the reserve capital, and the greater the possibility of a diminution or delay of the returns through a fall in prices or a glut on the market. And, furthermore, the returns are so much less secure, the more the original transaction was conditioned upon speculation on the rise or fall of commodity prices. But it is evident that with the development of the productive power of labour, and thus of production on a large scale: 1) the markets expand and

<sup>&</sup>lt;sup>a</sup> See present edition, Vol. 36.

become more distant from the place of production; 2) credits must, therefore, be prolonged; 3) the speculative element must thus more and more dominate the transactions. Production on a large scale and for distant markets throws the total product into the hands of commerce; but it is impossible that the capital of a nation should double itself in such a manner that commerce should itself be able to buy up the entire national product with its own capital and to sell it again. Credit is, therefore, indispensable here; credit, whose volume grows with the growing volume of value of production and whose time duration grows with the increasing distance of the markets. A mutual interaction takes place here. The development of the production process extends the credit, and credit leads to an extension of industrial and commercial operations.

When we examine this credit detached from banker's credit, it is evident that it grows with an increasing volume of industrial capital itself. Loan capital and industrial capital are identical here. The loaned capital is commodity capital which is intended either for ultimate individual consumption or for the replacement of the constant elements of productive capital. What appears here as loan capital is always capital existing in some definite phase of the reproduction process, but which by means of purchase and sale passes from one person to another, while its equivalent is not paid by the buyer until some later stipulated time. For example, cotton is transferred to the spinner for a bill of exchange, yarn to the manufacturer of cotton goods for a bill of exchange, cotton goods to the merchant for a bill, from whose hands they go to the exporter for a bill, and then, for a bill to some merchant in India, who sells the goods and buys indigo instead, etc. During this transfer from hand to hand the transformation of cotton into cotton goods is effected, and the cotton goods are finally transported to India and exchanged for indigo, which is shipped to Europe and there enters into the reproduction process again. The various phases of the reproduction process are promoted here by credit, without any payment on the part of the spinner for the cotton, the manufacturer of cotton goods for the yarn, the merchant for the cotton goods, etc. In the first stages of the process, the commodity, cotton, goes through its various production phases, and this transition is promoted by credit. But as soon as the cotton has received in production its ultimate form as a commodity, the same commodity capital passes only through the hands of various merchants who promote its transportation to distant markets, and the last of whom finally sells these

commodities to the consumer and buys other commodities in their stead, which either become consumed or go into the reproduction process. It is necessary, then, to differentiate between two stages here: in the first stage, credit promotes the actual successive phases in the production of the same article; in the second, credit merely promotes the transfer of the article, including its transportation, from one merchant to another, in other words, the process G - M. But here also the commodity is at least in the act of circulation, that is, in a phase of the reproduction process.

It follows, then, that it is never idle capital which is loaned here, but capital which must change its form in the hands of its owner; it exists in a form that for him is merely commodity capital, i. e., capital which must be retransformed, and, to begin with, at least converted into money. It is, therefore, the metamorphosis of commodities that is here promoted by credit; not merely C - M, but also M - C and the actual production process. A large quantity of credit within the reproductive circuit (banker's credit excepted) does not signify a large quantity of idle capital, which is being offered for loan and is seeking profitable investment. It means rather a large employment of capital in the reproduction process. Credit, then, promotes here 1) as far as the industrial capitalists are concerned, the transition of industrial capital from one phase into another, the connection of related and dovetailing spheres of production; 2) as far as the merchants are concerned, the transportation and transition of commodities from one person to another until their definite sale for money or their exchange for other commodities.

The maximum of credit is here identical with the fullest employment of industrial capital, that is, the utmost exertion of its reproductive power without regard to the limits of consumption. These limits of consumption are extended by the exertions of the reproduction process itself. On the one hand, this increases the consumption of revenue on the part of labourers and capitalists, on the other hand, it is identical with an exertion of productive consumption.

As long as the reproduction process is continuous and, therefore, the return flow assured, this credit exists and expands, and its expansion is based upon the expansion of the reproduction process itself. As soon as a stoppage takes place, as a result of delayed returns, glutted markets, or fallen prices, a superabundance of industrial capital becomes available, but in a form in which it cannot perform its functions. Huge quantities of commodity capital, but unsaleable. Huge quantities of fixed capital, but largely idle due to stagnant reproduction. Credit is contracted 1) because this capital is idle, i. e., blocked in one of its phases of reproduction because it cannot complete its metamorphosis; 2) because confidence in the continuity of the reproduction process has been shaken; 3) because the demand for this commercial credit diminishes. The spinner, who curtails his production and has a large quantity of unsold yarn in stock, does not need to buy any cotton on credit; the merchant does not need to buy any commodities on credit because he has more than enough of them.

Hence, if there is a disturbance in this expansion or even in the normal flow of the reproduction process, credit also becomes scarce; it is more difficult to obtain commodities on credit. However, the demand for cash payment and the caution observed toward sales on credit are particularly characteristic of the phase of the industrial cycle following a crash. During the crisis itself, since everyone has products to sell, cannot sell them, and yet must sell them in order to meet payments, it is not the mass of idle and investment-seeking capital, but rather the mass of capital impeded in its reproduction process, that is greatest just when the shortage of credit is most acute (and therefore the rate of discount highest for banker's credit). The capital already invested is then, indeed, idle in large quantities because the reproduction process is stagnant. Factories are closed, raw materials accumulate, finished products flood the market as commodities. Nothing is more erroneous, therefore, than to blame a scarcity of productive capital for such a condition. It is precisely at such times that there is a superabundance of productive capital, partly in relation to the normal, but temporarily reduced scale of reproduction, and partly in relation to the paralysed consumption.

Let us suppose that the whole of society is composed only of industrial capitalists and wage workers. Let us furthermore disregard price fluctuations, which prevent large portions of the total capital from replacing themselves in their average proportions and which, owing to the general interrelations of the entire reproduction process as developed in particular by credit, must always call forth general stoppages of a transient nature. Let us also disregard the sham transactions and speculations, which the credit system favours. Then, a crisis could only be explained as the result of a disproportion of production in various branches of the economy, and as a result of a disproportion between the consumption of the capitalists and their accumulation. But as matters stand, the replacement of the capital invested in production depends largely upon the consuming power of the nonproducing classes; while the consuming power of the workers is limited partly by the laws of wages, partly by the fact that they are used only as long as they can be profitably employed by the capitalist class. The ultimate reason for all real crises always remains the poverty and restricted consumption of the masses as opposed to the drive of capitalist production to develop the productive forces as though only the absolute consuming power of society constituted their limit.

A real lack of productive capital, at least among capitalistically developed nations, can be said to exist only in times of general crop failures, either in the principal foodstuffs or in the principal industrial raw materials.

However, in addition to this commercial credit we have actual money credit. The advances of the industrialists and merchants among one another are amalgamated with the money advances made to them by the bankers and money lenders. In discounting bills of exchange the advance is only nominal. A manufacturer sells his product for a bill of exchange and gets this bill discounted by some BILL-BROKER. In reality, the latter advances only the credit of his banker, who in turn advances to the broker the money capital of his depositors. The depositors consist of the industrialists and merchants themselves and also of workers (through savings banks) --- as well as ground rent recipients and other unproductive classes. In this way every individual industrial manufacturer and merchant gets around the necessity of keeping a large reserve capital and being dependent upon his actual returns. On the other hand, the whole process becomes so complicated, partly by simply manipulating bills of exchange, partly by commodity transactions for the sole purpose of manufacturing bills of exchange, that the semblance of a very solvent business with a smooth flow of returns can easily persist even long after returns actually come in only at the expense partly of swindled money lenders and partly of swindled producers. Thus business always appears almost excessively sound right on the eve of a crash. The best proof of this is furnished, for instance, by the Reports on Bank Acts of 1857 and 1858, in which all bank directors, merchants, in short all the invited experts with Lord Overstone at their head, congratulated one another on the prosperity and soundness of business-just one month before the outbreak of the crisis in August 1857.<sup>a</sup> And, strange-

<sup>&</sup>lt;sup>a</sup> See Report from the Select Committee on Bank Acts, Part I, 1857, pp. 327-419.

ly enough, Tooke in his *History of Prices* succumbs to this illusion once again as historian for each crisis.<sup>a</sup> Business is always thoroughly sound and the campaign in full swing, until suddenly the debacle takes place.

We revert now to the accumulation of money capital.

Not every augmentation of loanable money capital indicates a real accumulation of capital or expansion of the reproduction process. This becomes most evident in the phase of the industrial cycle immediately following a crisis, when loan capital lies idle in great quantities. And such times, when the production process is curtailed (production in the English industrial districts was reduced by one-third after the crisis of 1847), when the prices of commodities are at their lowest level, when the spirit of enterprise is paralysed, the rate of interest is low, which in this case indicates nothing more than an increase in loanable capital precisely as a result of contraction and paralysation of industrial capital. It is quite obvious that a smaller quantity of a circulation medium is required when the prices of commodifies have fallen, the number of transactions decreased, and the capital laid out for wages reduced; that, on the other hand, no additional money is required to function as world money after foreign debts have been liquidated either by the export of gold or as a result of bankruptcies; that, finally, the volume of business connected with discounting bills of exchange diminishes in proportion with the reduced number and magnitudes of the bills of exchange themselves. Hence the demand for loanable money capital, either to act as a medium of circulation or as a means of payment (the investment of new capital is still out of the question), decreases and this capital, therefore, becomes relatively abundant. Under such circumstances, however, the supply of loanable money capital also increases, as we shall later see.

Thus, the situation after the crisis of 1847 was characterised by "a limitation of transaction and a great superabundance of money" (Commercial Distress, 1847-48, Evidence No. 1664). The rate of interest was very low because of the "almost perfect destruction of commerce and the almost total want of means of employing money" (l. c., p. 45, tes-

<sup>&</sup>lt;sup>a</sup> Th. Tooke, A History of Prices, and of the State of the Circulation, from 1839 to 1847 Inclusive, pp. 329-48 and A History of Prices, and of the State of the Circulation, During the Nine Years 1848-1856, Vol. VI, pp. 218-29.

timony of Hodgson, Director of the ROYAL BANK OF LIVERPOOL).<sup>a</sup> What nonsense these gentlemen concocted (and Hodgson is, moreover, one of the best of them) in order to explain these facts, can be seen from the following remark:

"The pressure" (1847) "arose from the real diminution of the moneyed capital of the country, caused partly by the necessity of paying in gold for imports from all parts of the world, and partly by the absorption of FLOATING into fixed CAPITAL."  $^{\rm b}$ 

How the conversion of floating capital into fixed capital reduces the money capital of a country is unintelligible. For, in the case of railways, e.g., in which capital was mainly invested at that time, neither gold nor paper is used for viaducts and rails, and the money for the railway stocks, to the extent that it had been deposited solely in payment, performed exactly the same functions as any other money deposited in banks and even increased the loanable money capital temporarily, as already shown above<sup>c</sup>; but to the extent that it had actually been spent for construction, it circulated in the country as a medium of purchase and of payment. Only in so far as fixed capital cannot be exported, so that with the impossibility of its export the available capital secured from returns for exported articles also drops out of the picture — including the returns in cash or bullion — only to that extent could the money capital be affected. But at that time English export articles were also piled up in huge quantities on the foreign markets without being able to be sold. It is true, the FLOATING CAPI-TAL of the merchants and manufacturers of Manchester, etc., who had a portion of their normal business capital tied up in railway stocks and were therefore dependent upon borrowed capital for running their business, had become fixed, and they, therefore, had to suffer the consequences. But it would have been the same, if the capital belonging to their business, but withdrawn from it, had been invested, say, in mines instead of railways-mining products like iron, coal, copper being themselves in turn FLOATING CAPITAL. The actual reduction of available money capital through crop failures, corn imports, and gold exports constituted, naturally, an event that had nothing to do with the railway swindle.

"Almost all mercantile houses had begun to starve their business more or less ... by taking part of their commercial capital for railways" [l.c., p. 42].—"Loans to so great

<sup>&</sup>lt;sup>a</sup> Op. cit., p. 21, No. 231. The page given in the text is wrong. - <sup>b</sup> See First Report from the Select Committee..., p. 39, No. 466, paraphrased. - <sup>c</sup> See this volume, pp. 464-67.

an extent by commercial houses to railways induced them to lean too much upon ... banks by the discount of paper, whereby to carry on their commercial operations" (the same Hodgson, l. c., p. 67). "In Manchester there have been immense losses in consequence of the speculation in railways" (R. Gardner, previously cited in Buch I, Kap. XIII, 3, c.<sup>a</sup> and in several other places; Evidence No. 4884, l. c.).

One of the principal causes of the crisis of 1847 was the colossal flooding of the market and the fabulous swindle in the East Indian trade with commodities. But there were also other circumstances which bankrupted very rich firms in this line:

"They had large means, but not available. The whole of their capital was locked up in estates in the Mauritius, or indigo factories, or sugar factories. Having incurred liabilities to the extent of  $\pounds 500,000-600,000$ , they had no available assets to pay their bills, and eventually it proved that to pay their bills they were entirely dependent upon their credit" (Ch. Turner, big East Indian merchant in Liverpool, No. 730, l. c.).

See also Gardner (No. 4872, l. c.):

"Immediately after the China treaty, so great a prospect was held out to the country of a great extension of our commerce with China, that there were many large mills built with a view to that trade exclusively, in order to manufacture that class of cloth which is principally taken for the China market, and our previous manufactures had the addition of all those."—"4874. How has that trade turned out?— Most ruinous, almost beyond description; I do not believe that of the whole of the shipments that were made in 1844 and 1845 to China, above two-thirds of the amount have ever been returned; in consequence of tea being the principal article of repayment and of the expectation that was held out, we, as manufacturers, fully calculated upon a great reduction in the duty on tea."

And now, naïvely expressed, comes the characteristic credo of the English manufacturer:

"Our commerce with no foreign market is limited by their power to purchase the commodity, but it is limited in this country by our capability of consuming that which we receive in return for our manufactures."

(The relatively poor countries, with whom England trades, are, of course, able to pay for and consume any amount of English products, but unfortunately wealthy England cannot assimilate the products sent in return.)

"4876. I sent out some goods in the first instance, and the goods sold at about 15 per cent loss, from the full conviction that the price at which my agents could purchase tea would leave so great a profit in this country as to make up the deficiency... but instead of profit I lost in some instances 25 and up to 50 per cent."—"4877. Did the manufacturers generally export on their own account?— Principally; the merchants, I think, very soon saw that the thing would not answer, and they rather encouraged the manufacturers to consign than take a direct interest themselves."

<sup>&</sup>lt;sup>a</sup> English edition: Ch. XV, 3, c (present edition, Vol. 35).

In 1857, on the other hand, the losses and failures fell mainly upon the merchants, since the manufacturers left them the task of flooding the foreign markets "on their own account".

An expansion of money capital, which arises out of the fact that, in view of the expansion of banking (see, below, the example of Ipswich, where in the course of a few years immediately preceding 1857 the deposits of the farmers quadrupled<sup>a</sup>), what was formerly a private hoard or coin reserve is always converted into loanable capital for a definite time, does not indicate a growth in productive capital any more than the increasing deposits with the London stock banks when the latter began to pay interest on deposits. As long as the scale of production remains the same, this expansion leads only to an abundance of loanable money capital as compared with the productive. Hence the low rate of interest.

After the reproduction process has again reached that state of prosperity which precedes that of overexertion, commercial credit becomes very much extended; this forms, indeed, the "sound" basis again for a ready flow of returns and extended production. In this state the rate of interest is still low, although it rises above its minimum. This is, in fact, the only time that it can be said a low rate of interest, and consequently a relative abundance of loanable capital, coincides with a real expansion of industrial capital. The ready flow and regularity of the returns, linked with extensive commercial credit, ensures the supply of loan capital in spite of the increased demand for it, and prevents the level of the rate of interest from rising. On the other hand, those cavaliers who work without any reserve capital or without any capital at all and who thus operate completely on a money credit basis begin to appear for the first time in considerable numbers. To this is now added the great expansion of fixed capital in all forms, and the opening of new enterprises on a vast and far-reaching scale. The interest now rises to its average level. It reaches its maximum again as soon as the new crisis sets in. Credit suddenly stops then, payments are suspended, the reproduction process is paralysed, and with the previously mentioned exceptions, a superabundance of idle industrial capital appears side by side with an almost absolute absence of loan capital.

<sup>&</sup>lt;sup>a</sup> See this volume, p. 495.