Bulletin of the Conference of Socialist Economists

Spring 73

BULLETIN OF THE CONFERENCE OF SOCIALIST ECONOMISTS

SPRING 1973

FOREWORD

This is the first printed issue of the Bulletin. Membership has grown to the point where xeroxing is no longer economical in terms both of money and of comrades' time. After some investigation with printers (of whom Pluto Press was particularly helpful) Barbara Coysh of Oxford has undertaken to produce the Bulletin. However the present print order leaves quite a substantial number of unclaimed copies. Members should help to alleviate this situation by finding new people who are prepared to subscribe. Although subscriptions are still flowing in, we could do with a lot more.

We hope that the article on the present position of, and prospects for, the British economy will be the first of a regular series of short topical pieces. Contributions (not more than 5,000 words) on broad subjects, like this issue's piece, or on more narrowly defined subjects (e.g. North Sea oil, the B.S.A. bankruptcy, the price of gold, the talks on world trade, the rise in commodity prices etc.), should be sent to Andrew Glyn, 58 Lonsdale Road, Oxford. Contributions from overseas would be especially welcome given the lack of information generally available on developments abroad.

Editorial Board

VULGAR ECONOMY (PART II)

Bob Rowthan

The capitalist mode of production

It is well-known that Marx criticised Ricardo (and other classical economists) for thinking of capitalist production as something 'eternal' or 'natural'. This has been widely interpreted to mean that Ricardo was unhistorical in his approach, and that the main distinction between Marx and Ricardo is that Marx saw capitalism as a mere passing phase in the history of human society, whereas Ricardo did not. Indeed, Marxism is seen as Ricardianism plus history.

The trouble with this view is not so much that it is wrong, but that it is superficial. Marx did not criticise Ricardo for failing to analyse capitalism as a system which grew out of an earlier form of society and will in turn be replaced by another form, nor for failing to analyse or describe the historical developments of this system. On the contrary, he admired Ricardo's analytical and, in the first instance, a-historical method. Where Ricardo failed, in Marx's opinion, was in his characterisation of the capitalist system, and as a result in his analysis of 'the economic law of motion of modern society'. Moreover, the intellectual reason he failed to characterise the capitalist system adequately is quite simply that he lacked a concept - the concept of a 'mode of production'. Virtually every one of Marx's specific criticisms of Ricardo can be traced back to the absence of this concept in the latter's work - his confused treatment of prices and values, his failure to distinguish adequately between production and circulation, between surplus value and profit, or between labour and labour power.

Thus, when Marx says Ricardo thought of the capitalist system as something 'eternal' or 'natural', he is not criticising Ricardo for his unhistorical analysis, but saying that, because Ricardo thought of capitalism in this way, he failed to see it as a mode of production with specific features differentiating it from other modes of production. Marx's use of the concept of a 'mode of production' marks a radical shift in problematic, which has been largely unrecognised or ignored by Marxist political economists.

Seen in its most general terms, a mode of production is simply the set of social relations within which men produce. In his famous Preface to a Contribution Marx says:

> In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. (Selected Works p. 182)

Any mode of production has two distinct aspects or levels: the mode of appropriation of nature, and the mode of appropriation of the product. This distinction can be seen clearly in the following passage where Marx describes the capitalist labour process,

> The labour-process, turned into the process by which the capitalist consumes labour-power, exhibits two characteristic phenomena. First, the labourer works under the control of the capitalist to whom his labour belongs; the capitalist taking good care that the work is done in a proper manner, and that the means of production are used with intelligence, so that there is no unnecessary waste of raw material, and no wear and tear of the implements beyond what is necessarily caused by the work.
>
> Secondly, the product is the property of the capitalist and not that of the labourer, its immediate producer. (Capital Vol. 1 pp. 184-5)

In their appropriation of nature men combine together in a definite set of social relationships specified by such characteristics as production techniques, organisation of the labour process, division of labour, authority and control. Notice that the appropriation of nature, as it is defined here, is a social affair. It is not man in the abstract acting upon nature, nor is it the 'non-human world of technology' as the neo-Ricardian Baradwaj has described the labour process. It is social man producing within a definite set of social relationships.

The manner in which the product, and therefore the surplus product, is appropriated varies from one mode of production to another. In feudal or slave society, for example surplus product is directly appropriated by extra-economic force. In capitalist society it is appropriated on the basis of apparent freedom, according to the economic laws of commodity exchange.. This aspect of a mode of production is widely recognised to involve social relationships. Indeed, under the name 'distribution' the neo-Ricardians treat it as the only level at which social relations occur, and, as the above quotation of Baradwaj shows, treat the equally important appropriation of nature as an asocial or natural process.

The two levels of a mode of production are relatively autonomous and cannot be reduced, one to another. The laws of motion of a mode of production are based upon the articulation and interaction of the two levels, and these laws can, therefore, only be understood by means of an analysis which takes account of both levels.

With these distinctions in mind, let us examine Marx's characterisation of the capitalist mode of production. To understand his characterisation, one must recognise that Marx was seeking, on the one hand, to contrast the capitalist mode with slave, feudal and other modes of production, in which the labourer is permanently tied to an individual owner or master and does not have the freedom to dispose of his labour power as he wishes, and, on the other hand, he was seeking to contrast industrial capital with merchant, userers' and other forms of capital.

Capitalist production is characterised by two things: it is the production of commodities - goods are produced for exchange and social production is spontaneously organised, by means of this exchange; and every element in the labour process has become a commodity, including labour power itself - the capacity of the labourer to work. Thus, capitalist production is commodity production, generalised to the point where labour-power has become a commodity. The worker cannot, of course, sell himself for an indefinite length of time, for then he would cease to be a freeman.

As a commodity owner, the worker is free to sell or not sell his labour power, as he chooses, subject only to the economic constraints imposed by the exchange of commodities. This is in contrast to feudalism and slavery, where the worker does not possess such freedom. As Marx says in the <u>Grundrisse</u>,

> In the slavery relationship the worker belongs to an individual, particular owner, whose labour machine he is ... In the bondage relationship, the worker is an element of landed property; he is a chattel of the earth just as cattle are ... Labour power seems to the free worker to be entirely his property, one of his elements which he as a subject, controls, and which he retains in selling it.

This freedom is, however, formal rather than real, for, although the worker is not compelled by open force to work for others, he does not possess the means to work on his own account, and therefore must out of economic necessity work for others. He is, as Marx says:

> free in the double sense, that as a free man he can dispose of his labour-power as his own commodity, and that on the other hand he has no other commodity for sale, is short of everything necessary for the realisation of his labour power. (<u>Capital</u> Vol. 1 p. 356.)

As a result, he must work for others, or he starves. Unlike the slave or the serf, he has some freedom to choose the individual who will control his labour power, he can within limits choose the capitalist for whom he works. But, although he can free himself from the individual capitalist, he cannot free himself from the despotism of capital as a whole. He must still work for some capitalist. Hence the formal rather than real nature of his freedom. Even so, it remains true that the constraint on the free labour is the economic law of commodity exchange, rather than the extra-economic force of slave or feudal society.

For our purposes, however, the more important contrast is between industrial capital and other forms of capital. Many 'vulgar socialists' such as Proudhon, sought the explanation for capitalist profit and surplus value in what Marx called the realm of 'circulation' - the buying and selling of commodities, and the lending of money for interest. Merchant capital, which acquires its profit by buying cheap and selling dear, relies upon some monopoly position or form of extra-economic power in the circulation of commodities. Indeed, it is characterised by the fact that its profit derives from the sale and purchase of commodities at prices which differ from values or, more generally, from prices of production.[11] Usury capital is characterised by the fact that it derives profit from the lending of money for interest.

The vulgar socialists looked upon industrial capital - capital directly exploiting labour-power by employing workers to produce commodities - as a form of merchant or userers capital. The implication of this view is that surplus-value can be eliminated simply by making the exchange of commodities competitive and banning the lending of money for interest. Labour-power could remain a commodity.

Marx took just the opposite view. In his eyes, the capitalist mode of production was characterised by the fact that surplus value is actually created

---

[11] Marx used the term 'merchant capital' in two different senses: sometimes to denote commercial capital in general, even when it operated under competitive conditions, and other times to denote capital which made a profit by cheating or monopoly in the esphere of exchange. In the text the term is used in this second and narrower sense.

outide of the sphere of circulation, that it does not stem fundamentally from monopoly or extra-economic force in the sphere of circulation, nor from the lending of money for interest. On the contrary, the capitalist mode of production is characterised by competition in the sphere of circulation, and by the 'exchange of equivalents'. Moreover, userers and merchants capital are no longer independent forms, but must be seen as derivative forms of industrial capital which is the dominant form in modern society,

> both merchants' capital and interest-bearing capital are derivative forms, and at the same time it will become clear, why these two forms appear in the course of history before the modern standard form of capital. (Capital vol. 1 p. 165)

The contrast between merchants and industrial capital, and thereby the specific characteristics of industrial capital, can be made clearer by comparing the labour process (production) and the exchange of commodities (circulation) in three different hypothetical situations. The first situation is that of simple commodity production, where independent producers such as peasants or artisans exchange freely and competitively their commodities. In this mode both production and circulation are characterised by freedom and equality. In the labour process the worker is independent, being under the control of no other person, and is free to do what he wants within the limits laid down by the natural world. In the circulation process he sells his wares freely, without interference, and like any other commodity seller receives the competitive price.

Next consider a situation where individual producers must sell or buy through intermediaries who hold a monopolistic position. We can consider such a situation as the combination of merchant capital in the sphere of circulation with simple commodity production in the labour process. Historically this was often the form in which independent producers were compelled to trade. In this combination, production, as before, is characterised by freedom and equality. Circulation, however, is characterised by unfreedom and inequality. The monopoly of the intermediaries denies to the individual producers the right, or at least the opportunity, of trading with anyone else. Moreover, the intermediary and the individual producers do not confront each other as equals, as they did before. The intermediary is in a privileged position as a trader.

Finally, consider capitalist production in its pure form, where free competition reigns. In their capacity as commodity traders, all participants, capitalists and workers, are free in the sense that they can sell to anyone willing to buy, and buy from anyone willing to sell. This applies to the workers sale and the capitalist's purchase of labour power just as much as it applies to transactions in any other commodity. As traders, capitalists and workers participate equally, each having commodities to exchange, each being unable to bring to bear any extra-economic power to alter the ratios at which they must exchange commodities. Thus, as in the case of simple commodity production, circulation is characterised by freedom and equality, the significant difference, of course, being that labour power is now a commodity and the worker sells not his products, but himself. Having sold himself, the worker must now work for the capitalist. In the labour process he works under the control of the capitalist, producing what the latter wants, submitting to capitalist labour discipline and performing the kind of work the capitalist desires. The labour process is therefore, characterised by unfreedom and inequality. The worker must do as he is told, and the capitalist stands over him as a superior, rather than confronting him as an equal, as he does in the sphere of circulation.

The three situations just described are shown in fig. 1.

	Merchant capital Plus simple Commodity Production	Simple Commodity Production	Capitalist Production
Circulation	unfreedom and inequality	freedom and equality	freedom and equality
Production	freedom and equality	freedom and equality	unfreedom and inequality

fig. 1

It is clear that in these examples, merchant capital and industrial capital are related to the pure form of simple commodity production in diametrically opposite ways. Merchant capital represents the introduction of unfreedom and inequality in the realm of exchange. Industrial capital represents the introduction of unfreedom and inequality in production. It is also clear that no amount of freedom and equality in the realm of circulation will convert capitalist production into simple commodity production. Now, bourgeois equality applies exclusively to the circulation process, where individuals participate as commodity buyers and sellers. It does not relate to the labour process. Thus, capitalist production is consistent with bourgeois equality, and, for that matter, with bourgeois freedom which allows every commodity owner to dispose of his commodity as he wishes. Finally, bourgeois justice sanctions the unfreedom and inequality in production. As a seller of labour power, the worker has freely consented to work for the capitalist for a given length of time, under known conditions. In making him work, the capitalist is only exacting his due as a commodity purchaser. The fact that the worker is compelled to sell himself to the capitalist, because he has been dispossessed at some stage in the past, or else was bred a proletarian, is of no concern to bourgeois justice, which concerns itself exclusively with the actual act of exchange and not the circumstances which bring about and condition this exchange. Thus, capitalist production is consistent with bourgeois equality, freedom and justice. Merchant capital, on the other hand, is not. In introducing monopoly or non-economic coercion into circulation, it is violating these standards. So long, therefore, as we are considering the situation of the simple commodity producer, facing feudal or other monopolies, the application of bourgeois standards represents a liberation for the labourer. When we consider capitalist production, however, this is not the case. On the contrary, it is the application of bourgeois standards to circulation which is the foundation of the worker's unfreedom and inequality in the labour process. Indeed, it is the existence of free and unfettered commodity exchange which makes the 'law of value' act upon the individual capitalist as an external coervice force, which compels the individual capitalist to behave as he does in the labour process, which leads him to revolutionise the labour process so that the worker becomes a mere appendage to the machine. As Marx remarked on the relationship between freedom (anarchy) in exchange and unfreedom (despotism) in production,

> in a society with capitalist production, anarchy in the social division of labour and despotism in that of the workship are mutual conditions of the other (Capital vol. 1 p. 357)

Now, the crucial point about the vulgar socialists was that they thought that the worker could be liberated by the application of bourgeois morality.

As we have seen, however, this is not the case. Indeed, in its purest form, capitalism is the very embodiment of bourgeois morality, since all commodity sellers receive their rights as commodity sellers. In putting forward their demands for freedom and equality in the realm of circulation, the vulgar socialists were putting forward the demand of small artisans and other simple commodity producers, seeking to free themselves from domination by merchant capital, which in many cases was gradually impoverishing them and converting them into proletarians. To these workers, the demands of the vulgar socialists promised a short-term if not a long-term salvation. To the proletarian, however, who was already compelled to sell his labour-power they promised nothing. Indeed, many of the great struggles of the working class, over such questions as the limitation of the working day or the formation of trade unions, have been struggles against bourgeois freedom in exchange, for they have sought to deny to the individual worker the right to dispose of his labour-power as he wished. The freedom of the individual worker has been curtailed in the interests of the working class as a whole.

The basic position of Marx is summed up in the following celebrated passage from Capital, describing the sphere of circulation.

> This sphere that we are deserting, within whose boundaries the sale and purchase of labour-power goes on, is in fact a very Eden of the innate rights of man. There alone rule Freedom, Equality, Property and Bentham. Freedom, because both buyer and seller of a commodity say of labour-power, are constrained only by their own free will. They contract as free agents, and the agreement they come to, is but the form in which they give legal expression to their common will. Equality, because each enters into relation with the other, as with a simple owner of commodities, and they exchange equivalent for equivalent. Property, because each disposes only of what is his own. And Bentham, because each looks only to himself. The only force that brings them together and puts them in relation with each other, is the selfishness, the gain and the private interests of each. Each looks to himself only, and no one troubles himself about the rest, and just because they do so, do they all, in accordance with the pre-established harmony of things, or under the auspices of an allshrewd providence, work together to their mutual advantage, for the common weal and in the interest of all.
>
> On leaving this sphere of simple circulation or of exchange of commodities, which furnishes the "Free-trader Vulgaris" with his views and ideas, and with the standard by which he judges a society based on capital and wages, we think we can perceive a change in the physiognomy of our dramatis personae. He, who before was the money-owner, now strides in front as capitalist- the possessor of labour-power follows as his labourer. The one with an air of importance, smirking, intent on business; the other, timid and holding back, like one who is bringing his own hide to market and has nothing to expect but - a hiding. (Capital vol. 1 p. 176)

On the basis of this discussion, let us now examine some points where Marx differs from Ricardo and his modern followers.

Three Basic Points

1. The origin of surplus value

Marx stated that surplus value originated in production and not in circulation, and that surplus-product represented the surplus or unpaid labour of workers. This has been interpreted by many, including Bortkiewicz and other neo-Ricardians, to mean that profits or the surplus product represent a deduction from the product of labour, and that the capitalist is able to deduct this surplus product because he owns the means of production, without which production is impossible.

As it stands this interpretation of Marx is either incorrect or incomplete. If by 'deduction', it is meant that the capitalist obtains his profit by making use of a monopoly position in circulation and cheating the worker, the interpretation expresses a view diametrically opposed to that of Marx who, as we have seen, did not locate the origin of profit within the realm of circulation.

Alternatively, the expression 'deduction from the product of labour' may simply mean that workers provide the only human factor in the production process and, therefore, create the entire product. From this point of view, all output is the product of labour and it follows definitionally that surplus product is a part of labour's product and is, therefore, a deduction from this product. Although correct, and accepted by Marx, this view is superficial and certainly does not require his long analysis to sustain it. Indeed, there is something rather circular in the argument which first defines all output as the product of labour, and then triumphantly exclaims that it has shown surplus product to be a deduction from the product of labour. Of course, for propagandist purposes, it is useful to make such an argument against the apologetic versions of vulgar economy, which see the 'sacrifice' of the capitalist as a contribution to production.

Against more sophisticated neoclassical economists, such as Debreu, however, such an argument is useless. They would agree that, considered from a technical point of view, the only human contribution to production is labour, and that capitalists get a part of the total product because they own the means of production. Indeed, they would go further and say that all this takes place on the basis of competition, of bourgeois justice.

The argument could be given more weight by pointing to the origins of the present distribution of property, how workers were dispossessed in the process of primitive accumulation, and how the capitalist system has mechanisms for ensuring that sufficient proletarians will be available for exploitation. Even with this addition, however, the interpretation fails to come to grips with Marx's specific characterisation of the capitalist mode of production and the form of exploitation within it. Indeed, it fails to distinguish any significant differences between the capitalist mode of production, where the worker labours under the direct control of the capitalist, and certain other modes of production, such as the domestic system in which the labourer works at home, using materials and perhaps means of production owned by the entrepreneur, or alternatively, simple commodity production where workers are in debt to the money lender. In all but capitalist production, the worker is not paid a wage for his labour-power, but receives payment for his labour in the shape of the completed product. This distinction does not, however, play any great role in the main deduction theories, which pay very little attention to the labour process and the social relations under which it is conducted.

This distinction does however play a crucial role in Marx and one must interpret him literally, when he says that surplus-value is created in production and not in circulation, for then one is compelled to take into account the specific feature of capitalism as a mode of production, not merely as a mode of distribution, as the deduction theorists, particularly those of the neo-Ricardian school, tend to think of it. In particular, one must begin with the fact that, in this mode of production, the labourer works under the control of the capitalists, who compels him to work, to produce value. Moreover, the worker is compelled to work for longer than is necessary merely to replace the means of subsistence he consumes. Thus, he is compelled to perform surplus labour, which is embodied in a surplus product, which being a commodity is surplus-value. It is this emphasis on the labour-process which characterises Marx's analysis, and which, more than anything else, distinguishes him from all main schools of bourgeois economics, both neoclassical and neo-Ricardian, as well as the majority of modern-marxist writers, who display much the same faults as the neo-Ricardians.

This emphasis is particularly clear when Marx discusses Ricardo's treatment of wages. Ricardo, like the neo-Ricardians of today, took the intensity and duration of the working-day as given, and considered merely changes in the rate of wages per unit of time. In doing so, he removed production, as a social process, from the picture. Surplus value is seen, not as something intimately related to the social power of capital within the labour process, but as the result of two factors: on the one hand, the real wage rate which reflects the subsistence needs of workers, together with their bargaining power, and, on the other hand, the productivity of labour, which in the Ricardian tradition, reflects the ingenuity of the capitalist, rather than the struggle between capital and labour within the production process.

The effects of this perspective are described by Marx in the following quotations:

> the labourer must first be compelled to work in excess of the necessary time, and this compulsion is exerted by capital. This is missing in Ricardo's work, and therefore also the whole struggle over the regulation of the normal working-day. (Theories of Surplus Value, vol. 2, p. 406)
>
> The origin of surplus value does not become clear and consequently Ricardo is reproached by his successors for having failed to grasp and expound the nature of surplus-value. That is part of the reason for their scholastic attempts at explaining it. But because thus the origin and nature of surplus-value is not clearly comprehended, the surplus-labour plus the necessary labour, in short, the total working-day, is regarded as a fixed magnitude, the differences in the amount of surplus- value are overlooked, and the productivity of capital, the compulsion to perform surplus-labour - on the one hand (to perform) absolute surplus-labour, and on the other its innate urge to shorten the necessary labour-time - are not recognised, and therefore the historical justification for capital is not set forth. Adam Smith, however, had already stated the correct formula. Important as it was, to resolve value into labour, it was equally important to resolve surplus-value into surplus-labour, and to do so in explicit terms. (Theories of Surplus Value, vol. 2, p. 406.)

In contrast to Ricardo, Marx initially took the daily wage as fixed and considered variations in the duration and intensity of work. This enables him to concentrate on what he considered to be the crucial aspect of capitalist exploitation, that, behind the facade of freedom and equality in the exchange of commodities, lies the harsh reality of compulsion and inequality in the labour process. Later, both in Capital itself and Wages, Price and Profit, Marx allows the daily wage to vary and builds up a picture which includes both the struggle over wages in the sphere of circulation and the struggle over the duration and intensity of work in the labour process.

Provided our sole aim is to study certain formal relationships between technology, real wages and the rate of profit, there is little to choose between the approaches of Marx and Ricardo. Ex-post they lead to the same result. Workers perform surplus labour in either case and the same equations will describe the relationship between the various market magnitudes - prices, wages etc. Indeed, the Ricardian approach is perhaps simpler. If, however, our aim is to understand capitalism as a mode of production and to 'reveal the economic law of motion of modern society', it is ridiculous to ignore certain fundamental determinants of this motion and concentrate exclusively on the quantities which appear in the equations of Sraffa and other neo-Ricardians. For they, like the neoclassicals, consider production to be an asocial or natural process. For them, capital is, as I have already said, a social relationship only when it concerns the appropriation of the product, or as they put it 'the distribution of income'. For them, all social relations are focussed on the process of circulation. The fact that capital also organises and enforces the production of commodities, and the production of surplus-value is of no importance to them. Their equations, indeed their whole theory, could, with minor changes, be modified to fit a society in which workers hired their equipment from capitalist owners, who took no part in the production process. Provided the real wage is defined to mean what the workers retain after the payment of hire charges to the capitalist, the formal relationships will be unchanged. Moreover, capitalists will still derive their income from the ownership of the means of production, and they will still 'deduct' their profit from the product of labour. The fact that neo-Ricardian theory can, with so little modification, be adapted to suit such different modes of production, suggests that it is seriously deficient.

2. The value of labour-power

Marx criticised the classical economists for talking of the 'value of labour', which he considered to be an irrational expression for the 'value of labour-power'. He himself gave a variety of reasons why the latter was the correct expression.

In the first place, it corresponded to the fact that exploitation in the capitalist system is based upon bourgeois justice, that workers sell their capacity to work at its value - they are not cheated. As Marx says in his Marginal Notes on Wagner,

> Now in my presentation profit on capital is in fact also not "only a deduction of 'theft' from the labourer". On the contrary, I represent the capitalist as the necessary functionary of capitalist production, and indicate at length that he does not only "deduct" or "rob" but enforces the production of surplus value and thus first helps to create what is to be deducted; I further indicate in detail that even if in commodity exchange only equivalents are exchanged, the capitalist - as soon as he has paid the labourer the real value of his labour power - quite rightfully, i.e. by the right corresponding to his mode of production, obtains surplus-value. (Translated in Theoretical Practice)

In the second place, it resolved the classics problem that labour, unlike any other commodity, appeared to have two distinct values, one corresponding to the labour contained in the workers's subsistence, and the other corresponding to the worker's actual labour. To overcome this, the classics distinguished between living and dead labour, suggesting that living labour should have one value, and dead or embodied labour another value. This distinction between living and dead labour destroyed the unity of their value theory, and Marx's replacement of 'labour' by 'labour-power' served to restore this unity.

Thus, the introduction of the concept 'labour-power' served both to emphasise that exploitation in capitalist society is based upon bourgeois justice, and to unify the theory of value so that every commodity has a unique value. Neither of these, however, is the fundamental reason for the change. This, once again, concerns the characterisation of capitalism as a mode of production. So long as the classics used the concept 'value of labour', they were able to avoid discussing the social relations of the labour process itself, or at least to avoid giving these relations a central part in their analysis. The significance of this can be seen from the following passage from Capital,

> That which comes directly face to face with the possessor of money on the market, is in fact not labour, but the labourer. What the latter sells is his labour-power. As soon as his labour actually begins, it has already ceased to belong to him it can therefore no longer be sold by him. Labour is the substance, and the immanent measure of value, but has itself no value. (Capital vol. 1, p. 536)

By the time the worker enters the production process, he has already sold himself to the capitalist, even if his payment actually comes later, even if he works on piece-rates. His labour-power no longer belongs to him. He no longer controls his own labour.

It was the absence of the concept 'labour-power' which prevented the classics from seeing capital in its entirely, as a social relationship,

> Instead of labour, Ricardo should have discussed labour-power. But had he done so, capital would also have been revealed as the material conditions of labour, confronting the labourer as power that had acquired an independent existence and capital would at once have been revealed as a definite social relationship. Ricardo thus only distinguishes capital as "accumulated labour" from "immediate labour". And it is something purely physical, only an element in the labour-process, from which the relation between labour and capital, wages and profits, could never be developed. (Theories of Surplus Value, vol. 2, p. 400)

Note the dual nature of the social relationship which is capital. On the one hand, as a relation between capital and labour, it concerns the subordination of the worker to the capitalist during the appropriation of nature, and, on the other hand, as a relation between profits and wages, it expresses their relations during the appropriation of the product.

In the last analysis, the significance of the distinction between labour and labour power is that, in purchasing labour-power, capital establishes its despotism in the labour process. This despotism, however, results in the constant revolutionising of the techniques of production, raising the productivity of the worker and bringing together even greater number of workers, thereby laying the material foundation for a new society and stimulating the resistence of the class which will bring this new society into being.

This concept of the social relation 'capital' is, it will be noticed, markedly different from that of either Ricardo or the neo-Ricardians. For the latter, capital is a social relationship only in so far as it represents a claim to a part of the product.

3. Variable and constant capital

Amongst a wide variety of economists, there has been considerable confusion about the distinction between, or even the meaning of, the terms 'variable' and 'constant' capital. Some economists have immediately identified these with circulating and fixed capital respectively. Others have identified variable capital directly with the wage fund, so that if workers are paid at the end of the production period, as Marx said they usually were, variable capital is not in fact capital, since it is not advanced.

To understand the distinction, we must begin with the simple fact that variable capital is fundamentally the worker himself, or rather his labour power. It is true that Marx used the term to describe the wage fund, but such a use is derivative and by no means fundamental. Thus, variable capital is labour power - the living or subjective element in the labour process. Constant capital, by contrast, is the dead or the objective element in the process. The reason, that either of these is capital, has nothing whatsoever to do with whether they are paid in advance or not. What matters is that, during the production process, both constituents are under the control of the capitalist. Both means of production and the worker are incorporated into capital itself.

> On entering that process, they become incorporated with capital. As co-operators, as members of a working organism, they are but special modes of existence of capital. Hence, the productive power developed by the labourer when working in co-operation, is the productive power of capital. This power is developed gratuitously, whenever the workmen are placed under given conditions, and it is capital that places them under such conditions. Because this power costs capital nothing, and because, on the other hand, the labourer himself does not develop it before his labour belongs to capital, it appears as a power with which capital is endowed by Nature - a productive power that is immanent in capital. (Capital, vol. 1, p. 333)

Thus, constant capital is means of production and variable capital is labour power. Each of these is to be interpreted first of all, not as components of the fund expended in purchasing them, but rather as qualitatively distinct elements within the labour process itself, in other words as elements of what Marx called 'productive' capital in contradistinction to money or commodity capital. By calling labour power 'variable' capital, Marx established a conceptual connection between the creation of surplus value and despotic nature of the capitalist production process. The surplus value created by workers in this process is not determined simply by the means of consumption needed to sustain them, but also by the amount and intensity of the labour they are compelled to perform. By increasing the amount or intensity of labour his workers perform, the individual capitalist is able to extract additional surplus labour. If powerful enough, therefore, he can vary the amount of surplus value his workers create. Thus, the term 'variable' draws attention to the fact that the surplus value actually created varies according to the relative power of combatants within the production process.

These definitions are so simply and so clearly given by Marx, that it would seem impossible, that anyone, who has read even the first volume of Capital, could misunderstand them, or, fail to see their importance. Yet generations of economists, both Left and Right, have done just this. Such is the power of tradition over men's minds, a tradition that insists on reading Marx as though he were an English classical economist.

THE THEORY OF THE PERMANENT ARMS ECONOMY - A CRITIQUE AND AN ALTERNATIVE*

David Purdy

I INTRODUCTION

There is a widely held view on the left that the expansion and relative stability of the advanced capitalist economies since the Second World War have been founded on high levels of military and defence-related expenditure. The most fully articulated version of this view is the theory of the permanent arms economy, which forms a central tenet of the global vision of at least one political group on the British left, the International Socialists. For I.S. the theory serves not only to explain post-war capitalist economic development, but also establishes a crucial link between the functioning of private enterprize capitalism and the "state capitalist" systems which the main-stream of I.S. believes to exist in the Soviet bloc. Although when considered in isolation, the centrally planned Soviet economies do not appear to conform to the politico-economic categories used by Marxists to analyze capitalism, they are held to form part of an internally antagonistic world capitalist system in which military competition and the permanent threat of war mediate between the rival power blocs and continually reproduce the exploitative relations of production described as state capitalism.

This critique is concerned primarily with the adequacy of the theory of the permanent arms economy as an account of past-war capitalist development. After a brief recapitulation of the main points of the theory some fundamentalist criticisms are considered and dismissed and the real theoretical weaknesses of the theory expounded. Finally, an alternative account of the present stage of capitalist development is suggested. East-West relations receive only the briefest treatment. These two aspects of the theory are, of course, related. To the extent that doubt is cast on the leading role of arms spending as a source of expansion and stability, the view of the arms' race as the lynch pin of the world capitalist order embracing both East and West is also weakened. In the present writer's view a balanced assessment of the role of arms spending depends on rejecting the view that the dominant mode of production prevailing in the U.S.S.R., Eastern Europe, China, North Korea, North Vietnam and Cuba can be characterized in any significant sense as capitalist, whatever else might be said about it. Nevertheless, in strict logic, <u>some</u> of the criticisms of the arms economy theory developed here could he accepted regardless of one's view on the class nature of the Soviet bloc states.

The theory starts from a healthy insistence that the first duty of Marxists is to face reality. For two decades following the Second World War the advanced capitalist countries enjoyed relatively full employment and, by the record of their own past history, unprecedented growth rates. These facts must be explained and not conjured out of existence by declaring them to be mere "appearances" masking the real essence. Explanations running in terms of the pace of technological advance or the rapid growth of world exports will not do. These factors have been important in sustaining the expansion once

*I am indebted to Ian Steedman for helpful comments and criticisms on an earlier version of this paper. The views expressed in the paper and responsibility for remaining errors, factual or analytical, are of course, mine.

under way but are clearly not independent of the expansion itself. Orthodox Keynesian explanations in terms of state intervention to maintain aggregate demand and prevent the recurrence of slumps are also inadequate. In the last analysis they regard the state as an independent agency standing outside of society and ignore the limits on state intervention set by the capitalist mode of production. As Michael Kidron puts it, "... too much productive expenditure by the state is ruled out. Seen from the individual capitalist corner, such expenditure would be a straight invasion of his preserve by an immensely more powerful and materially resourceful competitor; as such it needs to be fought off. Seen from that of the system, it would lead to such a build-up of the capital-labour (value) ratio, to use one mode of expression, or to such a low marginal productivity of capital*, to use another, and to such a low average rate of profit as a consequence, that the smallest rise in real wages would precipitate bankruptcy and slump".[1]

In other words, if state intervention is to be ideologically and politically acceptable to the capitalist class and compatible with the system's objective requirements for stability, it must beyond a certain point take the form of "unproductive" expenditure. (The term "unproductive" has been used in various ways by Marxists. Here it clearly refers to expenditure on objects which are not productively consumed as elements of either constant or variable capital, i.e., the product of Marx's Department III, without necessarily carrying out any of the "rational-critical" connotations introduced by Baran and Sweezy.[2]) State expenditure on armaments therefore provides the perfect candidate for state intervention. "Since arms are a waste (or a 'luxury') in the strict sense that they are neither wage goods nor investment goods and therefore cannot constitute inputs into the system, they have no direct part in determining it and their production has no direct effect on profit rates overall. But since their production is a leak of high capital intensity, it tends to offset the system's inbuilt bias towards declining rates of profit".[3]

The argument that state intervention to preserve full employment and the associated inducement to private accumulation has consisted and had to consist of massive expenditure on "defence goods", is apparently clinched by reference to a proposition originally established by the neo-Ricardian economist von Bortkeiwicz,[4] and recently more elegantly confirmed by Piero Sraffa.[5] Bortkeiwicz's solution to the transformation problem (the problem of transforming values into prices of production when the rate of profit in the different branches of production is required to be equal despite variations between branches in the organic composition of capital) yields the corollary that the general rate of profit is independent of conditions of production in Department III. The arms industries are presumed to form a large part of Department III, though how large a part is uncertain. The conclusion is drawn that a relative expansion of Department III via an expansion of the arms sector will drain off a part of the investible social surplus, thus slowing down the rise in the

---

*Quite apart from the implication of this statement that the organic composition of capital and the capital-labour ratio are "alternative modes of expression", it is truly remarkable to find a Marxist writer uncritically deploying such mystifications of bourgeois economics as the "marginal productivity of capital". This concession is all the more paradoxical in view of the approving use which Kidron subsequently (see below) makes of Sraffa's critique of marginalism. It is perhaps indicative of a general shallowness and looseness of logic which, as will be shown, pervades the entire theory of the permanent arms economy.

organic composition of capital in Departments I and II and helping to check the associated falling tendency of the rate of profit. A similar corollary follows from Sraffa's theoretical construction of an economy in which commodities figure not only as the end products of the production process but also as inputs into the production of themselves and other commodities. "Non-basic" commodities (roughly those which do not enter directly or indirectly into the production of all commodities) play no part in the determination of commodity prices and the associated rate of profit.

II THE TRANSFORMATION PROBLEM: SOME MISTAKEN CONCEPTIONS

Fundamentalist criticisms of the arms economy theory have focussed on the Bortkeiwicz solution to the transformation problem and its corollary. (See Yaffe[6]). This solution is said to produce the result, unacceptable to Marxists, that the sum of commodities valued at their prices of production (total price) does not equal the sum of commodity vales (total value)* and/or that total surplus value does not equal total profit. This result is said to contradict Marx's whole theory of value and surplus value. Now it is true that Marx spoke of the transformation of values into prices as a process whereby the total surplus value created in production in proportion to the amount of labour power purchased by each capitalist, was shared out amongst the capitalists in proportion to the size of their total capital. It seems natural to interpret this as meaning that after the transformation, neither more nor less profit exists in the aggregate than the surplus value originally produced. But quite apart from the fact that Marx's numerical example of the transformation involves the unrealistic assumption that the elements of constant and variable capital are priced at their values, whilst the prices of the commodities produced are allowed to deviate from their values,[7] and whatever we think Marx himself may have had in mind, it is clear that his theory of value does not stand or fall with the proposition that total price equals total value.

Suppose there are n processes of production producing one commodity each, A_i $i = 1, \ldots, n$. (What follows borrows heavily from the formulation by Medio).[8] Assume there is no fixed capital. Let a_{ij} be the amount of the j^{th} commodity used up to produce one unit (in physical terms) of the i^{th}. Let λ_i be the amount of labour time embodied both directly and indirectly in one unit of the i^{th} commodity. Let l_i be the amount of direct labour required to produce one unit of the i^{th} commodity. We then have the following system of n equations:

$$(1)\ \lambda_i = \sum_j a_{ij}\lambda_j + l_i \qquad i, j = 1, \ldots, n$$

The values of the n commodities are fully determined by the (known) technical conditions of production. (Note that this does not amount to technological determinism. The course of the class struggle will affect what techniques of production are adopted and, given the technique, the degree of intensity with which labour power is utilized).

---

*It should be noted for this proposition to be meaningful it is necessary to interpret "price of production" as a pure number and not as having a monetary dimension. Otherwise there would be a dimensionality problem in comparing total price and total value, values being defined and measured as amounts of labour time.

To determine the amount of surplus value we need to know the value of labour power. (It is assumed that labour power exchanges at its value). This is determined by the bundle of physical goods required for the worker's maintenance and reproduction, and represented by the vector $(b_1, b_2, \ldots\ldots, b_n)$, where some of the b_i may of course be zero, and by the labour time necessary to produce this bundle. Thus the value of labour power, w, is given by:

$$w \equiv \sum_j b_j \lambda_j$$

Again it should be noted that the value of labour power is socially, not technically, determined since the real wage contains a "moral and historical" element which clearly may change over time and space.

Hence equation (1) can be rewritten:

$$(1') \qquad \lambda i = \sum_j a_{ij}\lambda_j + l_i w\,(1 + e) \quad i, j = 1, \ldots\ldots, n$$

where e is the rate of exploitation (assumed everywhere equal, though this is not essential) defined as:

$$e \equiv \frac{l_i - l_i \sum_j b_j \lambda_j}{l_i \sum_j b_j \lambda_j} = \frac{1 - w}{w}$$

This abstract system of production, the detailed analysis of which occupies much of Volume One of "Capital", may be called the value system. In his analysis of this system Marx assumes that commodities exchange at their values. This is not an arbitrary assumption, but reflects a real distinction between the more and the less essential features of the capitalist system. The production of values and the appropriation of surplus value lie at the heart of the capitalist mode of production. The deviation of exchange values, from values on the other hand, is a feature of secondary importance. Its analysis serves two main functions: first to complete and demonstrate the logical consistency of the theory of value; second, to show how the origin of capitalist profit as surplus value becomes concealed and mystified as a result of the actual operation of the capitalist economy.

The necessity to descend from the abstract value system to the analysis of the formation of prices of production arises from the fact that when the organic composition of capital differs in different lines of production, a uniform rate of profit requires that the ratios in which commodities exchange against each other in equilibrium (prices of production) should deviate systematically from the ratios of their values (amounts of embodied labour time). Without such deviations industries which a high organic composition would receive a lower rate of profit than industries with a low organic composition. The determination of these prices of production and the associated uniform rate of profit can be represented in a system of n equations corresponding to the n equations of the value system. This further set of equations may be called the "price system". Let π_i denote the price of any commodity (in terms of any standard) per unit of labour time embodied in that commodity:

$$\text{i.e.} \quad \pi_i \equiv P_i/\lambda_i \qquad i = 1, \ldots\ldots, n$$

If we then adopt the n^{th} commodity (e.g. gold) as our numeraire, and define

$$P_i \equiv \pi_i/\pi_n \qquad i = 1, \ldots\ldots, n$$

we may write:

$$(2) \qquad \lambda_i P_i = \left(\sum_j (a_{ij}\lambda_j + l_i b_j \lambda_j) P_j\right)(1 + r)$$

where r is the rate of profit and is defined as:

$$r \equiv \lambda_i P_i - \sum_j (a_{ij}\lambda_j + l_i b_j \lambda_j)\, P_j \Big/ \sum_j (a_{ij}\lambda_j + l_i b_j \lambda_j)\, P_j$$

Since $P_n = 1$, by definition, we have n equations to determine n unknowns, the n-1 P_i and r. Hence provided that the system of equations is consistent there is a determinate solution. In particular note that the P_i are a set of pure numbers, since

$$P_i \equiv \frac{\pi_i}{\pi_n} = \frac{P_i}{\lambda_i} \Big/ \frac{P_n}{\lambda_n} = \frac{P_i}{P_n}\frac{\lambda_i}{\lambda_n}$$

When either r = 0 or the organic composition of capital is everywhere equal, $P_i = 1$ for all i since in these cases the ratios in which commodities exchange are equal to the ratios of their values,

$$\frac{P_i}{P_n} = \frac{\lambda i}{\lambda_n}$$

In these cases it will be true that "total price" equals "total value",

$$\text{i.e. } \Sigma\lambda_i P_i = \Sigma\lambda_i, \text{ since } P_1 = P_2 = \ldots = P_n = 1.$$

Where $r \neq 0$ or where organic compositions differ, then in general $\frac{P_i}{P_n} \neq \frac{\lambda_i}{\lambda_n}$ so that only by a fluke will it be true that $\Sigma\lambda_i P_i = \Sigma\lambda_i$.

One can of course make it true by definition that total price equals total value. The important point is that this would precisely be an arbitrary definition and not a fundamental requirement of the theory of value. It can be seen from equation (2) that prices of production and the associated rate of profit are fully determined as functions of the elements λ_j, b_j, a_{ij}, and l_i, i.e. as functions of the values of commodities, the real wage and the technical production co-efficients. Since the values of commodities are fully determined as functions of the elements a_{ij} and l_i (equation 1), it follows that the rate of profit can change only if there is either a change in the real wage bundle or in the technical production co-efficients. This is entirely consistent with Marx's demonstration in Volume One of "Capital" that capitalist profit originates as unpaid labour time in the process of capitalist production and that it does not arise in the sphere of circulation nor is it to be attributed to the productive powers of physical capital goods. Marx argued that given the working day, the rate of exploitation depended on the bundle of commodities making up the real wage and on the total labour time embodied in each wage commodity. The rate of profit is now seen to depend on these same factors except that whereas a change in the technical production co-efficients which left $\Sigma b_j\lambda_j$ unaffected would also leave the rate of exploitation unaffected, the same will not in general be true for the rate of profit. Thus r depends additionally on the technical input-output structure of the economy. (See Steedman[9]) for a rigorous demonstration of this point in terms of a reduction to dated quantities of labour rather than a set of simultaneous input-output relations).

That this extra source of dependence should arise when we move from the analysis of the rate of exploitation to the analysis of the rate of profit corresponds to the fact that the transformation of values into prices concerns the relations amongst the capitalists themselves, i.e. between the different branches of the economy, whereas the rate of exploitation concerns the relations between the capitalists and workers, which do not essentially involve the inter-relations between the various branches of the economy. The exploitation process can be studied at the level of the individual enterprise or at the aggregate level of inter-class relations. Its analysis requires the consideration of only one representative commodity. To analyze the process of the formation of prices of production and the rate of profit we necessarily have to deal with a multi-commodity world in which the complex linkages between the various processes of commodity production make an explicit appearance. Moreover this approach to the transformation problem actually strengthens the significance which Marx himself attached to it. Once we move from the value system to the price system, then, as Marx puts it, "... Surplus value, disguised as profit, actually denies its origin, loses its character and becomes unrecognisable ... The actual difference of magnitude between profit and surplus value ... in the various spheres of production now completely conceals the true nature and origin of profit, not only from the capitalist, who has a special interest in deceiving himself on this score, but also from the labourer. The transformation of values into prices serves to obscure the basis for the determination of the value itself".[10]

III THE REAL CRITIQUE OF THE THEORY

Thus criticisms of the arms economy theory which turn on the validity of the Bortkeiwicz solution to the transformation problem and its corollary are misconceived. They are also beside the point. Acceptance of the Bortkeiwicz corollary does not entail acceptance of the theory of the permanent arms economy. The conclusion which I.S. economists have drawn from the proposition that conditions of production in Department III play no role in the determination of the rate of profit, is that a relative expansion of Department III via an increase in the arms sector allows a large proportion of the investible surplus to be drained off into unproductive consumption by the state. This reduction in the rate of accumulation (i.e. the proportion of total surplus value re-invested as additional constant and variable capital in Departments I and II) checks the tendency for the organic composition of capital in these two Departments to rise and hence acts as a brake on the fall in the rate of profit which would otherwise occur. This in turn sustains the means and the incentive to private accumulation. Additional impetus to the resultant prolonged boom comes from the technical spin-off to civilian uses arising from military research, though this is alleged to decline through time as military technology becomes increasingly specialized. (It is not made clear what effects spin-off and its declining importance are supposed to have on the organic composition of capital in Departments I and II, but this argument is subsidiary to the main theme and may be ignored here.)

Two assumptions are crucial to this argument. The first concerns the validity of Marx's law of the falling tendency of the rate of profit. The second concerns the connections between the rate of accumulation and the movement of the organic composition of capital (Hereinafter referred to as the O.C.C.). Let us discuss each of these in turn.

In Volume III of "Capital" Marx argues that despite the operation of various counteracting forces, in the long run the rate of profit would tend to fall because of the secular rise in the organic composition of capital which Marx believed to be the normal accompaniment of capitalist competition, growth and technical change. Two principal objections have been made against this "law". The first, that a rising O.C.C. will generally be associated with rising productivity (falling values) and will thus tend to raise the rate of exploitation and hence the rate of profit, may be discounted. In the limit the whole of net output would be appropriated by the capitalists, after which point the rate of exploitation could not be raised any further. In reality long before this point was reached the value of labour power would be likely to undergo an upward displacement through increases in and addition to the bundle of goods which constitute its components.

This point and the general formulation of the problem of the falling rate of profit can be seen most clearly if the rate of profit is defined as:

$$p = \frac{s}{k + t\ (c + v)}$$

where s is surplus value, v is variable capital, c is constant capital <u>flow</u> (depreciation of fixed capital equipment plus raw materials, fuel, etc., used up in current production), k is the constant capital <u>stock</u> (capital invested in fixed equipment, stocks of raw materials and half finished goods net of depreciation) and t is the time period of production and circulation in years, all variables being expressed on an annual basis.* The denominator of this ratio thus represents the value of the total capital advanced by a capitalist in the course of a year (or by the whole capitalist class). It will be observed that the <u>stock</u> of constant capital as well as the flow is included in this expression. This is in accordance with Marx's own preferred formulation (See Marx)[11] even though more often than not he assumed that no capital goods were carried over from one period of production to the next, so that only the flow of constant capital figured in the expression for the rate of profit. It is absurd for Marxists to continue to imitate this habit of Marx's. It is the return on total capital invested that interests the capitalists, not just the return on circulating capital which is usually small in relation to fixed capital. Moreover, since changes in the proportions of fixed to circulating capital are bound to occur in the course of capitalist development the ratio of s to c + v may be quite misleading as an indicator of long run profitability, though it may have some significance in the short run in view of the importance which modern corporations attach to maintaining their cash flow. The question at issue, however, is one which concerns the long run in which such considerations may justifiably be ignored.

If we define the rate of exploitation $e \equiv s/s + v$, the organic composition in terms of capital stock $q \equiv k/s + v$, and the organic composition in terms of capital flow, $r \equiv c/s + v$, the above expression for the rate of profit can be re-written:

$$p = \frac{e}{q + t\ (r + 1 - e)}$$

These definitions differ from the conventional ones, but have certain advantages for our present purpose. Defining e in this way is convenient because its range is then between 0 and 1 instead of 0 and infinity if the usual s/v

---

* I am indebted to Geoff Hodgson for drawing my attention to this formulation of the problem of the falling rate of profit, which is dealt with more fully in his forthcoming book on Marxist economic theory.

formula is used. Defining the O.C.C. in this way has the advantage that q and r depend with this formula solely on the technical conditions of production. With the usual c/v formula the O.C.C. also depends directly on the relations of production. The latter determine the value of labour power. The lower this is the less the value of the variable capital required to be employed in conjunction with a given value of constant capital and hence the higher the O.C.C. defined as c/v. It is useful to be able to keep separate the factors bearing on the rate of exploitation from those bearing on the O.C.C. which is intended to represent the ratio of dead to living labour employed in production. In the last analysis as was pointed out earlier, a complete separation is impossible since the relations of production will also affect the techniques of production chosen as the class struggle proceeds.

Obviously if e reaches its upper limit, i.e. 1, the rate of profit will be at its maximum for given techniques of production. Thus:

$$P_{max} \doteq \frac{1}{q + tr}$$

If we ignore the term tr as being negligibly small in relation to q, then approximately the maximum rate of profit is given by the expression 1/q. (In Volume Two of "Capital" Marx gives some attention to reductions in t through revolutions in transport etc., which clearly have the effect of raising the rate of profit. The same result would flow from reductions in r as a consequence of the elimination of waste in the use of raw materials etc. If the term tr is small, however, these may justifiably be relegated to the status of secondary forces in the long run.) It is evident from this formulation that the law of the falling rate of profit depends on the postulated rise in the organic composition of capital.

Now Marx frequently spoke interchangeably of the technical composition of capital and of the O.C.C. The former is intended to convey the idea of the degree to which living labour makes use of produced means of production in some physical sense, an idea which is necessarily loose and subjective since heterogeneous physical objects are incommensurable. The O.C.C. is a ratio of values. It seemed obvious to Marx that the immense expansion of the productive forces generated by capitalist development had brought and would continue to bring a rise in the technical composition and a corresponding rise in the organic composition. Moreover, Marx's expectation seems to be borne out by the few, admittedly crude, empirical investigations which have been conducted into this question for the nineteenth century when industrialisation on an extensive scale made its initial impact. Gillman[12] used data for the U.S. economy to estimate the O.C.C. defined as c/v and computed on the basis of the values of both fixed and circulating capital. His series showed a steady rise from 1880 to 1919, stabilized on a plateau through the 1920's, rose sharply during the Depression years owing to the less precipitous falls in capital values than in employment and wage rates, declined equally sharply during the recovery to fall below its 1919 level during the way years, and then in the post-war years rose to a new plateau which was nevertheless lower than that of the 1920's. Correspondingly the rate of profit showed a falling tendency up to 1919 but thereafter fluctuated around a slightly rising trend.

Closer inquiry into this question reveals that there is in fact no necessary one to one correspondence between the technical and the organic composition of capital. It is true that the maximum rate of profit must fall by definition if there is an increase in the inputs of given capital goods required per unit of output (the elements a_{ij} in terms of the circulating capital model discussed in Section II in connection with the transformation problem.) Hence if this process continues the actual rate of profit will eventually fall. But technical change does not normally take the form of replicating existing types of machines and physical inputs. More usually it involves the introduction of new types of inputs, which requires a complete respecification of the economy's input-output structure. There is absolutely no a priori reason why even if methods of production evolve in the direction of obviously greater mechanization (replacement of hand looms by power looms etc.), the value embodied in the elements of constant capital should rise relative to the total live labour time expended. Owing to the introduction of new methods of production productivity will be rising in the industries which produce these new capital goods, and in the industries which supply inputs to these industries and so on. Only by specifying the entire input-output structure of the economy and the character and incidence of technical change could one determine the direction of change of the O.C.C. This would not in principle be impossible. The point is, however, that whether the O.C.C. rises, falls or remains constant over time is a completely contingent matter. The conclusion appears inevitable that the "law" of the falling rate of profit is no law at all in any accepted sense of the word "law". It may be that the rate of profit has in practice fallen and will continue to fall for reasons unconnected with the movement of the O.C.C. For instance, a secular fall in the rate of exploitation due to an uncompensated rise in the moral and historical component of the value of labour power might occur, partly as a result of a rise in the minimum educational and cultural levels required of labour in general by modern processes of production, and partly as a result of the growing strength of organized labour combined with intensified international competition which weakens the ability of each national capitalist class to resist labour's demands. At any rate there is no necessary tendency for the rate of profit to fall on account of a rise in the O.C.C.

This being the case the question whether siphoning of the investible surplus into Department III helps to shore up the general rate of profit by holding down the O.C.C. in Departments I and II, appears pointless unless a rising tendency of the O.C.C. can be empirically demonstrated and theoretically explained. And even if such a rising tendency could be demonstrated, it would still have to be shown that the magnitude of the rise that would have occurred without the existence of a substantial Department III to check it, would have been sufficient to cause a serious decline of profitability for capital. Suppose, for instance, that with a permanently higher rate of accumulation and a correspondingly smaller Department III, the O.C.C. in Departments I and II would have risen by, say 5% a decade instead of 4% at a lower rate of accumulation. By the end of a century, assuming a constant rate of exploitation, the relative expansion of Department III would have caused an initial rate of profit of, say 20% to decline to only 13.5 (approximately) instead of to 12.3%. Hardly an impact of world historical significance!

Of course, the above numerical example is purely illustrative and it might be objected that since arms spending has at times drawn off half the investible surplus, the difference between the rates of growth of the O.C.C. in Departments I and II with and without arms spending would in reality be appreciable. If we assume that the O.C.C. of marginal capital outlays is higher than the prevailing average it necessarily follows that a lower rate of accumulation will result in a lower increase in the O.C.C. over a given period of time. But this raises the second of the two crucial assumptions noted earlier, namely the connection between the rate of accumulation and the movement of the O.C.C. To assume that the marginal O.C.C. is greater than the average simply begs the question. Since there is no a priori reason to suppose that technical change embodied in new investment will raise the O.C.C. there is no reason to posit any particular connection between the rate at which new investment in productive facilities is being carried out and the movement of the O.C.C. Thus the fact that the rate of profit is independent of the O.C.C. in Department III tells us nothing about the direction and rate of change of the rate of profit if the rate of accumulation is reduced below what it would otherwise have been by a relative expansion of Department III.

Furthermore, suppose that the effects alleged to flow from the expansion of Department III actually occurred. Suppose that in response perhaps to international and domestic political pressure the state reduced its spending on defence (relative to the other components of national spending) simultaneously replacing it with an amount of productive civilian expenditure sufficient to maintain the same level of employment as before. In these circumstances we should expect to find a sudden sharp dip in the rate of profit, other things being equal, notably the rate of exploitation. Now the biggest single cutback in defence spending occurred, of course, just after the Second World War. The defence bill in the U.K., for instance, fell from around 40% of total spending to about 10%. Yet there were no signs of any sharp fall in the rate of profit during the late 1940s and early 50s, nor any evidence that any decline which might have occurred was offset by a rise in the rate of exploitation. It is, of course, possible that the transition from a wartime to a peacetime economy was accompanied by an increase in the proportion of non-defence unproductive expenditures (whatever these might be; perhaps some parts of spending on health, education and welfare would qualify for inclusion in the category "unproductive expenditure" on the criterion here being used, though how large a part is uncertain since it seems reasonable to include some items of collective provision amongst the elements of variable capital). But the arms economy theorists have given no indication that this happened, and in any case the thesis would then become a thesis about unproductive expenditures in general, not about arms spending in particular.

Perhaps the immediate post-war period was exceptional. What of defence cutbacks in subsequent periods? In the U.K. government military spending fell from over 12% of G.N.P. in 1952 to around 7% in 1960 and declined more gently from that level through the 1960s to reach about 5½% by the end of the decade. The series for the rate of profit on the net assets of quoted companies in the U.K. estimated by Glyn and Sutcliffe[13] shows a very gentle decline over the 1950s (from 15.6% to 14.9% before tax and excluding stock appreciation) followed by a sharp drop in the 1960s (from 14.9% to 9.7%), the decline being particularly marked after 1964. Prima facie this is completely contrary to what one would have expected according to the theory under investigation. Admittedly this is a very crude test. It is clearly unsatisfactory to treat the U.K. economy in isolation. It is very doubtful, however, whether the arms economy thesis would fare much better if we had reliable data for the rate of profit in all the major capitalist countries, which could be compared with changes in the relative size of the defence sector. In all the advanced capitalist countries defence spending was a substantially smaller fraction of total output by the end of the 1960s than in the early 50s. "Taken together, the O.E.C.D. countries' defence expenditure tool 10.2% of G.N.P. in 1952-53 at the height of the post-Korean War re-armament; while at the next peak, in 1967, the proportion was only 6.5% In 1968 the fall in defence expenditure elsewhere more than offset the further rise in the U.S."[14] Any reduction in profitability, and with it private accumulation, which occurred over this period occurred in the 1960s, especially towards the end of the decade by which time most of the cutback in defence spending had already been long accomplished.

This limited empirical evidence cannot be decisive on its own. Taken in conjunction with the previous analytical criticisms, however, it does seem to undermine the theory's chief theoretical foundation.

Deprived of any support from the "law" of the falling rate of profit the arms economy theory becomes in effect another species of underconsumption theory. In this version, the leading exponents of which are Baran and Sweezy, the state has to intervene in the economy on a massive scale in order to offset capitalism's secular tendency to stagnation arising from the disproportion between the growth of the productive forces and the limited consuming power of the masses. The form of this intervention is said to be determined on the one hand by the need to protect the imperialist system against movements of national liberation in the Third World and against the rival socioeconomic systems of the Soviet bloc, and on the other hand by the ideological and political resistance of the beougeoisie in the imperialist countries to any substantial extension of productive public enterprise or of welfare spending. Thus Baran and Sweezy[15] pose the question why the public spending programmes initiated under the New Deal failed "to attain what the war proved to be within easy reach?" They reply that "what was wrong with the government spending of the '30s was not its direction but its magnitude: there was just not enough of it to come anywhere offsetting the powerful depressive forces at work in the private sector of the economy". And why was there not enough government spending? Because "given the power structure of United States monopoly capitalism the increase of civilian spending had reached its outer limits by 1939. The forces opposing further expansion were too strong to be overcome". By contrast the American ruling class are argued to have no vested interest in opposing and every reason for encouraging the expansion of Federal military spending.

It is certainly true that capitalist imperialism requires the maintenance of huge military machines, and the development of nuclear weapons and sophisticated warfare technology necessitates vast outlays of public funds. To this extent the question sometimes asked by academic economists as to what would happen if "peace broke out", is, precisely, academic. In the age of imperialism there can be no serious question of totally converting swords into ploughshares. It does not at all follow, however, that any partial cutback in defence spending would lead automatically to a more or less erious recession. It is simply not the case that alternative forms of public spending have not and could not in the future be used to replace some part of a reduced defence budget. Even in the U.S.A., the bastion of laisser-faire and the slowest of all capitalist countries to espouse Keynesianism and the techniques and ideology of capitalist planning, government purchase of goods and services rose as a proportion of G.N.P. from 18.6% in 1955 to 22.6% in 1970.[16] Over this period defence spending fell from 10.2% of G.N.P. to 8.3% (7.5% in 1971). At the same time "Social Welfare Expenditures under Public Programs" (covering social insurance, public aid, health and medical programmes, veterans' programmes, education, housing and other social welfare) rose from 8.6% to 15%, accounting by 1970 for almost half of government expenditures for all purposes. The economic expansion initiated under the Kennedy and Johnson Administrations after the doldrums of the 1950s had little to do with defence spending. Between the end of 1960 and the middle of 1965 increased defence expenditure comprised less than 10% of the total "expansionary actions" of the U.S. Government.[17] True, government spending associated with the Vietnam war assumed great importance in the next three years and temporarily reversed the declining share of defence spending. But by this time private accumulation had recovered momentum and all the evidence suggests that this additional government boost to demand seriously over-stretched the American economy and caused heavy inflationary strains.

Nor should it be imagined that defence cutbacks necessarily lead to widespread transitional disturbances even when they are compensated by simultaneous increases in other forms of spending. One recent study used input-output techniques to investigate the economic effects - industrial and regional - of a 20% cut in arms spending assumed to be compensated by a uniform percentage increase in all components of non-military final demand sufficient to maintain aggregate employment unchanged in all sectors taken together.[18] Not surprisingly the results showed that the impact of such a switch, measured by the percentage changes in output and employment estimated to result from it, would fall especially heavily on a small group of highly specialized industries (aircraft, ordnance, research and development, electronics equipment, non-ferrous metals) and on a small number of regions in which these industries are particularly concentrated (California, Colorado/New Mexico, Arizona/Nevada/Utah, Maryland/Virginia/Delaware/West Virginia/Washington D.C.). In the worst hit of these regions (California and Colorado/New Mexico) the total number of wage and salary earners who would be displaced from employment and would have to find alternative work (some of them in the jobs created by the compensating increase in non-military demand) amounted to 2.3% and 2.1% of their respective totals. These are hardly major disturbances though they might lead to the sort of intractable pockets of depression and unemployment in particular industries or areas that have become the normal accompaniment of economic structural change under capitalism. But such an outcome would be a far cry from the catastrophic slump predicted by the underconsumption theorists.

The underconsumption version of the arms economy theory suffers from a basic lack of historical perspective. Attention is focussed on the function of arms spending within an ongoing capitalist economy. The historical genesis of the arms economy is ignored. Thus Kidron[19] argues that arms spending was never consciously designed as a means of achieving and maintaining full employment, but was, as it were, stumbled on accidentally. The whole analysis is then conducted in terms of the putative effects of a given commitment by the state to high military outlays. The origins of this commitment and its continual recreation and modification by the unfolding interaction of state and class forces on a global scale are neglected. This cannot be justified as a logical-historical abstraction. The arms race is a historically specific feature of a particular stage of capitalist development. To confine analysis to an account of its functional role in modern capitalism is to fall into one of the basic methodological faults of bourgeois social science: the complete failure to understand the present as history. The high post-war levels of defence spending have been sustained in the context of the collapse of the war-time alliance with the U.S.S.R. and the emergence of the Cold War. The fact that capitalist states devote enormous quantities of resources to defence is inseparably connected with the antagonism between the capitalist and the Soviet socio-economic systems. The irreconcilable contradiction between these two modes of production stems from two fundamental features of the Soviet system which have so far persisted despite all the distortions introduced by the Soviet bureaucracy: first, the Soviet system still bears the faint imprint of the working class revolution which gave it birth; second, the abolition of the private ownership of the means of production throughout the greater part of the Soviet economy builds the principle of economic planning and rational social control into the basic structure of Soviet society. The actual practice of the party bureaucracy and the state planners is, of course, far from reflecting any real collective choice rationally and democratically decided. The political regimes of the Soviet bloc states contain contradictions of their own. But this merely shows that the abolition of private capital is only a necessary, and not also a sufficient condition for socialism. It remains necessary, as the bourgeoisie at least, is well aware.

Thus arms expenditure cannot simply be represented as functional hole-filling. The capitalist states must maintain a high level of military preparedness in order to contain the revolutionary forces unleashed by October 1917. This is not to argue that every dollar spent on defence is part of the necessary costs of containment. The phenomenon of what the Americans call "boondoggling" is rife. The anti-communist rationale for the defence makes the arms budget highly (though not infinitely) elastic. The specialized nature of much military hardware, the extra-market character of government defence contracts, the political influence of the "military-industrial complex", and the fanatical secrecy in which the whole arms business is shrouded, combine to make the arms industry a veritable nest of state patronage. (Though it is evidently not a universal solvent as the recent difficulties of Rolls-Royce and the Lockheed Company testify). Acting against these forces are the various political and economic pressures attendant upon the sheer waste involved in the arms race and its more recent outgrowth, the space race. Environmental pollution, urban decay and above all the social pollution of continued widespread poverty form a visible and increasingly vocalized challenge to capitalist priorities. Rampant inflation, intensified competition for world markets and dwindling confidence in the dollar as an international medium of exchange force a further rethinking of government policy towards the allocation of resources. Internationally these pressures express themselves in pressure from the U.S. government on the other Western powers to assume a "fairer" (greater) share of the burden of defending "democracy", in withdrawal from Vietnam and the pursuit of de-escalation and accommodation with the Soviet bloc, and in diplomatic manoeuvering to consolidate and widen the Sino-Soviet split. The exact size of the defence budget is a variable even though its existence is not.

IV AN ALTERNATIVE ACCOUNT OF POST-WAR CAPITALISM

The theory of the permanent arms economy has been shown to rest on an invalid argument concerning the rate of profit, without which the theory becomes a theory of underconsumption subject to the charges that it fails to square with capitalist reality and lacks historical perspective. The essential problem remains to provide an alternative account of the prolonged post-war capitalist expansion which also explains the current faltering of this expansion and the obvious and growing signs of crisis. It is to this task that we now turn.

There have been two recurrent themes in the arguments so far criticized. The first is the idea that the objective development of the capitalist mode of production leads, or would lead, if unchecked, to some kind of economic breakdown, whether because of a decline in accumulation owing to an inevitable fall in the rate of profit, or because of an inbuilt tendency for the growth of the productive forces to outstrip the growth of effective demand. The second and related theme is that this objective development is checked, though not completely eliminated, by state action, which however is constrained within very narrow limits by the objective requirements of the capitalist mode of production and the structure of power in bourgeois society. The alternative view which is about to be expounded departs from, or more accurately, re-interprets these two ideas in a way which is more consonant with the reality of modern capitalism. The segregation of economics and politics, between objective and subjective factors, implicit in the simple breakdown theme, is abandoned in favour of an integrated approach which fuses political and economic analysis and transcends the subjective-objective dichotomy. The view of the capitalist state as a passive instrument in the hands of the bourgeoisie is dismissed in favour of a more active and autonomous model of the state.

State expenditure on armaments is merely one aspect of the generalized expansion of the state's politico-economic role which has occurred during the twentieth century, an expansion which is inseparably connected both as cause and effect with the development of capitalist imperialism and the intensification of inter-imperialist rivalries. It is the huge politico-economic weight of the modern capitalist state which makes the epithet "state monopoly capitalism" the most appropriate shorthand description of the present stage of capitalist development. The greatest upsurge in the state's economic involvement occurred during the two world wars, particularly in the Second and its immediate aftermath, which marked a watershed in the history of capitalism. Three decisive changes dominated the political and economic conjuncture at the end of the war. First, the older European powers were seriously weakened both economically and in terms of political stability by the pre-war Depression, the ravages of fascism and the devastation of the war itself. The United States now emerged unambiguously as the world's leading capitalist power and for almost two decades after the war enjoyed a super imperialist position. But this very disparity between the U.S.A. and Europe compelled the U.S. state to assume responsibility for restoring the viability of European capitalism, and more generally to place its powerful resources in the vanguard of the fight to make the world safe again for capitalism. By means of the Marshall Aid Plan, the establishment of NATO and general political manoeuvring the United States helped to resuscitate the European bourgeoisie in reconstructing capitalist social relations. Second, the U.S.S.R. under the Five Year Plans had become an industrialized country, although its economic development had been cruelly retarded by the war and it was still far from being able to match the West in its economic attainments. The emergence of the Soviet Union as a leading industrial and military power together with the eventual "loss" to capitalism of Eastern Europe and China and the growth of movements of national independence in the colonial world, posed a clear challenge to the capitalist system. Not only had the global sway of capitalist relations been pushed back, with many sections of the new "shrunken frontier" still in dispute and requiring the commitment of resources for their defence which could ill be spared and might endanger domestic political stability; but also the ruling classes of the advanced capitalist states could not afford to allow any relapse into another episode of mass unemployment and internecine trade warfare for fear of unfavourable comparison with the planned economies of the Soviet bloc.

Third, except in the states defeated during the war (Germany, Italy and Japan) where the labour movement had been completely smashed, the domestic balance of class power within each capitalist state had shifted against the bourgeoisie. On the one hand, the bourgeoisie had been badly shaken and demoralized by the experience of Depression, fascism and war. In the eyes of large sections of society their erstwhile social superiors had discredited themselves. On the other hand, the working class had experienced wartime full employment and a substantial degree of economic regulation by the state. It now knew by direct experience that economic depression was not a natural, unavoidable phenomenon. At the same time the ruling class had been compelled to extend an official embrace to workers and their organizations in order to secure their co-operation with the war effort. The working class was unlikely to accept any return to the bad old days, at least without a fight, a fight which might put the capitalist order itself in jeopardy.

The three elements of this conjuncture mutually re-inforced each other in pushing the ruling class towards an implicit political commitment to use the powers of the state for far more radical interventions in the economy than they had ever envisaged previously. The principal components of this commitment were the willingness to use, if necessary, the new Keynesian techniques of economic management in order to prevent any prolonged lapse from full employment, the establishment of at least a minimal apparatus for economic planning, and the extension of public ownership or regulation into sectors which could not be run profitably in private hands but which were nevertheless vital for servicing the requirements of the private sector. The precise form, degree and timing of state interventions has varied between capitalist states in a way that does not concern us here.[20] Nor is it suggested that state intervention followed a fully conscious and coherent strategy of the ruling class for the long run preservation of its rule. At times the state has acted against the immediately perceived interests of capital and throughout the post-war period there have been important divisions within each national bourgeoisie over basic questions of political and economic strategy, which would have to be taken into account in any concrete analysis of capitalism's post-war evolution. The important point is that the forces described previously have led to a qualitative change in the politico-economic role of the state. It is this major structural shift in the capitalist system that lies at the root of the post-war expansion.

Knowledge that the state would, if necessary, intervene to maintain the level of aggregate demand and would in other ways act to stabilize the economy has been an important parameter of private capital's decisions. Business confidence has been sustained and high rates of investment stimulated. This in turn has rendered unnecessary the actual performance of the state's rescue function. Indeed, for much of the time the state's problem has been one of containing demand and coping with the inflationary consequences of permanent full employment. The state, in short, has acted as a safety net for private capital.

Shorn of its general grounding in Marxizm much of this account so far could be happily accepted by bourgeois economists, or at any rate their Keynesian wing. Where it parts company with them is in denying the neutrality of the state and in denying that the state's possession of the knowledge, resources, techniques and political will to maintain full employment has in any way overcome the contradictory and historically limited character of the capitalist system. It is also important to be clear that the view outlined above does not imply that the system has in fact been stabilized and that there will literally never be any departure from the full employment zone. In the first place, despite, and sometimes because of, state intervention, the business cycle (measured in terms of output fluctuations) has continued to occur in the post-war period. What <u>has</u> changed is the systems' vulnerability to cyclical fluctuations. Although the <u>amplitude</u> of output fluctuations measured from the peak to the trough of the cycle has not diminished greatly compared with the classical days of the trade cycle before the First World War, the <u>period</u> of the cycle has been much shorter on average, and, of course, the cycles have been fluctuations around a rapidly rising trend. Moreover, the fluctuations in employment have been far less marked than the oscillations in output. During periods of slack demand employers have frequently "hoarded" labour, especially skilled labour, in order to ease their manpower problems as labour markets tightened during the next upswing. Thus although recessions have continued to punctuate the system's expansion, they have been generally short-lived and have not developed into major slumps with calamitous drops in output and employment. These facts are consistent with the view that the state has set the floor to unemployment. Several factors have contributed to the achievement of stabilization in this sense. In many countries the state controls a large proportion of total investment through nationalized undertakings and state holding companies, which has helped to reduce the instability of this traditionally volatile component of demand. In addition the boom has been semi-institutionalized in the private sector through a lowering of the time horizon over which fixed capital equipment has been expected to pay off its initial costs. This has been due to the rapid rates of obsolescence induced by the pace of technical progress, itself a product of buoyant business expectations. At the same time large corporations able to withstand short run setbacks through diversification of their interests and the sheer size of the finance at their command, have tended to adopt longer planning horizons and have been reluctant to curtail their long term investment programmes when demand conditions have been temporarily unfavourable.

In the second place, the ruling class's commitment to full employment has been by no means absolute and unqualified. The maintenance of more or less permanent full employment has given rise to new contradictions, to be analyzed below, and in its efforts to cope with these the ruling class may opt to modify its initial commitment, not necessarily in a carefully calculated way, but rather as the outcome of conflicting tendencies and ideas within the ruling class over political and economic strategy. In the U.K., for example, the corollary of the view that the peristence of full employment for two decades following the Second World War reflected a basic political option on the part of the ruling class in the context of the changed international and domestic balance of class forces prevailing after the war, is that the recent relatively high rates of unemployment in the U.K. also reflect a political option in a new set of circumstances. The severe deflationary measures carried through by the Labour Government from 1966 to 1968 in response to a chronic overseas payments crisis resulted in low rates of capacity utilization and a squeeze on profitability. The consequent jolt to business confidence led to a general "shake out" of labour and a marked curtailment of private investment. As the boost to profit margins and exports which had been anticipated from the 1967 devaluation became dampened by the wages explosion and acceleration in the rate of inflation which began in 1969, the economy continued to stagnate and the unemployment rate crept steadily upwards. Caught in the middle of this process the new Tory Government at first acquiesced in its predecessor's deflationary policies and later deliberately limited its expansionary actions in order to keep unemployment at a sufficiently high level to strengthen its own and the employers' position on the wages front. Control over inflation had become the sine qua non of a resumption of private accumulation. By the time of its negotiations with the T.U.C. over a voluntary tripartite prices and incomes policy, the Government was explicitly making a reduction in the unemployment rate conditional upon success in curbing inflation. Moreover, even if the present freeze does succeed in bringing down the rate of inflation and working class resistance is defeated, it seems probable that the economy will be run at a higher average level of unemployment than in the 50s and 60s.

The post-war boom has shifted capitalist contradictions on to a new plane. The account which follows draws heavily on British experience, but it is contended that similar trends have been at work in the other major capitalist countries in varying degrees, and that in some ways British capitalism may be regarded as an ideal type for the present purpose. A full comprehension of the contemporary world would require a specification of the exact stage of maturity of the contradictions of state monopoly capitalism in each country and an analysis of their interaction at the international level. This is beyond the scope of this essay and the writer's knowledge.

Persistent full employment has tilted the balance of power between capital and labour. Previously the process of labour-saving innovation and the periodic recurrence of mass unemployment had served both to check any upward movement in money wages and to strengthen the employers' degree of control in the process of production. With the advent of state-backed full employment it was labour power rather than jobs which became scarce. Labour's bargaining power, its ability to secure gains or avert losses by inflicting or threatening to inflict costs on the employers through a disruption of production, was immeasurably strengthened as compared with the Depression era and except for a minority of unskilled and badly organized workers. At the same time as enhancing labour's ability to struggle for improvements full employment and the associated economic expansion gradually wrought a revolution in the working class's expectations and aspirations with regard to both the material and non-material aspects of living standards. On the shop floor the growth of the shop stewards movement and the development of workplace bargaining have been both a cause and consequence of a drive, at first unconscious and implicit but later increasingly conscious and explicit, to wrest control from the hands of management. More generally the experience of annual improvements in real wages after nearly half a century prior to the Second World War when the average pattern of working class life had remained virtually unchanged,[21] has given rise to a generalized expectation that similar improvements would (and ought to) continue to accrue in the future. In addition the general increase in all the major capitalist countries during the 1960s in the proportion of national resources devoted to items of collective provision may be indicative of pressures arising from an extension of aspirations beyond the confines of personal real incomes. In Marxist terms money wages have been released from their former subjection to the continual re-creation of the reserve army of unemployed. Real wages have advanced and the moral and historical component of the value of labour power has undergone a continual extension. Recent experience, moreover, suggests that this process has been irreversible at least in the short to medium run. High rates of unemployment in the U.K. (by post-war standards) have not induced any downward adjustment of aspirations. Instead, any check to the growth of earnings and the unaccustomed experience of job insecurity have sharpened the working class's determination to realize its frustrated expectations. The process has also had important demonstration effects. Comparison with the gains made by the most advanced sections of the working class have drawn hitherto quiescent sections into effective trade union organization and militant action, whilst the erosion of traditional white collar pay and status differentials has precipitated these groups too into unprecedented industrial struggle.

This enhancement of labour's will and ability to fight has presented capital with its most compelling problem: how to preserve full employment and economic expansion whilst simultaneously re-imposing the labour discipline formerly periodically provided by the dole queue. In its attempts to cope with this contradiction the British ruling class has groped its way through stop-go-stop, incomes policies of various types and degrees of stringency, the "reform" of trade unions, the recasting of workplace relations so as to restore managerial ascendancy, the dissemination of productivity bargaining with the same objective, and more recently the Industrial Relations Act, the maintenance of a permanently higher level of unemployment and a return to a prices and incomes policy. At the same time as pursuing these economic policies the ruling class has sedulously attempted to engineer a broad social consensus not simply through ideological exhortations and propaganda but also by political and structural moves to integrate the trade union leadership into the apparatus of bourgeois rule. Similar developments have occurred elsewhere, though with differing emphases dependent on the state of the national economy, the strength of the trade union movement and the general level of political consciousness amongst the working class.

The force with which the contradictions between full employment and the need to re-impose labour discipline has made itself felt has depended on the degree to which working class aspirations have been accommodated. The room for manoeuvre available to each national ruling class at any point in time in the ongoing struggle over the distribution of the social product depends on a variety of contingent factors. Pressure to restrict money and real wage increases may arise when the particular circumstances of the national economy are judged to require a shift of resources into investment or into exports or into the state sector. At the most general level, however, the principal determinant of each state's capacity to meet working class aspirations without encroaching on such other claims on resources has been the long term rate of growth of productivity. (This itself, of course, is not independent of the balance of class forces inasmuch as one of the determinants of productivity growth is the ability of the working class to resist measures of modernization, rationalization, speed up etc. pursued by the employers at its expense). With productivity rising regularly at a high rate money and real wages can increase without this causing either an erosion of profit margins or a rate of price inflation which in the context of an increasingly integrated and unrestricted international market would have adverse repercussions on domestic capital's international competitiveness and on the balance of payments. Not that high rates of productivity growth can provide a permanent social lubricant for capitalism. Apart from the point noted above that productivity growth depends amongst other things on the state of the class struggle, there is in principle no reason why a gap between workers' aspirations and the possibility of meeting them without detracting from the claims of capital and the state should not emerge at any rate of growth of productivity. What does seem clear, however, is that where, as in Britain, productivity has grown relatively slowly, labour's drive, built on the foundations of full employment but now relatively autonomous, to realize the aspirations which the post-war development of the capitalist system has helped to generate, has rendered the ruling class's search for a disciplinary substitute for mass unemployment particularly acute.

This is not the place to investigate the laggardly performance of British capitalism over the post-war period in its historical and political perspective. The chief elements of such an analysis are coming to be accepted as common ground on the left. The backwardness and long term competitive weakness of British industry, inherited from the pre-war and even nineteenth century eras, the relative (defensive) strength of the organized working class, the anachronistic attempt to maintain an imperial posture in the shadow of the United States when the economic base could no longer support such policies, have combined to produce the familiar vicious circle running through slow productivity growth, competitive weakness, low profitability and lagging investment. Superimposed on this pattern over the last few years has been the eruption of working class militancy and of more offensive trade union demands and tactics, which have been transforming the class struggle from the "normal" war of manoeuvre into an overt battle for survival.

V SOME OBJECTIONS AND A CONCLUSION

There seem to be four main objections to the theses outlined above. First, the weight attached to state intervention seems to imply that policy and politics determine the course of the economy. But is it not the case that the anarchy of the capitalist system at the international level drastically foreshortens the options open to each national ruling class? It is certainly true that no capitalist state can act independently of events in the rest of the world. It does not follow, however, that no capitalist state is autonomous with respect to policy. For example, with respect to the single objective of preserving full employment there is no reason in principle why on average state policy should not be successful. Naturally because of the repercussions of full employment on the domestic balance of class forces and the further effects which these changes may have on the rate of inflation, international competitiveness and profitability, such success may be bought only at the price of sharpening the contradictions which have replaced what was formerly capitalism's most glaring contradiction - the periodic co-existence of poverty through mass unemployment with the wealth of the productive forces. It is a complete vulgarization of the Marxist theory of the state to regard the state's actions as the passive responses to the needs of the moment thrown up by the onward march of the system. The state is an active force in modern capitalism; its interventions, the outcome of conflict and debate between rival tendencies and the interests within the ruling class, profoundly affect the system's movement, though they do not and cannot fix all aspects of the system's evolution without remainder.

Second, it may be argued that the state's actions have frequently been counterproductive. Demand has been trimmed at times when the economy was already on the downswing, or boosted when an upswing was in progress. How, then, can it be argued that state policy has been primarily responsible for the post-war expansion and the system's reduced vulnerability to cyclical fluctuations? It is perfectly true that economic "fine-tuning" has not been notoriously successful. This does not mean that the state has not been able to check a downturn in economic activity and prevent it from escalating into a severe slump, when it has become obvious that such a downturn has in fact occurred, even if the downturn was itself the result of an earlier error in state economic policy. The view that state policy has been irrelevant leads logically to the conclusion that if the system were clearly heading for a major economic catastrophe the ruling class and its state would be paralyzed and unable to act. Now a conjuncture can be imagined in which this might happen. But whether it would happen is contingent and not predetermined. Only by an analysis of concrete conditions could one determine the likelihood of paralysis. One of the key variables in such a situation would be the level of political consciousness and revolutionary determination of the working class itself.

Third, it might be asked why, if the ruling class has for a considerable period opted to preserve full employment, was the Depression ever allowed to happen? A full answer to this question would involve a complete analysis of the causes of the Depression. Part of the answer lies in the realms of ideology. It is true, as Keynes argued, that the leading economic policy makers of the inter-war period were the slaves of defunct economic theories which did not admit within their scheme of things even the possibility of permanent unemployment and hence the possibility and desirability of corrective state action. This is not to argue that the Great Depression was caused by bad economic theory. What we are endeavouring to explain is the contrast between the state's role in the post-war period and its role in the 20s and 30s. Fundamentally the question posed above is based on a false presupposition - namely, that historical interpretations can always be transposed between different historical periods. The historical process is irreversible. Part of the case argued here has been that the ruling class's post-war commitment to full employment was itself promised on the anterior experience of the Depression and the shifts in the international and domestic balance of class forces which were accomplished at the end of the war. In the 20s and 30s a different historical situation existed.

Finally it might be argued that the views expounded here are overly idealist and voluntarist. They are certainly incompatible with any rigid economic determinism or with any breakdown theories of economic development. In the last analysis there is no purely economic crisis from which the ruling class cannot by one means or another extricate itself. In fact it is probably more accurate to say that there are no purely economic crises. The categories "objective" and "subjective", "materialist" and "idealist" have been greatly misused by Marxists in a way which probably derives from the confinement of Marxist political economy until comparatively recently to a model of capitalism more appropriate to an earlier epoch of its history when the "sponteneity" of capitalist development was one of its most obvious features. Not that the use of these dichotomies was any more valid for that epoch either. The laisser-faire model of the capitalist state, for example, was largely a peculiarity of Anglo-Saxon development. Once the power of the state had been utilized to help consolidate and strengthen capitalist social relations, the "workshop of the world" required little state intervention to support its activities. It was precisely in the last quarter of the nineteenth century when Britain's early monopoly of world trade began to be challenged that the doctrine of laisser-faire began to dissolve under the pressure of demands for increased state involvement in the economy. Moreover, it should be obvious from what has been said that state monopoly capitalism fuses politics and economics into a dynamic totality. Marxists have often observed that in various respects mature capitalism foreshadows in a distorted form the socialist future. Under socialism the economy will be guided by conscious political direction. This element of conscious control is already present in a partial and reactionary form in state monopoly capitalism. The accusation of voluntarism fails, therefore, to take into account the real developmental tendencies of the capitalist system itself.

One general implication of the framework outlined above stands out clearly. Any adequate theoretical comprehension of post-war capitalism must explicitly integrate political and economic analyses of social reality. It is impossible to understand the main tendencies of development of state monopoly capitalism without suffusing economic theory with a full appreciation of the political balance of forces both within and between the main class protagonists. The view of the capitalist economy as an automation grinding out its crisis-ridden path towards self-destruction must be finally laid to rest. It is not an inexorable rise in the organic composition of capital that makes capitalism a historically limited system. The constant and complex interaction of economic and political forces is a central feature of mature capitalism. The contradictions to which this interaction gives rise drives the bourgeoisie with the state in the vanguard to undertake a generalized offensive on all fronts against the working class, aimed not just at its living standards but at its organization, self-confidence and capacity for independent action. The form taken by this assault varies with the political and economic conjuncture. Sometimes it may involve the politics of open confrontation. Usually it involves the more subdued, subtle and protracted politics of containment by integration, the normal strategy of the British ruling class in the twentieth century. There can be no guarantee that the bourgeoisie will not succeed. What is certain is that in order to subdue the aspirations and progressive forces which the development of its system has called forth, to preside securely over the arena in which the class antagonists pursue their contradictory goals, the bourgeoisie must resort to mounting repression and anti-democratic forms of rule. It is the prospect of this modern barbarism which sets the limit to the capitalist mode of production.

REFERENCES

1. Michael Kidron, Western Capitalism Since the War (Penguin, 1970), p. 54.

2. Paul A. Baran and Paul Sweezy, Monopoly Capital (Monthly Review Press, N.Y., 1966); and Paul A. Baran, The Political Economy of Growth, (Monthly Review Press, N.Y., 1962).

3. Michael Kidron, Capitalism - the Latest Stage in World Crisis ed. Nigel Harris and John Palmer (Hutchinson, 1971), p. 211.

4. Ladislaus von Bortkeiwicz, On the Correction of Marx's Fundamental Theoretical Construction in the Third Volume of Capital, Appendix, Sweezy Edition, Karl Marx and the Close of his System, by E. von Boehm-Bawerk etc. (N.Y., 1949).

5. Piero Sraffa, The Production of Commodities by Means of Commodities, (Cambridge, 1963).

6. David Yaffe, The Marxian Theory of Crisis, Capital and the State, Bulletin of the Conference of Socialist Economists, Winter 1972, p. 52.

7. Karl Marx, Capital Volume III Chapter 9, Formation of a General Rate of Profit and Transformation of the Values of Commodities into Prices of Production.

8. Alfredo Medio, Profits and Surplus Value: Appearance and Reality in Capitalist Production in A Critique of Economic Theory, (Penquin Modern Economics Readings, 1972), edited by E. K. Hunt and Jesse G. Schwartz.

9. Ian Steedman, Marx on the Rate of Profit, Bulletin of the Conference of Socialist Economists, Winter 1972.

10. Karl Marx, Capital Volume III (Progress Publishers, Moscow, 1971) pp. 167-8.

11. Karl Marx, Capital Volume III Chapter 4, The Effect of Turnover on the Rate of Profit, (N.B. This chapter was inserted by Engels, but a careful reading of Volume III shows it to be entirely consistent with Marx's formulation).

12. Joseph K. Gillman, The Falling Rate of Profit (Dobson, London 1957), especially Chapters 4 and 5.

13. Andrew Glyn and Bob Sutcliffe, British Capitalism, Workers and the Profits Squeeze, (Penguin Special, 1972), Appendix E Table E.1, p. 248.

14. Glyn and Sutcliffe, op. cit. p. 101.

15. Paul A. Baran and Paul Sweezy, Monopoly Capital, (Monthly Review Press, N.Y., 1966), Chapter 6.

16. These and subsequent statistics for the U.S. economy are taken from the Statistical Abstract of the U.S. 1971, U.S. Department of Commerce, Bureau of the Census.

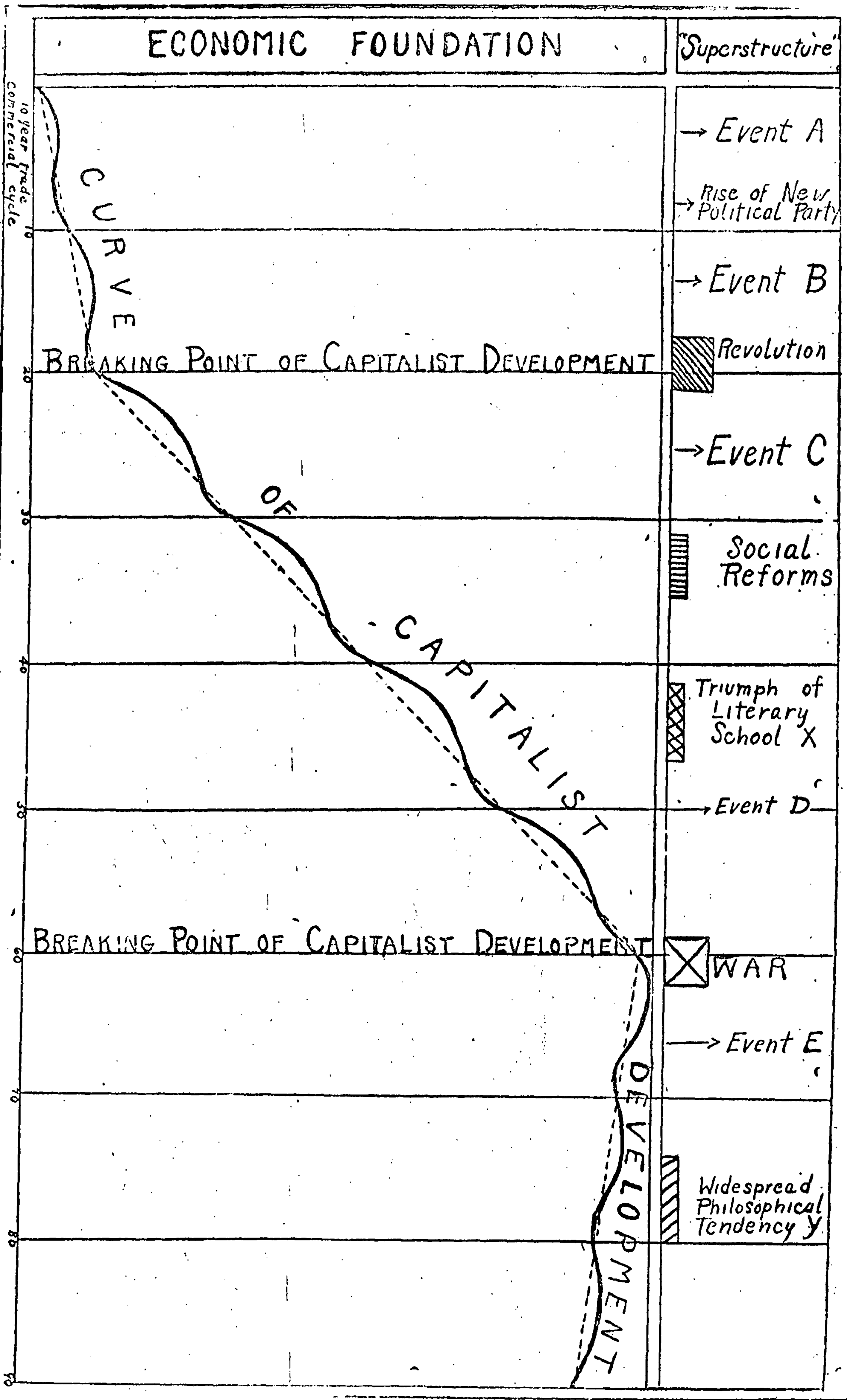
17. Report of the Council of Economic Advisors, 1969, Table 8.

18. Leontieff et al. The Economic Effect - Industrial and Regional - of an Arms Cut, Review of Economics and Statistics, Volume 47 no. 3, August 1965, pp. 217-241.

19. Michael Kidron, Western Capitalism Since the War, p. 57.

20. For an excellent discussion of these developments see Bill Warren, The State and Capitalist Planning, New Left Review No. 72, March-April 1972.

21. See E. J. Hobsbawm, Industry and Empire, (Pelican Economic History of Britain, Volume 3, 1971) pp. 162-4, p. 263 and pp. 281-4.



Base of the chart

THE CURVE OF CAPITALIST DEVELOPMENT

By Leon Trotsky

INTRODUCTORY NOTE BY

S. Zienan

Leon Trotsky's note on Kondratieff's "Long Cycle" hypothesis, reprinted below from the "Fourth International", May, 1941, was unearthed very many years ago, subsequent to a remark by the late Erwin Rothbart, and at a time when it still seemed mandatory for marxists to achieve a fully integrated history of capitalism. The first indication to Trotsky's note came to light in a paper by A. Herzstein, (cf. below) where it is discussed in conjunction with two further contributions by Trotsky to the same theme, one the wellknown report to the 3rd Congress of the Third International, the other a contribution to the collective volume "Mirovoe khoziastovo 1919-1925," Moscow 1926. The last item has not been traced and is not listed in Louis Sinclair's recent bibliography.

In those far-off days the "single factor" models of Bauer, Grossmann, Hilferding, Kalecki, Luxemburg and others dominated marxian thinking about capitalist development, crisis, stagnation and breakdown, strangely foreshadowing somewhat similar constructions which now constitute "growth economics". Such a narrow down of the political economy of capitalism neither delivers a convincing integration of theory and history, but worse is impotent face to face with the actual mode of capitalist production which constitutes a dynamic totality where any given variable can appear at one instant as partially dependent and at the next as partially independent. For a conception of capitalism, considered as an actually existing historic totality, in which "the interaction of <u>all</u> the basic "laws of motion" is seen as necessary to assure a given specific development" the Kondratieff hypothesis may be taken as a yardstick of the maturity of theory. What makes this concept so attractive a problematic for the marxist is of course precisely that Kondratieff's time series are primarily 'value' series-interest and price movements-so that one is a fortiori tempted to identify these secular movements as long cycles of over-and under-accumulation, in their turn occasioned by underlying secular changes in the profit rate which issue from the capitalist dynamic.

Marxist discussion of these matters have had a curious history, to say the least. In the years immediately preceding 1914, evident secular trends in prices, fixed interest rates and the price of gold occasioned long papers in the page of Kautsky's "Die Neue Zeit", by Parvus, Otto Bauer, Kautsky and Varga (1903-1914). Of these the most noteworthy are Parvus' and Varga's contributions, incidentally also in connection with monetary theory. J. van Gelderen is reputed to have written significantly (in Dutch) and S. de Wolff summed up these controversies in his contribution to the Kautsky-Festschrift in 1924 in a paper with the title "Periods of Prosperity and Depression" ("Derlebendige Marxismus", Jena, 1924), and receives some credit by Kondratieff as an independent originator of the long wave hypothesis. Kondratieff himself first broached the "long cycle" theory in 1922, somewhat diffidently, and later more boldly and extensively documented in 1925. This later paper was translated in the "Archiv f. Sozialwissenschaft u. Sozialpolitik", 56, (1926), 573-609 (A somewhat abbreviated English version is available in the Reviews of Economic Statistics, 17, (1935), 105-115, also in Readings in Business Cycle Theory, 1951). Through its German publication, Kondratieff gained very wide currency. Schumpeter became and remained his chief champion and integrated his own theory of entrepreneurial innovation into the "long cycle" framework. Kondratieff's paper is written from a highly empirical point of view and marred by an inability to distinguish economic from technological processes. Its appearance, and a somewhat later more elaborated version of the supposed mechanism of the "long cycle" (Voprosy Konjunktury, 4 (1928), 5-85, also abridged in Archiv f. Sozialw. u. Sozialpol., 60 (1928), 1-85) immediately occasioned violent controversies in the Russian literature. Of these a reasonable summary is available in George Garvey's long review and critical paper on "Kondratieff's theory of Long Cycles, Review of Economic Statistics, 25 (1943) 203-220, also Readings in Business Cycles and National Incomes, London 1953). This last work is recommended for all references to the Russian work of that period and also for a searching examination of Kondratieff's statistical evidence and methodology. One of the Russian papers, though, must be singled out, A. Gerzstein's "Do Long Waves in Economic Life exist?" (ref. 52 in Garvy). This can be read in German translation in Unter d. Banner d. Marxismus, 3 (1929) 92-127 and 298-315 (where the author figures as Herzstein). Both Herzstein and Garvy confront 'physical' and 'value' time series and dispute the validity of Kondratieff's separation of oscillatory behaviour from trend. This work may serve to inject an element of caution into the empirical basis of the "long cycle" phenomenon. What remains untouched by this and some other critiques is the existence of breaks in the general trend of capitalist accumulation, that is periods of relatively high and relatively low rates of growth, not necessarily strictly cyclical about a trend.

In common with Trotsky all the Soviet contributors to the Kondratieff debate, be they Mensheviks, Bolsheviks or non-party, argue strenuously for the exogenous character of the causation of the long swings in capitalist accumulation. In other words, whereas the normal cyclical development of accumulation is the well understood resultant of the internal dynamic of capitalism, it was asserted that the "the evolution of capitalism is determined by certain external factors. These factors must be looked upon as being, to a certain extent, accidental and independent of the internal rhythm of the capitalistic economy". While it may be conceded that the period of primary accumulation and the earlier phases of capitalism are subject to such factors, this remains a curiously passive approach which amounts to a declaration of resignation on the part of marxist theory in its endeavour to subsume the actual historical development of the capitalist world economy under its political economy. In his recent Tilbury address (1970), "History of Capitalism and Laws of Motion of Capitalism", E. Mandel has argued vigorously on behalf of the "unitary" theory of history and economics in the capitalist era. Mandel appears to accept the reality of Kondratieff long cycles, seen tout court as over and under-accumulation waves and by implication at least controverts Trotsky's views. It is a major merit of this paper to have reopened the question of the dynamic of the long swings of capitalist economic activity, a question which ought to be central for marxist economic theory. - S. ZEINAN

****

In his introduction to Marx's The Class Struggle in France Engels wrote:

"In judging events and groups of events in modern history one can never arrive at the <u>ultimate</u> economic causes. Even at the present time when highly specialized literature provides us with such rich stores of material, it is impossible even in England to follow from day to day either the trend of industry and trade on the world market, or all the changes which take place in methods of production - it is impossible to follow them in order to be able at any given moment to draw a general balance of these multiplex, interlacing and constantly changing factors. Moreover, the most important of these factors operate by and large in a masked form for a long period of time, until they finally manifest themselves suddenly and potently. No clear picture of the economic history of a given period can be obtained until this period itself has reached its completion. The picture is obtained only later on, <u>post factum</u>, after the material has already been collected and sifted. Statistics, constitute here an indispensable auxiliary vehicle, but statistics always lag behind. In consequence, it is only too often necessary in the case of current, modern history to approach that factor which is of most decisive importance as if it were a constant; to view the economic situation, as it initially unfolds in the period under investigation as if it were constant and immutable throughout the entire period; and, on the other hand, of necessity to center attention only on such changes in the economic situation as arise from clear and indisputable events - and which therefore are themselves as clear and indisputable as the very events. The materialistic method is therefore only too often compelled to confine itself to reducing political conflicts to the clash between the interests of those classes in society and those factions within the classes which are already given at the outset of the investigation and which have already been created by economic development; and to regard the various political parties as a more or less adequate expression of their respective classes and factions. It is self evident <u>how great a source of error is constituted by unavoidably ignoring the simultaneously occurring changes in the economic situation, this true basis of all the events under investigation</u>." (Our emphasis).

These ideas which Engels formulated shortly before his death were not further developed by anyone after him. To my recollection they are even rarely quoted - much more rarely than they should be. Still more, their meaning seems to have escaped many Marxists. The explanation for this fact is once again to be found in the causes indicated by Engels which militate against any kind of finished economic interpretation of <u>current</u> history.

It is a very difficult task, impossible to solve in its full scope, to determine those subterranean impulses which economics transmits to the politics of today; and yet the explanation of political phenomena cannot be postponed because the struggle cannot wait. Hence flows the necessity of resorting in daily political activity to explanations which are so general that through long usage they become transformed into truisms.

As long as politics keeps flowing in one and the same forms, within one and the same banks, and at about one and the same speed, i.e., as long as the accumulation of economic quantity has not passed into a change of political quality, this type of clarifying abstraction ("the interests of the bourgeoisie", "imperialism", "fascism") still more or less serves their task: not to interpret a political fact in all its concreteness, but to reduce it to a familiar social type, which is, of course, intrinsically of inestimable importance.

But when a serious change occurs in the situation, all the more so a sharp turn, such general explanations reveal their complete inadequacy, and become wholly transformed into empty truisms. In such cases it is invariably necessary to probe analytically much more deeply in order to determine the qualitative aspect, and if possible also to measure quantitatively the impulses of economics upon politics. These "impulses" represent the dialectic form of the "tasks" which originate in the dynamic foundation and are submitted for solution in the sphere of the superstructure.

Oscillations of the economic conjuncture (boom-depression-crisis) already signify in and of themselves periodic impulses which give rise now to quantitative, now to qualitative changes, and to new formations in the field of politics. The revenues of possessing classes, the state budget, wages, unemployment, proportions of foreign trade, etc., are intimately bound up with the economic conjuncture, and, in their turn, exert the most direct influence on politics. This alone is enough to make one understand how important and fruitful it is to follow step by step the history of political parties, state institutions, etc. in relation to the cycles of capitalist development. By this we do not at all mean to say that these cycles explain <u>everything</u>: this is excluded if only for the reason that cycles themselves are not fundamental but derivative economic phenomena. They unfold on the basis of the development of productive forces through the medium of market relations. But cycles explain a <u>great deal</u>, forming as they do through automatic pulsation an indispensable dialectic spring in the mechanics of capitalist society. The breaking points of the trade-industrial conjuncture bring us into a closer proximity with the critical knots in the web of the development of political tendencies, legislation, and all forms of ideology.

But capitalism is not characterized solely by the periodic recurrence of cycles - otherwise what would occur would be a complex repetition and not dynamic development. Trade-industrial cycles are of different character in different periods. The chief difference between them is determined by quantitative inter-relations between the crisis and the boom period within each given cycle. If the boom restores with a surplus the destruction or constriction during the preceding crisis, then capitalist development moves upward. If the crisis, which signalizes destruction, or, at all events, contraction of productive forces, surpasses in its intensity the corresponding boom, then we get as a result a decline in economy. Finally, if the crisis and boom approximate each other in force, then we get a temporary and stagnating equilibrium in economy. This is the schema in the rough. We observe in history that homogeneous cycles are grouped in a series. Entire epochs of capitalist development exists when a number of cycles is characterized by sharply delineated booms and weak, short-lived crises. As a result we have a sharply rising movement of the basic curve of capitalist development. There obtain epochs of stagnation when this curve, while passing through partial cyclical oscillations, remains on approximately the same level for decades. And finally, during certain historical periods the basic curve, while passing as always through cyclical oscillations, dips downward as a whole, signalizing the decline of productive forces.

It is already possible to postulate <u>a priori</u> that epochs of energetic capitalist development must possess features - in politics, in law, in philosophy, in poetry - sharply different from those in the epochs of stagnation or economic decline. Still more, a transition from one epoch of this kind to a different one must naturally produce the greatest convulsions in the relationships between classes and between states. At the Third World Congress of the Comintern we had to stress this point - in the struggle against the purely mechanistic conception of capitalist distintegration now in progress. If periodic replacements of "normal" booms by "normal" crises find their reflection in all spheres of social life, then a transition from an entire boom epoch to one of decline, or vice versa, engenders the greatest historical disturbances and it is not hard to show that in many cases revolutions and wars straddle the borderline between two different epochs of economic development, i.e., the junction of two different segments of the capitalist curve. To analyze all of modern history from this standpoint is truly one of the most gratifying tasks of dealectic materialism.

Following the Third World Congress of the Comintern, Professor Kondratiev approached this problem - as usual, painstakingly evading the formulation of the question adopted by the Congress itself - and attempted to set up alongside of the "minor cycle", covering a period of ten years, the concept of a "major cycle", embracing approximately fifty years. According to this symmetrically stylized construction, a major economic cycle consists of some five minor cycles, and further more, half of them have the character of boom, while the other half is that of crisis, with all the necessary transitional stages. The statistical determinations of major cycles compiled by Kondratiev should be subjected to careful and not over-credulous verification, both in respect to individual countries as well as the world market as a whole. It is already possible to refute in advance Professor Kondratiev's attempt to invest epochs labelled by him as major cycles with the self-same "rigidly lawful rhythm" that is observable in minor cycles; it is an obviously false generalization from a formal analogy. The periodical recurrence of minor cycles is conditioned by the internal dynamics of capitalist forces, and manifests itself always and everywhere once the market comes into existence. As regards the large segments of the capitalist curve of development (50 years) which Professor Mondratiev incautiously proposes to designate also as cycles, their character and duration is determined not by the internal interplay of capitalist forces but by those external conditions through whose channel capitalist development flows. The acquisition by capitalism of new countries and continents, the discovery of new natural resources, and, in the wake of these, such major facts of "superstructural" order as wars and revolutions determine the character and replacement of ascending, stagnating or declining epochs of capitalist development.

Along what path then should investigation proceed?

To establish the curve of capitalist development in its non-periodic (basic) and periodic (secondary) phases and breaking points in respect to individual countries of interest to us and in respect to the entire world market - such is the first part of the task. Once we have the fixed curve (the method of fixing it is of course a special question in itself and by no means a simple one, but it pertains to the field of economic-statistical technique), we can break it down into periods, depending upon the angle of rise and decline in reference to the exis of abscissas (see the graph). In this way we obtain a pictorial scheme of economic development, i.e. the characterization of the "true basis of all events under investigation" (Engels).

Depending upon the concreteness and detail of our investigation, we may require a number of such schemas: one relating to agriculture, another to heavy industry, and so on. With this schema as our starting point, we must next synchronize it with political events (in the widest sense of the term) and we can then seek not only for correspondence, or to put it more cautiously, interrelationship between definitely delineated epochs of social life and the sharply expressed segments of the curve of capitalist development but also for those direct subterranean impulses which unleash events. Along this road it is naturally not at all difficult to fall into the most vulgar schematization; and, above all, to ignore the tenacious internal conditioning and succession of ideological processes; and to become oblivious of the fact that economics is decisive only in the last analysis. There has been no lack of caricature-conclusions drawn from the Marxist method! But to renounce on this account the above-indicated formulation of the question ("it smells of economism") is to demonstrate complete inability to understand the essence of Marxism which seeks for the causes of changes in social superstructure in the changes of the economic foundation, and not anywhere else.

At the risk of incurring the theoretical ire of opponents of "economism" (and partly with the intention of provoking their indignation) we present here a schematic chart which depicts arbitrarily a curve of capitalist development for a period of ninety years along the above-construed lines. The general direction of the basic curve is determined by the character of the partial conjunctural curves of which it is composed. In our schema three periods are sharply demarcated: 20 years of very gradual capitalist development (segment A-B); 40 years of energetic upswing (segment B-C); 30 years of protracted crisis and decline (segment C-D). If we introduce into this diagram the most important historical events for the corresponding period, then the pictorial juxtaposition of major political events with the variations of the curve is alone sufficient to provide the idea of the invaluable starting points for historico-materialist investigations. The parallelism of political events and economic changes if of course very relative. As a general rule, the "superstructure" registers and reflects new formations in the economic sphere only after considerable delay. But this law must be laid bare through a concrete investigation of those complex inter-relationships of which we here present a pictorial hint.

In the report to the Third World Congress we illustrate our idea with certain historical examples drawn from the epoch of the revolution of 1848, the epoch of the first Russian revolution (1905), and the period through which we are now passing (1920-1921). We refer the reader to these examples (see the New Course). They do not supply anything finished but they do characterize adequately enough the extraordinary importance of the approach advanced by us - above all, for understanding the most critical leaps in history: wars and revolutions. If in this letter we utilize a purely arbitrary pictorial scheme, without attempting to take any actual period in history as a basis, we do for the simple reason that any attempt of this sort would resemble far too much an incautious anticipation of those results flowing from a complex and painstaking investigation which has yet to be made.

At the present time it is of course still impossible to foresee to any precise degree just what sections of the field of history will be illuminated and just how much light will be cast by a materialist investigation which would proceed from a more concrete study of the capitalist curve and the inter-relationship between the latter and all the aspects of social life. Conquests which may be attained on this road can be determined only as the result of such an investigation itself, which must be more systematic, more orderly than those historic-materialist excursions hitherto undertaken. In any case, such an approach to modern history promises to enrich the theory of historical materialism with conquests far more precious than the extremely dubious speculative juggling, with the concepts and terms of the materialist method which has, under the pens of some of our Marxists, transplanted the methods of formalism into the domain of the materialist dialectic; which has led to reducing the task to rendering definitions and classifications more precise and to splitting empty abstractions into four equally empty parts; in short, had adulterated

Marxism by means of the indecently elegant mannerisms of Kantian epigones. It is a silly thing indeed endlessly to sharpen and resharpen an instrument, to chip away Marxist steel when the task is to apply the instrument in working over the raw material!

In our opinion this theme could provide the subject matter for the most fruitful work of our Marxist seminars on historical materialism. Independent investigations undertaken in this sphere would undoubtedly shed new light or, at least, throw more light on isolated historical events and entire epochs. Finally, the very habit of thinking in terms of the foregoing categories would extremely facilitate political orientation in the present epoch, which is an epoch that reveals more openly than ever before the connection between capitalist economics that has attained the peak of saturation with capitalist politics that has become completely unbridled.

I promised long ago to develop this theme for the Vestnik Sotsialisticheskoi Akademii. Up to now I have been prevented by circumstances from keeping this promise. I am not sure that I shall be able to fulfill it in the near future. For this reason I confine myself in the meantime to this letter.

April 21, 1923.

SOME REMARKS ON THE FALLING RATE OF PROFIT

George Catephores

The aim of this note is to discuss critically certain arguments concerning the rising organic composition of capital presented by David S. Yaffe in his paper "The Marxian Theory of Crisis, Capital and the State". (The paper was submitted by its author to the December 1972 Conference of the Socialist Economists and was subsequently published in the Winter 72 Bulletin of the C.E.S., p. 5-58). In that paper the following claim was made:

> Marx regarded it as an incontrovertible fact, (Theories of Surplus Value, Vol. III, p. 364), as a self-evident or tautological proposition (ibid., p. 366) that the organic composition should rise. To show that this was not a mere assertion but follows logically from the concept of capital itself will be the concern of the rest of this section. (Bulletin of the C.E.S., Winter 72, p. 17).

It is not clear from the above statement what exactly is to be proven; that the theorem about the rising organic composition is "a tuatological proposition" or that it follows logically from the concept of capital itself. The two are not the same thing. If the idea of the rising organic composition is nothing more than a tautology, then it is devoid of empirical content and becomes trivial and uninteresting, like all tautological propositions. It would be paying small compliment to the formidable logician who wrote "Capital" to treat one of his main conclusions in this manner. Moreover it would be supporting an interpretation which Marx himself has explicitly rejected, as will be shown below. If, on the other hand, Yaffe's statement is taken to mean that the rise in the organic composition is so essential a part of the workings of capitalist accumulation that it is implied in the mere existence of a capitalist system then it certainly ceases to be an empty tautology and comes much closer to what Marx has written, although even so, as we shall attempt to show, it overstates Marx's position.

If the rest of the paper under consideration gave a clear indication as to the direction which the thought of its author was taking with regard to the ambiguity described in the previous paragraph, then we might easily overlook the quoted statement and dispense with further quibbling. Unfortunately, in view of the author of the present note, this ambiguity is not an incidental abberation but plagues the whole section of the paper devoted to the rising organic composition. David Yaffe, by using parts of Marx's substantial analysis of the essence of the capitalist system, tries to present a logically ironcast case which he even donates with the rigour of algebraic presentation. But the marriage between the analytical and the formalistic part remains a rather barren one. We gain no new insight in Marx's analysis, which becomes neither less nor more convincing as a result, while the algebraic demonstration not only remains without general validity but even in the narrow scope of a special case it produces the result of rising organic composition only tautologically.

Marx, in similar cases used to say: "the proof of the pudding is in the eating". Let us therefore proceed without any further introduction to eating some of David S. Yaffe's pudding, to find out its taste. The argument in the paper under consideration technically rests on a combination of the rule of the introduction of machinery under capitalism, as worked out by Marx in the first volume of "Capital", and of the need of self-expansion of capital, leading to capital accumulation. According to Marx's rule, machinery will only be introduced when the machine costs less to purchase and install than the value of labour power it displaces when integrated in the production process. Since the value of the machine is determined by the amount of labour spent in its production the fact that it costs less than the labour power it displaces means directly that after the introduction of machinery, and assuming a given total output, less labour will find employment overall in the economy than before the introduction of the machine. This is only a natural consequence of the increasing productivity of labour overall. But, if the mass of surplus-value produced in the economy is to be sustained, then, assuming no increase in the rate of surplus value squeezed out of the workers left in employment after the introduction of machinery, the labour which has been released must be re-employed, and this presupposes an expansion of output, which, however, is beneficial for capitalists, as it allows them to exploit as many workers as before and hence maintain the mass of the original surplus-value intact.

So far so good. Let us now see how David S. Yaffe uses this bit of analysis to establish the logical inviolability of the theory of the rising organic composition. Turning to page 20 of the C.E.S. Winter 72 Bulletin, we read:

> The necessity to continually extend and substitute objectified labour for living labour is clearly expressed in the condition for the introduction of machinery for the purpose of cheapening a product. That is, that less labour must be expended in the production of the machine than the (paid) labour (value of labour power) that is displaced by the employment of the machinery. The limit to the use of the machinery is given by the difference between the value of the machine and the value of labour power displaced by it. (Capital,
>
> $$c_{t+1} - c_t \quad v_t - v_{t)1} \text{ (usual notation)}$$
>
> clearly if all labour available for exploitation is to be employed in the interest of capital this requires a further extension of the division of labour (material side) and C must increase at a faster rate than V for total social capital (value-side). Likewise if we consider total social capital in periods 't' and 't+1' and let w be the total value produced in one period of production, then with the usual notation
>
> $$C_t + V_t + S_t = w_t$$
>
> $$C_{t+1} + V_{t+1} + S_{t+1} = w_{t+1}$$
>
> If the total working-time available to capital for its employment remains constant (V+S=const) then for accumulation to take place
>
> $$w_{t+1} \quad Wt$$
>
> so that with or without an increase in the rate of exploitation, if all labour is to be employed
>
> $$\frac{C_{t+1}}{V_{t+1}} \quad \frac{C_t}{V_t}$$

If the working population increased then accumulation would have to be that much faster (greater than the increase in the working population) to satisfy the condition for the introduction of machinery and the expansion requirements of capital.

Let us notice, in passing, that for the above example to get off the ground competition has been assumed, as machinery is introduced "for the purpose of cheapening a product", hence for competitive reasons. Indeed, some such assumption is absolutely necessary, otherwise capitalist would have no reason to start increasing the organic composition of capital, and thus store up trouble for themselves, as the rate of surplus-value and the total labour-power available have been assumed constant, an assumption that precludes any increase in profits due to mechanization. (Alternatively, it might, of course, be assumed that machinery is introduced in order to weaken the bargaining power of the working class, which presses for wages higher than the value of labour-power. Such an interpretation would, indeed, be much closer to the "concept of capital", in which the author of the paper under discussion likes to deal. But as full employment is also assumed throughout one does not see how the power of the workers is undermined in the case in hand. If the assumption of full employment were dropped then, of course, it would become impossible to talk about a constant v, a constant s/v, and even a constant or rising c/v. In the case of the last ratio unemployment might force us to drop the assumption of the non-existence of realization difficulties and with realization difficulties and economic crises we might have to take into account the phenomenon described by Marx as "slaughter of capital values" that would clearly reduce the organic composition. This quite irrespective of the effects of the rate of surplus-value on the rate of profit, both of which might very well increase under such circumstances. The algebraic example suggested in the paper would, in all such cases, fall to pieces).

Even, however, on its own terms, the algebra referred to leaves a lot to be desired from an analytical point of view. What the example purports to show is that accumulation of capital necessarily leads to the rise in the organic composition. The result, however, crucially depends on two assumptions: (a) that the labour force does not increase and (b) that organic composition has already risen, when we begin to explore the process of accumulation. To clarify this let us take a numerical example. Let us assume that, in period 't' the value-structure of the planned, or the traditionally recurring, output is:

$$50c+50v+50s = 150w \qquad (1)$$

Now, capitalist introduce a technique which allows to them to transform the value structure of output into

$$60c+40v+40s = 120w \qquad (2)$$

together with labour power corresponding to 10v being thrown out of work. This is the starting point, David S. Yaffe's 't', and it has to be remarked that the rise in the organic composition of capital has already taken place, it has been assumed into the system. It ought also to be noticed that w_t w_{t+1}. But the supernumerary workers have to be reabsorbed by industry if the mass of profit is to be maintained. Let us make the additional assumption that they will be absorbed at the new, higher, organic composition ratio (6/4 rather than 5/5). Constant capital will then have to increase even more than it does in equation (2) above. To employ the supernumerary workers capitalist would have to increase their stock of constant capital by another 15c. Hence the total change will be:

$$75c+50v+50s = 1752 \qquad (3)$$

and w_{t+1} will indeed be greater than w_t, not, however, because it increased independently of the organic composition but exactly because it reflects the consequences of an increase in the organic composition. The ratio c/v, on the other hand, remains, of course, invariant with respect to w the change in w. David Yaffe has not deduced the rising composition of capital from accumulation; he has assumed a rising. This is perfectly acceptable, from the marxian point of view, and completely tautological as far as deducing the rise in the organic composition from the accumulation of capital is concerned. We only find the organic composition to have risen in the end of the proof because we assumed it to increase at the beginning.

On the other hand, even if we drop the additional assumption of an equal organic composition in all sectors, the tautological character of the result is not very much affected, because the rise in the organic composition remains invariant with respect to the change in w; (obviously, c+dc/v must be greater than just c/v, provided the labour force does not expand). But dropping the assumption of an equal organic composition everywhere is a dangerous thing to make, from the point of view of the paper under discussion. Because if, in addition, we also drop the assumption of a constant labour force, then we are in deep water, indeed. Starting with equation (2) above, once again, but assuming now an increase of labour power, corresponding to another 30v, who will work, let us say, with zero constant capital (an acceptable approximation to minimal constant capital), and assuming also that the previously supernumerary workers are to be employed on the same terms with the new workers, we get:

$$60c+80v+80s = 220w \qquad (4)$$

with w_{t+1} much greater than w_t or even than w_{t+1}, but with the organic composition (now 6/8) distinctly lower than in all previous periods. Hence, only as long as we assume at the beginning and throughout our proof that the organic composition has risen, can we find that it has in fact risen; a not altogether surprising outcome.

It is interesting to remark that Marx knew this possibility very well and included it in his list of causes counteracting the tendency of the rate of profit to fall given in Chapter XIV, part IV of the third volume of "Capital". There we read:

> On the other hand, new lines of production are opened up, especially for the production of luxuries, and these lines take for their basis this relative overpopulation set free in other lines of production by the increase of their constant capital. These new lines start out with living labour as their predominating element, and go by degrees through the same evolution as the other lines of production. In either case the variable capital constitutes a considerable proportion of the total capital and wages are below the average, so that both the rate and the mass of surplus-value are exceptionally high. Since the average rate of profit is formed by levelling the rates of profit in the individual lines of production, the same cause, which brings about a falling tendency of the rate of profit, once more

produces a counterbalance to this tendency and paralyses its effects more or less. ("Capital", Vol. III, p. 277-78)

What we claim to have shown thus far is that the algebraic demonstration of the inevitability of the rise in the organic composition offered by David S. Yaffe does not advance the discussion of the problem because it resolves itself to a tautology: assume at the beginning a rise in the organic composition, following upon Marx's rule of introduction of machinery under capitalism, and you find that organic composition has risen at the end of the proof. Furthermore, to justify the initial assumption, the author of the paper under consideration has had resort to the assumption of competition, something he expressly does not want to do and claims not to have done. (See "Bulletin of the C.E.S.", Winter 72, p. 29). From the technical point of view, the main criticism one would address to a paper like the one under discussion is that it treats in static terms and on the assumption that similar conditions of production prevail throughout the economy, a problem for which diversity and dynamic change are crucially important. Only in this manner is the paper able to gloss over the consequences of different rates of increase in productivity in the various sectors of production, which, if taken into account, would be one more reason why the organic composition of capital might rise, fall or remain the same. David S. Yaffe seems to be satisfied with dismissing the possibility of such an effect by describing capital-saving innovation as "a confusing ideological term" (Bulletin of the C.E.S., Winter 72, p. 21). Be that as it may, why not reject the ideologically charged concept and give some thought to the "cheapening of the elements of constant capital", an idea of a very respectable marxian pedigree, (see "Capital", Vol. III, p. 276). There is no reason, at the level of abstractness and generality at which the paper under consideration is dealing, why the cheapening of the elements of constant capital should not reverse the process of the rising organic composition.

Therefore, the only solid bit of analysis we can discover in this section of David S. Yaffe's paper, (a paper, it must be said, of a lot of merit in some other sections of it) is Marx's rule on the introduction of machinery under capitalism. To reduce the theorem of the rising organic composition to that rule and derive everything else tautologically seems to me to be both drastic and not very relevant to the analysis of capitalism. But then, perhaps, rising organic composition is in fact a tautology or has, at least, been treated as such in earnest by the author of the paper we are discussing. What was the view of Marx himself on this aspect of the question.

Marx held in no great esteem tautologies in general and the rising organic composition tautology in particular. Discussing the related subject of tautologies arising in the area of the falling rate of profit, he had this to say:

> The rate of profit sinks from 40% to 30% and 20% because the mass of surplus-value, and of profit, produced by the same capital falls absolutely from 40 to 30 and 20. Since the magnitude of the value of capital, by which the surplus-value is measured, is given as 100, a fall in the proportion of surplus-value to this given magnitude can be only another expression for the fact that surplus-value and profit decrease absolutely. *This is, of course, a tautology. But we have demonstrated that the nature of the capitalist process of production* brings about this decrease. (Italics have been added. See: Karl Marx, "Capital", Vol. III, Part III, Chapter XIII, p. 258-259 in the Kerr 1909 edition of Chicago. All subsequent page references to Vol. III of "Capital" come from this edition).

Hence Marx was not satisfied with tautologies and purely logical derivations. What really mattered with him was not the tautological proposition but the demonstration about the nature of the capitalist process of production, presumably an empirically ascertainable nature. However, as the reference to "nature of the capitalist process of production" might be construed as regarding a fairly general model, let us turn to another passage of the "Capital", where the contrast between the formalistic and the realistic approach to the problem of the rising organic composition is explicitly treated.

> The price of the individual commodity falls. Abstractly speaking, the rate of profit may remain the same, even though the price of the individual commodity may fall as a result of an increase in the number of these cheaper commodities, for instance, if the increase in the productivity of labour extended its effects uniformly to all the elements of the commodities, so that the total price of the commodities would fall in the same proportion in which the productivity of labour would increase, *while on the other hand the mutual relations of the different elements of the price of commodites* (and c/v, the organic composition, is undoubtedly one such relationship) *can remain the same*. The rate of profit might even rise, if a rise in the rate of surplus-value were accompanied by a considerable reduction in the value of the elements of constant, and particularly of fixed, capital. *But, in reality*, as we have seen, the rate of profit will fall in the long run. (Italics have been added. See: "Capital", Vol. III, p. 269).[1]

Marx, therefore, rejected the tautological interpretation of his theorem on the falling rate of profit explicitly and, as the second of the above quotations shows, also of the rising organic composition. Pure logic gave him no definitive result and he had to make an appeal to reality, in order to give some substance to the logical schemata. The appeal to quality may actually mean two things: either that Marx considered a rising organic composition an essential part of the capitalist system, or that he considered these phenomena explainable on the basis of his model of capitalism and empirically well-documented but not necessarily implied in the process of capitalist accumulation. In the former case, David S. Yaffe might claim that his "concept of capital" and Marx's "nature of the capitalist system" are one and the same thing. (Incidentally Marx, even in the supporting quotation of the "Grundrisse" mentioned by D.S.Y. when he introduces the term "concept of capital", makes use of no such hegelian language but talks, purely and simply of the "relationship of capital to living labour", see "Grundrisse", p. 662). Even so, however, the tautological derivation of the result from "the nature of the capitalist system" is something Marx has explicitly rejected.

It is to a certain extent a matter of judgement how far Marx considered the falling rate of profit and the rising organic composition as essential parts of capitalism, or as features which he had observed in the capitalism of his days. Quotations might be found supporting either interpretation, although, in the view of the author of the present note, the balance of the evidence would tend to support the latter view. Had he believed otherwise, Marx, after having weighed up so carefully the various influences and counterinfluences on the rate of profit and on the organic composition, would not have failed to provide us with some rigorous proof of how one set of influences would systematically tend to outweigh the other. To quote what Maurice Dobb has written

---

[1]Andrew Glynn

on our question thirty-five years ago, the fact that Marx

> ...provided no _a priori_ proof that one set of influences would necessarily surmount the other was an omission which, I believe, was made advisedly because it would have been alien to his whole historical method to suggest that any answer could be abstractly given or that any conclusion of universal application could be deduced mechanically from data concerning technical change conceived _in vacuo_. (M. Dobb, Political Economy and Capitalism, Third Edition (1940), p. 109).

In either case, however, Marx's view on the matter would not absolve us, nor would the founder of historical materialism want it to absolve us, from taking stock of reality and facing up to its nature, the "laws of motion of capitalism", may have been modified. If we are faced with statistics which throw doubt upon the correctness of our concepts, our first duty is to examine such statistics first on their own terms, and show what is wrong with them, if we believe them to falsify reality. (The author of the note does not claim any particular expertise in this field. He is under the general impression that not enough attention has been paid to this aspect of the matter). If we find that we cannot fault the statistics, then, perhaps, we ough to re-examine our concepts or the way in which we apply them. The very last thing we ought to consider, in such circumstances, is to reiterate Marx's old arguments, without attempting to digest the evidence that has accumulated in the meantime. We cannot solve our problems by claiming that everything is tautologically implied in "the concept of capital". This would sound very much like a retreat back towards objective idealism, a course that the author of a paper making a motto of the phrase "the abandoning of the materialist basis leads inexorably from revolutionary socialism to reformism" would, surely, vehemently reject.

BRITISH CAPITALISM IN 1972 AND 1973

Andrew Glyn

1972 was an extremely contradictory year for British capitalism. On the one hand the imposition of a compulsory wages freeze and almost 24 million working days 'lost' through strikes; on the other hand the Chancellor could claim in his Budget speech that 'living standards...rose faster than in any year since the war' and unemployment (in the year ending March 1973) fell by almost one quarter of a million.

1. Wages, consumption

Output in fact grew rapidly in 1972-around 4 per cent in the year up to the fourth quarter according to average of the rather widely varying estimates of Gross Domestic Product-and this accounts for the fall in unemployment. But the pattern of demand underlying this growth was extremely uneven. Private consumers' expenditure grew by $6\frac{3}{4}$ per cent and this pre-empted more than the total absolute increase in GDP; so the resources for the rather slower increases in public expenditure and in private investment were more than balanced out by the huge increase in imports net of exports.

The rise in personal consumption was fuelled by the tremendous increase in real personal disposable income of around $9\frac{1}{2}$ per cent in the year up to the fourth quarter of 1972. A very rough calculation suggests that if direct taxes (including national insurance con tributions) and government grants to persons in the form of pensions etc. had risen as fast as other personal incomes (wages, interest, etc.) then the rise in real PDI would have been only about $7\frac{1}{2}$ per cent. So around one quarter of the rise in PDI can be attributed to lower direct taxation and higher government grants, and if the contribution of cuts in indirect taxes to holding down price increases is added then the total contribution of lower taxation to this rise is about one third. The very rapid expansion of credit also played some part in boosting consumption-outstanding HP debt grew by one quarter and personal bank advances practically doubled.

What is quite clear is that real earnings grew rapidly. The National Institute (Economic Review February 1973) calculated that average wages and salaries grew by 15 per cent in money terms between the fourth quarters of 1972 and 1973 - with wage rate increases running at about 20 per cent in the third quarter of 1972 as compared with only about 10 per cent at the beginning of the year. If the earnings increase is deflated by the rise in the retail price index of $7\frac{3}{4}$ per cent this gives a rise of real earnings of $6\frac{3}{4}$ per cent.* In a normal year a good part of this increase would be whittled away by the rising proportion of wages taken in taxation and insurance contributions as the increase in money earnings pushes the worker into a higher tax bracket. But the 1972 cut in income tax, and the decision also to keep national insurance contributions constant, will have meant that the take home pay of most workers will have risen slightly more than their pre-tax earnings. While remembering

*In calculating real PDI the National Institute uses the consumer's price index derived from the National Accounts, which shows an increase of only 6.1 per cent over the same period. Two years ago the Institute regarded the different trends shown by these indices as being due to lower price indices being used for food and fuel in the CPI. Whether or not this is still the explanation it is almost certainly the case that the RPI is the better index for calculating real wages.

that the living standards of groups of workers caught by the freeze will have substantially fallen, the average increase in workers' living standards of something like 7 per cent during 1972 is in strong contrast to increases of about 2 per cent in 1971 and about ¾ per cent per annum over the period 1964-70 (see Jackson, Turner and Wilkinson, Do Trade Unions Cause Inflation, p. 66). Certainly these developments are important in assessing the apparent willingness of many groups of workers to accept wage increases within the government's Phase 2 limits.

2. Profits, investment, mergers

The facts about workers' real earnings seem to square very badly with reports in the financial press of how rapidly profits are rising, for example the Financial Times of 22.3.73 reported a 21 per cent increase in profits for 255 industrial companies for the year up to the middle of 1972. In fact these reports are extremely misleading because of the failure to take account of stock appreciation and because of the increasing under-provision for depreciation in company accounts as the gap between the average historic and replacement costs of assets continues to widen as a result of the rapid inflation. These problems of measurement are best dealt with by calculating the ratio of company profits to total domestic incomes, before deducting any estimate of depreciation (since there are no quarterly capital consumption figures) but after deducting stock appreciation:

Company Profits as a % of Total Domestic Incomes

1971				1972			
1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q
10.1	9.9	11.6	11.0	10.3	10.6	10.3	10.2

So after a substantial recovery prior to the CBI price restraint of July 1971, the share of profits fell back in 1972 to a level hardly above that of the tightest part of the profits squeeze at the beginning of 1971. What is also important is that this failure to increase profitability coincided with a very rapid increase in productivity as output expanded and firms continued to shed labour-between the third quarters of 1971 and 1972 industrial production rose by 3½ per cent, industrial employment fell by 3½ per cent so that productivity in industry grew by 7 per cent. Despite continued forecasts that the turn-round was about to happen manufacturing investment continued to fall in 1972, and by the last quarter was 10 per cent lower in real terms than a year earlier. Though the continued excess capacity obviously explains part of this fall it is likely that the complete failure to 'get profitability right' in advance of the freeze played at least some part in the fall in domestic investment.

Certainly direct investment overseas (in factories, etc.) continued to rise - reaching about £600m in 1972 as compared with £550m in 1971 and with private domestic industrial investment of about £5000m in 1972. At the same time the lack of confidence in the prospects for British capitalism was shown in another way by the staggering rise in portfolio investment (purchases of foreign shares by British capitalists) from around £100m in 1970-71 to £700m in 1972. Meanwhile the process of monopolisation of industry within the U.K. accelerated. Take-overs of industrial and commercial companies were worth about £2500m in 1972 after running at around £1000m p.a. since the previous record of about £2000m in 1968. Taking the five years 1968-72 something like one quarter of the net assets of industrial and commercial companies have become centralised through takeover. In 1972 very high rates of merging were recorded in a number of manufacturing industries including food, drink, tobacco and paper. There were in all 70 takeovers worth more than £5m each and they constituted three quarters of the total assets merged (Business Monitor M7, Feb. 1973). It is against this background that one must judge the government's 'tougher monopoly policy' (Times 24.2.73) of referring bids to the Monopolies Commission, and which resulted in three proposed mergers, none very large, being dropped. The Times (13.12.72) also reported that the Department of Trade and Industry had 'at least 200 applications from industry for selective financial assistance'; so far what has emerged is £5m loan to enable Manganese Bronze to takeover the motorcycle interests of BSA.

3. Balance of Payments

The balance of payments on current account deteriorated from a surplus of more than £1000m in 1971 to bare balance in 1972 - the deterioration between the second halves of the year being about £1500m. During 1972 the volume of exports grew by 1 per cent, despite a growth in the volume of world trade of about 9 per cent, while the volume of imports grew by 12 per cent (imported manufactures grew by 23 per cent). This poor performance in 1972 of the volume of trade was exacerbated by a 4 per cent deterioration in the terms of trade, as the floating of the pound in June, and the rise in world commodity prices, pushed up the price of imports in the second half of the year.

4. Prospects for 1973

On the assumption of a neutral budget the National Institute forecast that GDP would rise by 5 per cent during 1973 - in the event the budget contained about £100m concessions on VAT but the Treasury's forecast, taking account for the budget, implies a similar rate of growth. Despite the fact that this expected growth for 1973 is actually rather faster than growth during 1972 it is very striking that consumers' expenditure is expected to grow at only half the previous rate (i.e. around $3\frac{1}{2}$ per cent). Moreover the rise is only as big as that because of the forecast that the proportion of income saved will fall back from the high level reached in 1973. For the National Institue expects the rate of increase of real PDI to fall from $9\frac{1}{2}$ per cent during 1972 to only 1 per cent during 1973.* Since some $\frac{3}{4}$ per cent of this rise reflects the £300m tax concessions on top salaries and unearned incomes less than £2000 p.a. it is clear that workers' real incomes are not expected to rise at all during freeze and Phase II, if these forecasts, which assume the policy to be successful, are born out. The fact that the middle class is expected to finance some growth in consumption by reducing the proportion of income saved is of little comfort to most workers whose only way of saving less is to incur more debts. In any case there is good reason to suppose that the postion will be worse than the Institute supposes. Firstly there is the likelihood that the retail price index will continue to rise faster than the consumer price index, (the CPI is forecast to rise by 5 per cent between the fourth quarters of 1972 and 1973 in line with costs taking account of an expected 9 per cent rise in import prices, and a $\frac{3}{4}$ per cent effect on the CPI of the introduction of VAT). Secondly there is the further devaluation of the pound of 1 or 2 per cent, in the wake of the February

*The Institute tries to disguise this by only showing calculations for the second halves of the years, between which the growth of real PDI is rather more, while all their other calculations refer to fourth quarters.

dollar devaluation, which is bound to push up import prices even further than the Institute was forecasting. So it is highly likely that the cost of living will rise by more than the forecast rise, in line with government policy, of earnings of $6\frac{1}{2}$ per cent between the fourth quarters of 1972 and 1973. Moreover workers will in addition be faced by a rise in the proportion of their real income taken in taxation as money income increases. So a fall in workers' living standards of 1 or 2 per cent in 1973 is quite on the cards.

It is important to understand that this fall, based on the National Institute's predictions, is not the counterpart of any substantial improvement in pre-tax profitability on the domestic U.K. market. For the squeeze on workers they anticipate comes solely from increasing taxation and from the very steep rise in import prices, rather than from British capitalists increasing prices faster than costs which would directly improve profitability.

The bourgeoisie will of course be gaining by the tax concessions on their incomes, and post-tax profitability will benefit from the more valuable investment incentives under the new corporation tax and from the cuts in the rate of tax since the Tories came in. Even so in the absence of faster increases in prices and profits, the National Institute may well be over optimistic in their forecasts that half the total increase in demand will come from higher stockbuilding by business in 1973 and that manufacturing investment will increase by 12 per cent. Their forecasts for imports to grow by only 9 per cent in volume and exports to grow by as much as 8 per cent may be on the optimistic side as well, though here they can point to an effective devaluation of the pound of about 10 per cent since mid-1971* and an anticipated rise in the volume of world trade of 10 per cent as OECD countries experience the fastest increase in output since 1955. The Treasury is even more optimistic about imports and exports, though it expects a less rapid build up of stocks than the Institute. It may well be the case that further tax cuts during the year will be necessary if output is to meet the target growth of 5 per cent; though this would temporarily increase workers' spending power it will mean that the tax increase in following years will have to be all the steeper if private consumption is to be reduced sufficiently to make way for the higher investment and exports which British Capitalism desperately requires.

The small downward adjustment of the pound in the wake of the February 1973 dollar devaluation will no more than nibble at the gigantic current account deficit (expected by the National Institute to be running at about £1000m p.a. by the end of the year). So further devaluation, with the resulting erosion of workers' living standards, is inevitable. British capitalists will certainly try and take some of the benefit of the recent depreciation of the pound in the form of higher profits-export prices being exempt from Phase II - and it may give them some relief from the pressure of foreign competition in holding down their prices and profits in the home market as well. The Phase II price code is ambiguous as to whether the determining factor in price increases will be the percentage increase in allowable costs (which would more or less freeze profit margins) or whether firms will be allowed to increase profit margins to the level of the best 2 out of the last five years. This latter would imply a rise in profits of about 30 per cent and a fall in workers' living standards of anything up to 3 or 4 per cent. Even if the former stricter criterion is generally applied the Price Commission is allowed to modify it and allow higher profits if they are 'necessary in order to encourage or ensure investment'. Any capitalist should be happy with that loophole.

*The devaluation comes to about 23 per cent against the Yen, 20 per cent against the D-Mark, 15 per cent against the Franc, while the pound has been revalued by about 3 per cent against the dollar.

PRODUCTIVITY, ORGANIC COMPOSITION AND THE FALLING RATE OF PROFIT

Robin Murray

In his contribution to the last Bulletin (CSE B. Winter 1972) Andrew Glyn developed an argument against those who saw changes in organic composition "as the real, underlying, basic cause of all capitalist crises". While agreeing that in capitalism productivity and the technical composition of capital are likely to rise, he suggested that whether or not these increases also led to an increase in the organic composition of capital would all depend "on the relative growth of technical composition and productivity". In this note I want to challenge one part of the corn model around which he built his argument, and add some comments of my own on the conditions under which we may expect the organic composition of capital to rise, and the rate of profit to fall.

In the corn model, the organic composition of capital is shown to remain constant (and even fall) when the technical composition of capital and productivity rise as the result of (i) inputs being valued at current productivity levels (i.e. according to the socially necessary labour time established <u>after</u> the productivity increases), (ii) the value of labour power remaining constant. When real wages are held constant and the value of labour power therefore falls with the increase in productivity in the production of wage goods, then the organic composition of capital rises in line with the technical composition. Thus, whether the organic composition of capital rises or not is not a predetermined issue, but will depend on the success that workers have in maintaining the level of their wages in period of increasing productivity. The central role of wages in determining movements in the rate of profit was, of course one of the main emphases in Andrew Glyn and Bob Sutcliffe's book.

The crucial assumption of the corn model is, however, not what happens to wages, but rather the valuation of inputs at current socially necessary labour times. If we add to Andrew Glyn's table a further column for profits in the situation where inputs have been so valued, we find no case in which the rate of profit falls, whether or not the organic composition of capital moves up or down. Indeed, in one case (IV b) where the organic composition of capital rises by 50%, profit rises by 127%. The main reason for this is the writing down of the value of the capital advanced as a result of the productivity increases. Constant capital of 75 tons of seed corn suddenly has its value cut in half as the result of its application in the process or production. So, too, in IV(b) does seed corn. But this is surely mistaken. The capitalist advances a quantity of money capital which he exchanges for commodities. These commodities are necessary to set in train a new process of production. The fact that this new production lowers the value of the inputs used up in the process can make no difference to the original value of the commodity inputs prior to the circulation of the new output. To cut the subsistence wage in money terms by half on the grounds that corn will be halved in value in the next time period, does nothing to keep the labourer alive today.

My argument, therefore, is that it is the value structure of line III^{i} rather than line III^{ii} of the corn model which is appropriate, and if this is so, then as Andrew Glyn acknowledges, there will be a rise in the organic composition of capital. In the accompanying table I have added three further columns to those in the original table, and extended the figures for line III^{i} for a further two time periods, (plus figures for period XX by way of comparison). From this it is clear that while the organic composition of capital rises, so too does the rate of exploitation (column 15) but at a lower rate than the organic composition. Thus the profit rate (column 16) falls.

In column 14 we address the question of depreciation. Andrew Glyn argued that "it is totally inconsistent to produce a value scheme where the value of the product (250) is more than the value of the inputs, reckoned at current productivity, plus value created - thus after replacing constant capital (125) and deducting wages (50) and surplus value (50) there would still be unallocated value of (25)". (p. 96). It is only inconsistent, however, if we value inputs at their replacement cost rather than their historic cost, and as I argued above it is the latter which is relevant. The depreciation of capital becomes relevant when we consider the amount of value available for expanded reproduction (in physical terms) in period II would only require a value of 153 hours for constant capital (col. 1 x col. 6), and 31 hours for variable capital (col 6 x col. 10). This leaves a total value of 67 hours from the capital originally advanced in period II (209 + 42 = 251), to add to the surplus value of 58 for expanded reproduction. This indicates the importance of funds from depreciation for the capitalist in such a system (the relative weights had increased by 996:100 by period XX), but it in no way alters the value relationships - accumulation of value being governed by surplus value of the previous period.

If, as I have argued, Andrew Glyn is mistaken in his treatment of the effect of productivity changes on value relationships, he is right in pointing out the importance of analysing value in non-equilibrium situations of this sort. Under some circumstances we can show that even if we drop his assumptions about valuation, the rate of profit will rise in his model. Thus if we assume that the capital output ratio rises from 1:2 to 1:2.5 in period II, then this will raise the rate of profit in period 3, since it depreciates wages (and thus increases surplus value) more rapidly than it increases the value of constant capital. The point is worked through in terms of the original model in columns IIa and IIIa of our main table.

Similarly, if we assume that the constant-capital/output ratio remains fixed at 1:2, but that employment also increases because labour productivity, while rising, does not rise fast enough to keep step with the increase in the mass of constant capital, then the rate of profit will once again rise. This is because in value terms the mass of capital advanced remains the same, while with more workers the amount of surplus value increases. Rows II (b) and III (b) in the table give a numerical expression to this point.

Both with increasing constant-capital/output ratios and with an increase in the labour force the rate of profit rises not because of a fall in the organic composition of capital but because the rate of exploitation rises faster than the rise in organic composition. Furthermore, in both cases, once the initial effect ceases (through a levelling out of increases in the constant-capital/output ratio, or by running up against a full employment ceiling) then the rate of profit once again begins to fall, (in periods IV (a) and IV (b) not shown in the table). The case of full employment is particularly interesting. If we assume, as in III (c) in the table, that there is a full employment constraint of 120 hours in the economy then 56 units of surplus value from period II (b) can no longer be profitably accumulated, the mass of profit falls, and with it the rate of profit both on invested and total social capital. All this happens at a full employment ceiling whether or not wages are forced up above the value of labour power.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Seed Corn			Output						Wages						
Time Periods	Tons	value (c) ($1x6_{t-1}$)	Labour Hours (s+v)	tons	value (2+3)	Value to replace Seed-Corn per ton (5÷4)	Value to replace total Seed-Corn (6x1)	Technical Composition of Capital (1÷3)	Dead/ Living Labour (2÷3)	tons	value ($10x6_{t-1}$)	Organic Composition of Capital (2÷11)	Surplus Value(s) (3-11)	Surplus from depreciation (2-7+11-[$10x6_t$])	Rate of Exploitation (s/v) (13÷11)	Rate of Profit % (13÷[2+11])
I	75	150	100	150	250	1.67	125	0.75	1.5	25	50	3	50	33	1.0	25.0
II	125	209	100	250	309	1.24	154	1.25	2.1	25	42	5	58	66	1.4	23.3
III	225	278	100	450	378	0.84	189	2.25	2.8	25	31	9	69	99	2.3	22.4
XX	26,214,425	1,887	100	52,428,850	1,987	0.000038	996	262,144.25	18.9	25	0.00180	1,048,333	99.998	891	55554.6	5.3
II(a)	125	209	100	313	309	0.99	124	1.25	2.1	25	42	5	58	102	1.4	23.3
III(a)	288	285	100	719	385	0.54	154	2.88	2.8	25	25	11	75	143	3.0	24.1
II(b)	120	200	120	240	320	1.33	160	1.00	1.67	30	50	4	70	50	1.4	28.0
III(b)	202	269	152	404	421	1.04	210	1.33	1.77	38	51	5	101	70	2.0	31.6
III(c)	160	213	120	320	333	1.04	166	1.33	1.77	38	51	4	69	58	1.4	26.1 (21.6)

Notes: 1. Time period I is the same as Andrew Glyn's period III(a), and follows Andrew Glyn's period I (which in my schema would be period 0).

2. In the first set of calculations, periods I-XX, I assume a constant-capital output ratio of 1:2, with a constant labour force. In II(a) I assume that this ratio has increased to 1:2.5, and remains at that for III(a). In II(b) I assume a constant ratio once more of 1:2, but with a labour-output ratio rising less fast (it increases by one third in each period). Accordingly there is an increase of employment in each of the periods, II(b) and III(b), though in III(c) this is constrained by a labour availability of only 120 hours.

3. I have assumed throughout that wages and capital goods are purchased at the beginning of the period at the previous period's values.

4. Figure in brackets in row III(c), column 16, is the rate of profit on total social capital whether or not it has been advanced.

In this particular corn model, therefore, a number of Marx's general propositions appear to be born out: a rising organic composition of capital, a rise in the mass of profits consistent with the fall in the rate of profit, and counter tendencies which can offset the fall in the rate of profit but which - in the cases we have dealt with - demand a rate of increase in technical change or in the labour force which in many circumstances would be difficult to sustain. These propositions do not depend on the level of wages. Where the rate of exploitation is held constant (rather than rising as we have assumed) the organic composition still rises, while the rate of profit falls more severely.

A NOTE ON MARX ON THE RATE OF PROFIT

S. R. Broadbridge

In his article 'Marx on the Rate of Profit' (CSE B. Winter 1972) Ian Steedman suggests that the rate of profit does not depend upon $\frac{S}{C+V}$ and that it is affected only by the rate of surplus value in the wage goods industry. However, most of this conclusion is an optical illusion caused by the notation.

In what follows I adopt his notation by use in addition

v = variable capital per unit of output
c = constant capital per unit of output
w = wages per man

(all measured in price terms)

Then, in Steedman's formula (1)

$$P_1 = l_{11}(1+r)\left[l_{12}(1+r)^2 + l_{13}(1+r^3) + \ldots\ldots + l_{1n}(1+r)^n\right]$$

Since l_{11} is living labour and

$l_{12}\ l_{13}$ etc. are dead labour,

This can be written

$$P_1 = \frac{v_1\ (1+r) + c_1\ (1+r)}{w}$$

$$= \frac{v_1 + c_1 + r\ (v_1 + c_1)}{w}$$

Thus Steedman's formula (2) can be written

$$L = \frac{v_1 + c_1 + r\ (v_1 + c_1)}{w}\ W_1 + \frac{v_2 + c_2 + r\ (v_2 + c_2)}{w}\ W_2 + \text{etc.}$$

$$= \frac{v + c + r\ (v + c)}{w}\ W \qquad \text{(A)}$$

Given techniques and money wages, when W increase r must fall (and vice versa) because the portion of the labour force devoted to necessary labour (production of wage goods) varies in its proportion to that devoted to surplus labour (production of other goods) i.e. s/v changes. This seems to show that Marx is right in his assumptions ((ii) P 107) that the general rate of profit depends upon quantities of labour. In Steedman's formula (4), although it is concealed in the notation, ir <u>is</u> derived from quantities of labour.

More important, from (A) above

$$r = \frac{Lw - W\ (v+c)}{W\ (v+c)}$$

$$= \frac{\text{Wage cost of total output - total cost of wage goods}}{\text{Total cost of wage goods}}$$

$= \frac{S}{C+V}$ in the wage goods industry in Marx's terminology

Given competition and one rate of profit, $\frac{S}{C+V}$ in the wage goods industry is the same as $\frac{S}{C+V}$ in general so that Steedman's formulae translate into Marx's. The substitution of dated dead labour for constant capital merely adds the useful point that r enters into the price of constant capital - i.e. that the 'transformation' of values into prices of production involves also the 'transformation' of inputs.

J. Ann Zammit (ed) THE CHILEAN ROAD TO SOCIALISM (IDS, UNIVERSITY OF SUSSEX, 1973) £2.50. Stephen Parker

A universal component of the socialist argument is the impossibility of a capitalist solution to the problems of underdevelopment. It is particularly important, therefore, to investigate and learn from the experience of any attempt to pursue a socialist strategy in a semi-colonial country. Chile is the most recent attempt to deploy such a strategy. This book is the report of a 'Round Table' held in Santiago in March 1972. The blurb claims that "this book will provide useful insights for all those concerned with socialism and development". This claim is somewhat extravagant and deserves a careful assessment. We might expect that this was just another rendezvous for the peripatetic development jet set, but one is pleasantly surprised to find that the discussion seems to have had a more than academic interest to most participants, who clearly felt the urgency of evolving socialist solutions to Chilean problems. Nevertheless the book is less interesting for the light it sheds on Chile than on the problems of academics discussing socialism.

While furnishing some important information, few of the papers present comprehensive surveys of the area they cover. For instance, there is a section on 'Participation and Socialist Consciousness' - obviously a question of central importance. There is no paper which lays out the facts and the history of workers' participation, providing material necessary for an informed discussion. This may have been acquired by participants but is missing for the less fortunate readership. More adequate contributions appear, but are brief and dry, resembling those of orthodox economists. Analysis begins by considering the needs of the economy rather than by analysing the problems and tasks confronting the working-class and its allies, and developing programmatic solutions. In spite of obvious and sincere concern on the part of participants, the discussion tends to remain at an academic level. One looks in vain for the kind of strategic insight, imagination and blunt realism displayed in bolshevik discussion and policy. Papers and discussion are often too brief; we are treated to a survey of agrarian policy in thirty pages, without any really adequate analysis of rural class structure and dynamics. Everything focusses on discussion of _Latifundia_, while scant attention is paid to the problems of "85% of the rural population (who) remained outside the agrarian reform". (p. 212)

While the formal content of papers and discussion leaves something to be desired, the _character_ of the discussion is extremely instructive. The complacent formality of analysis alternates with uncertainty and rambling speculation. Instead of discovering answers the reader finds the questions dumped in his lap. For example:

> After eighteen months of such resolute efforts to introduce into Chile revolutionary changes in the legally constituted system and accepting and respecting the prevailing legality, the question is posed as to whether it is still possible to think that revolutionary changes can be made lawfully. (p. 30)

Obviously an important question. But it serves, not to initiate a discussion, but to conclude it! In this particular case we are treated to several examples of the frustration of the Popular Unity's programme by a hostile legislature. One might expect that this would provoke a serious discussion of the P.U's fetish for observing bourgeois legality. Instead, we have a reiteration of the P.U's perspective and a complete disorientation when it comes to providing concrete solutions to concrete problems. This tension between programme and reality is manifest throughout the book. These tensions seem to be treated as mere temporary deviations away from the fundamental pattern of evolution. "Things are bad, of course, but in the long run..." This mixture of complacency and uncertainty is the first soporific awareness that something might be deeply wrong with the 'Chilean Road to Socialism'. No adequate attempt is made in this book to discover what that might be.

A recurrent theme is the 'uniqueness' of the Chilean case, and the limited relevance of historical experience in, say, Russia. This kind of argument is really banal: everbody knows that Chile is not, say, Japan; that it has different class and economic structures, political ideologies and traditions. But what do they share in common? Is it simply that some people in both countries want socialism? Or is there a material basis which of necessity forces a real internationalism on the working class movement? Lenin's Imperialism argued that capitalism's development of the productive forces had (amongst other things) outgrown national boundaries, pulling all nations under the sway of the world economy, and made the progress of the less advanced dependent on that of the most advanced. This was true of Russia in 1917 and is true of Chile today. While there exists differences, there are also fundamental similarities. The national bourgeoisie's imbrication with imperialism on the one hand and the feudal oligarchy on the other prevented it from making a bourgeois revolution: it was the working class that forced it to reluctantly mount its historical pedestal and just as swiftly to relinquish it. In Chile, scientific assessment shows that the land is capable of feeding 20 million people (p. 22), or twice the Chilean pop. while at present over 20% of Chile's imports are of food (p. 362). 70% of the countries exports are accounted for by copper (p. 145). More than 35% of Chile's export capacity is required to service the foreign debt. (p. 155) The national and agrarian questions stare the country in the face - the same questions that faced Russia. And yet the relevance of the Russian experience is scarcely touched upon. While it is obviously ludicrous to suggest that identical tactics can be pursued, the fundamental strategy remains valid. For example, Lenin insisted on the urgency and necessity of instituting a monopoly of foreign trade: "Without this monopoly we shall not be able to 'free ourselves' from the foreign capital by paying 'tribute'.[1] The purpose of this monopoly is to reduce the pressure of world economy, facilitating increased socialist accumulation, and providing an essential planning instrument for the transitional economy. Apart from the insistence of an East European economist on this point (p. 176) it is ignored in discussion of questions of foreign policy. But with the increased disparity in productivity between the advanced capitalist countries and the semi-colonial nations since 1917, this question is of even more pressing urgency. Without such a monopoly, the world market becomes a powerful instrument for pumping surplus-value out of backward countries; slowing up independent accumulation. It strengthens the position of pro-capitalist elements of the economy, endangers the structure of imports, and for these reasons increases the difficulty of planning. But perhaps Chile's 'uniqueness' allows it to escape such problems and stand outside the general development tendencies of 20th century capitalism? The Chilean Road is silent on such issues.

Plenty of fire is directed at so-called 'ultra-lefts' (i.e. critics of the P.U. strategy) but there is urgent need of a mote and beam department at P.U. headquarters. Having nationalised the Copper industry, we are told that:

> Chile as a large producer would have to develop its own technological advances, but it was recognised that the effort to formulate such a policy and to incorporate local science and technology into the copper industry would be starting from a very low base. Chile still had very few copper technologists or economists and in the past there had been little or no research into copper ores, or mining and processing techniques, or the industry's problems. (p. 159)

U.N. and Rumanian help is being accepted to get over this. But how long will this take? Do the nationalizations mean being cut off from the technological advances of the U.S. copper companies? Was the skilled manpower expatriate depriving Chile of an essential resource? We may try and show ourselves to be frightfully socialist by nationalising the copper industry, but if it is done in such a way as to sabotage present production, and jeopardize future advance, we are nothing but utopians, and the worst kind of reactionaries. The U.S.S.R. has a history of technology transfer policy which is extremely instructive. A policy of granting concessions to gain access to technology, train manpower, etc. was carefully implemented. It was seen that only an absorption of the most advanced achievements of capitalism could begin to lay the basis for socialism and fuel the struggle against capitalist restoration. Intransigent and principled expropriation, without careful accounting of the material balance sheet may be morally elevating, but constitutes a material step-back. In the last analysis socialists are <u>for</u> the forces of production, as well as being against the relations of production. Any socialist strategy must embrace both the material and social aspects of transition. This book focusses on orthodox issues of nationalisation: compensation, integration into the national economy and so on. Yet all such efforts at commencing socialist reconstruction will be frustrated unless a correct policy towards technology and skilled manpower is adopted. However, information and discussion of these issues, so relevant elsewhere, is far too brief.

The discussion on worker's participation is one of the best examples of combining an academic approach, while ignoring history. From the discussion of participation not one argument for the <u>economic</u> necessity of 'participation' emerges. It is recognised as granting workers' control over their own existence, a higher form of democracy and so on. But until one can demonstrate that there is a material necessity for such control it must remain an ideal pipedream. Socialism may well be a possibility, but it will be impossible to persuade the working class to struggle for it unless it can be shown to be a necessity, springing from real experience rather than abstract morals. And yet the book is sprinkled with instances of this necessity which are not dealt with in the discussion of participation. An example:

> Taken together, the total of mineral ballast removed from Chuquicamata (copper mine) showed an enormous increase in 1971 over 1970, but a lot of this effort went into removing the ballast left in place by the former mining company which had attempted to extract as much mineral as possible before finally being taken over ... the pre-nationalisation exploitation policy in Chuquicamata subsequently involved the new administration in a tremendous effort to remove large quantities of rubble before extracting ore. Output in Chuquicamata was therefore lower than anticipated... (pp. 153-156)

An obvious example of capitalists' sabotage of production. This is precisely the kind of situation where the Popular Unity should have called on the workers to exercise control in order to safeguard production. Such control over the immediate labour process is a vital first step in the preparation for socialist revolution. But it is no more than the first step. As Lenin put it: "Until workers' control has become fact ... it will be impossible to pass from the first step (from workers' control) to the second step towards socialism, i.e., to pass on to workers regulation of production".[2] The P.U. seems to see the question as "essentially an organisational problem" (p. 181), of universalizing workers' control through Councils in each enterprise, and linking these together. This would seem to mean replacing the existing capitalist control of the enterprise via corresponding workers' control:

> It must extend to the whole of economic and social life, ranging from the production committee in a section of an enterprise to the administration of the whole company, right up to the level of regional and national economic planning. (p. 188)

There was a feeling by participants that such organisation might lead to conflicts between sections of the working class and the interests of the class as a whole. One participant describes how "sometimes workers are keen to get higher prices for their products, or dislike producing products which are not so profitable". (p. 67) Such organisation fosters preoccupation with performance of the immediate labour process to the exclusion of that of society as a whole, and drives a wedge between the producer and the consumer. In the Russian revolution Lenin sought to institute workers management, the general regulation of production, as opposed to workers control over the immediate labour process, through the Soviets.[3] These were organs not of economic but of political power. Potential organisational forms of such power apparently already exist in Chile. Price and supply committees have been set up to tackle problems arising from inflation and the shortage of goods (p. 56). These can only be effective if they become genuine investigating committees of the working class and its allies, investigating the reasons for price rises, the availability of housing, especially in rich areas etc. and undertaking the necessary administrative measures directly. Such simple, straightforward, practical measures seem to have been beyond the reach of participants concerned to develop sophisticated bureaucratic solutions.

It must be admitted that such measures pose the question of power and authority. Who is exercising the power of society and over whom? Repeatedly the question of the nature of the state is posed, whether over the implementation of the P.U. programme, the question of workers management, or the monopoly of foreign trade. We are told that:

> The essence of uniqueness of the Chilean Road to Socialism lay in the fact that the process was to take place within the bourgeois institutional framework and would use it whenever possible to effect radical changes, gradually transforming the system into a socialist one. (p. 238)

> This peaceful road to socialism is contrasted with the 'violent' road:

> it was claimed that the protagonists of a violent confrontation were now the powerful national and international groups who previously had always argued in favour of pacific social evolution. (ibid)

What a subtle reversal, what dialectic, what paradox! "It's not the lefties, but the capitalists who are going to use violence". One wonders what the working class will say to the P.U., when the guns of the counter revolution are pointed at its temple. Will it congratulate the P.U. on its foresight or upbriad it for failing to act upon it? This kind of glib argument may suffice at Round Tables in Santiago but it provides no solution to problems raised by capitalist sabotage and subversion. Lenin insists in State and Revolution (Chapter 1, part 4) that "The supersession of the bourgeois state by the proletarian state is impossible without a violent revolution" and even goes so far as to suggest that this is a "general rule". What is at issue behind the smokescreen of 'violence' is the question of the supersession of the bourgeois state. Marx learnt from the Paris Commune that "the working class cannot simply lay hold of the ready-made State machinery and wield for its own purposes". The frustration of the P.U. executive by the legislature confirms this. The Chilean state is not simply occupied by the representatives of capital, but is a capitalist state, a machine that cannot but act against the working class and its attempts to construct socialism. It has to be smashed by the armed workers, who must erect a state of the Paris Commune type. This necessity, part of Marxist theory since 1871, found no mention at the Round Table. But what can one expect in a period when the first qualification of a 'Marxist' is the repudiation of Marxism? The admission of the army to the government and the failure to break its power represents a Trojan horse in the ranks of the working class. There is no discussion of the failure to undermine the Generals' basis of power, but merely a speculative sociological analysis of the officer caste. Throughout the book we discover an inability to embark on a serious analysis of the question at issue in a politically responsible manner. What is at stake is considerably more than academic prestige - the political fate of the international working class in the coming period, and therefore the future of society.

The book does not limit its coverage to the Chilean experience. It includes a number of papers discussing the 'socialist road' in Cuba, Yugoslavia, Hungary and Tanzania. Here too the principle of 'uniqueness' seems to apply. While they are generally more comprehensive contributions, no lessons are explicitly drawn with regard to Chilean problems. Apart from the presence of their authors at Santiago it is difficult to understand why they appear in this volume. A deeper survey of Chilean political and economic history preceeding the P.U. would have been much more valuable, as well as a much more throrough discussion of the P.U.'s strategy towards the state than that published.

The editor and the IDS Staff are to be congratulated on the speedy production of this volume, but they are not responsible for the content of the discussion. Generally, the contributions on Chile are uneven and patchy, marshalling information in an unbalanced manner. Too often discussion begins from the P.U.'s policy, rather than from the problems, and there appears to be both an ignorance of, and a reluctance to discuss relevant historical experience, in particular that of Russia. The general drift of contributions is therefore academic rather than political, while the emphasis on Chilean 'uniqueness' smacks of complacency and arrogance. Those socialists who take the problems facing the international working class seriously must await a fuller analysis and more critical and informed appraisal. The book will probably be a best seller amongst radical practitioners of the pseudo science of 'development': those who seek an appraisal from the stand point of scientific socialism will acquire few positive lessons from The Chilean Road to Socialism.

NOTES

1. 'The Immediate Tasks of the Soviet Government' in _On Workers' Control and the Nationalisation of Industry_ (Moscow, 1970) p. 159.

2. Ibid., p. 161.

3. Ibid., p. 51; Trotsky, _The Struggle Against Fascism in Germany_ (New York, 1971), p. 244. For the information of participants, Soviets were geographical councils, _not_ factory committees (p. 208). See also E. H. Carr's discussion in _The Bolshevik Revolution_, Vol. 2 (London 1972) p. 62ff and Note D.

Critique 1

a new journal of soviet studies and socialist theory

CONTENTS OF NO. 1

Subsequent issues are planned to continue the debates on the nature of contemporary Soviet society, Communism and the Transition Period, and the debates of the Twenties. The journal will also provide informed discussions of current events in the Soviet Union and Eastern Europe, relating factual information to theoretical aspects. A review section will put readers in touch with books most likely to be of interest to radical scholars in this field. The translations section is to be a regular feature of Critique and will include translations of rare documents of the Twenties as well as contemporary material.

Subscription Rates

Annual subscriptions: Inland 80p. Overseas £1.20 ($3.00)
Single Issue: Inland 40p. Overseas 60p ($1.50)
Institution Annual Rates: Inland £1.20. Overseas £1.80 ($4.50)
(published bi-annually)

For a subscription to CRITIQUE please complete form below and return to: CRITIQUE, 31 Clevedon Road, Glasgow G12 OPH, Scotland (tel: 041-339-5267)

I would like to subscribe to Critique

Annual Subscription	Inland 80p ___	Overseas £1.20 ($3.00) ___
Single Issue	Inland 40p ___	Overseas 60p ($1.50) ___

I enclose ______ I enclose ______

Name ....
(please print)

Address ....

....

Working Papers on the K A P I T A L I S T A T E

KAPITALISTATE is an international bulletin of Marxian studies on the capitalist state.

It is not designed to be just another journal, with a small editorial board on the one hand and a large number of passive subscriber-readers on the other. In contrast, the Working Papers will be a means for Marxist theoreticians and researchers to improve their contacts and disseminate and coordinate their work effectively.

The bulletin therefore has coordinating editors in a number of countries who are responsible for activities around the bulletin in their respective countries. The content of the bulletin will be developed by thirty to forty contributing editors covering specific subject areas and regions: they will help to gether and edit materials, and make regular or occasional contributions.

Groups to carry out these tasks have been formed already in the U.S.A., West Germany, Italy and Japan; in France, the Netherlands and Great Britain groups should come into existence shortly. If you are interested in helping, please contact us at the address given below.

The subscription rate for the U.K. is £3.25 p.a. for individuals, and and £5.00 for institutions. The bulletin will appear 4 times a year. Single issues are also available for £1.00.

Information on rates and contact addresses in other countries is available from the address below.

CONTENT OF THE FIRST ISSUE

Current events: Currency crises (Knieper)
Current projects: Corporate regionalism in the US (Feshbach, Shipnuck); The state & dependent development (Pompermayer - & comment by Wallerstein); Public science & technology policy in the FRG (Neuendorff, Rodel); Contradictions of US state economic policy (Rose); Autonomy & penetration in Venezuela (Hein et al); Formation of interstate functions in capitalist social formations (Simonis); Radical criminology (Schwendinger); Regional Studies & local movements; StaMoCap v. Marx & Lenin (Mohl).
Progress reports: USA, Italy, Germany.
Theoretical notes: Capital & state in the world economy (Picciotto, Radice); Nation states & multinational corporations (Martinelli, Somaini); Theory of the fiscal crisis (O'Connor); Japanese monopoly capitalism & the state (Noguchi).
Working material/bibliographies: Problems of state intervention (Altvater); Abolition of market control & the problem of legitimacy (Offe); Political economy of state expenditures & revenues - bibliography (O'Connor).
Reviews: Italian analyses of class struggle & the state (Bock); survey of journals.

KAPITALISTATE SUBSCRIPTION FORM

Name .... Address ....

....

1. I enclose £3.25/£5.00 for 4 issues

2. I enclose £1.00 for the first issue.

3. Please send more information sheets/sub. forms.

4. (If outside U.K.) Send me relevant sub.rates and address.