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A Critique of Professor Goodwin's  
"Critique of Sraffa"

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A CRITIQUE OF PROFESSOR GOODWIN'S "CRITIQUE OF SRAFFA" (\*)

In his paper *Prelude to a Reconstruction of Economic Theory. A Critique of Sraffa*, Professor Goodwin rejects as an "astonishingly unfortunate statement" (Goodwin, 1985, p. 2; see also Goodwin, 1986, p. 205) Piero Sraffa's claim that the rate of profits is "susceptible of being determined from outside the system of production, in particular by the level of the money rates of interest" (Sraffa, 1960, p. 33). As a contribution to the present "Workshop in honour of R.M. Goodwin", I shall endeavour to make him change his mind on this subject (section 1). I shall also contend that the "standpoint" adopted by Sraffa (1960, p. V) is not so far from that of Marx as Professor Goodwin seems to believe (section 2). Such an unconventional person will appreciate, I am sure, an unconventional way of paying homage to him.

1. "Either from a Marxist or an orthodox point of view", we read in Professor Goodwin's paper, "one cannot start with a profit rate and then pay labour what is left, which may be high, low or even negative" (Goodwin, 1985, p. 2). Of the two issues raised in this statement - the suita-

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bility of treating wages as a residue and the possibility that too little (or less than nothing) is left for their payment - the second is easily disposed of "by setting a limit below which the wage cannot fall" (Sraffa, 1960, p. 10). This limit can be expressed as the value of certain quantities of necessaries; or rather of all the commodities produced ("a", "b", . . . . . "k"):

$$w^* = A * p_a + B * p_b + \dots + K * p_k$$

where the quantities of commodities other than necessaries equal zero. As the wage falls,  $w^*$  may rise or fall, or it may alternate in rising and falling (1).

In discussing the first issue - the casual link established by Sraffa between the rate of interest and the rate of profits, and the consequent view of labour as the "residual claimant" - it will be assumed that all capital goods are owned by joint-stock companies, which raise long-term finance by issuing ordinary shares and distribute the whole of their profits as dividends. The rate of return on shares and the rate of interest on government bonds (assumed to be uniform on all shares and all bonds, respectively) are linked by a relationship reflecting the preferences of the holders of wealth. Given these preferences, a rise (or a fall) in the rate of interest brought about by appropriate policy measures will be associated - thanks to people's (and financial intermediaries') readiness to switch from shares to bonds and vice versa - with a fall (or, respectively, a rise) in

the price of shares.

Suppose now that the interest-pegged rate of return on shares, confidently expected to stay there in the relevant future, finds itself above the rate of profits obtained from the employment of capital in production; which amounts to saying that the value of a company's shares falls short of the replacement cost of the underlying assets. The purchase of capital goods will, then, be discouraged, for: (a), as Keynes puts it, "there is no sense in building up a new enterprise at a cost greater than that at which a similar existing enterprise can be purchased" (Keynes, 1936, p. 151); and (b) the purchase of capital goods by a company will cause the price of its shares to fall; the reason for this, as stated by Lord Kahn, being that such a purchase "entails acquiring capital assets which cost more than the value indirectly placed on them by the Stock Exchange" (Kahn, 1971, p. 216; see also note 2, below).

A normal state of affairs - one in which take-overs do not represent a cheaper way of acquiring capital goods than purchases from the producing industries or in the second-hand market, and the accumulation of capital is not inhibited by the damage it imposes on existing shareholdings (2) - can be re-established (if the monetary authorities stick to their policy) only if profits and dividends are increased. Indeed, a uniform increase of prices by all the firms in the same trade will spontaneously suggest itself as a suitable remedy for their common evils.

In some cases a tacit agreement to that effect may be expected to be immediately reached. In others some firms

will try to win customers from their competitors by not putting up prices. But, whether they succeed or not, persisting in this conduct beyond a certain point will prove no less harmful to themselves than to their competitors. Thus, intra-trade competition will not prevent the firms from putting up prices relative to money wages to the extent required to bring the rate of profits into line with the rate of return on shares. Nor will a price increase not exceeding that extent make any particular trade more attractive than it used to be for firms operating elsewhere, which suffer from the same evils and have to hand the same remedy as those in the trade.

If workers resist the fall in real wages, and a wage-price spiral sets in, the recovery of accumulation will not take place until either unemployment has sufficiently weakened such a resistance, or the inconvenience of a prolonged slump (and of labour unrest) has prevailed upon the monetary authorities to let the rate of interest adjust downwards. Increasing productivity, it must be added, will actually make things easier than the foregoing description may suggest, by reducing the size of the required rise in the price-wage ratio (or even by making such a rise wholly unnecessary).

Next, let us consider the case of a rate of profits above the rate of return on shares. The value of a company's shares now exceeds the replacement cost of the underlying assets, while the purchase of capital goods by a company causes the price of its shares to rise, as it "entails the acquisition of capital assets which cost less

than the market value placed on them indirectly by the Stock Exchange" (Kahn, 1971, pp. 219-20). To put it another way, the companies raise finance on better terms than they would be allowed to by the ruling rate of profits, the gain accruing to the shareholders in the form of an increased value of their shareholdings (2).

The purchase of capital goods, hence the installment of new productive capacity, will be encouraged, for "there is an inducement to spend on a new project what may seem an extravagant sum, if it can be floated off on the Stock Exchange at an immediate profit" (Keynes, 1936, p. 151). Such an inducement will not fade away until the attempt at increasing sales at the expense of the competitors has forced down prices relative to money wages to the extent required for the rate of profits to adjust to the rate of return on shares.

This may show itself either in falling prices or in prices not being increased so as to fully restore previous profitability following a rise in money wages. The latter rise is likely to be favoured both by the increase in employment consequent upon the investment boom and by the knowledge, common to both parties to wage negotiations, that the companies "can afford" it.

The foregoing does not seek to deny that the rate of profits may stand above the rate of return on shares (and thus the price of shares may keep rising) for any length of time. Nor that (once technical change is allowed for) the rate of interest and the rate of return on shares may be conceived of as remaining constant while the increments to

the national income due to the rise in productivity are distributed to the shareholders in the form of higher dividends rather than to the workers in the form of higher money wages or to the consumers in the form of lower prices. However, the higher profits and dividends are, relative to those required to prevent the accumulation of capital from causing a fall in the price of shares, the more intense competition, and the stronger trade-union pressure, may be expected to become.

2. Professor Goodwin also observes that "the turbulent history of capitalism exhibits behaviour quite different from the simplicities of Sraffian analysis" (Goodwin, 1985, p. 6). Against these "simplicities", he sets the imposing theoretical construction of Marx, who "never made the mistake of ignoring output and its dynamics" (*ibid.*, p. 4). Among Marx's contributions which find no counterpart in *Production of Commodities by Means of Commodities*, Professor Goodwin emphasizes his discovery of "effective demand in the form of the realisation problem" (*ibid.*, p. 4). Let us, then, devote some attention to the "realisation problem".

Careful scrutiny of the relevant parts of Vol. III of *Capital* (ch. 1 to 15) shows that this problem - important as it is in Marx's view of the working of the capitalist system - is not permitted to interfere with the determination of the general rate of profits. In calculating the latter as the ratio of the overall surplus-value produced in the economy ( $S$ ) to the overall constant plus

variable capital ( $C + V$ ), Marx assumes that the surplus-value produced is entirely "realised", which implies that the national output is adjusted to the level and composition of aggregate demand, and (changes in the degree of utilisation of productive capacity playing no significant role in the analysis) that the existing stock of means of production is adjusted to the requirements of production. The reason for Marx's reference to such a "fully adjusted situation" (as we may decide to call it: see Vianello, 1985, p. 70) is apparently to be sought in his opinion that: (a) maladjustments as regards the composition of the national output tend to be corrected by transfers of capital from one industry to another; and (b) crises and "capital destruction" periodically take care of the systematic tendency to over-production and over-abundance of capital resulting from "the poverty and restricted consumption of the masses as opposed to the drive of capitalist production to develop the productive forces" (Marx, 1894, p. 484) - thus preventing such a tendency from having a "permanent effect" on profitability (3).

Over-production, over-abundance of capital, disproportions as between industries or sectors are all part of the "turbulent history of capitalism". They may depress profitability and result in crises. But they do not directly affect the general rate of profits, which represents the guiding light for investment and pricing decisions (4). Indeed, they can do so only indirectly, namely, by causing a change in the methods of production.

In order to ascertain how such a change (and/or a



change in the wage rate) makes the general rate of profits vary, Marx abstracts from any turbulence whatsoever, by taking as given in succession the sets of quantities corresponding to two or more "fully adjusted situations" deployed over time. Each set is made up of the quantities of commodities forming the surplus-product (whose value is  $S$ ) as well as the quantities of means of production employed in the economy (whose value is  $C$ ) and the quantities of necessaries consumed by the workers (whose value is  $V$ ).

When, therefore, Sraffa takes as given the quantities of commodities which appear in his equations, he does something similar to what Marx does, and for the same purpose. Indeed, Sraffa's "simplicities" are the same as Marx's, the difference between *Capital* and *Production of Commodities by Means of Commodities* being not in the method, but in the scope of the analysis. The ground covered by the latter may in fact be described as the "theory of value" (or the study of the relation between the rate of profits, the wage and the prices of the commodities), the only proposition outside this definition to be found in the book being the causal connection established between the rate of interest and the rate of profits.

Having started by trying to make Professor Goodwin change his mind on the latter connection, I conclude by indicating a point on which he should not, in my opinion, have changed his mind. "I long thought", Professor Goodwin writes, "/Sraffa/ was also ... aiming to put Marx, the last of the Classics, on a firmer footing, but he resolutely

refused to accept my view, and I now recognize that this formed no part of his aim" (Goodwin, 1985, p. 7; see also Goodwin, 1986, p. 203, note 1). Whereas what Sraffa may have had in mind in the conversation referred to by Professor Goodwin can only be a matter for speculation, there can be no doubt about what Sraffa has actually done. For *Production of Commodities by Means of Commodities* does indeed put Marx on a firmer footing by correcting his calculation of the rate of profits (and of relative prices), thus also making it possible to study how the rate of profits changes in the course of the "turbulent history of capitalism".

F O O T N O T E S

(1) What  $w^*$  cannot do, in a system of single-product industries, is to fall faster than the wage (for no price can do so, whatever the standard in terms of which the wage and the prices are expressed; cf. Sraffa, 1960, pp. 38-40). It follows that, once the wage has fallen to  $w^*$ , it cannot fall further in terms of the standard if the limit is to be observed. This conclusion does not survive transplantation into a system of multiple-product industries. As in such a system the price of a commodity may fall faster than the wage (cf. *ibid.*, pp. 61-2), it cannot be ruled out that, starting from being equal to  $w^*$ , the wage may fall further in terms of the standard, the observance of the limit being ensured by  $w^*$  falling at a higher rate than does the wage. (Nor, of course, can it be ruled out that a rise of the wage in terms of the standard may prove incompatible with the limit).

(2) Reference to a highly simplified case may help to clarify the nature of the gain that the purchase of capital goods brings to the shareholders. Let us assume that the capital goods do not wear out with use and that technical change is wholly unknown. Let us further assume that a company is confidently expected not to raise finance for the purpose of growth, so that the value of its capital goods (at normal prices),  $C$ , the number of its shares,  $N$ , and their price,  $p$ , are all confidently expected to remain constant at their initial levels  $C_0$ ,  $N_0$  and  $p_0$ . If  $i$  is the rate of return on shares and  $r$  the rate of profits,

$$iN_0p_0 = rC_0 \quad (1)$$

Suppose now that an unexpected, once-and-for-all issue of shares by the company in question for the purpose of purchasing capital goods causes the price of its shares to rise to  $(p_0 + \Delta p)$ , and that thenceforth the price is again confidently expected to remain constant. The value of the capital goods purchased is obviously equal to the additional finance raised, i.e.

$$\Delta N(p_0 + \Delta p) = \Delta C \quad (2)$$

As the company continues to distribute the whole of its profits as dividends, and the shareholders continue to receive the ruling rate of return on their shares,

$$i(N_0 + \Delta N)(p_0 + \Delta p) = r(C_0 + \Delta C) \quad (3)$$

From (1), (2) and (3), it follows that

$$N_0 \Delta p = \frac{r - i}{i} \Delta C \quad (4)$$

$(r - i)\Delta C$  represents the difference between the profits per unit of time obtained from the employment of the additional capital and the cost per unit of time of the additional finance raised - this difference going to the "old" shareholders in the form of additional dividends. What (4) says is, then, that the increase in the aggregate value of the existing shareholdings is equal to the present value of the stream of additional dividends resulting from  $r > i$ ; or that  $\Delta p$  is such as to bring these additional dividends into equality with the return on  $N_0 \Delta p$  reckoned at the ruling rate (and the total dividends distributed to the "old" shareholders with the return on their shares reckoned in the same way). The foregoing discussion, which owes very much to Lord Kahn's (1971) terse treatment of the subject, can be easily adapted to the case of a rate of profits below the rate of return on shares.

- (3) "When Adam Smith explains the fall in the rate of profit from an over-abundance of capital, Marx observes, "he is speaking of a permanent effect and this is wrong. As against this, the transitory over-abundance of capital, over-production and crises are something different. Permanent crises do not exist" (Marx, 1905-10, vol. II, p. 497, footnote).
- (4) The prices of production represent "the guiding star of the merchant or the manufacturer in every undertaking that requires time" (Marx, 1867, p. 163, note 1). This obviously applies also to the general rate of profits on which the prices of production are based.

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