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ACCUMULATION OF CAPITAL

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Ambiguities in the meaning of the word "capital" lie much deeper than the problems of measurement or the esoteric controversy about "reswitching".

Orthodox Theory

Orthodox theory treats capital as a "factor of production" (aling with land and labour) and its contribution to the general output of industry is measured by the rate of interest. There are several layers of confusion in these concepts. First, interest is paid for a loan. A business operates partly with its own money and partly with finance borrowed from outside. Both the motive and the capacity for borrowing arises from the expectation of future profits which can be earned from investing the money. A successful business enjoys a flow of gross profit (excess of receipts over running costs) which enables it to maintain the value of its earning assets by means of depreciation allowances, and to enjoy a net profit. The rate of net profit per annum over the value of assets must exceed the rate of interest on external finance by a wide margin - otherwise the business is not successful and will not enjoy credit to permit further borrowing.

The value of the stock of assets owned by a business is not a very precise concept because it depends partly upon the accounting conventions in use. The stock exchange value of a quoted company, at any moment, mainly depends upon the view that the market takes of its future profitability and upon the general level of the interest rates offered by alternative placements.

The vagueness of the concept of the total value of the stock capital is a serious problem for the orthodox theory but it is not so important for realistic positive analysis, where rough measures will s Here, the important concepts are the share of gross profits in value ad and the annual flow of gross investment, for both of which fairly good mates are available in the industrial economies.

The second level of confusion in the orthodox theory is in att buting productivity to finance. The productivity of the labour force e ed in industry, broadly speaking, depends on the technique of production operation. Different techniques require different quantities of labour embodied in means of production - buildings, equipment and stocks of wor in progress. Orthodox theory requires a "production function" in terms labour and capital showing "diminishing returns from capital applied to labour". This may be interpreted to mean that, comparing one technique with another, a higher output per man currently employed necessarily requires a larger stock per man of labour embodied in equipment. This is normally the case in the early stages of industrialisation, but for the advanced economies, the very process of accumulation involves technical change, and it is just as capable of taking on a "capital-saving" bias as a "capital-using" bias. This means that the ratio of the value of the stock of capital per man employed (K/L) to the value of the flow of output per man (O/L) does not necessarily rise, and may fall, as productivit increases.

The third layer of confusion in the orthodox theory is the notion that the distribution of the product of industry between wages and profits can be accounted for by the technical characteristics of the

process of production, capital regarded as finance, which receives profits, being identified with equipment and stocks, which assist workers to produce output.

The famous controversy over "capital theory" consisted of a series of attempts by the Anglo-Italian critics to expose the fallacy of conflating the concept of capital as finance and as rentier wealth with the concept of a stock of means of production. Unfortunately, the controversy has not been successful; the mainstream economists accept many of the points made against them but continue to propound the same doctrines as before:

> He who is convinced against his will
> Is of the same opinion still.

Marxian Formulae

The Marxian tradition cuts right across all these sophistries. Capitalism is a particular phase of historical development in the manner of organising labour for production and of extracting a surplus from it. The search for profit is the driving force of capitalism and continuous (though fluctuating) accumulation through reinvestment of profits is essential to its nature. The distribution of the product of industry between wages and profits depends upon the evolution of technology and the fortunes of the class struggle. This knocks out the orthodox fallacies but the formulae in which Marx set out his own theory are themselves not always perfectly clear.

The stock of assets which a manufacturing business controls comprises both plant and a revolving fund of working capital which consists of outlays on wages and materials, power etc. over the period of delay between making payments and receiving the proceeds from sales.

Marx maintains that only the part of capital invested in the wa
fund enables the capitalist to acquire surplus value, while the rate of profit is reckoned on his capital as a whole.

We can understand from the *Grundrisse* what gave rise to this conception. Marx started from the proposition that only current labour produces *value* (in the formulae, *value* is measured by current labour time and that labour embodied in fixed capital and in raw materials does not produce a surplus over its own *value*. When production is completely mech-nised, no more *value* will be produced and exploitation will come to an end This is incomprehensible. The robots which are to displace current labou presumably, are to be produced by capitalistic investment; when the capit lists command all the wealth and all the power in society they have no ne to worry about whether or not they are getting any *value*.

In *Capital*, Marx developed a realistic theory of exploitation and accumulation but some traces of this mysticism remain in his formulae. He represents the flow of production per annum as c + v + s, that is, the replacement of physical means of production used up over the year, the wage bill for the year and the annual profit, all reckoned in labour time. Thus v + s, the *value* of net output, is equal to the man-hours of work performed over the year. Then he writes c + v for the *value* of the stock of capital, and $\frac{s}{c + v}$ as the rate of profit. Here is where confusion creeps in. Clearly, it is v in its aspect as the wage bill, which permits the capitalist to exploit labour and it is s/v (which corresponds to the ratio of net profit to the wage bill) that represents the rate of exploi-tation. But, regarded as part of the stock of capital, v means the wage fund, that is, the part of working capital required to pay out wages over the period of through-put of production. The relation of the wage bill pe

annum to the wage fund, and of the wage fund to the rest of the stock of capital, are merely accidents of technology (the time pattern of production) of no profound significance. The important relationship is that of the wage bill to the flow of net output.

The use of the same symbol, v, for the wage bill and the wage fund has caused a great deal of confusion, particularly in connection with the doctrine that a tendency for the rate of profit to fall as accumulation goes on can be accounted for by a rise in "organic composition of capital" (c/v). Marx argued that when the rate of exploitation is constant through time, and organic composition is rising, then the rate of profit is falling.

If a rise in organic composition means an increase in the ratio of fixed capital (whether measured by labour embodied or by finance invested) to the wage fund, it does not seem to have anything to do with case. The most natural meaning to give to organic composition is the ratio of the whole stock of capital, measured by labour embodied, to the amount of labour employed (K/L). Not it is true that, in a prosperous capitalist economy, the value of capital per man employed (by any reasonable measure) is constantly rising, but with changing technology the value of output per man is rising also. There is no presumption that the value of capital per unit of output (K/O) should normally be rising; in statistical studies of U.S. industry in modern times, it is found to be fairly constant.

Samir Amin, in his great study of Accumulation on a World Scale, does not allow himself to be confused by Marx's formulae, but he argues that the great increase of heavy industry in modern economies must entail a rise in investment per unit of output, so that, with a fairly constant rate of exploitation (the ratio of net profit to the wage bill) there must be a tendency for the rate of profit to fall in the industrial economies,

though this may be fended off by investment in the underdeveloped wor[ld]

To interpret organic composition in terms of heavy industry [is] to involve an optical illusion. Capital equipment measured in terms [of] tons of steel may be constantly rising (though even that is not neces[sarily] true) but as Marx himself pointed out, "cheapening the ingredients of [con]stant capital" may partly offset the tendency for the value of capita[l per] man (K/L) to rise, and rising output per man may completely offset any tendency for the value of capital per unit of output (K/O) to rise. (Marx forgot to point out that cheapening the ingredients of the work[ers'] standard of life permits real wages to rise while the rate of exploita[tion] remains constant, but this is now admitted by non-dogmatic Marxists su[ch] as Samir Amin.)

In the orthodox theory, accumulation is determined by househo[ld] saving; the businessmen are somehow obliged to invest that is saved, so that they meekly creep down the production function, with a falling ra[te] of profit, as accumulation raises "capital" per unit of labour. Marx'[s] robust and rapacious capitalists would not behave so. When accumulati[on] has absorbed the reserve army of labour, so that accumulation with con[stant] capital per man becomes impossible, they instal labour-saving techniqu[es] which raise output per man (Q/L) as much or more than they raise [c]apit[al] per man (K/L).

A capital-using bias in technology may occur in particular industries, but obviously, competition cannot force a business to intro[-] duce techniques that raise the cost of production of its output. When technology requires a rise in investment per unit of output, it will be installed only if it brings about a corresponding saving in the wage b[ill]

Ricardo's view, that mechanisation of industry tends to reduce employment, seems to be a great deal more plausible than the view that it tends to reduce the rate of profit. If there is a tendency for the rate of profit to decline we must look for some other explanation to account for it.

Profits and Accumulation

The role of profits in accumulation must be considered in two stages. First, the mechanism of the realisation of the surplus, that is, the problem of effective demand, and second, the problem of finding an ever-growing outlet for investment, to permit accumulation to continue.

The flow of private sector saving per annum in an economy, that is, the excess of income over expenditure on consumption, is equal to the flow of outlay on gross investment (including investment in housing and other consumer durables), plus the surplus (or minus the deficit) on the foreign balance and plus the deficits on the central and local budgets. It follows that the flow of saving represented by retained profits (including depreciation allowances) is equal to the sum of these three items minus saving by households.

The essential points at which the theory of effective demand opened up by Keynes and by Kalecki departed from orthodoxy are, first, that saving by households tends to reduce the profitability of industry and budgets deficits to increase it, and secondly that the flow of profit-seeking investment is inherently unstable; a rise in the flow of investment (not offset by a decline in the other two items) both increases the flow of funds available to finance further investment (retained profits) and increases the prospects of profits from further investment, which are affected by current experience. Conversely for a decline in investment. Periods of rapid accumulation are periods of high profits,

and periods of stagnation of low prifts. Investment generates profi[illegible] and profits facilitate investment. Plans for investment being conce[illegible] at any moment are influenced by the preceding level of retained prof[illegible] but they are not closely bound by it. During a boom reinvestment of profits is supplemented by borrowing, and in a slump it may fall belo[illegible] even the reduced level of retentions, so that businesses are lending [illegible] the rest of the economy instead of borrowing from it.

In some periods, slumps are deeper and more prolonged than in others. We expect to find alternations of low and high levels of the [illegible] of profit, not a continuous decline.

Over a long run, taking good times with bad, there is a continuously growing flow of retained profits accruing to successful capita[illegible] firms. To maintain prosperity, therefore, requires that sufficient opportunities for profitable investment should be forthcoming on an ev[illegible] widening scale to permit the process of accumulation to continue.

This was the problem that concerned Rosa Luxemborg. She maintained that opportunities for home investment in the capitalist countri[illegible] could not provide a sufficient outlet for the growing stream of reinve[illegible] ment of profits and that when the geographical expansion of capitalism came to an end it would fall into stagnation. She exaggerated the problem because she believed that real wages in the home countries of capitalism would not rise, so that the share of profits would be incre[illegible] however, even if the share were more or less constant, it would still be true that the amount of profits seeking an outlet in investment wou[illegible] grow from year to year, and it would still be true that the unequal di[illegible] tribution of income in the capitalist countries sets a limit to the ex[illegible] to which the growth of the home market can provide an adequate outlet for investment.

Samir Amin maintains that what is now called the Third World has been useful to capitalism as a dump for the investment of its excessive profits, which has brought about the "development of under development". This is sharply opposed to the orthodox view that by exporting capital the rich countries are supplying the poor with "factors of production" that they could not obtain for themselves.

Importing Capital

Here, above all, it is necessary to emphasize the distinction between "capital" in the sense of finance and in the sense of means of production. A loan does not transfer factors of production from one country to another. It permits the receiving country to enjoy a surplus of imports for a certain time that is to be paid for later. Whether this permits the creation of means of production in the receiving country depends upon how this surplus is utilised. In the colonial period, investment was mainly in opening up sources of raw materials. When investment is made in mines or plantations, a small amount of finance creates a large block of natural wealth, which thenceforth belongs to the capitalist business which provided the funds. Such investments were aimed at supplying a market in the industrial countries which was already in view. They could be operated largely with very cheap labour (local or immigrants from other poor countries) and they yield high profits as long as the market continues to exist. Such investments provide export earnings for the country where it is located which, however, are offset by the repatriation of profits and by the import of consumer goods for expatriate managers and the comprador class which develops around them.

More recently, cheap labour itself has become an objective for investment. In countries such as South Korea where wage rates are exceptionally low and workers exceptionally diligent, factories are set

up to make components of sophisticated products, such as electronic equipment. The whole profit on the finance that is invested locally accrues from the sale of the completed products in other markets.

Another type of investment is that of the great corporations setting up branch plants in the Third World to sell in the local marke This brings in know-how, organising ability and salesmanship. It prov some finance, though where there is already rentier wealth in the coun this may be supplied by borrowing locally. The investment consists in organising the creation of productive capacity in the country. It may supply a large part of the equipment required from headquarters, but co struction and transport must be provided locally, thus the value of the venture, which (if it is successful) yields profits in perpetuity to headquarters, much exceeds the original finance provided. Its sales in the local market are often at the expenses of local businesses which ha been bought up or competed out of existence.

The contribution which aid and loans make to accumulation in the so-called developing economies depends upon how their own schemes of investment are carried out. Investment requires ingredients that cannot be produced at home; this brings about a direct increase in imports. But the whole finance of a project is not required for direct imports; a large part is expended on wages at home, and part on profits for local businesses. The expenditure of wages and of profits produces a further increase in demand. There is therefore a multiplier effect; the increase in demand that falls upon home supplies generates a furthe increase in home incomes, and except in so far as additional incomes ar saved, the increase in demand falls upon imports.

The loans finance the surplus of imports, but only a part of this goes directly into investment, while the debt incurred (except fo

any free aid) covers the whole import surplus. Moreover, investment directed to the general development of industry, as opposed to the colonial type of investment in production for export, does not provide foreign earnings to service the debt.

As the indebtedness builds up, more and more of whatever foreign earnings the country may have is absorbed in paying for old loans, and it dare not repudiate its debts so long as it is dependent on borrowing more. For the lenders, the advantage lies not so much in the return on their loans as in the power which it gives them to maintain the principles of financial discipline.*

On the whole it seems that the Marxist argument (in spite of some verbal confusions) is a great deal more convincing than the orthodox answer to it.

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* See Cheril Payer, The Debt Trap, Pelican 1974

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