Chapter Two

VALUE AND AVERAGE PROFIT

The problem with which we are now concerned is familiar. In the various spheres of production the organic composition of capital, the ratio between *c* (constant capital, expended on the means of production) and *v* (variable capital, expended in paying the wage of labor), varies. Since, however, only variable capital produces new value, and since, therefore, it alone produces surplus value, the amount of surplus value produced by two capitals of equal size varies in accordance with the organic composition of these respective capitals, varies, that is to say, in accordance with variations in the ratio between the constant capital and the variable capital in the respective enterprises. But, therewith, also, the rate of profit, the ratio between the surplus value and the total capital, varies. Thus according to the law of value equal capitals yield different profits proportionate to the magnitudes of the living labor which they set in motion. This conflicts with reality, for in the real world equal capitals bring identical profits, whatever their composition. How can the "contradiction" be explained?

Let us first hear what Marx has to say.

"The whole difficulty arises from the fact that commodities are not exchanged simply as *commodities*, but as *products of capital* which claim equal shares of the total amount of surplus

value, if they are of equal magnitude, or shares proportional to their different magnitudes."[1]

The capital advanced for the production of a commodity constitutes the cost price of this commodity. "The cost price [= c + v] does not show the distinction between variable and constant capital to the capitalist. A commodity, for which he must advance £100 in production, costs him the same amount whether he invests 90c + 10v, or 10c + 90v. He always spends £100 for it, no more no less. The cost prices are the same for investment of the same amounts of capital in different spheres, no matter how much the produced values and surplus values may differ. The equality of cost prices is the basis for the competition of the invested capitals, by which an average rate of profit is brought about."[2]

To elucidate the working of capitalist competition Marx presents the following table, wherein the rates of surplus value $\frac{s}{v}$ are assumed to be identical, while as regards the constant capital varying proportions are incorporated into the product according as the wear and tear varies.

Capitals	*Rate of Surplus Value, Percent*	*Surplus Value*	*Rate of Profit, Percent*	*Used-up C*	*Value of Commodities*
I 80c + 20v	100	20	20	50	90
II 70c + 30v	100	30	30	51	111
III 60c + 40v	100	40	40	51	131
IV 85c + 15v	100	15	15	40	70
V 95c + 5v	100	5	5	10	20

In this table we see five instances in which the total capital is identical, and in which the degree of exploitation of labor is the same in every case, but the rates of profit vary widely, according to the differing organic composition. Let us now look upon these

[1] Vol. III, p. 206.
[2] Vol. III, p. 182.

capitals, invested in various fields, as a single capital, of which numbers I to V merely constitute component parts (more or less analogous to the different departments of a cotton mill which has different proportions of constant and of variable capital in its carding, preparatory spinning, spinning, and weaving rooms, on the basis of which the average proportion for the whole factory is calculated), then we should have a total capital of 500, a surplus value of 110, and a total value of commodities of 610. The average composition of the capital would be 500, made up of 390c and 110v, or in percentages, 78c and 22v. If each of the capitals of 100 were to be regarded simply as one fifth of the total capital, the average composition of each portion would be 78c and 22v, and in like manner to each 100 of capital would be allotted a mean surplus value of 22, so that the mean rate of profit would be 22 percent. The commodities must, then, be sold as follows:

Capitals	*Surplus Value*	*Used-up C*	*Value of Commodities*	*Cost Price of Commodities*	*Price of Commodities*	*Rate of Profit Percent*	*Deviation of Price from Value*
I 80c + 20v	20	50	90	70	92	22	+ 2
II 70c + 30v	30	51	111	81	103	22	— 8
III 60c + 40v	40	51	131	91	113	22	—18
IV 85c + 15v	15	40	70	55	77	22	+ 7
V 95c + 5v	5	10	20	15	37	22	+17

The commodities are thus sold at 2 + 7 + 17 = 26 above, and 8 + 18 = 26 below, their value, so that the deviations of prices from values mutually balance one another by the uniform distribution of the surplus value, or by the addition of the average profit of 22 percent of advanced capital to the respective cost prices of the commodities of I to V. One portion of the commodities is sold in the same proportion above in which the other is

sold below value. Only the sale of the commodities at such prices renders it possible that the rate of profit for all five capitals shall uniformly be 22 percent, without regard to the organic composition of these capitals.

"Since the capitals invested in the various lines of production are of a different organic composition, and since the different percentages of the variable portions of these total capitals set in motion very different quantities of labor, it follows that these capitals appropriate very different quantities of surplus labor, or produce very different quantities of surplus value. Consequently the rates of profit prevailing in the various lines of production are originally very different. These different rates of profit are equalized by means of competition into a general rate of profit, which is the average of all these special rates of profit. The profit allotted according to this average rate of profit to any capital, whatever may be its organic composition, is called the average profit. That price of any commodity which is equal to its cost price plus that share of average profit on the total capital invested (not merely consumed) in its production which is allotted to it in proportion to its conditions of turnover, is called its price of production. . . . While the capitalists in the various spheres of production recover the value of the capital consumed in the production of their commodities through the sale of these, they do not secure the surplus value, and consequently the profit, created in their own sphere by the production of these commodities, but only as much surplus value, and profit, as falls to the share of every aliquot part of the total social capital out of the total social surplus value, or social profit produced by the total capital of society in all spheres of production. Every 100 of any invested capital, whatever may be its organic composition, draws as much profit during one year, or any other period of time, as falls to the share of every 100 of the total social capital during the same period. The various capitalists, so far as profits are concerned, are so many stockholders in a stock company in which the shares of profit are uniformly divided for every 100

shares of capital, so that profits differ in the case of the individual capitalists only according to the amount of capital invested by each one of them in the social enterprise, according to his investment in social production as a whole, according to his shares" (III, 186-187). The average profit is nothing other than the profit on the average social capital; its total, like the total of the surplus values, and like the prices determined by the addition of this average profit to the cost prices, are nothing other than the values transformed into prices of production. In the simple production of commodities, values are the center of gravity round which prices fluctuate. But "under capitalist production it is not a question of merely throwing a certain mass of values into circulation and exchanging that mass for equal values in some other form, whether of money or other commodities, but it is also a question of advancing capital in production and realizing on it as much surplus value, or profit, in proportion to its magnitude, as any other capital of the same or of other magnitudes in whatever line of production. It is a question, then, of selling the commodities at least at prices which will yield the average profit, in other words, at prices of production. Capital comes in this form to a realization of *the social nature of its power*, in which every capitalist participates in proportion to his share in the total social capital. . . . If the commodities are sold at their values . . . considerably different rates of profit arise in the various spheres of production. . . . But capital withdraws from spheres with low rates of profit and invades others which yield a higher rate. By means of this incessant emigration and immigration, in a word by its distribution among the various spheres in response to a rise in the rate of profit here and its fall there, it brings about such a proportion of supply to demand that the average profit in the various spheres of production becomes the same, so that values are converted into prices of production" (III, 229-230).

In what relationship does this doctrine of the third volume stand to the celebrated law of value of the first volume?

In Böhm-Bawerk's opinion the third volume of *Capital* manifestly contains the statement of an actual and irreconcilable contradiction to the law of value, and furnishes proof that the equal average rate of profit can only become established if and because the alleged law of value does not hold good. In the first volume, declares Böhm-Bawerk,[1] it was maintained with the greatest emphasis that all value is based on labor and labor alone; the value was declared to be the common factor which appears in the exchange relation of commodities. We were told, in the form and with the emphasis of a stringent syllogistic conclusion, allowing of no exception, that to set down two commodities as equivalents in exchange implies that a common factor of the same magnitude exists in both, to which each of the two must be reducible. Apart, therefore, from temporary and occasional deviations, which are merely apparent breaches of the law of exchange of commodities, commodities which embody the same amount of labor must on principle, in the long run, exchange for each other. And now, in the third volume, we are told that what according to the teaching of the first volume must be, is not and never can be; that individual commodities do and must exchange with each other in a proportion different from that of the labor incorporated in them, and this not accidentally and temporarily, but of necessity and permanently.

But this, says Böhm-Bawerk, is no explanation and reconciliation of a contradiction, it is the naked contradiction itself. The theory of the average rate of profit and of the prices of production cannot be reconciled with the theory of value. Marx must himself have foreseen that this reproach would be made, and to this prevision is evidently due an anticipatory self-defense which, if not in form, yet in point of fact, is found in the Marxist system. He tries by a number of observations to render plausible the view that in spite of exchange relations

[1] Above, pp. 29 ff.

being directly governed by prices of production, which differ from the values, all is nevertheless moving within the framework of the law of value, and that this law, in the last resort at least, governs prices. On this subject, however, Marx does not make use of his customary method, a formal, circumscribed demonstration, but gives only a number of juxtaposed casual remarks, containing divers arguments which are summed up by Böhm-Bawerk under four heads.

Before we consider these "arguments" and the counter-arguments of Böhm-Bawerk, it is necessary to say a word or two concerning the "contradiction" or the "withdrawal" which Marx is supposed to have perpetrated in the third volume. As regards the alleged withdrawal, those who use this term have forgotten that the first volume was not published until the tenth chapter of the third volume, which forms the bone of contention, had already been composed. For the draft of the last two books of *Capital* was composed by Marx during the years 1863 to 1867, and from a note by Engels (III, 209n) we learn that the tenth chapter of the third volume, the one containing the solution of the riddle, was written in 1865. To speak of a withdrawal in this connection is tantamount to saying that Marx, in order to remain at a definite point, first moved a mile forward and then a mile backward. Such is, nevertheless, the view which the vulgar economists have formed of the essence of the dialectic method, because they never see the process but only the completed result, so that the method always seems to them a mystical "hocus-pocus." Nor is there any better justification for the accusation of contradiction than for the accusation of withdrawal.

In Böhm-Bawerk's view, the contradiction is found in this, that, according to the first volume, only commodities embodying *equivalent* amounts of labor are exchanged each for the other, whereas in the third volume we are told that the individual commodities are exchanged one for another in ratios which do not correspond to the ratios between the amounts of labor

respectively incorporated in them. Who denies it? If Marx had really maintained that, apart from irregular oscillations, commodities could only be exchanged one for another *because* equivalent quantities of labor are incorporated in them, or only in the ratios corresponding to the amounts of labor incorporated in them, Böhm-Bawerk would be perfectly right. But in the first volume Marx is only discussing exchange relationships as they manifest themselves when commodities are exchanged for their *values;* and solely on this supposition do the commodities embody equivalent quantities of labor. But exchange for their values is not a condition of exchange in general, even though, under certain specific historical conditions, exchange for corresponding values is indispensable, if these historical conditions are to be perpetually reproduced by the mechanism of social life. Under changed historical conditions, modifications of exchange ensue, and the only question is whether these modifications are to be regarded as taking place according to law, and whether they can be represented as modifications of the law of value. If this be so, the law of value, though in modified form, continues to control exchange and the course of prices. All that is necessary is that we should understand the course of prices to be a modification of the pre-existing course of prices, which was under direct control of the law of value.

Böhm-Bawerk's mistake is that he confuses value with price, being led into this confusion by his own theory. Only if value (disregarding chance deviations, which may be neglected because they are mutually compensatory) were identical with price, would a permanent deviation of the prices of individual commodities from their values be a contradiction to the law of value. In the first volume, Marx already refers to the divergence of values from prices. Thus, he asks: "How can we account for the origin of capital on the supposition that prices are regulated by the average price, that is, ultimately by the value of the commodities?" And he adds: "I say 'ultimately,' because average prices do not directly coincide with the values of

commodities, as Adam Smith, Ricardo, and others believe" (I, 185n). Again: "We have assumed that prices = values. We shall, however, see in Volume III, that even in the case of average prices the assumption cannot be made in this very simple manner" (I, 244n).

We thus see that the Marxist law of value is not canceled by the data of the third volume, but is merely modified in a definite way. We shall make closer acquaintance with these modifications and grasp their significance better after we have further considered the course of Böhm-Bawerk's exposition.

The first "argument" adduced by Marx in favor of his view is summarized by Böhm-Bawerk as follows:[1] Even if the separate commodities are being sold either above or below their values, these reciprocal fluctuations cancel each other, and in the community itself—taking into account all the branches of production—the total of the prices of production of the commodities produced still remains equal to the sum of their values.

The first thing that strikes us here (and the observation may be repeated with regard to all that follows) is that Böhm-Bawerk denotes as an "argument" that which for Marx was no more than a logical deduction from his premises. It is then, of course, easy to demonstrate that what Marx says does not amount to an argument.

Böhm-Bawerk tells us that it is admitted by Marx that *individual* commodities do not exchange for one another at their values. Stress is laid on the fact that these individual deviations compensate or cancel each other. How much of the law of value is left? asks Böhm-Bawerk. The object of the law of value is to elucidate the actual exchange relations of commodities. We wish to know, for instance, why a coat should be worth as much in exchange as twenty yards of linen. There can clearly be a question of an exchange relationship only between *individual commodities among each other.* As soon,

[1] Above, pp. 32 ff.

however, as we look at *all commodities as a whole* and sum up their prices, we must studiously and perforce avoid looking at the relations existing within this whole. The relative differences of price compensate each other in the sum total. It is, therefore, no answer to our question concerning the exchange relationships of the commodities to be told the total price which they bring when taken together. The state of the case is this: to the question of the problem of value, the Marxists first reply with their law of value, telling us that commodities exchange in proportion to the labor time embodied in them. They then revoke this answer as far as it concerns the domain of the exchange of individual commodities, the one domain in which the problem has any meaning, while they maintain it in full force only for the aggregate national product, for a domain therefore in which the problem, being without object, cannot properly be put at all. As an answer to the strict question of the problem of value, the law of value is avowedly contradicted by the facts; and in the only application in which it is not contradicted by them, it is no longer an answer to the question which demanded a solution. It is no answer at all, it is mere tautology. When one penetrates the disguises due to the use of money, commodities do eventually exchange for commodities. The aggregate of commodities is thus identical with the aggregate of the prices paid for them; or the price of the entire national product is nothing else than the national product itself. In these circumstances, therefore, it is quite true that the total price paid for the entire national product coincides precisely with the total amount of value or labor crystallized therein. But this tautological utterance denotes no increase of true knowledge, neither does it prove the correctness of the law that commodities exchange in proportion to the labor embodied in them. Thus Böhm-Bawerk.

The entire train of reasoning is utterly beside the point. Marx is inquiring about the total value, and his critic complains because he is not inquiring about the value of the individual commodity. Böhm-Bawerk fails to see what Marx is aiming at

in this demonstration. It is important to show that the sum total of the prices of production is identical with the sum total of the values, because thereby, first of all, it is shown that the total price of production cannot be greater than the total value; but, inasmuch as the process of the production of value is effected solely within the sphere of production, this signifies that all profit originates from production and not from circulation, not from any addition to the finished product subsequently effected by the capitalist. Secondly, we learn that, since the total price is equal to the total value, the total profit cannot be anything else than the total surplus value. The total profit is thereby quantitatively determined, and solely on the basis of this determination does it become possible to calculate the magnitude of the rate of profit.

But can we, without lapsing into absurdity, venture to speak of a total value at all? Böhm-Bawerk confounds the exchange value with the value. Value manifests itself as exchange value, as a quantitatively determined relationship, in virtue of the fact that one commodity can be exchanged for another. But whether, for example, a coat can be exchanged for twenty yards of linen cloth or for forty yards is not a matter of chance, but depends upon objective conditions, upon the amount of socially necessary labor time contained in the coat and in the linen respectively. These conditions must make themselves felt in the process of exchange, they must substantially control that process, and they must have an independent existence quite apart from exchange, if we are to be entitled to speak of the total value of commodities.[1]

Böhm-Bawerk overlooks the fact that value in the Marxist sense is an objective, quantitatively determined magnitude. He overlooks it because in reality the concept of value as determined by the marginal utility theory lacks this quantitative

[1] See Friedrich Engels, "Ergänzung und Nachtrag zum dritten Buch des 'Kapital,'" *Die Neue Zeit,* Vol. I, p. 7. [Reprinted in *Engels on Capital* (1937), p. 97.]

definiteness. Even supposing that the value as equivalent to the marginal utility of each unit in an aggregate of goods is known to me, this value being determined by the utility of the last unit in this store of goods, this does not enable me to calculate the magnitude of the value of the total store. But if the value, in the Marxist sense, of a single unit be known to me, the value of the aggregate of these units is likewise known.

In the transition from the simple to the capitalist production of commodities, the distribution of the social product is what undergoes change. The distribution of the surplus value is now no longer effected in accordance with the measure of the labor power which the individual producer has in his particular sphere expended for the production of surplus value, but is regulated by the magnitude of the capital it has been necessary to advance in order to set in motion the labor that creates the surplus value. It is obvious that the change in the distribution makes no difference in the total amount of surplus value undergoing distribution, that the social relationship is unaltered, and that the change in the distribution comes to pass solely through a modification in the price of the individual commodities. It is further obvious that if we are to determine the amount of divergence, we must know, not only the magnitude of the surplus value, but also the magnitude and indeed the *value* magnitude of the advanced capital. The law of value enables us to determine this magnitude. I can thus readily ascertain the deviations as soon as the value magnitudes are known to me. Value is consequently the necessary theoretical starting point whence we can elucidate the peculiar phenomenon of prices resulting from capitalist competition.

Böhm-Bawerk's entire polemic is therefore all the more fallacious inasmuch as Marx, when he inquires about the total value, does this solely in order to distinguish, within the total value, the individual parts which are important to the capitalist process of distribution. Marx's concern is with the value newly created within a period of production, and with the ratio in

which this newly created value is distributed between the working class and the capitalist class, thus furnishing the revenues of the two great classes. It is therefore utterly false to say that Marx revokes the law of value as far as individual commodities are concerned, and maintains it in force solely for the aggregate of these commodities. Böhm-Bawerk is led to make this contention only because he fails to distinguish between value and price. The truth is, rather, that the law of value, directly valid for the social product and its parts, enforces itself only inasmuch as certain definite modifications, conformable to law, occur in the prices of the individual capitalistically-produced commodities—but these modifications can only be made comprehensible by the discovery of the social nexus, and the law of value renders us this service. Finally, it is pure gibberish for Böhm-Bawerk to say, as he does, that the aggregate of commodities is identical with the aggregate of the prices paid for them. Aggregate of commodities and aggregate of prices are incommensurable magnitudes. Marx says that the sum total of the values (not of the commodities) is equal to the sum total of the prices of production. In this case we have commensurability, inasmuch as prices and values are both expressions for different quantities of labor. For the total price of production can be compared with the total value only if, though quantitatively different, they are qualitatively homogeneous, both being the expression of materialized labor.

It is true that Böhm-Bawerk considers that in the ultimate analysis commodities exchange for commodities, and that this is why the aggregate of prices is identical with the aggregate of commodities. But here he disregards not only the price but also the value of the commodities. The question is, given an aggregate of commodities, by the piece, by weight, etc., how great is their value, or what is their price, since for the social product these are coincident. This value or price is the magnitude of a definite quantity of money, and is something completely different from the aggregate of commodities. Marx's inquiry relates to

this magnitude, which must according to his theory incorporate an equal expenditure of labor with the aggregate of commodities.

The first "argument," like those that follow, is merely designed to indicate how far the law of value holds good directly, without modifications. Naturally, it is easy for Böhm-Bawerk to show that the modification of the law of value which Marx had previously indicated as a necessary outcome of the nature of capitalist competition, and which he here invariably presupposes, is not proved.

In his criticism of the second argument, Böhm-Bawerk proceeds as follows. Marx, he says, claims for the law of value that it governs the variation of prices, inasmuch as, if the labor time required for the production of commodities be reduced, prices fall; if it be increased, prices rise (III, 208, 211). But Böhm-Bawerk has omitted the condition which Marx attaches to this proposition, for Marx begins by saying: "Whatever may be the way in which the prices of the various commodities are first fixed or mutually regulated, the law of value always dominates their movements." Böhm-Bawerk overlooks this, and reproaches Marx with ignoring the fact that labor, while it is *one* of the determinants of price, is not the sole determinant, as Marx's theory demands. This conclusion, says Böhm-Bawerk, rests on an oversight so obvious that it is amazing Marx failed to perceive it. But what Marx said, and the only thing he wanted to say, was that changes in the expenditure of labor entail changes in prices, that is to say that, the prices being given, the variation in prices is determined by the variation in the productivity of labor. The oversight is here committed by Böhm-Bawerk, who could not have raised the objection he does had he quoted the passage in full.

More important, however, are Böhm-Bawerk's subsequent objections to the Marxist exposition. Marx conceives the transformation of value into price of production as an historical proc-

ess, which is summarized by Böhm-Bawerk as the "third argument" in the following terms: "The law of value, Marx affirms, governs with undiminished authority the exchange of commodities in certain primary stages in which the change of values into prices of production has not yet been accomplished." The argument, we are told, has not been developed by Marx with precision and clearness, but the substance of it has been interwoven into his other disquisitions.

The conditions which are requisite in order that commodities shall be exchanged for their values are developed by Marx as follows: He assumes that the workers themselves own their respective means of production, that they labor on the average for an equal time and with equal intensity, and that they exchange their commodities directly. Then two workmen in any one day will by their labor have added to their product equal amounts of new value, but the respective products will vary in value in accordance with variations in the amount of labor previously incorporated in the means of production. This latter portion of value will correspond to the constant capital of the capitalist economy; the portion of the new value expended upon the workers' means of subsistence will correspond to the variable capital; while the portion of the new value which remains will correspond to the surplus value, which will accrue to the laborer. Thus both the laborers receive equal values after the value of the invested "constant" capital has been deducted; but the relationship between the portion of value representing surplus value and the value of the means of production—that which corresponds to the capitalist rate of profit—will differ in the respective cases. Since, however, each of them has the value of the means of production made good to him in exchange, the circumstance is completely immaterial. "The exchange of commodities at their values, or approximately at their values, requires, therefore, a much lower stage than their exchange at their prices of production, which requires a relatively high development of capitalist production. . . . Aside from the fact that prices and

their movements are dominated by the law of value, it is quite appropriate, under these circumstances, to regard the value of commodities, not only theoretically, but also historically, as existing prior to the prices of production. This applies to conditions in which the laborer owns his means of production, and this is the condition of the land-owning farmer and of the craftsman in the old world as well as the modern world. This agrees also with the view formerly expressed by me that the development of product into commodities arises through the exchange between different communes, not through that between the members of the same commune. It applies not only to this primitive condition, but also to subsequent conditions based on slavery or serfdom, and to the guild organization of handicrafts, so long as the means of production installed in one line of production cannot be transferred to another line except under difficulties, so that the various lines of production maintain, to a certain degree, the same mutual relations as foreign countries or communistic groups" (III, 206-209).

Against this reasoning, Böhm-Bawerk tells us, "the gravest doubts arise, whether we regard it from within or without." It is inherently improbable, and experience also is against it. To demonstrate the improbability, Böhm-Bawerk illustrates Marx's example arithmetically. Laborer I, he says, represents a branch of production which requires technically a relatively large and costly preparatory means of production, for the installation of which he has required five years' labor, while the formation of the finished product needs an additional year. Let us assume that the laborer furnishes the means of production. In that case it will be six years before he secures a return for the value of his labor. Laborer II, on the other hand, can provide the necessary means of production and complete the finished product in a single month, and will therefore secure his yield after one month. But in the Marxist hypothesis absolutely no attention is paid to this difference in point of time as regards the receipt of payment, whereas a year's postponement of the re-

muneration of labor is assuredly a circumstance demanding compensation. Unquestionably, says Böhm-Bawerk, the different branches of production are not equally accessible to all producers. Those branches which demand an extensive outlay of capital are accessible only to a dwindling minority. Hence, in these latter branches, there ensues a certain restriction in supply, and this ultimately forces the price of their products above the level of those branches which can be carried on without vexatious delays. Marx himself recognizes that in such cases exchange for values would lead to a disproportion. He records the admission by saying that the equivalent surplus values represent unequal rates of profit. But the question naturally arises, why this inequality should not be neutralized by competition just as it is in capitalist society. Marx answers the question by saying that the only thing which matters to the two laborers is that for equal labor time they shall, when the values of the invested constant elements have been deducted, receive equal values, whereas the difference in the rates of profit is a matter of no moment to them, just as the modern wage earner is indifferent as to what rate of profit the quantum of surplus value extorted out of him may represent.

But the comparison is fallacious. For, says Böhm-Bawerk, the laborers of our day do not receive the surplus value, whereas in the supposed case the two laborers do receive it. It is therefore not an indifferent matter whether it be allotted to them by one measure or by another, by the measure of the work done or by the measure of the invested means of production. Consequently the inequality in the rates of profit cannot depend on the fact that the magnitude of the rate of profit is of no moment to the persons concerned.

These last sentences are a salient example of Böhm-Bawerk's polemic method. He completely ignores his opponent's actual line of argument, and quotes an illustrative example (which he proceeds to interpret falsely) as if it had been alleged to be a proof; he then triumphantly announces that an example is not

a proof. The difference with which we have to do is the difference between pre-capitalist and capitalist competition. In the local market which it dominates, pre-capitalist competition effectuates the equalization of the different individual values to produce a single market value; capitalist competition effectuates the transformation of value into price of production. This, however, is only possible because capital and labor can remove at will from one sphere of production to another; this removal cannot take place freely until all legal and material obstacles to the transfer have ceased to exist, cannot take place until (disregarding minor considerations) there exists absolute liberty of movement for capital and for labor. But in pre-capitalist conditions this *competition for spheres of investment* is impossible, and consequently the equalization of the different rates of profit is impossible. Since this is so, since the laborer who produces on his own account cannot change his sphere of production at will, the difference in the profit rates conjoined with equal masses of profit (= surplus value), is indifferent to him, just as to the wage laborer it is of no moment what rate of profit is represented by the amount of surplus value extorted from him. The *tertium comparationis* [the third term in the comparison] is in both cases that the laborers' chief concern is with the amount of surplus value. For whether they get the surplus value or not, in both cases they have to do the work which produces it. It depends strictly upon the duration of their labor. The matter may be expressed in arithmetical terms as follows. Let us suppose that there are two producers each of whom works on his own account, that one of them makes use of means of production amounting to 20 shillings daily, and that the other makes use of means of production amounting to 10 shillings daily. Let us further suppose that each of them daily produces new value to the amount of 20 shillings. The first laborer will receive 40 shillings for his product, the second will receive 30 shillings; of the 40 shillings 20, and of the 30 shillings 10, will be reconverted into means of production, so that there will remain for

each laborer 20 shillings. Since they are not free to change the sphere of production at will, the inequality of the rates of profit is of no consequence to them. Of the 20 shillings which remain at the disposal of each, let 10 shillings represent the portion used to provide the laborer's means of subsistence, or (in capitalist phraseology) let 10 shillings represent their variable capital, then for each of them the remaining 10 shillings will constitute surplus value. For a modern capitalist the affair would assume a very different complexion. In the first sphere he would have to disburse capital amounting to 30 shillings in the form of $20c = 10v$ in order to gain 10 shillings surplus value; in the second sphere, if he invested an equal amount of capital, it would be in the form of $15c + 15v$ and he would gain 15 shillings surplus value in return for his outlay. Since capital is transferable at will there will be competition between the investments until the profits are equalized, which will ensue when the prices are no longer 40 shillings and 30 shillings respectively, but 35 shillings in each case.

But Böhm-Bawerk's polemic secures its triumph in the "arithmetical exposition" of the example given by Marx. In this exposition the simple production of commodities presupposed by Marx is in the twinkling of an eye transformed into capitalist production. For with what else than capitalist production have we to do when Böhm-Bawerk equips one of the laborers with means of production requiring five years to furnish, while the means of production required by the other laborer can be furnished in a time measured in days? Does not this imply differences in the organic composition of capital, differences which, when so extensive, can arise only as the outcome of capitalist development? In the case of the laborer who works on his own account, such a laborer as Marx had in view, the means of production are tools of a comparatively simple kind, and there is no very notable difference in value between the tools used in the different spheres of production. Where tools of considerable value are employed (a fulling mill, for instance) these are usu-

ally the property of the guild or of the city, and each guildsman's share therein is insignificant. Speaking generally, in pre-capitalist conditions dead labor plays a modest part as compared with living labor. Although, however, the differences in question are inconsiderable, they do in fact suffice to determine certain differences in the rates of profit, differences whose equalization is hindered by the artificial barriers surrounding every sphere of production. But wherever the means of production bulked largely in comparison with labor, co-operative industry made its appearance at an early date, was speedily transformed into capitalist industry, and as a rule culminated in legalized or virtual monopoly (as in the mining industry).

Marx further assumes that the laborers in his illustration mutually exchange their respective products. Böhm-Bawerk complains of the injustice involved, in that one of the laborers, after working for six years, should receive merely an equivalent for his labor time, and not be allotted in addition some compensation for the time he has had to wait. But if one of them has had to wait six years for the return, the other has had to wait six years for the product, has had to store up his own products for six years that he may be able at last to exchange them for the former's product, now at length completed. Hence there is no occasion for allotting a special compensation to one of the two. But in reality there is no more historical warrant for the assumption of so great a divergence between the times when returns can be expected, than there is for the similar assumption of an extensive variation in the organic composition of the "capital."

Böhm-Bawerk, however, is not content with the Middle Ages. In the "modern world," too, relationships exist which correspond to those of the Marxist hypothesis. They are found, says our critic, as Marx himself indicates, in the case of the land-owning peasant farmer and of the handicraftsman. These ought to secure equal incomes whether the capital they have invested in means of production amounts to 10 shillings or to 10,000 shillings, a supposi-

tion which manifestly conflicts with the facts. Certainly it conflicts with the facts. But Marx never maintained that in the "modern" world two distinct prices obtain for an article according as it has been produced by capitalists or by handicraftsmen. As far as the "modern" world is concerned, Marx is referring, not to capitalist conditions, but to the medieval system as contrasted with the classical. This is manifest from the context, and it seems almost incredible that Böhm-Bawerk should have misunderstood the passage as he has done.

However, Böhm-Bawerk assures us that Marx's views as to the equalization of the rates of profit are historically untenable, and refers in this connection to an objection raised by Werner Sombart in the latter's criticism of Marx's third volume. But in actual fact Sombart makes no reference to the question of the validity of the law of value in pre-capitalist conditions. All he does is to oppose the contention that during the transition from the medieval to the capitalist economy, the equalization of the rates of profit has been brought about by the leveling of the originally unequal rates of surplus value. He holds, rather, that the starting point of capitalist competition is from the very outset to be found in the pre-existing commercial rate of profit. Had surplus value been the starting point, capitalism would first have seized upon the spheres in which living labor predominated, and only gradually would it have proceeded to exploit other spheres of production, in proportion as in those spheres prices had fallen owing to a great increase in production. In truth production develops with especial vigor in spheres wherein there is much constant capital, as for example in the mining industry. Capital would have had no reason to transfer itself from one sphere of production to another without a prospect of a "customary profit" such as existed in commercial profit. But, continues Sombart, the error can be shown in yet another way. If, at the outset of capitalist production, exorbitant profits had been obtainable in spheres where variable capital preponderated, this would imply that all at once capital had made use as wage

earners of those who had hitherto been independent producers, had employed them at half the amount which they had previously earned for themselves, and had pocketed all the difference realizable by the sale of the commodities at prices corresponding to their values. In actual fact, says Sombart, capitalist production began with the exploitation of declassed individuals, and in spheres of production some of which were completely new creations; unquestionably, therefore, capitalist production started from the fixing of prices directly in relation to the amount of capital invested.[1]

In opposition to Sombart, my own opinion is that equalization of the different rates of surplus value to form a single rate of profit was the outcome of a process long drawn out. In Sombart's opinion it would be incomprehensible that the capitalist should have troubled to gain control of production unless he had a prospect of securing as industrial capitalist the same profit which he had been in the habit of securing as a merchant. It seems to me, however, that Sombart overlooks the consideration that the merchant did not in the first instance cease to be a merchant when he became a manufacturer. The capital he employed in export was still his main concern. But by employing his extra capital (and in view of the comparatively small amount of constant capital then requisite, no considerable sum would be needed) for the production of commodities on his own account, he was enabled to provide the necessary articles more regularly and in larger quantities—important considerations in a rapidly expanding market. In the second place, inasmuch as he appropriated part of the surplus value produced by the handicraftsmen he transferred to the new industry, he realized an extra profit. Even if the profit rate he could secure on the capital invested in industry was lower than that obtainable on his commercial capital, nevertheless the total rate of profit was henceforth greater. However, a rapid increase in his industrial profit

[1] Sombart, *op. cit.*, p. 585.

rate occurred when, through the utilization of new technical methods (the association of labor, and factory production), he was enabled to produce articles more cheaply than his competitors, who were still satisfying their demand with commodities produced by independent handicraftsmen. Competition then forced his rivals to adopt the new method of production and to disregard the products of the handicraftsmen's labor. With the further progress of capitalism, when production no longer took place mainly for the purposes of the mercantile exporter, and when the capitalist began to effect a conquest of the whole market, his profit was chiefly dependent upon the following factors: His technical methods of production were superior, so that he could produce more cheaply than the handicraftsmen. Since for the time being the market value of the handicraftsman's products determined prices, the capitalist was able to realize extra surplus value or extra profit, which was greater in proportion as his technical superiority was more marked. For the most part, through special legal privileges, the exploitation of superior technical methods was a monopoly of individual capitalists. Not until the days of monopoly were over, not until the restrictions upon the transferability of capital had been abolished, not until the shackles of the laborer had been removed, was the equalization of the varying rates of profit, originally so divergent, rendered possible.

First of all, by the supplanting of handicraftsmanship and by the increase of competition within the sphere of capitalist production, the extra profit realizable by capital was reduced; and subsequently freedom of transference from one sphere of production to another effectuated the equalization of profit to become average profit.

The expansion of the market creates a need for enhanced and more regular supply, and this in turn impels commercial capital to acquire control of production as well. The profit which capital thus realizes may be less than commercial profit. For to capital it assumes the form of extra profit, which is made because the

commodities which capital produces are obtainable by it more cheaply than those purchasable from independent handicraftsmen. In the further course of economic evolution, the extra profit made with the aid of superior technical equipment by the capitalist who is competing with the handicraftsman for the home market becomes the motive force for the exclusive seizure of a sphere of production by capital. The organic composition of capital plays here a minor part; and in any case, as far as pre-capitalist conditions are concerned, Böhm-Bawerk and Sombart overestimate the extent of differences in the organic composition of capital.

Only where, as a matter of actual fact, the means of production bulk large in importance, as is the case in the mining industry, does the great preponderance of constant capital become a reason for capitalization, for which co-operation constitutes a preliminary stage. For the most part such industries are likewise monopolies, the yield of which has to be dealt with by special laws.

As soon, however, as capitalist competition has definitively established the equal rate of profit, that rate becomes the starting point for the calculations of the capitalists in the investment of capital in newly-created branches of production. The prices here fluctuate on either side of that price of production whose attainment makes the particular branch of production appear profitable. At the same time, the capitalist goes halfway to meet competition, for he himself accepts average profit as a regulative principle, and the sole effect of competition is to prevent his deviating from the norm and from securing an above-average profit for any considerable period.

It is obvious, moreover, that the formation of price in capitalist society must differ from the formation of price in social conditions based upon the simple production of commodities. We shall now pursue our examination of the change in the character of the formation of price by considering the "fourth argument."

Böhm-Bawerk tells us that, according to Marx, in a complex economic system the law of value regulates the prices of production, at least indirectly and in the last resort, since the total value of the commodities determined by the law of value determines the total surplus value, while this last regulates the amount of the average profit and therefore the general rate of profit (III, 211-212). The average profit determines the price of production. In the sense of the Marxist doctrine, says Böhm-Bawerk, this is correct, but the statement is incomplete, and our critic attempts to "complete" it as follows: The price of production is equal to cost price plus average profit. The cost price of the means of production consists, again, of two components: first the outlay on wages; and secondly the outlay upon means of production whose values have already been transformed into prices of production. If we continue this analysis we come at last—as does Adam Smith in his "natural price," with which, indeed, Marx expressly identifies his price of production—to resolve the price of production into two components or *determinants* [!]: (1) the sum total of the wages paid during the different stages of production, which taken together represent the actual cost price of the commodities; (2) the sum total of the profits calculated on all these disbursements upon wages. Consequently *one* determinant of the price of a commodity is the average profit incidental to its production. Of the other determinant, the wages paid, Marx speaks no further in this passage. But it is evident, says Böhm-Bawerk, that the total expended outlay upon wages is a product of the quantity of labor employed, multiplied by the average rate of wages. Since, however, according to the law of value the exchange relations must be determined solely by the *quantity* of labor expended, and since Marx denies that the rate of wages has any influence upon the value of the commodities, it is also evident that, of the two components of the factor "outlay upon wages," only the amount of labor expended is in harmony with the law of value, while in the second component, rate of wages, a determinant

alien to the law of value enters among the determinants of the prices of production.

It is almost incredible, the way in which Böhm-Bawerk deduces as a self-evident inference from Marx's train of thought the very conclusion which Marx has in so many words stigmatized as a gross fallacy. Let Marx speak for himself. "The value of the annual product in commodities, just like the value of the commodities produced by some particular investment of capital, and like the value of any individual commodity, resolves itself into two parts: Part A, which replaces the value of the advanced constant capital, and Part B, which presents itself in the form of revenue as wages, profit, and rent. This last part of value, B, stands in opposition to Part A to the extent that this Part A, under otherwise equal circumstances, in the first place never assumes the form of revenue, and in the second place always flows back in the form of capital, and of constant capital at that. The other portion, B, however, carries within itself an antagonism. Profit and rent have this in common with wages that all three of them are forms of revenue. Nevertheless, they differ essentially from each other in that profit and rent are surplus value, unpaid labor, whereas wages are paid labor." [1]

In that he reproduces as Marx's opinion "the incredible error in analysis which permeates the whole of political economy since Adam Smith," Böhm-Bawerk makes a double mistake. First of all he ignores constant capital. Apart from all else, this is least permissible in a place in which we have to do with the transformation of value into price of production. For what is decisive for this transformation is the organic composition of the capital, that is to say, the ratio between the constant and the variable capital. To disregard the constant capital in this case is to disregard the most essential point, is to render it quite impossible to understand the formation of the price of production. Yet graver, perhaps, is the second mistake. Inasmuch as Böhm-

[1] Vol. III, p. 977.

Bawerk, in common with Adam Smith, makes variable capital and surplus value "component parts," or as he puts it more stringently, "determinants," of value, he perverts Marx's doctrine into its precise opposite. For Marx, value is the *prius,* the thing given, while v and s are no more than parts whose magnitude is limited by the new value added to the dead labor (c) and determined in accordance with the quantity of labor. How much of this new value (which can be resolved into v + s, but does not originate from them) can be assigned to v and how much to s, is determined by the value of the labor power, which is equal to the value of the means of subsistence necessary for its maintenance, the balance remaining available for surplus value. Böhm-Bawerk is still entangled in the capitalist illusion in accordance with which the cost price is regarded as a constitutive factor of the value or of the price. Precisely because he ignores c, he makes it utterly impossible for himself to gain insight into the process of the formation of value. He does not see that in the product the portion of the cost price which represents the constant capital appears reproduced with its value unchanged. It is otherwise with the portion represented by v. The value of the variable capital presents itself in the form of the means of subsistence consumed by the laborer. The value of these means of subsistence is annihilated in the process of consumption. But the new value produced by the laborers belongs to the capitalist; a portion of this new value is re-invested by him in variable capital, and seems to him to replace this again and again, just as another portion of the value which flows back to him replaces the constant capital whose value is actually transferred to the product. The distinction between c and v is thereby obliterated, and the process of the formation of value is enveloped in mystery. Labor no longer manifests itself as the source of value, for value appears to be constituted out of the cost price plus an excess over cost price coming no matter whence. Thus the "price of labor" seems to be the cause of the

price of the product, so that ultimately the whole analysis resolves itself into the circular explanation of price by price. Instead of conceiving of value as a magnitude which, in accordance with definite laws, undergoes subdivison into two portions, one of which replaces the constant capital, while the other becomes revenue (v + s), revenue itself is made a constituent of price, and the constant capital is forgotten. Thus, Marx expressly insists that "it would be a mistake to say that the value of wages, the rate of profit, and the rate of rent form independent constituent elements of value, whose composition gives rise to the value of commodities, leaving aside the constant part; in other words, it would be a mistake to say that they are constituent elements of the value of commodities, or of the price of production" (III, 994).

If, however, the wage of labor be not a constituent of value, it naturally has no influence upon the magnitude of value. How, then, is it possible for Böhm-Bawerk to continue to proclaim that it has an influence upon value? To demonstrate this influence, he gives us two tables. Three commodities, A, B, and C, have at the outset the same price of production, namely 100, while the organic composition of the capital differs in each case. The daily wage is 5; the rate of surplus value (s′) is 100 percent; the total capital being 1,500, the average rate of profit (p) is 10 percent.

Commodity	*Working Days*	*Wages*	*Capital Employed*	*Average Profit*	*Price of Production*
A	10	50	500	50	100
B	6	30	700	70	100
C	14	70	300	30	100
Totals	30	150	1,500	150	300

Now let us assume that wages rise from 5 to 6; of the 300, 180 will now accrue to wages and 120 to profit; p′ is now 8 percent; the table, therefore, must be modified as follows:

Commodity	*Working Days*	*Wages*	*Capital Employed*	*Average Profit*	*Price of Production*
A	10	60	500	40	100
B	6	36	700	56	92
C	14	84	300	24	108
Totals	30	180	1,500	120	300

The tables exhibit certain peculiarities. Namely, we are not told the magnitude of the contant capital employed in the various branches, nor do we learn how much of the constant capital is transferred to the product; thus only is Böhm-Bawerk enabled to draw the conclusion that although a notable constant capital is employed, it nowhere reappears in the product, and the prices of production are identical. Still less are we able to understand how it happens that *higher* wages can be paid with the *same* capital. It is true that these errors make little difference to the final results, for Böhm-Bawerk does in a sense allow for the organic composition, inasmuch as he calculates the profit upon varying outlays of capital; and his second survey alters only the absolute figures, not the relative ones, for the rate of profit undergoes a greater fall than Böhm-Bawerk declares, seeing that the total capital is increased. But the failure to take the constant capital into account renders it impossible to secure an insight into the actual process. If we correct Böhm-Bawerk's tables, they read as follows:

Commodity	*Total Capital* $c+v$	c	v	s	p	*Value*	*Price of Production*
A	500	450	50	50	50	550	550
B	700	670	30	30	70	730	770
C	300	230	70	70	30	370	330
Totals	1,500	1,350	150	150	150	1,650	1,650 = 1,500 + 150

To avoid complicating the calculation needlessly, we have assumed that c is entirely used up. If the wage now rises from 5 to 6, the total capital is increased from 1,500 to 1,530, because v increases from 150 to 180; the surplus value is reduced to 120, the rate of surplus value to 66.6 percent, and the rate of profit to approximately 7.8 percent. The new value created by the laborers remains unchanged, and is 300. But the organic composition of the capital has been modified, and therewith has been modified the factor that is decisive in the transformation of value into price of production.

Commodity	*Total Capital c+v*	*c*	*v*	*s*	*p*	*Value*	*Price of Production*
A	510	450	60	40	40	550	550
B	706	670	36	24	55	730	761
C	314	230	84	56	25	370	339
Totals	1,530	1,350	180	120	120	1,650	1,650

The table shows the "effects of general fluctuations of wages on prices of production" (III, Chap. XI). We obtain the following laws [1]: (1) as far as a capital of average composition is concerned, the price of production of the commodities undergoes no change; (2) as far as a capital of lower composition is concerned, the price of production of the commodities rises, but not proportionally to the fall in the profits; (3) as far as a capital of higher composition is concerned, the price of production falls, but not as much as the profit (III, 236). What are we to deduce from this? If we are to believe Böhm-Bawerk, it appears that a rise in wages (the quantity of labor remaining unchanged) brings about a material alteration in the originally equal prices of production. This alteration can be ascribed in part only to the change in the rate of profit. Not wholly, of course, seeing that, for example, the price of production of commodity C has *risen*

[1] Rise in wages is alone considered. Naturally a fall in wages would have the contrary effect.

notwithstanding the fall in the rate of profit. This puts it beyond doubt that in the magnitude of wages we have to do with a price-determinant whose efficacy is not exhausted in the influencing of the magnitude of the profit, but which rather exercises *a direct influence of its own.* Böhm-Bawerk therefore believes that he has good reason for undertaking an independent examination of this link in the chain of determinants of price which Marx has passed over. (Marx has a special chapter on the subject!)

We have already seen that this "independence" is pushed so far as to represent Marx as saying the opposite of what he really thought. We now see how far Böhm-Bawerk's independence transcends the rules of logic. The same change in wages effects in the first case no change in the price, in the second case it causes a rise, and in the third case it causes a fall in the price. And this is what he calls having "a direct influence of its own" on price! In fact, however, the tables show clearly that wages can neither constitute components nor determinants of price; for, were it otherwise, an increase in these components must raise price and a decrease in these components must lower price. Nor can average profit constitute a magnitude independently influencing price, for if such an influence existed, whenever the profit falls the price must also fall. But by ignoring the constant portion of capital, and by thus leaving out of consideration the organic composition of capital, Böhm-Bawerk deprives himself of the possibility of explaining the process.

Speaking generally, we cannot gain an insight into the entire process from the standpoint of the individual capital, but this is the outlook to which we are restricted when we conceive the wage of labor to be an independent component of price. From this outlook it is impossible to understand how the capitalist can fail to be indemnified in the price for an increase in wages, for a greater outlay of capital. Nothing but the social relationships whose essence is disclosed by the law of value suffices to explain how the same cause, an increase in wages, can exercise so diver-

gent an effect upon the individual capitals, the effect varying as the ratio varies in which they respectively participate in the *surplus-value-creating process of the social capital.* Their participation in the social surplus-value-creating process is, however, indicated by their organic composition.

But the changed relationship between the capitals consists in this, that their share in the production of the total surplus value has been altered; the surplus value has diminished; but the respective capitals have contributed in varying manners to this diminution, according to variations in the magnitude of the labor they have respectively set in motion. Since, however, the reduced surplus value is to be distributed among them in like manner, the modification of their respective parts in the production of surplus value must find expression in a modification of the prices. The capitals, therefore, must not be regarded individually, as Böhm-Bawerk regards them, but must be apprehended in their social interconnections, as parts, that is to say, of social capital. But the part they respectively play in the creation of the total value of the social product is only to be recognized by a knowledge of their organic composition, by a knowledge of the relationship in which the dead labor, whose value is merely transferred, stands to the living labor which creates new value and of which the variable capital is the index. To disregard this organic composition is tantamount to disregarding the social relationships of the individual capital. This renders it equally impossible to understand the process whereby value is transformed into price of production, and to understand the laws which regulate variations in the price of production—laws different from those which regulate variations in value, but always traceable in the ultimate analysis to variations in the relationships of value.

"Seeing that the price of production in the second illustration rises, while it falls in the third, it is evident from these opposite effects brought about by a fall in the rate of surplus value or by a general rise of wages that there is no prospect of any compen-

sation in the price for the rise in wages, since the fall of the price of production in III cannot very well compensate the capitalist for the fall in the profit, and since the rise of the price in II does not prevent a fall in profit. On the contrary, in either case, whether the price rises or falls, the profit remains the same as that of the average capital whose price remains unchanged. . . . 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, recently reduced, average profit. It is quite evident that a rise of wages must affect a capitalist who has invested one tenth of his capital in wages differently from one who has invested one fourth or one half, according to whether 50, 25, or 10 percent of capital are advanced for wages. An increase in the price of production on one side, and a fall on the other, according to whether a capital is below or above the average social composition, is effected only by leveling to the new reduced average profit. It is clear that when, in consequence of the establishment of a general rate of profit for the capitals of lower composition (those wherein v is above the average), the values are lowered on the occasion of their transformation into prices of production, for the capitals of higher composition the values will be increased."[1] The variation in the price of production consequent upon a change in wages manifests itself as a direct effect of the new average rate of profit. As we have previously seen, the establishment of this rate is an outcome of capitalist competition. Böhm-Bawerk's polemic is therefore primarily unfortunate in this, that it is not directed against the decisive point, but against a phenomenon which only makes its appearance as a necessary consequence, as a sequel, of the primary condition, which is the formation of the price of production upon the basis of the equal rate of profit.

It makes no difference to the regulation of the price of production by the law of value, that in the wage of labor itself,

[1] Vol. III, p. 237.

that is to say in the magnitude of the variable portion of capital which has to be advanced, the transformation of the values of the laborer's necessary means of subsistence into prices of production has already been completed. We must not attempt to prove the contention that the price of production of a commodity is not regulated by the law of value, by maintaining the same thing of another commodity, to wit, labor power. For the deviation of the variable portion of capital takes place according to exactly the same laws as are observed in the case of any other commodity; in this respect there is no difference between the variable and the constant portion of capital. Only because Böhm-Bawerk makes the "value of the labor power" a determinant of the value of the product, does he fall into the error of looking upon the deviation in the price of labor power from its value as a disturbance of the law of value. Again, the magnitude of the total surplus value is unaffected by this deviation. For the total surplus value, which is equal to the total profit and regulates the rate of profit, is calculated for the social capital, where the deviations of the prices of production from value balance each other.

One more only of Böhm-Bawerk's objections remains to be considered. Even if, as Marx declares, the total surplus value regulates the average rate of profit, this nevertheless constitutes but *one* determinant, while as a second determinant, completely independent of the first, and *likewise completely independent of the law of value,* there operates the magnitude of the capital existing in society. Now, apart from the fact that the magnitude of the social capital is here assumed by Böhm-Bawerk to be known (which presupposes the law of value, since we have to do with the determination of the magnitude of a value), the objection has been expressly refuted by Marx, who writes: "The proportion of the sum of appropriated surplus values to the advanced total capital of society varies. Since the variation in this case is not due to the rate of surplus value, it must be due to the total capital, or rather to its constant part. The mass of

this part, technically speaking, increases or decreases in proportion to the quantity of labor power bought by the variable capital, and the mass of its value increases or decreases with the increase or decrease of its own mass. Its mass of value, then, increases or decreases likewise in proportion to the mass of the value of the variable capital. If the same labor sets more constant capital in motion, labor has become more productive. If less, less productive. There has then been a change in the productivity of labor, and a change must have taken place in the value of certain commodities. The following rule then applies. . . . If the price of production of a certain commodity changes in consequence of a change in the average rate of profit, its own value may have remained unchanged, but a change must have taken place in the value of other commodities" (III, 240).