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MARX ON UNEMPLOYMENT

THE relationship between Marxist and academic economists has changed in recent years. During the time of Marshall an impassable gulf still divided them. The one party was engaged in exposing the evils of the capitalist system, the other in painting it in an agreeable light. One regarded the system as a passing historical phase, containing within itself the germs of its own dissolution; the other regarded the system as a permanent, almost a logical, necessity. This fundamental difference of outlook was supported by a difference of language, each party using terms strongly coloured by its own point of view. Thus, the academics described the interest obtained by owning capital as the *reward of abstinence*, or *waiting*, and profit as the *reward of enterprise,* while Marx treats interest and profit (and rent) as *unpaid labour*, or *surplus value* (the surplus of the value produced by labour over the value paid to labour). This complete difference of attitude made inter-communication between the two schools impossible.

Latter-day academics have, for the most part, undergone a striking change.[1] The circumstances of the times have forced them to concentrate on two problems, monopoly and unemployment, which naturally raise doubts as to whether all is for the best in the best of all possible economic systems, and they are more inclined to analyse the defects of capitalism than to dwell upon its merits. The attempt to represent merely owning capital (waiting) as a productive activity has been abandoned, and the view is gaining ground that it is misleading to treat capital itself as a factor of production, on the same footing as labour. " It is preferable to regard labour . . . as the sole factor of production, operating in a given environment of technique, natural resources, capital equipment and effective demand." [2] What is more important, capitalism is no longer regarded as an eternal necessity. Thus, Mr. Keynes writes : " I see the rentier aspect of capitalism as a transitional phase which will disappear when it has done its work." [3] And Professor Hicks : " I do not

[1] I do not wish to attribute to any of my contemporaries any view which he does not hold. I am prepared to take upon my own head the opinions I attribute to the modern academics.

[2] Keynes : *General Theory of Employment, Interest and Money,* p. 213.

[3] *Ibid.,* p. 376.

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think one could count upon the long survival of anything like a capitalist system [in the absence of a trend of innovations sufficiently strong to maintain investment] . . . one cannot repress the thought that perhaps the whole Industrial Revolution of the last two hundred years has been nothing else but a vast secular boom." [1] These *dicta* are much closer to Marx than anything that can be found in Marshall, while Mr. Kalecki's epigram "The tragedy of investment is that it causes crisis because it is useful," [2] has a close affinity with Marx: "The real barrier of capitalist production is capital itself." [3]

The time therefore seems ripe to bridge the verbal gulf, and my object in this article is to examine what I take to be Marx's analysis of unemployment in language intelligible to academic economists.

First we must deal with some points of terminology. In Marx's system the price of commodities in general consists of $C + V + S$. C (constant capital) is the wear and tear and depreciation of fixed capital, plus raw materials; V (variable capital) is wages; and S (surplus value) is profit and interest [4] (S also includes the rent of land, but this is a complication which I shall neglect in the present study.) With a given stock of capital and given technique, output is proportional to employment; wages cost per unit of output is therefore constant up to capacity, and short-period marginal cost is equal to average prime cost; the familiar reversed L-shaped short-period cost curve can therefore be incorporated in the Marxian analysis.[5]

C and S are calculated per unit of employment, but since output per man-hour is constant in the short period, it can just as well be calculated per unit of output. Price, on the average of all commodities, then equals $\frac{C + V + S}{\text{output}}$. Marx's key concept, the rate of exploitation, $\frac{S}{V}$, is the ratio of net profit and interest to the wages bill. It is not the same thing as the profit

[1] *Value and Capital*, p. 302.

[2] *Essays in the Theory of Economic Fluctuations*, p. 149.

[3] *Capital*, Vol. III (pub. C. H. Kerr & Co.), p. 293.

[4] C, V and S are usually reckoned in terms of *value*, that is man-hours of labour, but, for convenience, Marx often reduces them to terms of money, by assuming a constant rate of wages per hour. As output per man-hour increases, the *value* of money falls if prices are constant, and remains constant if prices fall in proportion to the rise in productivity.

[5] Marx devotes a great deal of attention to changes in the working day, which was one of the leading problems of his time, but for purposes of the present discussion the working day may be assumed to be fixed.

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margin, or ratio of price to prime cost (Mr. Kalecki's " degree of monopoly "). To arrive at this we must first break up C into depreciation and raw-material cost. Or, better perhaps, assume a closed system, in which raw materials come out in the wash. C is then depreciation, and gross profit per unit of output is $\frac{S + C}{V}$, when output per man is constant.

The rate of profit on capital Marx expresses as $\frac{S}{C + V}$, but in order to express it in this form it is necessary first to turn C into an index of the stock of capital; to distinguish, as Marx puts it, between capital employed and capital consumed. This is done by assuming a given rate of turnover (or length of life) of fixed equipment. The rate of turnover is conceived to be governed purely by technical conditions. The stock of fixed capital is then a given number of years' purchase of the depreciation element in C, and $\frac{S}{C + V}$ becomes an index of the rate of profit on capital.

We must now consider what determines the amount of employment and the rate of real wages. Early in the first volume of *Capital*, Marx repudiates Say's Law : " Nothing can be more childish than the dogma, that because every sale is a purchase, and every purchase a sale, therefore the circulation of commodities necessarily implies an equilibrium of sales and purchases. If this means that the number of actual sales is equal to the number of purchases, it is mere tautology. But its real purport is to prove that every seller brings his buyer to market with him. Nothing of the kind. . . . No one can sell unless someone else purchases. But no one is forthwith bound to purchase, because he has just sold. . . . If the split between the sale and the purchase become too pronounced, the intimate connexion between them, their oneness, asserts itself by producing—a crisis." [1] This clearly promises a theory of crises in terms of a deficiency of effective demand. But Volumes II and III of *Capital* were never completed, and among the notes and fragments published by Engels after Marx's death we find only scattered hints of how the theory was to have been worked out. Meanwhile Marx develops his argument upon assumptions which rule out the problem of effective demand.

He sometimes refers to capitalists lending to each other,

[1] *Capital*, Vol. I (pub. Glaisher, ed. 1920), p. 87.

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but in general he thinks of a capitalist-entrepreneur who invests his own savings in his own business. The capitalist accumulates for the sake of accumulating, and the rate of interest plays no part either in governing the capital structure or in influencing the inducement to invest. It is merely the mechanism by which the usurer gets a share in the swag.[1] Whatever part of their profits the capitalists do not consume they invest. Thus, on Marx's assumptions the problem of effective demand does not arise, and the rate of accumulation of capital is governed by the rate of saving out of profits. The capacity output of capital is given by technical conditions, and capital is used to capacity. The amount of employment at any moment is therefore uniquely determined by the amount of capital in existence, and increases through time as capital accumulates.

The amount of employment being determined by the stock of capital in existence at any moment, the rate of real wages is determined by bargaining power between the capitalists as a class and the workers as a class. Workers seeking employment normally exceed the amount of employment offered by capital. The bargaining position of the workers is therefore very weak. Subsistence wages (the value of labour-power [2]) represent, in general, the normal level of wages, but wages may be below subsistence level, in the sense that they are insufficient to maintain health and efficiency from one generation to the next. This threatens to destroy the whole basis of the system, and the capitalists, as a class, are compelled to submit to labour legislation, in order to curb their own excessive greed.[3] On the other hand, wages may be raised above subsistence level by Trade Union action, and the subsistence level itself contains a conventional element—it is itself partly determined by the level of wages ruling in the past.[4] The level of subsistence therefore does not determine the level of wages, but rather sets a vaguely defined bottom stop to the level of wages. The actual level of wages depends upon bargaining power.

We may now turn to Marx's first account of the causes of unemployment, which is to be found in Volume I of *Capital*.[5]

[1] Vol. III, p. 428.

[2] Subsistence wages in real terms and the *value* of labour-power move together so long as output per man is constant. When productivity increases the *value* of labour-power falls.

[3] The Factory Acts, with which Marx is concerned (Vol. I, chap. X. 6.) were not directly concerned with wages, but shortening the working day raises real wages per unit of employment, and reduces the wear and tear of labour.

[4] Vol. I, p. 150.

[5] Vol. I, pp. 630–4.

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At any moment, as we have seen, the amount of employment is determined by the amount of capital in existence and the technique of production. The system is expanding, technique is developing and capital is accumulating, so that, as time goes by, a given amount of capital provides a decreasing amount of employment, but, on the other hand, the amount of capital is increasing. Meanwhile the labour market is being fed both by the natural increase of population and by a constant stream of dispossessed peasants and artisans, deprived of their independent livelihood by the extension of capitalism into fresh spheres. There is therefore chronic unemployment—the reserve army of labour.

From time to time it happens that the amount of capital catches up upon the available labour; unemployment is then temporarily reduced. The bargaining position of labour is strengthened and real wages rise. This reduces the amount of profit, and the rate of accumulation is therefore slowed up, since saving out of profits governs the rate of investment. At the same time the higher rate of real wages has some tendency to stimulate the increase in population,[1] and, what is more important, the scarcity of labour stimulates technical inventions. The amount of employment offered by a given stock of capital is therefore sharply reduced, while the amount of labour seeking employment continues to increase. Unemployment appears again. The temporary bargaining advantage of labour is lost, real wages fall, profits increase, and the process of accumulation is renewed.

Marx associates this rhythmical fall and rise in the reserve army of labour with the ten-year trade cycle.[2] But in my opinion it is something completely different. The chief characteristic of a boom is a rapid rate of capital accumulation. But in Marx's system unemployment does not fall because of a rise in the rate of accumulation, but because of an increase in the stock of capital. And, although the rate of accumulation slows up when wages rise, the situation has none of the characteristics of a slump. The demand for capital goods falls, as a result of the decline in savings, and the luxury trades also may suffer. But there is an exactly corresponding increase in the demand for wage goods. There is no reason why the total of employment should fall, below the high level reached when wages rose, until new inventions

[1] Marx holds that the birth rate is highest where poverty is greatest, but higher wages promote marriage, and reduce the decimation of the offspring. (Vol. I, p. 658. Vol. III, p. 256.)

[5] Vol. I, p. 646.

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have done their work. Meanwhile, during the phase of high wages, consumption is increased as much as investment is reduced, and there is no reason to expect a decline in activity.

Marx himself uses an argument very similar to the above in connection with a different problem (he is maintaining that a rise in wages will not increase the quantity of money in circulation):

" In consequence of a rise in wages, especially the demand of the labourers for the necessities of life will rise. In a lesser degree their demand for articles of luxury will increase, or the demand will be developed for things which did not generally belong to the scope of their consumption. The sudden and increased demand for the necessities of life will doubtless raise their prices momentarily. As a result, a greater portion of the social capital will be invested in the production of the necessities of life, and a smaller portion in the production of articles of luxury, since these fall in price on account of the decrease in surplus-value and the consequent decrease in demand of the capitalists for these articles. And to the extent that the labourers themselves buy articles of luxury, the rise in their wages—to this degree—does not promote an increase in the prices of necessities of life, but simply fills the place of the buyers of luxuries." [1]

The argument which applies to luxuries must also be applied to capital goods, since on Marx's assumptions the demand for capital goods is governed by the saving of the capitalists. Owing to the rise in wages and fall in profits, capitalists will be doing less investment, but the place of the buyers of capital goods is filled up, after a momentary fluctuation in prices, by the buyers of consumption goods, and the rise in wages is not a cause of a recession in trade.[2]

But, though Marx's analysis of changes in the reserve army of labour is not an analysis of the problem of the trade cycle, it nevertheless brings an important point to light. For it shows that, if the rate of interest is inflexible (or if the capital structure is insensitive to changes in the rate of interest) chronic technicological unemployment can occur even in a system which fully conforms to the conditions of Say's Law.

In Volume II Marx analyses the mechanism by which capital

[1] *Capital*, Vol. II (pub. Swan Sonnenschein, ed. 1907), p. 391.

[2] Marx meets the argument that a rise in wages will cause a rise of prices by saying " If it were in the power of the capitalist producers to raise the prices of their commodities at will, they could and would do so without waiting for a rise in wages " (*loc. cit.*, p. 392). This offhand treatment of the subject suggests that Marx did not realise the nature of the problem involved.

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is reproduced and expanded. This he does by dividing all industries into two groups: those producing capital goods, I, and those producing consumption goods, II. Then the total product consists of I, $c_1 + v_1 + s_1$, and II, $c_2 + v_2 + s_2$. In simple reproduction, when net investment is zero, $v_1 + s_1 = c_2$, that is, the net product of I is equal to the replacement of capital in II, and the whole of S, as well as of V, is devoted to consumption. For expansion (positive net investment) to occur, part of S must be saved and devoted to purchases from I; $v_1 + s_1$ then exceeds c_2, and must be balanced by an equivalent investment out of s_2.

Savings which are to be invested must first be accumulated in a hoard (the finance fund). When the rate of investment is increasing from year to year the hoards on hand at any one moment must be increasing. But, with a gold circulation, net hoarding can only occur if the stock of gold is increased. Thus gold-miners' outlay, which represents purchases without sale, precisely make up for the lag between sales and purchases by the rest of industry.[1]

As Mr. Kalecki has shown,[2] Marx's method provides the basis for the analysis of effective demand, and the academic economists, owing to their neglect of Marx, have wasted a great deal of time in rediscovering it for themselves. "To the extent that only one-sided exchanges are made, a number of mere purchases on one hand, a number of mere sales on the other, . . . the balance [between the two groups of industries] can be maintained only on the assumption that the value of the one-sided purchases and one-sided sales is the same. . . . These conditions become so many causes of abnormal movements, implying the possibility of crises, since a balance is an accident under the crude conditions of [capitalist] production." [3]

Volume II also contains a detailed analysis of the way in which the process of investment generates purchases without sales and so promotes boom conditions,[4] and a hint, thrown out by the way, that the length of the cycle may be connected with the average length of life of plant.[5] All this suggests that Marx was on the trail of the analysis of effective demand. But instead of following it up he turns, in Volume III, to a fresh scent—the law of the falling tendency of the rate of profit.

Marx accepted from Ricardo the fact of a falling rate of profit,

[1] Vol. II, p. 610. [2] *Essays*, p. 45. [3] Vol. II, p. 578.
[4] Vol. II, pp. 361–3. [5] Vol. II, p. 211.

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but he could not accept Ricardo's explanation, in terms of diminishing returns from land, for he held that the trouble did not arise from the niggardliness of nature, but from the inherent contradictions of capitalism. He therefore set out to find an explanation of his own. The modern view, that the fall in the rate of profit might be caused by a secular fall in the rate of interest, brought about by financial techniques economising gold and reducing lenders' risk, is no more congenial to Marx's point of view than the law of diminishing returns. His explanation is on entirely different lines.

As capital accumulates and technique develops, the "organic composition of capital" is raised, by an increase of constant capital (plant and raw materials) relatively to variable capital (the wages bill). This is represented by an increase in the ratio of C to V.

Now, if the rate of exploitation $\left(\frac{S}{V}\right)$ is constant, profit per man employed is constant. Therefore as capital per man increases, profit per unit of capital falls. $\frac{S}{V}$ is constant, $\frac{C}{V}$ is rising, therefore $\frac{S}{C+V}$ is falling. This is the law of the falling tendency of profits. It is, as Marx says, a tautology.[1] "But we have demonstrated that the nature of the capitalist process of production brings about this decrease" in the rate of profit, because it increases $\frac{C}{V}$.

This argument raises three difficulties. Marx deals with the first. "The increase in the value of the constant capital indicates but imperfectly the growth in the actual mass of the use-values represented by the material of the constant capital,"[2] for technical progress raises the productivity of labour in producing machines, as well as in using them. Thus the mere fact that physical capital (the mass of the use-values) increases does not necessarily mean that there is an increase in capital per man, measured in terms of wage-units. But in Marx's view inventions are predominantly labour-saving (or, as I prefer to say, capital-using), so that capital-cost per unit of output falls less than labour-cost, with technical progress, and capital per man employed increases. He is not, however, strictly accurate, when he says that the relative increase in constant capital "is but another expression

[1] Vol. III, p. 259. [2] Vol. III, p. 249.

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for the increased productivity of labour "[1] since productivity can increase without any change in the organic composition of capital.

The second difficulty Marx seems to have overlooked. $\frac{C}{V}$ is not the same thing as capital per man employed, for C is not the stock of constant capital, but its rate of depreciation. $\frac{C}{V}$ varies with the organic composition of capital, and $\frac{S}{C+V}$ with the rate of profit, only when the average rate of turnover of capital goods is constant.[2] If the system reacts to a falling tendency of profits by investing in less durable forms of capital, or if technical progress speeds up the rate of turnover, Marx's argument is not watertight. It is necessary for him to assume that the period of turnover is constant, or, rather, that it is not decreasing fast enough to keep the rate of profit constant when $\frac{S}{C+V}$ falls.[3]

The third difficulty is much more fundamental. The whole argument turns upon assuming a constant rate of exploitation. But what reason is there to suppose that "the nature of the capitalist process of production" tends to maintain a constant rate of exploitation? The assumption that it does comes into violent conflict with Marx's usual view that the rate of real wages tends to be constant round about subsistence level. For if the rate of exploitation is given, labour receives a constant relative share in net output, and as productivity increases, real wages rise.

Marx suggests that the rate of exploitation may be raised, for instance, by lengthening the working day, or by depressing wages below subsistence level.[4] He makes only a passing reference to the possibility that money wages may fall as productivity increases and the prices of wage goods fall.[5] Yet it would seem the most natural assumption for him to make that

[1] Vol. III, p. 253.

[2] Engels discusses this point at length in Vol. III, Chap. IV. He takes the view that technical progress, particularly in transport, tends to reduce the period of turnover, and so, other things equal, to raise the rate of profit. Engels supplied this chapter, as he found no material for it but the title in Marx's MS. (Vol. III, Preface, p. 14.)

[3] I am indebted to Mr. E. Rothbarth for some helpful discussions on this point.

[4] Vol. III, Chap. XIV.

[5] Vol. III, p. 257. The point is discussed at length in Vol. I, Chap. XII.

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real wages are constant. And if real wages are constant, the rate of exploitation is rising. What then becomes of the falling rate of profit? It is just as easy to say: assuming that the rate of profit is constant, the rate of exploitation rises as capital per unit of labour increases. One tautology is as good as another. And Marx himself makes use of precisely this argument in a different context. When he is discussing how the same rate of profit can be obtained by capitals of various compositions he shows how the rate of surplus value in different industries varies with the ratio of C to V.[1] There seems no reason why the situation should be different as between different industries at the same time from the situation as between the same industries at different times.

Marx appears to believe that there is an impassable upper limit to the rate of exploitation. But his argument here is excessively obscure,[2] and it seems obvious that if this is what it means, it must be mistaken. If real wages are constant (and if the problem of effective demand does not arise), profits in terms of product increase with productivity. If wages in real terms

[1] Marx puts the point in a complicated way. Each industry is credited, so to speak, with the average rate of exploitation of all industries so as to obtain the *value* of their products, and the different rates of surplus value "realised" in the various industries are shown as differences between the prices and the *values* of the products. Vol. III, p. 185.

[2] Vol. III, p. 290. "To the extent that the development of the productive power reduces the paid portion of the employed labour, it raises the surplus-value by raising its rate; but to the extent that it reduces the total mass of labour employed by a certain capital, it reduces the factor of numbers with which the rate of surplus-value is multiplied in order to calculate its mass. Two labourers, each working 12 hours daily, cannot produce the same mass of surplus-value as 24 labourers each working only 2 hours, even if they could live on air and did not have to work for themselves at all. In this respect, then, the compensation of the reduction in the number of labourers by means of an intensification of exploitation has certain impassable limits. It may, for this reason, check the fall of the rate of profit, but cannot prevent it entirely."

The numerical example is difficult to follow. Suppose that the technique of production is the same in each case. Then the 2 men produce 24 units of product and the 24 men produce 48 units. If real wages per man-day are $1\frac{1}{11}$ units, the same amount of surplus value is produced in each case ($24 - 2\frac{2}{11} = 48 - 26\frac{2}{11} = 21\frac{9}{11}$). If wages are less than this, the 24 men produce more surplus value; if wages are greater, the 2 men produce more. But if productivity per man-hour is greater for the 2 men (and this is the whole point) the total surplus value produced by them may exceed that produced by the 24 men, at even lower rates of real wages.

Marx appears to be basing his argument on the fact that the total *value* produced by a given number of men is limited by the working day. But the rate of exchange between *value* and money alters as productivity rises and the *value* of labour power falls. If money wages are constant V per man is constant in money terms. But if real wages are also constant, prices must be constant, and S per man rises, in money terms, with productivity.

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are constant and profits in real terms are rising continuously $\frac{S}{V}$ is rising continuously. Unless there is a limit to the increase in productivity there can be no limit to the rate of exploitation. And if the rate of exploitation can rise, the rate of profit need not fall.

The law of falling profits might be rescued by calling in, from academic economics, the principle of diminishing marginal productivity. In a given state of knowledge, product per man rises less than in proportion to capital per man, as capital increases. It does not follow that the rate of profit necessarily falls, for if real wages are constant the whole increment of product goes to capital.[1] But it is possible to argue that even with consistent real wages, a point must come, sooner or later, at which the rate of profit falls as capital increases. This, however, is not Marx's argument, for he never makes the unrealistic static assumption that knowledge is given. It seems, then, that Marx, like many an academic economist, has been carried away by his tautologies.

It may be objected that although the assumption of a constant rate of exploitation conflicts with Marx's view that real wages tend to be constant, it is all the same the most realistic assumption to make. For it seems, that, by and large, real wages do rise with productivity, and that the relative share of labour in the product of industry is remarkably stable. But if we are to appeal to reality, Marx's assumption that capital is always used to capacity must be removed. If the output of a given stock of capital is free to vary, as in fact it does, with the state of effective demand, $\frac{C}{V}$ is no longer fixed purely by technical conditions, but varies also with the degree of utilisation of capital. We can then say: with a constant rate of exploitation, $\frac{C}{V}$ falls when the rate of profit is rising, and rises when the rate of profit is falling.

A tautology can always be relied upon to look after itself. During the period of rising profits (a secular boom) the same cause which raises the rate of profit increases employment per unit of

[1] *E.g.*, suppose that an increase of 10 per cent. in capital per man causes 8 per cent. increase in net product, and that in the first position capital received 50 per cent. of the product. Then an increase of capital from 100 to 110 raises profit from 50 to 58. The rate of profit remains unchanged when the ratio of the proportional change in product to the proportional change in capital is equal to the share of capital in net product.

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capacity faster than technical progress increases capital per unit of capacity, so that $\frac{C}{V}$ falls; and when profits are falling the same cause which reduces the rate of profit raises $\frac{C}{V}$ faster than capital per unit of capacity increases. Similarly, in a given short period situation, with a given stock of equipment, employment per unit of capital rises, and $\frac{C}{V}$ falls, in the boom, when profits are rising, and rises in the slump, when profits are falling. The analysis of the actual behaviour of the rate of profit cannot progress any further without calling in the analysis of effective demand.

Marx illustrates the theory of the falling rate of profit by considering the case of "absolute over production of capital." [1] This I take to be, not a prediction of the Day of Judgment, but an extreme assumption adopted simply to bring out clearly the operation of a process which is at work all the time. If the rate of profit falls as capital accumulates there must be a certain upper limit to the total of profits.[2] Suppose that investment continues when this point has been reached; then a larger total of capital receives the same total of profits. Cut-throat competition between capitalists sets in, the new capital struggling with the old. "A portion of the capital would lie fallow completely or partially (because it would first have to crowd some of the active capital out before it could take part in the process of self-expansion)." [3]

This situation is similar to the situation at the top of the boom in Mr. Kalecki's model of the trade cycle.[4] In Mr. Kalecki's scheme the total of profits is a function of the rate of investment. When the rate of investment is constant from one period to the next, the total of profits is constant. But meanwhile the stock of capital continues to grow, and the rate of profit consequently falls. (As Marx puts it: "the mass of profits remaining the same, this mass would be calculated on an increased total capital." [5]) Marx's notion that part of the capital must lie

[1] Vol. III, pp. 294–300.

[2] This step in the argument entails some further assumptions. If the curve connecting the stock of capital and the rate of profit has an elasticity which never falls below unity the upper limit to the total of profits is never reached.

[3] Vol. III, p. 295. "The self-expansion of capital" implies obtaining profits. The purpose of acquiring profits is to accumulate capital by reinvestment.

[4] *Essays*, p. 140.

[5] Vol. III, p. 296. If real wages rise, the total of profits is reduced. The first type of crisis, described in Vol. I, is then superimposed upon the "absolute

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fallow is consonant with the assumption of perfect competition in the commodity market. Under perfect competition any equipment which is employed at all is employed to capacity. In Mr. Kalecki's scheme there is imperfect competition, and the "over production of capital" shows itself in the form of general under-capacity working. (It was the realisation that the assumption of perfect competition rules out under-capacity working that led to the modern development of the theory of imperfect competition.)

The difference between Mr. Kalecki's scheme and Marx's lies in the determination of the total of profits. And it is just at this point that there is a missing link in Marx's argument.

Marx goes on to argue that the slump conditions lead to a fall in wages, and that this brings temporary relief. "The present stagnation of production would have prepared an expansion of production later on, within capitalistic limits."[1] Here Mr. Keynes' analysis is in sharp conflict with Marx. Marx takes it for granted that a fall in money wages reduces real wages, while Mr. Keynes holds that (in a closed system) its main effect is merely to lower prices. This enhances the burden of debts, and only aggravates the malady it is intended to cure. But a fall in real wages (which may be brought about by an increase in monopoly, or by mere stickiness of prices when wages fall) is still worse. When real wages fall, the level of consumption corresponding to a given rate of investment is reduced. Unemployment increases and output falls further below capacity. The reduction in output offsets the rise in profit per unit of output, while the increased amount of surplus capacity reduces the incentive to invest. Thus, far from bringing relief, a fall in real wages deepens the slump.[2]

It may be objected that this argument assumes what it requires to prove—that the rate of investment is initially un-

over production of capital." The latter occurs even if the total of profits is constant.

[1] Vol. III, p. 299.

[2] It may seem paradoxical to argue that an increase in monopoly does not raise the total of profits, since it is obvious that over the long run monopoly tends to raise the rate of profit. But these apparently conflicting views are in reality aspects of the same phenomenon. Monopoly raises the rate of profit only because it restricts the amount of investment or actually destroys capital. In any given situation an increase in monopoly reduces output below what it would otherwise have been, and over the long run it reduces the stock of capital below what it would otherwise have been. In Mr. Keynes' view, capital obtains a profit by keeping itself scarce (*General Theory*, p. 214) and monopoly is one of the resistances (along with risk and the rate of interest) which prevents capital from accumulating sufficiently to eliminate profits.

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changed. And it is true that if we assume that either investment or capitalist consumption is immediately increased, under the cheering influences of lower wages, then profits also will be increased. This type of argument is full of tricks, and it is possible to get any result we please by making appropriate assumptions about the psychology of capitalists. There can be little doubt, however, that the crude test of history supports Mr. Keynes rather than Marx. The policy of " restoring equilibrium " by cutting wages was given an extensive trial in the great slump of the Nineteen-thirties, and the countries which abandoned it first were the first to experience a revival. The interpretation of history, also, is full of tricks, but at least we may say that to defend this position requires less ingenuity than to defend its opposite.

In all this argument Marx assumes that surplus value is realised (by the sale of the commodities produced) and in so far as a fall in the rate of profit checks accumulation, it does so by limiting the fund of savings from which new capital is created. But there are one or two passages in which he treats the matter from a different point of view. " As soon as the available quantity of surplus value has been materialised in commodities, surplus value has been produced. . . . Now comes the second act of the process. The entire mass of commodities, the total product, which contains a portion which is to reproduce the constant and variable capital as well as a portion representing surplus value, must be sold. . . . The conditions of direct exploitation and those of the realising of surplus value are not identical. They are separated logically as well as by time and space. The first are only limited by the productive power of society, the last by the proportional relations of the various lines of production and the consuming power of society. This last-named power is not determined either by the absolute productive power nor by the absolute consuming power, but by the consuming power based on antagonistic conditions of distribution, which reduce the consumption of the great mass of the population to a variable minimum within more or less narrow limits. The consuming power is furthermore restricted by the tendency to accumulate, the greed for an expansion of capital. . . . This internal contradiction seeks to balance itself by an expansion of the outlying fields of production.[1] But to the extent that the productive power develops, it finds itself at

[1] For instance, by colonial trade. Vol. III, p. 278.

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variance with the narrow basis on which the conditions of consumption rest."[1] Again: "The last cause of all real crisis always remains the poverty and restricted consumption of the masses as compared to the tendency of capitalist production to develop the productive forces in such a way, that only the absolute power of consumption of the entire society would be their limit."[2] Here the falling rate of profit, which entails rising real wages, has dropped out of the picture, and the reference to the proportional relations of the various lines of production glances back to the equations of expanded reproduction in Volume II. The balance is upset because demand for the product of the consumption-good industries is restricted—the workers cannot consume, and the capitalists will not. The consumption-good industries therefore present a narrow field for investment, and the capital-good industries in turn suffer from restricted demand. Here at last Say's Law is overthrown, and Marx appears to foreshadow the modern theory of effective demand.[3] In Mr. Keynes' language, a low propensity to consume, caused by unequal distribution of income and inordinate thrift, is a necessary condition for rapid accumulation in the early stages of capitalism, but, when its work has been done, it impedes accumulation, by reducing the incentive to invest, and generates recurrent and ever-deepening slumps. "The barrier of capitalist production is capital itself."

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[1] Vol. III, pp. 286–7. [2] Vol. III, p. 568.

[3] The foregoing passage is anticipated in Volume II (p. 363) by a note (ending "However, this belongs to the next part") appended to the account of an investment boom referred to above. This suggests that Marx intended to work out something which, if it had ever been completed, would have been very like the modern theory.

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