Isar om produktivitets diskussionen.

THE VARIATIONS OF THE WAGE AND THE BREAKDOWN OF THE CAPITALIST SYSTEM

Torkil

(Reply to Spraos)

Arghiri EMMANUEL

I. Statics

Spraos accepts that "given the technology and the volume of labour in each of the n industries..there is some allocation of the total capital stock among the n industries which will produce just the mix of products which is consistent with the pattern of demand associated with n-1 relative prices which correspond to n arbitrary wage rates." (p. 6) But, he adds, in order that some of these arbitrary wages, namely those of the Periphery, "be made self-sustainable, capital must flow towards the Periphery to raise the productivity of labour there." This, however, is impossible, because the very fact of the wage rise makes capital run away. So, he concludes, while the equilibrium point does exist, there is no path to it.

A question arises: why would there be any need of raising the productivity? Clearly, this would only be in order to make "arbitrary" wages consistent with market prices. Reasoning that way, Spraos simply forgets that, according to the inner logic of my model, which he explicitly challenges, the problem, if any, is not to make wages and/or other factor remunerations consistent with demand -determined prices, as in the neo-classical paradigm, but to make cost-determined prices consistent with a demand pattern as exogenous as my "political' wages themselves. He had already accepted that this performance can indeed be achieved by changing the "mix of products", in other words by changing the relative quantities. If this is so, what we need for the branch (or country) hit by the wage-rise

or country

is not an inflow but an outflow of capital, so that the volume of respective production be reduced and, therefore, fall into line with the reduced demand for it, subsequent to its increase in price. It follows that, far from thwarting the trick, this running away of capital comes just in the nick of time to make it work. Actually, it constitutes the very "path" to the new equilibrium that Spraos so badly needs. If productivity had something to do with it, it would be in the opposite direction.

Productivity has,however, nothing to do with it. As Spraos himself formulates it, technology is given. This does not mean that, as a matter of fact, the rise of wages will not induce the use of a more capital-intensive technique. All past movements of capital towards high-wage regions prove that it will. But this is an into-the-bargain gain and constitutes another story.

The mistake of Spraos is to think in terms of disparity in the wages within a branch, while the matter is of a disparity between branches (or, what amounts to the same, between countries specializing in different branches). Incidentally, it is for this reason that he refers to Indian textiles, supposedly less productive than English or German ones. Had he considered textiles in general (irrespective of origin) or - better - bananas, he would have arrived at quite different conclusions.

Trivially, in a two-factor model and a perfect market, Indian textile manufacturers cannot pay both factors at the same rate as their European counterparts unless they use a technology as efficient as theirs. Further more, although this is less obvious, I would not mind admitting that, in the case of an "arbitrary" rise of the wages in India, the Indian manufacturers will not be willing or able to raise the necessary investment funds and will shut down rather than modernize.

All that, however, is absolutely irrelevant to (a) the n-branches (Sraffa-type) system under discussion, in which there is a single technique and a single wage rate for each branch, and (b) the real world in which, besides manufactures where the Center's productivity may be superior to that of the Periphery, there is a host of other lines (particularly primary products), in which the Periphery enjoys a positive productivity differential <u>many times greater</u> than its negative one in manufactures.

What is the difference between an exogenous rise in wages occurring with a single producer and one occurring with the whole branch? The difference is that, the mobility of capital being assumed, individual profit rates <u>can</u> be unequal as a result of productivity differentials; branch averages cannot. If an individual producer (or an individual country specializing in the commodity under question) was yesterday - before the wage rise - unable to increase the price, there is no reason that he will be able to do so today. In both cases, the competition of other suppliers forbids the individual producer/country to pass on to their customers their <u>own</u> cost variations. No such barrier exists for the entire branch. Yesterday, the branch was indeed unable to raise the price; this is because the resulting overprofit would have attracted an <u>inflow</u> of capital causing an overproduction. Today, after the wage rise, not only does this sort of trade-off no longer exist, but, on the contrary, equilibrium demands that the price <u>be</u> adjusted upwards. Otherwise, the branch's rate of profit would fall below the general level and this would induce an <u>outflow</u> of capital and a reduction of the quantity produced, down to the point - determined by the price-elasticity of the demand - where the market will be <u>obliged</u> to pay a price ensuring the workers of the branch their ad-hoc wages and their employers the general rate of profit.

Does that mean that there is no problem with the quantitat-

ive adjustment conciliating autonomous factor-price variations with independently-given consumer preferences? Not at all. Given the assumptions of international immobility of labour and of short-run rigidity of techniques and specializations, there is indeed the problem of conciliating (i) the terms of trade with the balance of trade, and (ii) the fall in the volume of exports with the preservation of a given level of employment.

It is true that these questions had not been systematically tackled in the 1969 French edition and the 1972 English translation of my Unequal Exchange, the latter being the only text of mine Spraos refers to. But they have been tackled in numerous subsequent publications, the most exhaustive being my discussions with Somaini-Salvati-Boggio on the one hand and with Van de Klundert on the other.

I cannot, of course, re-state here extensively my analyses thereon. Roughly, the first question is settled by the existence in the real world of a price-elasticity of the demand considerably lower than what the neo-classical theory could afford to allow for; the second, by the existence of another sort of elasticity of the demand, working in the opposite direction and, probably because of that, deliberately ignored by the same theory: the income-elasticity.

i) Not to speak of oil, recent statistical findings in several other raw materials have been rendering it harder and harder for neo-classics to uphold their assumption of a price-elasticity of the demand greater than unity, however essential for the coherence of their theory this assumption might be. (Spraos accepts explicitly this fact). But the most significant denial has been provided by the recent evolution of comparative "inflation" rates and trade balances of the industrialized countries. If variations in exchange rates are taken into account, the export-price index of these countries

has evolved from 1972 (= 100) to 1976 as follows:

Japan	106	France	94
Germany	109	U.S.A.	88
Belgium	111	Italy	88
Switzerland	135	U.K.	87

Yet, during the same period, it is the first group, on the left, that has enjoyed a trade surplus - a considerable one indeed - and it is the second group, on the right, that suffered a deficit, in striking contradiction with the most respectable principles of textbook Political Economy.

It is clear that, as long as price-elasticity of the foreign demand is not greater than unity, good terms of trade can perfectly be consistent with good trade balances.

(It would perhaps be advisable to add that it is not even necessary that price-elasticity be that low; it suffices to be a little - some 10 to 20 per cent - greater than unity, since this is the usual average percentage of imported inputs in the value of exported commodities. In that case, the fall in the value of exports due to the rise in prices will be cancelled out by a fall in the value of imports due to the fall in the volume of exports, and trade will be balanced on a lower level. To my knowledge, this fact has never been given, in economic literature, the consideration it deserves.) (°)

ii) There remains, however, the second problem, that of the level of employment. Low as it might be, price-elast-

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(°) Spraos did not fail to acknowledge the relevance of the question about the nature of the demand. "If volume demanded of each commodity is fixed and wholly independent of prices, he admits on p.13, some of the points...against Emmanuel...would not hold." Well! It is not necessary that the demand be "wholly independent of prices". It would suffice that it vary not more than a certain proportion (say about 1.2 : 1) to them.

icity is nonetheless generally positive. Giving to the rest of the world less than before for the same counterpart as before may be an excellent operation on the plane of external accounts allowing you to gain on both, terms of trade and trade balance, but, if the level of domestic employment has to be preserved - otherwise the gain in the terms of trade leads to no final gain in the national economy - the question arises: who will buy the surplus generated by the fall, however small, in the volume of exports?

The answer is that it is the people of the producing country itself that will, as a result of the increase of its income following the rise in the wages (profits being practically unaltered thanks to their worldwide pooling). Otherwise one cannot see how this rise could materialize at all. This countervailing influence of income-elasticity is absent from the traditional neo-classical thought, since income itself is implicitly taken as a constant.

Simplifying in the extreme, let us suppose that country A produces 1000 cars, consumes 500 and exports the other 500 to country B against 500 tons of grain, of which the latter produces 1000 tons and keeps 500 for its own consumption (1 car = 1 ton of grain).

An increase of wages occurs within country A such as to entail an increase in the price of the cars of 100%. 1 car is now equal to 2 grain. As a consequence, country A henceforth consumes 700 cars, exporting only 300 to country B to be exchanged against 600 grain. 400 grain will then be left for the domestic consumption of that country.

Both elasticities (price and income) of the demand have been allowed for in a plausible way. Within the first country, the sale of cars has increased sharply, that of

grain much less. Within the second, the consumption of cars has been cut severely, consumption of grain less. Country A enjoys now more of both welfare components (cars, grain) than before; country B, less of both. The first got richer; the second, poorer. Yet the trade balance has not been disturbed (300 cars = 600 grain), not the slightest shift in technique or capital occurred and, therefore, no unemployment was to be feared anywhere.

Let us have a look at the real world. From 1950 up to the 1973 oil coup, real wages and export prices in industrial countries have considerably gone up, those of the Third World have fallen. Still, overall trade balance between the two groups did not prove negative for industrial countries. Meanwhile, production of developed countries increased not only in value but even in volume and at an unprecedented rate. Employment attained all-time peaks. What happened? How has the equilibrium been maintained? Who has consumed those ever growing flows of ever "dearer" commodities?

The answer is given by these same statistics. During the period under question, exchanges among developed countries progressed at a rate 1.8 times faster than those between them and the others. Those flows of "dear" commodities have been exchanged and consumed among and by the high-revenue peoples themselves, in a fashion not essentially different from the one which is roughly outlined in my car-grain example above.

Mutatis mutandis, the same will be the case if, following the establishment of some "New International Economic Order", the prices of Third World exports are increased, either directly by some sort of "OPEC" procedure or indirectly by the rise in the price of some naturally uncompetitive factor like wages or taxes (and sometimes rents).

True, the producers of cocoa will not put much of their

additional revenue in the consumption of cocoa. In that, they do not differ from the producers of oil, cars or transistors. But the surplus of cocoa, which the traditional consumers will give up owing to its advance in price, will now be consumed by the producers of copper, oil, bauxite, coffee etc., (along with those of cocoa themselves). They will assign to that the additional proceeds obtained from their own revalorized sales. It is the same for each one of the other products. Otherwise, one cannot see how the rise of their standard of living could at all materialize. The problem of humanity, following the establishment of such a new order, will not be to find consumers for the now too expensive oil, cocoa, coffee, copper, but to find enough oil, cocoa, copper, coffee, to continue to supply the non-producing consumers with, when the re-adjustment of prices has precisely permitted their producers to keep a part of them for their own use. This is the path to the new equilibrium point which Spraos so desperately looks for.

px (see p. 8a)

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Does that mean that "any arbitrary set of wage rates will do", as Spraos puts it? Not at all. There are limits and one of them is precisely the point where the demand curve steepens enough for the marginal price-elasticity to become equal to unity. (More accurately, to exceed unity by the percentage corresponding to the value of imported inputs). But first, the existence of an endogenous limit does not prevent a variable from being exogenously determined within the span of the curve lying on this side of the limit; second, the very historical fact of national wage rates having diverged so much from one another during a century or so of intense trade-union struggle without any correlation with productivity (since, as we have said above, when due account is taken of both exports- and imports-productivity differentials, the Periphery is considerably more productive than the Center), proves *per se* that the

Finally, if we drop the simplifying assumption of one branch-one country on the one hand, if we consider a rise in wages covering the whole area of the Third World on the other, neither inflow nor outflow of capital is strictly necessary to reequilibrate the system. At worst, that is, if it so happens that the production of a particular product in a particular country has all the same to be curtailed, the adequate capital movement to match with the new pattern of consumption (on a higher level) will, more often than not, be a movement from that branch into other branches within the same country and not, as we provisionnally said above, from that country into other countries.

segment of the curve, within which Unequal Exchange is relevant, is large enough to repay the time both of us spent, myself to work it out and Spraos to try to refute it.

And what would happen if by any chance such an exogenous rise of a wage rate recklessly overstepped the limit? Nothing as dreadful as Spraos thinks. Our national currency would devaluate - directly and automatically, if we have floating changes; indirectly and deviously, if not - by as much as the overstepping, the corresponding part of the wage rise becoming nominal. The equilibrium would be recovered, the country under consideration keeping all the gain of the rise in prices minus the amount overstepped. Contrary to what the "mainstream of bourgeois economists would say", the system is dynamically stable.

But, retorts Spraos, this simply means "taking advantage of previously unexploited monopoly opportunities", which, he adds, "as a point of principle has been understood since before Emmanuel was old enough to write".

It is prodigious how great a number of neo-classics are all of a sudden realising that "as a point of principle", the Unequal Exchange is after all not a novelty - rather a special case of the neo-classical theory itself. Each time I come across this kind of remark, I feel like asking them why then they object to it and why they go to such lengths and pains to refute it.

Be that as it may, this point convinced me that Spraos undertook to refute my thesis, not only without reading what I have published since 1972 but even without paying due attention to the text of the particular paper he had to discuss. For summarizing my point on page 4 I openly repeated what I had, time and again, already written namely, that the unequal exchange is nothing else than the conjunction of an _international_ competitive rate of profit with a _national_ uncompetitive ("political") wage. On the other hand, on page 5, I declared unreservedly that, instead

of the wages, my theory could just as well be formulated in terms of any other uncompetitive factor, for instance indirect taxes, going with that example, so far as to include the extreme case of an institutional, political, bureaucratic, and therefore <u>monopoly</u> factor-price.

To the extent, however, that there is some essential difference between monopoly in the commodity market, acknowledged by the traditional theory, and monopoly in the factor market, dealt with by the Unequal Exchange, the latter is somewhat more disturbing for neo-classics than a "special case" of their own doctrine would have been. On the contrary, to the extent that no such difference exists, Spraos is wrong when discriminating between the monopoly of Opec's cartel and that of the Detroit workers' union.

Actually, I do not believe that my point is a special case of the neo-classical theory. For factor prices are simultaneously the terms of distribution of the social output and, as such, when rigid, they are <u>intrinsically</u> so and not, like commodity prices, casually so. Treating them as flexible, as neo-classics do, constitutes an <u>illegitimate abstraction</u>.

This is not a theoretical subtlety but a substantial difference. Neoclassical abstraction would have been normal if, whatever the perenniality and the extent of rigidities, there were a monotonic function linking the yield of the system with the degree of competition, in such a way that the freer the trade the nearer to the ideal state we were. This is not the case. Capitalism is discontinuous. Once the exogenous interferences have passed beyond a certain threshold, the dynamics of the system is reversed and, in that case, keeping the competition going wherever possible is more immiserizing than abolishing it everywhere. (°)

(°) This is what is expressed by H.G. Johnson when he writes: "...if a number of the marginal conditions are violated and one of these violations is eliminated, you cannot be sure that this will make any improvement in welfare." (Money, Trade and Economic Growth, London 1964, p.43)

A hundred-per-cent pure market economy is a mental construction. Granting that, if it existed, it would be Pareto-optimissima, it nevertheless remains that the second-best situation - the only one that matters - is not the as-much-per-cent-as-possible competition, but the hundred-per-cent planning. In other words, as long as "imperfections" are casual, as with monopolies in the commodity markets, neo-classical economists are probably right to claim that we should try to remove them rather than set up new trade barriers because of them. But when the distorting interferences are organically linked with the system and cannot be helped, as is the case with the immobility of labour and the actions of the "Detroit" workers' union, an inverse interference like that of the Opec's cartel is the only means to partially offset the effects of the former and recover the relative optimum.

II. Dynamics

Spraos starts the second part of his critique with a very curious misreading of Marxian and Marx-type schemes, complaining that "the entire increment of total output per period is absorbed by the depreciations of wear and tear of the capital stock". (p. 9) He repeats this charge several times all through his comments on my different tables. I am at a loss to understand what figures this amazing statement refers to.

As it is well known, Marx uses the simplifying assumption of a turnover rate of both capitals, constant and variable, equal to unity. He is not alone in doing that. Many neo-Ricardians and most notably Sraffa do exactly the same. Nobody had ever attempted to describe these schemes as "funny" on that account. On the other hand, this can be perceived and worded in two ways: either as an abstraction from fixed capital or as an equality between the stock of capital in

the beginning of a period and the flow of depreciation within the same period. Spraos seems to choose the second formula and this is all the more welcome as it shows directly that it suffices to take a "period" long enough (10 or 20 years, why not?) to make the simplification itself vanish and render the scheme as realistic as anything. (°) However, all that by no means indicates that "depreciation devours the entire increment of output in a growing economy"! (p. 9)

I can fully understand situations in which depreciation plus unproductive consumption absorbs the entire output so that there is neither increment nor growth, but a depreciation devouring the increment is beyond me, especially so in a one-period turnover scheme in which by definition the increment of output is precisely but the positive difference between output and depreciation. From the very fact that there is an "increment of output" and that the economy is "growing", it follows that there is a current surplus, a "net output" in the sense of Ricardo, and that this surplus is being re-invested. This is the case in all the four tables of my paper.

In what proportion this new investment will be distributed between the two departments on the one hand and between c and v on the other, (the former proportion being necessarily subordinated to the latter), is another question. Marx has always held that the surplus is being distributed unequally between c and v, so that c grows faster than v. It so happens that his expanded-reproduction scheme (table 1) ignored this condition and this is why I proposed another (table 2) in which the latter is duly satisfied. Is that what Spraos had in mind when complaining about depreciations devouring increments? This would be quite an unconventional description for an allocation of the resources being, on the contrary,

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(°) At least as far as Spraos' argument is concerned, for in that case, indeed, if the rythm of fixed-capital turnover becomes realistic, that of variable capital will become too slow. It is this equality of turnover rates in the various components of capital and nothing else that can create problems. But these problems, incidentally dealt with in my main book, have nothing to do with Spraos' present point.

the only apt one to maximize the increment. Whatever his somewhat too peremptory views about the "empirical evidence" of a long-run fall in capital/output ratio, Spraos does not fail to agree with another empirifal evidence, (this one universally admitted), that of a steady long-run rise in the capital/labour ratio (in terms of capital per physical unit of labour) - what Marx called the rise of the technical composition of capital $(\frac{c}{v+m})$. Now, it is obvious that, if v+m and v/m are assumed as constant, we cannot have that composition rise without assigning to the department I, a greater part of the new investment as compared with department II. This is what is assumed and done in table 2. This means that in the place of one worn out machine more than one is being set up. If that is what Spraos describes as "depreciation devouring the increment", then, with the labour force constant, the only reproduction in which this "devouring" does not happen is the simple reproduction. On the other hand, in the case of the first five-year plans in the Soviet Union, where final consumption was stagnating and all the surplus was being accumulated in Department I, we should, by the same standard, be obliged to say that depreciation was devouring the increment! (°)

Spraos does however, not, deny that, if wages are lagging behind, an expanding capitalist economy will sooner or later run up against serious problems. He goes even so far as to detect some sort of a direct mathematical deadlock of the system, as the capital goods sector will "approach asymptotically 100% of national output". (p. 9) What he denies is the idea that the way out is, or has been, the trade union struggle. Endogenous forces of competitive capitalism, he argues, are likely to raise the wages and rescue the system just as well.

If this were so, the alleged falsity of my thesis would be

(°) Actually my table 2, described by Spraos as "funny", mirrors perfectly the accumulation process during these Soviet plans as far as the 100% dissociation of the two departments is concerned. Having to examine what would happen in a market economy if consumption lagged behind, I was by any methodological standard bound to use a model illustrating precisely the extreme case namely, that of consumption remaining entirely unchanged.

of an emirical rather than of a purely theoretical nature. But this is not so. Spraos is wrong in both directions. For one thing, there is no mathematical, material, necessity of deadlock, however disproportionate the growths of the two departments in relation to one another might be. Mathematically, the system can perfectly go on "producing more steel to produce more coal and producing more coal to produce more steel." As I recall in my paper, the first five-year plans in Soviet Union proved precisely that, but for political constraints, an autonomous accumulation in department I can go on without limit. (°). It is therefore not surprising that such a deadlock "cannot be rigorously deduced" from my model, as Spraos points out. Not only because numerical models can only show a possibility and never prove a necessity, but also because such a necessity simply does not exist. How could I have tried to prove "rigorously from (inside) the model" that the breakdown is necessary when myself I believe that "in itself, the independent growth of department I is not only possible but the only consistent with the material conditions of social production", as I clearly state in my paper (p.) ?

If Spraos had read of my writings a bit more than the Unequal Exchange published seven years ago, he would have found out that, far from "echoing Rosa Luxembourg", I have tried heavily to refute her thesis a mathematical (from inside the Marxian model) deadlock. (°°) He would also have noticed that, far from envisaging that the "dis-

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(°) From 1927 to 1939 and from 1951 to 1964, the capital/labour ratio increased in Soviet Union at a compound annual rate of at least 7%, in spite of the tremendous growth in the employed labour force, especially by the massive inflow of women into the productive wage-earning activities.

(°°) Especially in my LE PROFIT ET LES CRISES where I devoted an entire chapter to that issue.

proportionality would by itself lead to a breakdown of the system", which he charges me with (p. 16), I believe, on the contrary, that this disproportionality is the <u>necessary condition</u> for the economic growth and that what leads to the breakdown is but the impossibility of the capitalist system to implement that condition, that is to conciliate the objective laws of this disproportionality with the subjective motivations of its decision-makers.

What Spraos overlooks is that the Marxian reproduction schemes are post-realisation and post-investment schemes and cannot, therefore, reflect the difficulties and contradictions of realisation and investment. They show the inherent conditions of the process whatever the driving forces, market or plan. The main condition thereof is that investment must vary in inverse ratio to consumption. Are the inducements of the decision-makers, in either institutional frame, consistent with that condition? Obviously, this question can only be discussed and answered <u>outside</u> the model.

My point is precisely that this inverse ratio fits perfectly into the scope of a central planner, while, in contrast, no market-motivated individual producer can ever afford to push investment higher at the very moment that consumption and, therefore, his direct and indirect outlets are slackening. In some way, the main inferiority of the market economy as compared with the planned one, is not its resistance to raising the wages in proportion to growth but its inability to keep growing with low wages. Although this constitutes the core of my argument and has amply been dealt with in my text, it turns out to be the only point that Spraos leaves out of his critique.

Spraos attacks directly my conclusions. In them, a certain rise in wages is claimed to be a sine-qua-non condition of the very survival of the system. And so what?, he asks.

The "invisible hand", once more right there, can perfectly do the job. With capital/output decreasing and a given wage rate, any increase in the total output will result in an increase in the net profits. (°) This will induce competitive capitalists to bid up the workers and, as a result, wages will rise up to the level required for the consumption goods sector to "remain an approximately constant proportion of total output." (p. 10) Trade Unions are not necessary! (°°)

At least, that is plain. About one and a half century of trade unionism, collective bargaining, strikes, sometimes bloody violence and victims in the industrial countries turns out to be, according to that conception, but the result of a technical error of the working classes in these countries. Unnecessary!

After all, why not? I suppose that Spraos has some good arguments also to explain why the automatic mechanism he refers to had not worked before Trade Unions, for instance in England, during the hundred odd years extending from the beginning of the industrial revolution to the first half of the nineteenth century, when total output

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(°) In a rather loose terminology, Spraos writes "net profits" without making it clear whether he means the mass of the rate. On the other hand, his adamant assumption of a falling tendency in the capital/output ratio would be pointless if the relevant magnitude was not the rate of profit. In order to meet any incidence of Spraos' argument, I shall hereafter formulate my points in a way to reckon with both interpretations.

(°°) Except, he adds, if there is a reserve army and then only "up to a point". Which point? And what about if a reserve army is a permanent corollary of capitalist relations? No attempt is made by Spraos to conciliate this exogenous overdetermination with his endogenous determining mechanism based on profits.

was advancing by leaps and bounds. (°)

He would probably have not any more difficulty in making the best of the coincidence of wages beginning to rise significantly only after the launching of Trade Union action and having their rise accelerated towards the end of the century, following the political promotion of the organised working class and precisely at the very moment when the pace of productivity and total output had markedly slackened. (°°)

Empirical arguments are never convincing - we had better tackle the theoretical framework of Spraos' thesis. It is true that with a given wage/output ratio,if the technolog-

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(°) There is an impressive amount of literature about that. The majority of authors accept that the real wage had, during the period under review, regressed while the working day was lengthened. The main controversy concerns the dates. Barrat Brown, Hobsbawm, Gustav Schmoller situate the wage take-off towards the middle of the nineteenth century. Others, as P.Bairoch, see it rather around the end of the Napoleonic wars and notice the same setback in France from 1810 to 1830 (that is the period of the first large scale mechanization and rise of labour productivity).

A. Glyn and B. Sutcliffe, quoting Phelps Brown and Browne, assert that only by the end of the nineteenth century real wages regained - for the first time - the level of the fifteenth century plateau! M.Desai formulates the same assessment and Dureau de la Malle quoting Fabroni states that in ancient Greece real wages were equal to those of the North of Italy in 1804!

(°°) T. Baranovsky did not fail to notice: "The last thirty years of the nineteenth century are marked by a relative slowing down in the development of British industry and by a decline in the industrial supremacy of England...Yet this same period is distinguished by an increase in wages and in general by better conditions for the working class. This contradiction is explained by the steady rise in the social power of English workers." (Translated by me from the French edition of "The Industrial Crises", Paris 1913, pp. 325-326)

ical progress is such as to make capital/output ratio fall, both the mass and the rate of profit <u>must</u> rise. This is exactly what I myself have argued when criticizing Marx's theory of the falling tendency in the rate of profit, in some writings of mine which Spraos is apparently unaware of. But what Spraos forgot, when he so rashly claimed a falling tendency in the capital/output ratio, is that, if this is so, the so-called problem of the switch of techniques disappears and the more capital intensive technique becomes preferable <u>whatever the factor prices</u>. This means that, however low the wage and however high the mass and rate of profit, capitalists will have no need to queue the labour market, as Spraos would have them do. They will simply increase further their profits by subsituting capital goods for labour power. (°)

For a labour market, if any, to become, under the circumstances, a seller's market, as visualized by Spraos, the amount of available capital must be greater than what would be required to equip every living worker with the most capital intensive tool, whether the latter is available in ready stock or just blue-printed. To equip, for instance, every navvy with an excavator, every bricklayer with an elevator and every invoice-clerk with a computer. Even if the aggregate savings of the whole world were concentrated and ploughed in a single medium-size industrial country, like France or England, we would still be far from this fantastic situation. Financial means lag always considerably behind the technological potential.(°°)

Here is where the Marxian concept of the 'reserve army', as a corollary and not an appendix, makes sense. Marx's point is that even the situation which looks like the

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(°) On the other hand the variations of a positive rate of profit can only influence the rate of savings and through it the transfer of labour between depatment II (consumption goods) to department I (means of production), but by no means the overall demand for labour.

(°°) see p. 18a

(°°) cf. Ch. Bettelheim, "Le Problème de l'Emploi", Paris 1952, p. 106: "...the workers are not losing their jobs because there are too many machines around for them, according to Sismondi's formula, but, on the contrary, ...because there are not enough machines to employ all of them, at a given level of the technique and a given level of accumulation."

most favourable for the wage earner, namely capital accumulating at a rate greater than the demographic growth, turns out to be negative, since the abundance of capital, instead of enhancing the demand for labour, induces, on the contrary, a development of the material productive forces eventually resulting in a displacement of living labour (of workers by machines, of skilled labour by unskilled, of male by female, of adults by children etc.) The rise of the output/labour ratio, that is of the productivity of labour, due to the technological progress, instead of resulting in more output than before now being produced by a given number of workers (and therefore more chances than before (now being created) for an increase of each worker's share), results in [illegible] part of the workers, who were previously necessary to produce a given output, now becoming redundant and (their competition) pushing wages down.(°) In other words, the Marxian thesis is not that accumulation has a positive effect on the wage *except if* a reserve army happens to be there ex post, as Spraos would have it, but that it has a negative effect on it *because of* the reserve army it generates ex ante.

(°) (see p. 19a)

III. Reference to Marx

In an "appendix on Marx's thought", Spraos sets out to show that Marx himself believed in capital accumulation driving by itself (that is, competitively) wage rates up. For that purpose he picks up in the Capital a fraction of sentence and quotes: "...sooner or later a point must be reached, at which the requirements of accumulation begin

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(°) Of course, the underlying principle of Marx's thesis, in some places explicitly formulated, is the self-evident fact that, to be by any standard acceptable, a machine must incorporate less labour than it itself displaces.

~~(°) On the other hand, whether the investment is independent of savings or equal to them, the variations of the rate of profit have no influence on the volume of employment as far as~~

(°) On the other hand, the rate of profit as such (that is independently of the mass) has no influence on the volume of employment as far as the inducements are concerned, and this whether the investment is independent of savings or structurally equal to them. In the first case, because, however small the rate of profit might be, it is always preferable to invest than to keep idle a capital already saved; in the second, because an increase in the rate of savings, at best, has a neutral effect on the overall demand for labour, only influencing its allocation between department II (consumption goods) and department I (means of production); at worst (Keynes) it has a depressive effect on it – it is never stimulating.

to surpass the customary supply of labour and, therefore, a rise of wages takes place". True, there are "counter-quotations", he cautiously adds, but the above "is not an incidental throwaway sentence but part of a systematic analysis by Marx of the conditions under which continuous wage growth in step with total output can take place." (pp 14-15)

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Spraos accomplishes here the most amazing overturning of sense that a truncated quotation can ever lead to. It is not a question of contradiction between a quotation and "counterquotations" of other parts in the work of Marx. The matter is simply of an incorrect quotation bluntly expressing the contrary of the very point that Marx has made in this same, indeed very systematic (more than hundred pages), analysis contained in the 23th Chapter, one of the most crucial in the Capital, written precisely with the explicit purpose of demonstrating that, contrary to the "economists", as Marx puts it, competitive accumulation and higher productivity, far from enhancing the demand for labour and driving wages up, are making part of the working force redundant and pushing wages down.

One can hardly overestimate the key position of that chapter in the entire work of Marx. What distinguishes scientific socialism from all sorts of "utopian" socialism is precisely that the former considers the destruction of the system as not only ethically desirable but historically necessary. Now, if the improvement of the working class situation stood in direct relation to the accumulation of capital, the working class would get a stake in the normal development of the system. Contrary to Spraos's statement, the social struggle would not, in that case, be a "zero sum game", at least not in the long run, since the surplus-value of today would provide, via accumulation and productivity, for the wage rise of tomorrow. However conflictual the daily share-claiming might still be, the

conflict would be inscribed *within* the system and would not transcend it. Marx *had* therefore to demonstrate the negative effects of accumulation and productivity, and this so much more as the "apologists"' standpoint for positive relations between the amount of capital seeking investment and price of labour power on the one hand, and between productivity and "real wage" on the other, seemed the only consistent one with common sense. That is what he did (or tried to do) in the chapter under review.

How then can we explain Marx's sentence quoted by Spraos according to which accumulation must lead to a rise in wages? We can explain it by merely relating it to the beginning of the passage some lines above on the same page: "If we assume that...the composition of capital... remains constant..." (Marx p.763) (°) Spraos misquotes Marx by passing over that essential condition.

According to his particular method, Marx starts his analysis assuming something he does not believe in. (°°) A first section of several pages is devoted to that under the heading: "A growing demand for labour-power accompanies accumulation *if* the composition of capital remains the same". (My italics) Then on page 772, comes a second section under the heading: "A relative diminution of the vari-

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(°) All quotations from Marx hereafter refer to Penguin's 1976 edition of Volume 1 of Capital.

(°°) He used the same method in the transition from chapter VIII to chapter IX in Vol.3, the former examining what would happen *if* there were differences in the rates of profit and the latter showing that this is absurd and that a general rate of profit is indeed formed. A similar construction is found in Ricardo's "Principles", namely between sections 3 and 4. In the former, Ricardo assumes that "bows and arrows of the hunter are of equal value...with the canoe and the implements of the fisherman..." and concludes that the variation of wages has no effect on the relative prices of goods. Then in section 4 all that is reversed: "In the former section we have supposed...But...etc."

able part of capital occurs in the course of further progress of accumulation and of the concentration accompanying it." (°) The latter denies the "if" of the former. Marx then writes:

> "So far, we have considered only one special phase of this process that in which the increase of capital occurs while the technical composition of capital remains constant. But the process goes beyond this phase..." (p.772)

Then Marx goes on explaining that, in fact and contrary to the assumptions made in the previous section, the change in the technical composition of capital, that is the "growth in the mass of the means of production, as compared with the mass of the labour power that vivifies them", reflects the growing productivity of labour and "increase of the latter appears...in the diminution of the mass of labour in proportion to the mass of means of production moved by it..." (p.773) and he ends up the section with the conclusion: " On the one hand, therefore, the additional capital formed in the course of further accumulation attracts fewer and fewer workers in proportion to its magnitude. On the other hand, the old capital periodically reproduced with a new composition repels more and more of the workers employed by it." (p.781)

He repeats again and again the same point in the following sections: "(the) demand (for labour) falls progressively with the growth of the total capital, instead of rising in proportion to it, as was previously assumed." (p. 781, my italics). And further in section 4:

> "The greater...the functioning capital, the extent and energy of its growth, and therefore also the greater...the productivity..., the greater is the industrial reserve army...the greater is official pauperism. This is the absolute general law of capitalist accumulation." (p.798, italicized by Marx)

(°) In the French translation supervised by Marx the contrast between the two headings becomes more clearcut.

And finally on the same page:

> "...the higher the productivity of labour, the greater is the pressure of the workers on the means of employment, the more precarious therefore becomes the condition for their existence, namely the sale of their own labour power...The fact that the means of production and the productivity of labour increase more rapidly than the productive population expresses itself, therefore, under capitalism, in the inverse form that the working population always increase more rapidly than the valorization requirements of capital."

Does all that mean that Marx excluded any possibility of short-run competitive rise in wages? Of course not. Within the above long-run tendency, Marx allowed for exceptional circumstances springing from the fluctuations of the business cycle. He pointed nonetheless out that, even "under the conditions of accumulation we have assumed so far, conditions which are the most favourable to the workers...", (even "at the best of times", as he writes some lines below), "...a rise in the price of labour...only means in fact that the length and weight of the golden chain...etc." (768-69) That is what Spraos, disregarding "the most favourable" and "at the best of times", describes as Marx's "equanimity" about "an either/or situation". (p. 16)

On the other hand, Spraos is aware of the condition put by Marx in the first section, namely that the composition of capital be constant, but he argues that Marx referred to the value-composition and not to the technical. There Spraos takes too many chances indeed. Marx's text is remarkably explicit. After having formulated the condition in the sentence quoted above, "If we assume that...the composition of capital also remains constant", he adds in a parenthesis: "(i.e. a definite mass of the means of production continues to need the same mass of labour-power to set in motion)" (763)

Marx began the chapter by explaining that "the composition

of capital is to be understood in a twofold sense": the value-composition and the technical composition. Then in order to rule out any doubt about what composition is meant, not only does he add the above parenthesis, but, moreover, each time he had to refer to this in the following sections, he always writes "technical composition".

It is, therefore, not the value-composition, c/v, as Spraos erroneously states, that is relevant here, but the technical, $\frac{c}{v+m}$, precisely that "what in mainstream jargon is known as capital/labour ratio" and what Spraos definitely dismisses. On the other hand, that composition is the only one that makes sense here. Otherwise, Marx's point would turn into a childish tautology, namely: with c/v constant any increase in c will entail a proportional increase in v.

In fact, Marx's point

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Lastly, Spraos appeals to historical evidence contradicting the "conclusion that the share of wages in total output must fall as an inevitable result of the capitalist system's own logic." (p. 15A)

Marx had his own "historical evidence". He precisely devotes to it two thirds (70 pages out of 110) of the chapter under review, putting it under the heading: "Illustrations of the general law of capitalist accumulation". He passes under review (a) England from 1846 to 1866, a period during which took place a "titanic progress of production", (p.802), (b) the English agriculture from the middle of the eighteenth century up to the end of the Anti-Jacobin War, and also from the repeal of the Corn Laws up to the late sixties, two periods of great capital accumulation in the land, and (c) Ireland from 1840 to 1865, where a drastic decrease of population following the famine of 1846 and the emigration

of the fifties and sixties, resulted in a considerable centralization of farming and a tremendous growth of capital in proportion to the diminishing population. In all three cases, Marx reports that the standard of living of the workers had been significantly lowered throughout the periods under consideration.

Now, history is history and Spraos could not disagree with Marx on such an issue unless he referred to different historical periods, obviously those coming after the publication of Capital, periods in which there *did* indeed occur a rise in the share of the working class, as unobjectionable as the stagnation or fall which occurred in the previous period. If this is so, Spraos' historical reference is absolutely irrelevant to "the capitalist system's own logic". For it is surely not consistent with that logic to have the price of a commodity fixed by collective bargaining, and this Spraos knew only too well when endeavouring at all costs to demonstrate that what the Trade Unions have achieved the free market would have achieved just as well (or even better). The very fact that it was not achieved before Marx, in a period when the system, *did* work according or *nearly* according to its own logic and when growth was at its highest, and it *has indeed* bren achieved, according to, Spraos himself, after Marx, that is, in a period when the labour power ceased absolutely to be a freely traded commodity, while growth got considerably slower, ruins definitely the main point of Spraos' analysis.

IV. Miscellaneous

1. Spraos reverts to the quantitative argument of Bettelheim: "...what is presently being exchanged (with the Periphery) is less than 5% of the Centre's GNP."

   Acknowledging the reply I have already given namely, that, the present value of world trade being already reduced by the inequality of the exchange, the latter is not a fraction but a multiple of the former, he suggests to go back to the starting point. There must be a first year of "inequality" in which the latter does represent but a fraction of the percentage of the previous year (last equal-exchange year). As far back as 1900,this percentage was of the order of 10%. It follows that the kick-off amount we can get by this method will be "insignificant for the task ... asigned to it."

   I am not sure to have adequately grasped this point of Spraos'. Does he mean "insignificant" for that initial period or for the cumulative process leading to the situation of today?

   I maintain that the unequal exchange does exist "significantly" for about a hundred years. The task assigned to it is to spur the investment will without curtailing investment potential. Its final effect is an enormous differenciation in the standard of living between nations. This means that there are a qualitative and a quantitative aspect.

   Qualitatively, as I said in my paper, unequal exchange acts as a catalyst. In this field, an exogenous additional (that is, over the endogenous growth) enlargement of the domestic market, even by 1 or 2 percent of the GNP from one year to the other, is surely not insignificant on the plane of the incitements to the investment of that year.

   Quantitatively, one has but to refer to the tables of compound interest, to see what tremendous effects can a hundred-year accumulation have.

2. The last question that Spraos formulates namely, "...why did capitalists wait until the emergence of trade unions before they helped themselves to this flow of manna...", is either the result of an all-sweeping misunderstanding or else naïve.

If Spraos means to ask why capitalists did not avail themselves of this "flow of manna", independently of the level of the wages they were conceding at home and of the existence or not of trade unions, the question shows that he has hopelessly misunderstood the chief thing in the Unequal Exchange. In that case, the answer is simple: because this "manna" does not exist at all without the rise of wages at home and is only proportional to that rise.

On the contrary, if Spraos only wants to know why high wages have to be snatched from the capitalists and why the latter do not grant them voluntarily with a view to unblock the system and develop their respective countries, then the question is naive.

First, capitalists do not care to develop this or that country at all. They themselves are well "developed", wherever they live. Nay, given the relativity of things here below, they are, all other things remaining equal, much happier and more "developed" in an underdeveloped than in a developed country. Development, if any, comes in spite of them, as a by-product of their accumulation, driving them on and on up to their passing away.

Second, although capitalists form a class with common interests, they do not form, for all that, a co-op of production. They compete with each other and while it is to the interest of each one of them to have the others raise their wages, it is just as much to his interest to keep his own wages low. The national state itself cannot help that, since one country of the Center is competing with other countries of the Center for the same commodities.

Third, even for all the capitalists of the Center taken together

the inequality of the exchange is not an "additional source of profit", as Spraos puts it. Given a world-wide equalization of the rate of profit, a local increase of wages,wherever it takes place, entails, directly and by itself, a fall, not a rise, in the general rate of profit. On the other hand, if capitalists could indeed set up such a centralized decision power in economic matters on the scale of the entire Center, they would no longer need to raise the wages, since, in that case, they would be able to fix the prices independently of the wages and invest independently of the level of consumption.

One way or another, if the unequal exchange saves, at a certain historical conjuncture, the capitalism of certain countries from the deadlock, this is only possible at the price of deadlocking other countries.

Fourth, it is true that if capitalists of all countries united and sat down to coordinate their action in respect to wages and investment, most of the problems we speak of would no longer exist, but this very union would mean that the capitalist system, as a system of independent producers (Marx),has been transformed into something else. I am afraid, in that case, I myself will probably have to sit down too and produce some new theory for the international trade.