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THEORIES OF THE CRISIS

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> It is now six years since the worst recession since World War II hit the western economies. A new recession is now developing, even though in most countries there has not been anything like sustained recovery from the last recession. The rate of growth in the ‘post-recession’ year, 1978, was less than the average for boom *and* slump years prior to 1973.

The pattern of recession – slow recovery – further recession in the West is not countered by any great industrial expansion in the rest of the world. [1]

Nor are things any better in the other ‘third’ of the world – the so-called Communist countries. Almost without exception their growth rates have been declining and they have been cutting back on investment plans. So, for instance, the 1975–80 Russian plan set the lowest targets for decades. A report by the semi-official Polish ‘Experience and the Future’ group tells of ‘severe difficulties experienced by the Polish economy following a period of rapid growth at the start of the ’70s ... So far this year (1979)

growth rates have remained below 2%', leading to 'an expected fall in the standard of living for the next two to three years'. [2]

At the same time as the global slow down in economic growth, the inflationary pressures of the mid-1970s persist. For the first time ever in its history the OECD is expecting double-digit inflation for its member countries taken as a whole.

Underlying the element of crisis within the economic 'upturn' was the low recovery of investment internationally.

In the US the 'boom' of 1976–8 did not lead to any real surge in investment. 'Last year's estimated 16% rise in after tax US corporate profits did not stimulate a comparable surge in capital spending, according to the latest survey of the Department of Commerce, Businesses plan to increase their investment by a modest 3% in real terms ... This compares with an increase last year of 5% in real terms.' [3]

The same is true even for the most dynamic of the western capitalist countries. In West Germany, for instance, 'hopes for a revival of economic activity led by investment were quickly dispelled in the first half of 1978'. And in Japan, 'private domestic demand has remained weak'. [4]

What has produced this turn of the whole world economy towards stagnation and crisis? How long will it last? What are the prospects for the world system returning to the sorts of growth rates known in the 1950s and 1960s?

In this journal and elsewhere we developed a rudimentary theory of why the unprecedented world boom of the 1940s–1970s was bound, eventually, to collapse. [5] The argument basically, was that the long boom was sustained by an unprecedented peace-time level of arms spending, especially in the US although to a lesser extent in Britain and France. But this level of arms spending could not be sustained indefinitely since it imposed a burden which slowed down the growth rates of great arms spenders as opposed to other states. By 'the mid-seventies' we forecast as early as 1960–1961, there would be a falling back of the world economy into the pre-World War II pattern of worsening cyclical crises.

Capitalism’s major problem was seen as the tendency for the means of production to expand at a much faster rate than the employed, productive labour force (in Marx’s terms for the Organic Composition of capital to rise), so that the value of investment grew much more rapidly than the source of profit and the rate of profit consequently had to fall. These tendencies could, we suggested, be off-set if some of the surplus value that would normally be accumulated under the pressure of inter-capitalist competition were to be ‘drained’ out of the system. We argued that in the past this had been achieved through imperialism; that in the post-1940 period it happened as military competition between rival capitalist states forced each to divert funds from productive accumulation to arms programmes; but that already in the late 1950s inter-capitalist economic competition was leading to a fall in the proportion of world output going on arms and thus to the slow re-emergence of symptoms of crisis.

The argument had considerable predictive power. It enabled us to sustain realistic revolutionary activity at a time when other revolutionaries moved rapidly from frenetic activity based on ultra-optimistic perspectives to disillusionment and collapse. But it did not attain any significant hearing outside our own ranks. As the reality of capitalist crisis came to be something which was taken for granted in the late 1960s and early 1970s – and as a whole new generation of intellectuals became interested in Marxism – our theory was peripheral to most of the discussions that took place. Instead, a range of quite different explanations of the crisis appeared in Marxist publications.

This article is an attempt to look at some of these. It is an edited version of the first section of an uncompleted three part work which tries to locate the present crisis in terms of the whole dynamic of capitalist development.

The second part, when finished, will reappraise Marx’s theory of capitalist breakdown and look at various attempts to criticise Marx’s argument.

The third – Towards a Synthesis – tries to use Marx’s theory to draw together the correct elements in the different explanations

of the crisis, to restate some of the 'insights' of past IS theory and to integrate the lot into a coherent picture of the world economy today.

Wages as the cause of the crisis

> The simplest explanations for the crisis-prone nature of the western economies are those which blame the pressure of wages on profits over the least 19 years and more.

In Britain the best known version of the 'theory' apart from that of Tory politicians, is that put forward by two left wing Oxford economists, Andrew Glyn and Bob Sutcliffe, back in 1972. [6] Their explanation concentrated on British figures, but implied that the argument was of wider, international, relevance.

> 'British capitalism has suffered such a dramatic decline in profitability that it is now literally fighting for survival. This crisis has developed because mounting demands from the working class for a faster growth in living standards have coincided with growing competition between capitalist countries. This competition has prevented British capitalism from simply accommodating successful wage demands by pushing up prices ... And it has intensified because the other rich capitalist countries have been subject to the same pressures from the working class as British capitalism ...' [7]

> Bob Rowthorn, a Cambridge economist who belongs to the British Communist Party, has argued very much the same case, pointing to pressure from wages as one of the causes of the crisis in the USA: '... the rate of profit did not fall because the organic composition rose, but because the share of output going to profits fell'. Indeed for Rowthorn this 'accounts for the *entire* reduction of US profitability between 1965 and 1970.' [8]

The notion of a dramatic reversal in the balance of forces between labour and capital, leading to a squeeze on profits, also

plays a role in the explanation of the crisis put forward by the Belgian Marxist economist, Ernest Mandel. He has argued that in the late 1960s internationally, ‘the reserve army of labour’ was eaten up by capitalist expansion and profits were cut into by wages. The ‘limits of the reserve army’ were reached, ‘and a pronounced increase in real wages started to roll back the rate of surplus value.’ [9]

There are, however, decisive counter-arguments against the claim that wages can have caused the crisis.

Firstly, the argument just does not fit the empirical facts for at least two of the western economies – including the giant US economy. [10] The sources usually given to justify the argument about wages and the crisis are those of Glyn and Sutcliffe for Britain and Nordhaus for the USA. [11] The latter figures are, for instance, quoted as authoritative by Mandel and Rowthorn. Yet they are open to considerable doubts. [12]

As a result of these doubts, Perlo has given a quite different interpretation to the Nordhaus data. Giving figures which probably exaggerate the level of profits (he includes *all* the cost of stock appreciation and capital consumption in profits) he suggests that the ‘share of profits’ in the US *rose* from 19.5% in 1946 to 22.1% in 1974. [13] A more recent Brookings Papers analysis of US profits by Feldstein and Summers also casts great doubts on the Nordhaus figures. It suggests that the fall in US profits is much less than Nordhaus claimed. Using pre-tax figures for total returns to non-financial capital (i.e. profits and interest payments), it provides the following picture for net profits (after deducting stock appreciation and based on net capital stock) and gross profits (again deducting stock appreciation, but this time based on gross capital stock). [14]

	Net	**Gross**	**Cyclically Adjusted Net**
1950–59	11.1%	11.1%	11.2%
1956–65	10.9%	11.3%	11.9%
1960–69	11.7%	11.9%	12.1%

1970–76	7.9%	9.6%	10.4%

> It can be seen that no decline in the rate of profit, on any measure, takes place until after 1970.

Glyn and Sutcliffe's figures for Britain claim that the share of 'wages and salaries' rose from 73.3% to 78.8% between 1955 and 1970, and that there was a corresponding decline in profit's share. But the figures are subject to many of the same criticisms as Nordhaus's. They assume that *none* of the cost of financing stock appreciation is borne by company borrowing. And they give figures *before* tax. As Glyn himself has admitted in a later article, the share of wages and salaries does not rise, but sinks, from 55.6% in 1955 to 50.2% in 1970, once direct and indirect taxes are taken into account. [15]

C.J. Burgess and A.J. Webb have shown that if you take the share of national income in Britain going to all companies after tax, making deductions for stock appreciation and capital consumption, and adding on the government hand-outs to industry, you find that there is no decline in the 1950s and 1960s. [16]

But it is not only on empirical grounds that the claim that a 'growing share of wages' has provoked the crisis fall down. Its proponents also fail to present any adequate explanation of the mechanism causing the alleged upsurge of wages at the expense of profits internationally.

An attempted explanation – given, for example, by Rowthorn and Mandel and by the Americans Body and Crotty [17] goes something like this. Economic expansion can take place as long as there is a 'reserve army of labour', prepared to enter employment at a relatively low level of wages. But in the 1960s this reserve army dried up, leading to a growth of wages (either because of upward bidding by capitalists seeking labour or by an increase in the bargaining power of unions).

The first difficulty lies in the claim that there was a 'drying up' of the reserve army of labour. Expansion of production does not only lead to a sucking in of workers into production; it also

means productivity rises that drive workers out of some areas of production and into others [18] (witness the rising plateau of unemployment in the US in the 1950s and 1960s; and the near doubling of unemployment in Britain through 'shake out' during the Wilson government of the late 1960s). What is more capitalist expansion in the 1950s and 1960s had the effect of massively *increasing* in size the world wide reserve army: in the metropolitan countries conditions were created in which the number of married women prepared to enter the workforce rose massively; at the same time, throughout the world there was a huge migration of workers from the countryside to the towns, so that in nearly all the 'developing countries' there were vast pools of labour only too eager to get employment in the 'developed countries'. There was no sign of these pools drying up in the late 1960s. Look at the vast influx of 'illegal' Mexican labour into the US. Look at the growth of the 'foreign' population of Germany doubling from 1.92m in 1968 to 4.13m in 1974, until deliberate government action was used during the crisis of 1975 to force about a million of the 'guest workers' out of the German economy and back to the 'third world'.

Rather than the 'reserve army' drying up, something quite different happened – the crisis created problems *of absorbing* the reserve army. In fact, the effect of the crisis has been to extend the reserve army: it has doubled unemployment in the OECD countries and more than doubled it in the 'developing countries'. If a 'drying up' of the reserve army was the cause of the crisis, then the crisis could never have happened, and should now be resolving itself as the reserve army grows still further.

This leads us straight into another difficulty with the 'wages share' argument – it just cannot explain why all the western economies moved into crisis at the same point in the mid-70s. In Italy, in Britain, in Spain and in France there were important improvements in the level of working class organisation in the late 1960s and early 1970s. But there was no similar improvement in the other major economies – Japan, West Germany, and, above all, the US. The American 'reserve army' grew once the Vietnam War began to wind down, and the union

density of the American working class has fallen significantly since then, from 22.4% of the labour force in 1965 to 20.1% in 1976. [19] Furthermore as Perlo has pointed out, for the period before the outbreak of the 1974–5 recession, ‘there was a sharp decline in real wages of non-agricultural workers from late 1972 to spring 1975, while productivity on the whole increased.’ [20]

Finally, the ‘wages share’ argument simply cannot explain the timing of the turning point from a period of expansion to a period of contraction. During the 1950s real wages rose, year after year, in *all* the major capitalist countries. By the mid-1950s even in the countries which had been devastated by World War II they were higher than the pre-war figure. Yet the rate of profit was not squeezed, investment grew, inflation remained at a relatively low level and there was near-full employment everywhere.

Even if it is assumed (despite our previous arguments) that in the late 1960s and early 1970s rising wages did cut the ‘share of profits’ in company value added and the national income, it still has to be explained why this should have happened, when it did not happen in the early period. The explanation could only be in terms of the system no longer being able to afford the real wage increases that it previously could. But then it is not rising real wages that cause the crisis, but rather the crisis that causes rising real wages to cut into profits. The ‘declining share of profit’ becomes a product of the crisis, not a cause (even if it is a product of the crisis that feeds back into the economy to make the crisis worse). Theories that purport to explain the crisis in terms of the ‘rising share of wages’ or the ‘declining rate of exploitation’ do no such thing. They force even their adherents to turn to other factors in an effort to overcome the contradictions in their own positions – factors such as government spending (Glyn and, in part, Rowthorn), the changing international structure of the system (Rowthorn) or ‘long waves’ (Mandel).

Government spending and the crisis

> The notion that excessive government spending has been the cause of the crisis is very widespread. On the right it has been presented by the Oxford economists, Bacon and Eltis. [21] On the left their conclusion has been taken up, for instance, by Aglietta who writes of it, 'this analysis uses a terminology other than our own, but is governed by the same perspective', while both Mattick and Yaffe [22] had argued before Bacon and Eltis that the symptoms of stagflation were the result of successive Keynesian exercises in deficit budgeting designed to prevent crisis. According to Mattick, efforts by government to bring together 'labor and idle capital for the production of non-marketable goods' lead to a 'constant' growth in the 'non-profit sector' until it 'outweighs the profitable sector and therewith endangers the latter's existence'. 'Deficit financing and government induced production … must come to an end. The Keynesian solution will stand exposed as a pseudo-solution capable of postponing but not preventing the contradictory course of capital accumulation.' [23]

But has the 'public sector' been 'squeezing' the 'profit sector'? The evidence for such 'squeezing' is very meagre indeed for the period prior to the onset of world crisis in the early 1970s.

Bacon and Eltis crudely give figures for employment in the public and the 'productive' (i.e. private) sector; they show that the former has been growing and the latter falling, and conclude that the rise in one has *caused* the fall in the other.

But they virtually ignore the fact that the rise in public sector employment has been primarily by drawing into the workforce people – especially married women – who were previously not in it, at the same time as there has been a growing pool of unemployed labour that would welcome work in the 'productive' sector if there were any available. So in Britain between March

1967 and December 1975, the number of males in employment fell by more than a million; in the same period, the number of women in employment rose by more than 900,000 – and this growth was entirely in the ‘service’ sector. [24]

And even some bourgeois economists have pointed out that in terms of resources, Bacon and Eltis do not distinguish properly between ‘public sector use of resources’ and ‘transfers made by the state between different components of the private sector, which has no direct impact on the output of that sector.’ [25] In Britain, ‘In the post-war period there has been no substantial increase in the share of resources which the public sector authorities take for their own direct expenditure. [26] Government expenditure on goods and services was 24% of the GNP in the early 1950s and 27% in 1973. Certainly you cannot explain the crisis which broke in Britain in 1974 by ‘excessive’ taxation to feed the allegedly insatiable demands of government: ‘the aggregate tax burden in the UK fell quite sharply between 1964 and 1973 ...’ [27] So it could not have been ‘taxation’ of the ‘productive’ sector to feed the ‘unproductive’ sector that caused the crisis.

That leaves open the possibility that the ‘productive sector’ was hit in another way, by Keynesian ‘deficit financing’, government spending financed by borrowing on the market which drew off the funds available for private industry. This, essentially, is the argument of Mattick and Yaffe – government borrowing postpones the crisis for a period, only to make it worse when it finally comes.

However, facts again put a huge question mark over any such explanation: real examples of deficit financing have been rare outside of war conditions. As Matthews pointed out for Britain: ‘The question is whether the high level of demands that actually occurred (during the long post-war boom – *CH*) was due to government action or whether it was due to other forces, as a result of which government action was not needed ... The hypothesis that it was due to fiscal policy is open to a simple, basic objection. This is that throughout the post-war period, the government, so far from injecting demand into the system, has

persistently had a large surplus … Fiscal policy appears to have been deflationary in the post-war period.’ [28]

It is true that there were two periods (prior to the 1974 crisis) when the government embarked upon large *capital-spending* programmes in order to try to give a ‘Keynesian’ boost to the economy – the Maudling boom of 1962 which was finally ended by Labour in 1966, and the Barber boom of 1972–3 that preceded the crisis of 1974. There was also in the US an important period in which the government resorted to deficits to finance an unpopular upsurge in spending (due to the Vietnam war) – in 1965–8.

Financial Balance of Government Sector, as a Percentage of GNP/GDP [29]

	1971	1972	1973	1974	1975
US	−2	−½	–	−½	−4
Japan	−1	−1½	½	−2½	−7
W. Germany	–	–	−1½	−1	−6
France	½	½	½	½	−3
Italy	−4½	−6½	−8	−5	–
UK	1½	−1½	−2½	−4½	−5

But these hardly explain the elements of crisis to which these upsurges in spending themselves were a response. So both the 1971 crisis in Britain and the 1973–4 crisis internationally followed years *not* marked by budget deficits.

Central and Local Government Deficits, as Percentage of GNP/GDP [30]

	1974	1975	1976
Italy	−5.4	−11.1	−10

UK	−5.3	−5.7	−5¾
W. Germany	−1.2	−6.3	−5¾
Japan	+0.2	−4.3	−4¼
US	−0.3	−4.5	−3
France	+0.6	−2.2	−1½

(+ = surplus, – = deficit)

> It can be seen from these two sets of figures that Italy and to a lesser extent Britain, apart, the deficits only became truly large once the crisis had broken, *after* 1974. But government deficits then were inevitable, unless governments were going to increase the depth of the crisis deliberately by huge cuts in their own expenditure.

As Ian Gough has noted ‘It is not the case that the great expansion of state borrowing since World War II has been financed by government borrowing; instead taxation has grown in parallel.’ He also adds, ‘The recent growth in public sector deficits is a conjunctural phenomenon, *following from* the present slump not precipitating it.’ [31]

We have seen that you cannot claim that the state sector has been ‘squeezing’ the private sector – unless somehow you see the private sector as ‘squeezed’ by a transfer of resources between its different sectors. Nor can you claim that Keynesian deficit budgeting has destroyed the motor spring of growth in the system. But this still leaves one argument unanswered – the claim that it is the transfer of resources, via the state, between the different parts of the private sector that has brought society to the point of crisis. [32]

The most thorough attempt to do this within a Marxist framework has been by the American economist, James O’Connor (although, as I will argue later, his categorisation is grafted on to an account of the crisis quite different to Marx’s). O’Connor breaks public expenditure down into two sets of

components. The first set he calls '*social capital*' and is made up of expenditure which is 'indirectly' productive for private capital, i.e. it complements private capital in its drive to extract surplus value to accumulate. His second category consists of expenditures which are completely non-productive, but which are necessary for the social stability of the system. He calls these the 'social expenses of production' and includes in them 'the welfare system' (i.e. social security as opposed to national insurance benefits that have to be earned by 'work') because their function is to 'keep social peace among unemployed workers', [33] arms expenditure (since its aim is to protect and expand markets, not to create wealth) and payments to non-productive intermediate classes.

How have the different sorts of expenditure grown in relation to each other? O'Connor argues that in the US the main burden of social capital expenditure has been borne by local and state governments -which are very much influenced by local capital. The social expenses of the system, by contrast, have tended to be borne by the national capital – i.e. by the federal government. 'If federal government has earned the label the 'warfare-welfare state', local and state governments deserve the name the 'productivity state'. [34]

How the two sectors have grown in the US is shown by figures given recently: [35]

	Federal Expenditure	**Local and State Government Expenditure**	
1947	12.9% GNP	5.4% GNP	
1952	20.5	6.6	
1956	17.6		
1971	21	10.9	(1972 figure)

It would seem that the proportion of the GNP on 'non-productive' expenditures has remained more or less constant since 1952 (indeed, if you remember that 1947–9

> was an exceptional case, in that arms spending fell drastically for the only time during the post-war period, the constancy would seem to much longer lasting). On the other hand, 'indirectly productive' expenditures have increased steadily.

It is worth noting, however, that within 'non-productive expenditures' the proportion spent on 'warfare' has tended to decline slowly over the years (with the exception of the Vietnam war years of 1965–8), and the proportion on 'welfare' to rise.

O'Connor sees 'productive' expenditures as rising in order to sustain the growing needs of industry for a skilled workforce and for a modern 'infrastructure'. But why do the non-productive, non-military expenditures also rise?

There seem to be two reasons: (1) Demographic changes which mean that there are more old people, and therefore more people likely to be sick but not insured. (2) The effect of the crisis itself in producing a growing 'sub-proletariat' of permanently unemployed – a sector that made itself felt dramatically with the ghetto uprisings of the mid-1960s.

O'Connor himself does *not* explain the crisis in terms of growing expenditure on these items. The title of his book is 'the fiscal crisis of the state', not 'the fiscal crisis of the system'. His explanation for the crisis of the system lies elsewhere – in the explanation given by Baran and Sweezy in terms of a 'growing surplus' (which is dealt with later on). However, what the figures from the US do show quite clearly is that there is no simple correlation between increased state spending and the elements of crisis within the system.

In the pre-war period, government spending was at a very low level and the system was in very deep crisis. In the 1950s it was about 70% up on the pre-war figures, but the system boomed. In the 1970s it was another 20% higher, but the system no longer boomed and capacity utilisation fell to 80% in 1969–73 compared to 90% in the 1950s. [36] If only spending on 'goods and services' (i.e. not on transfers) is measured, the increase

1951/7 to 1969/73 is only 12% – and there is a decline in the proportion of GNP going to these after 1974.

What may be more significant is the shift from *military* expenditure to productive (and non-productive) non-military expenditure – but we will be dealing with this point much later.

Ian Gough has applied some of O'Connor's arguments to Britain and other countries. He shows that: 'Excluding the US (where it was boosted by military spending in the 1960s) state consumption rose by 3.9% in real terms in all OECD countries from 1955-69, while GNP rose 5.7%. In other words, *real* state consumption expenditure has fallen as a share of GNP over the last two decades', although 'this is more than accounted for by the decline in military spending, and social transfers have continued to rise ...' [37] This only produced anything like real problems for those countries, like Britain, where the rate of growth of GNP was less than the average.

Gough argues that most of the growth of state expenditure was in the 'indirectly productive' area:

> 'The single most important conclusion that emerges is that an increasing proportion of the total are productive expenditures, producing inputs for the capitalist sector. The share of the social services, infra-structure and accumulation expenditures is growing, while that of unproductive luxury expenditure is declining. It is wrong, therefore, to regard the growth of the state as an unproductive 'burden' upon the capitalist sector; more and more it is a necessary precondition for private capital accumulation.' [38]

So the biggest single area of growth of public expenditure in Britain between 1961 and 1973 was educational expenditure which grew by 2.6% of GNP. This expenditure growth was almost entirely in the sections of the educational system catering for the minority of school students who remained in the educational system after the age of 16, and was directly associated with the perception of governments that higher education had to be expanded to cope with the technological needs of British capital.

> Close behind the growth in educational expenditure came the growth in direct and indirect support for industry – environmental, transport (chiefly motorway) and financial grants. Welfare and social security expenditure did grow as well – but this was very much a product of the growing numbers of unemployed, a product of the crisis, of the system, not a cause.

So even if you conclude that the increase in public sector spending is part of the cause of the crisis, this hardly amounts to 'the public sector squeezing the private sector'. Rather it is a case of the cost of sustaining the growth of capital constraining the further development of that growth itself.

However, as I have argued earlier, it is difficult to see such spending as a cause of crisis, since it happily fitted with the needs of the system in the 1940s, 1950s and 1960s. If it seems like a burden today, it must be because something else in the system has changed. That is why those, like O'Connor and Gough, who have looked closely at the matter see the 'fiscal crisis of the state' as a product of a wider crisis. For O'Connor, this is the crisis of monopoly capital as described by Baran and Sweezy, for Gough it is a crisis arising from the 'distributional struggle' over wages. Our explanation will be rather different – but we can go along with Gough and O'Connor in rejecting public expenditure as the cause.

Theories of 'Long Waves'

> One set of theories to gain renewed popularity in recent years, both in Marxist and non-Marxist circles are those of 'long waves'. The notion of 'long waves' was first propounded by the Russian Menshevik economist, Kondratieff, in the 1920s. The idea was later taken up by

the bourgeois economists Schumpeter and, more recently, Rostow, and by the 'Trotskyist' economist Mandel.

Kondratieff claimed to show, on the basis of statistical data for prices, interest rates, security prices, wages, levels of foreign trade, and levels of national production, that as well as short-term boom-slump cycles, there were long-term 'waves' in economic activity. For 20–25 years, you would find, if you averaged out slump and boom years, a rising level of economic activity – with less than average interest rates, rising prices, greater than average increases in physical output, rapidly rising foreign trade. This upward movement would then peak and be followed by 20–25 years of downward movement, which in turn would give rise to a new upward movement. Kondratieff calculated what the secular trend had been over the previous 100–150 years for each of his different sets of data, and then drew graphs for each set of data of the 19 year running average of the deviation from the trend. He claimed that these running average deviations showed a quite clear cyclical pattern. [39]

Kondratieff does seem to have emphasised one correct point: the capitalist system has expanded more rapidly at some periods than at others. A modern supporter of his ideas, Mandel, provides the following figures in justification. [40]

Annual Change in Industrial Output

Germany		England		US	
		1822–47	3.2%		
1850–74	4.5%	1848–75	4.6%	1849–73	5.4%
1875–92	2.5%	1876–93	1.2%	1874–93	4.9%
1893–1914	4.3%	1894–1913	2.2%	1894–1913	3.9%
1914–38	2.2%	1914–38	2.0%	1914–38	2.0%
1939–67	3.9%	1939–67	3.0%	1939–67	5.2%

> However, what is open to doubt is the sense of calling these ‘waves’. Trotsky, who a year before Kondratieff had noted the existence of periods of ‘upturn’ and ‘downturn’ in the ‘curve of capitalist development’, was extremely critical of Kondratieff for labelling these periods ‘waves’. [41]

And in the light of the statistics his position is worse still. Look for instance at the figures for industrial growth we reproduced above from Mandel in his attempt to justify Kondratieff’s case. They lump together uneven numbers of business cycles to make up each ‘upturn’ and ‘downturn’. The first British ‘downswing’ lasted 20 years, the first ‘upswing’ 27 years, the second ‘downswing’ 17 years, the second ‘downswing’ 19 years, the third ‘downswing 24 years, and so on. In the case of Germany, starting with the first ‘upswing’, the period lengths are 24 years, 17 years, 20 years, 24 years. Taking one short term slump or boom, lasting 3 or 4 years, from one ‘period’ and transferring it to an adjacent one could, in certain circumstances, completely change the averages for the two periods, turning ‘downswing’ into ‘upswing’ and vice-versa. [42]

Kondratieff’s ‘waves’ preceded the theory. So, for instance, his article *Long Waves in Economic Life* does not contain any explanation of them, although he insisted there must be one. This he tried to present in February 1926.

> ‘Marx asserted that the material base of crises or average cycles, repeating themselves each decade, is the material wearing out, replacement and expansion of the mass of means of production in the form of machines lasting an average of 10 years. It can be suggested that the material base of long cycles is the wearing out, replacement and expansion of fixed capital goods which require a long period of time and enormous expenditures to produce. The replacement and expansion of these goods does not proceed smoothly, but in spurts, another expression of which are the big waves of the conjuncture ...’ [43]

> Day adds that,

> 'The forms of investment which Kondratieff has in mind included railways, buildings and the periodic technological renovations of industry which attend the rising wave of a long cycle. A rising wave presupposes a lengthy period of saving in excess of fixed capital formation, ultimate concentration of these savings in the hands of investors and profit opportunities sufficiently attractive to induce a new wave of investment ...'
>
> But with the new investment wave would come social and political instability and a depletion of investable funds, so that the interest rate would rise, curtailing investment and producing a new declining wave.

But in the declining wave there would accumulate, on the one hand innovations which could not be brought into production until there was a new round of massive capital accumulation, and on the other investable funds, as those on fixed incomes saw their value of their incomes rise with falling prices and therefore increased their saving.

Later 'long wave' theorists have taken up much of Kondratieff's account. Schumpeter stressed the role of 'bunches' of innovation, and this is also one of the elements stressed by Mandel. [44] Mandel amends Kondratieff slightly, seeing the massive investment not as involving a different set of long-term capital investments to those normally undertaken in the ten-year cycle, but rather as involving a complete replacement of old capital equipment throughout industry. This massive innovation, according to Mandel, allows the system to expand for up to 25 years without encountering the Marxist crisis of the falling rate of profit.

And Mandel insists that there is a need for a precipitating factor to bring about the shift from one phase to another: a shift in the balance of class forces, producing a change in the rate of exploitation which makes the wholesale renovation of capital equipment profitable (in the case of the shift from the downward phase to the upward one) or which makes virtually any investment unprofitable (in the case of a shift from an upward phase to a downward one).

Mandel sees fluctuations in the size of the reserve army of labour – the level of unemployment – as providing the mechanism which causes these shifts in the balance of class forces themselves to have a cyclical character. During the upward part of the 'long wave', the average level of unemployment falls, and this is reflected in the tendency for the rate of exploitation to decline. Beyond a certain point this depresses profit rates (or at least prevents any containing of the other factors depressing profit rates), causes the average level of investment to fall and the long wave to turn downwards. The downward movement of the long wave, in turn, tends to increase the size of the reserve army, and to recreate conditions favourable to capital as against labour. At a certain point this finds its reflection in a major defeat for the working class and a shift upwards in the rate of exploitation and of profit. The condition is thus created for the profitable investment of the savings accumulated during the downturn. A new upward wave commences.

Against this several points need to be made. Firstly, there are empirical objections, very similar to those made against Kondratieff 50 years ago: much of the empirical evidence just does not fit Mandel's claim that the 'upturn' of 1939–67 followed *everywhere* a shift in the balance of class forces to the advantage of capital. In the major economies undamaged by World War II the shift in the balance of class forces was clearly to the advantage of the workers compared with the situation after the World War I in the 1920s, which immediately preceded the greatest depression the world had known.

Again, in the 1960s and 1970s the 'downturn' in the largest capitalist country, the US, took place after 20 years of expansion of the 'reserve army' as the plateau of unemployment rose. When you talk about the last ten years, Mandel's arguments fall foul to all the objections made earlier against those who believe that 'wage push' precipitated the crisis.

The timing of the most recent 'long cycle' is also open to major objections. Mandel provides production indices purporting to show a 'downturn' for the world economy as a whole for the years 1914–38 and an upturn for 1939–67. But the dates are

completely arbitrary. In Germany you can certainly talk of a downturn (if you exclude war production) for the years 1914–33. But then begins an upturn which continues – with the exception of the devastated early post-war years – right through to 1973. How can a 37 year 'upswing' fit into a 'cyclical' movement lasting according to Mandel 40 to 50 years?

In Japan the figures fit even less – the 'upswing' would have to be from 1932 to 1973 – i.e. 41 years. In the US and the UK it would be from 1940 to 1973 – 33 years.

Most of these upswings were long enough to cover a whole cycle, if it were made up of two parts of 16–20 years each.

At least one reviver of Kondratieff's ideas seems to want to do this. Rostow argues that, for the US: 'Already, the peak for the automobile sectoral complex can be dated in the mid-1950s.' The income created there led to demand in new areas, such as education, health, travel, recreation, 'to these may be added the aerospace complex in the post-sputnik era ...' But, the implication is that all these expanded during an overall *downward* curve, which reached its turning point in 1972–3, when 'The world economy experienced a sharp turning point in foodstuffs and raw material prices – a break as sharp as those of the 1790s, the 1840s, 1890s and 1930s ... I am inclined to believe that the fifth Kondratieff upswing is upon us.' [45]

Rostow makes this apparently perverse judgement on the basis of the behaviour of *prices* – which, after all, were Kondratieff's own major indices of 'upturns' and 'downturns'. All this goes to show is that using Kondratieff's method you can arrive at quite contradictory conclusions, depending upon your own arbitrary fixing of 'turning points' and cycle lengths.

There are also important theoretical criticisms to be made of Mandel's model. First, his notion of the 'saving of capital' during the long 'downswings' does not make any sense. The 'downswing' is a period in which the short-term cyclical crises of the system are much more severe than the average. But such crises have, as one very important effect, the wholesale destruction, 'devaluing', of capital. And what is destroyed or 'devalued' cannot be saved.

Mandel makes not the slightest attempt to deal with this problem.

Despite all these empirical and theoretical objections, many people are still attracted to the notion of 'long waves'. Why is this? The attractiveness seems to lie in the way in which they purport to fit the aberrant behaviour of the system during periods of deep crisis into an apparently water-tight mathematical model. Sense is made out of nonsense. The irrational becomes part of an equilibrium model. The long waves, like any other simple harmonic motion, oscillate around a fixed point. Any deep crisis of the system is no more than a mechanism by which the system prepares itself for another long period of expansion. Kondratieff never hid his view that long waves were oscillations that were part of the long-term equilibrium of the system. His was a theory of equilibrium. Like all theories of equilibrium, it assumed that however bad things seemed, there was always a hidden hand that would put things right.

In the subsequent version of the theory in Schumpeter, Rostow and Mandel, this basic assumption persists. Once, however, you reject the view that the different features of the system at different points in time can be fitted into a wave-like motion, you can still talk about 'upturns' and 'downturns' without concluding that they must follow each other as day follows night.

A crisis of hegemony?

The American Keynesian economist, Kindelberger, has explained the crisis of the 1930s in the following terms:

> 'The world system was unstable unless some country stabilised it as Britain had up to 1913 ... When every country turned to its national private interest, the world public interest went down the drain, and with it the private interests of all.'

Between 1873 and 1913,

> 'British foreign lending and domestic investment were maintained in continuous counterpoint. Domestic recession stimulated foreign

> lending; boom at home and it went down. But boom at home expanded imports, which provided an export stimulus abroad ... Countercyclical lending stabilised the system ...' [46]
>
> By contrast, US overseas investment in the 1930s *accentuated* booms and slumps: 'US foreign lending was positively correlated with domestic investment, not counterposed ...' [47]

Kindelberger then extends this argument to the 1970s, seeing it as a period of the breakdown of the ability of one great power to provide a structure for the rest of the world system to operate within, very similar to the period of the 1920s and 1930s.

In the forties, the fifties and the early sixties, the US economy was all powerful. Not only was the US the policeman of the world; it was also its financier. The dollar was the great safety net that prevented anyone else from falling too hard. But the last ten years have seen a decline in the ability of the US to do this as a result of the relative decline in its economic predominance. [48]

Kindelberger's arguments have been taken up and refined by a number of socialist economists. For example, the American radical Arthur MacEwen argues: 'One of the fundamental aspects of the crisis of the US economy in the 1970s has been the disruption in the stability in the international capitalist economy. The 25 years following World War II were characterised by a continuous increase in integration of the world capitalist system. However, throughout those years, forces were building towards the destruction of stability ... By the beginning of the 1970s, those forces had come into their own, and the basis for stability – US hegemony – had been eliminated.' [49]

The long expansion after 1945 rested upon the ability of the US 'To re-establish an international order which had been lacking for half a century – since the time when other nations began seriously to challenge Britain's pre-eminence.' [50]

One aspect of this new hegemony was the vast expansion of US direct investment overseas – from 11 billion dollars in 1950 to 30 billion dollars in 1960 to 70 billion dollars in 1970 to 133 billion dollars in 1976.

But the very success of the new world system based upon US hegemony began to undermine that hegemony. ‘For both economic and political reasons, the success of the US required that it, take an active role in rebuilding the war-torn areas of the capitalist system … Consequently, throughout the post World War II period, the other capitalist nations were able to move to a position where they could challenge the US both economically and politically. As early as the late 1950s and the early 1960s it was becoming clear that Japanese and European goods were beginning to compete effectively with US products. And other nations began to grumble about the costs of supporting a world monetary system based upon the dollar …’

The contradictions were exacerbated by the Vietnam war. The war meant that the domestic economy overheated – a process made worse by the policy of financing the war (because of its unpopularity) by deficit financing instead of by taxation. Internationally it led to a considerable reduction in US trade surpluses. Yet the flow of US investment abroad continued to expand, until the other economic powers believed the dollar was overvalued and that they were in effect subsidising the US economy to the tune of about two billion dollars a year. The chickens came home to roost in 1971 when Nixon devalued the dollar and brought the Bretton Woods system to an end.

At the same time the collapse of US military hegemony – in part a function of the collapse of the economic hegemony that had backed up military power – meant that the US was no longer able to keep in line the all-important middle east oil states when they decided to force up prices in 1973–4.

The very integration of the world economy built up on the basis of US hegemony in the previous period meant that the new instability fed back into the US domestic economy – the US was dependent on imports for 40% of its oil; its exports were 10% of GNP by the mid-1970s as opposed to only 5–6% ten years before; earnings from direct overseas investment made up 30% of after-tax corporate profits; US-backed loans abroad had tripled in the years 1971–75. [51]

Sustained expansion after the 1974–5 recession was impossible within the existing international framework – it meant a massive surge of imports into the US, a balance of payments deficit and a further fall in the dollar, which in turn threatened to undermine the world monetary system still more. But destruction of the old integrated world system by a retreat into protectionism was too frightening to attempt. As a result the short-lived 1977–8 American boom came to an end – even though the European and Japanese economies had hardly pulled themselves out of the previous recession.

'Crises of hegemony' theories have a certain attractiveness. They certainly describe one very important aspect of what happens in periods of intensified economic instability – the breakup of the old institutional framework internationally and the decline in the stabilising power of previously predominant economies. But they do not prove that the crisis of hegemony *causes* the general crisis. Could it not, perhaps, be the other way round, with an internal economic crisis of the dominating power undermining its hegemony? Or perhaps both the internal economic crisis and the crisis of hegemony are the result of third factor?

The questions become more emphatic when one looks more closely at the arguments of the 'crisis of hegemony' theorists. Let us look first at Kindelberger.

Take his account of British investment in the late nineteenth century. He says it sustained the stability of the world economy because savings were always invested, either at home or abroad. But simple references to Britain's dominant international position do not explain *why* they were always invested. Some factor not referred to by Kindelberger must explain why British savings were always invested somewhere in the late nineteenth century, while American funds were only ever invested abroad at times of domestic boom in the 1920s and 1930s. But then *this factor* is the explanation of the deepening of the crisis in the 1920s and 1930s and must be seen as provoking the crisis of hegemony.

The same might be said for the 'crisis of hegemony' in the 1970s. Certainly from the early 1960s onwards the succession of crises on the foreign exchange markets flowed from the decline of American hegemony. But did these *cause* the general economic crisis after 1973? If so, how? Certainly not through any decline in the flow of American funds abroad. The flow into the Eurodollar market was much greater in the late 1970s than, say, in the late 1950s. It was not a drying up of savings available either in the US or internationally that caused the deepening of the crisis. The savings were there – but were not, in general, productively invested. The Eurocurrency funds flowed into speculation, financing the burgeoning debts of the 'third world' and Eastern Europe – but not, by and large, into direct investment. (This does not rule out the possibility at some point in the future of a collapse of international credit – but this would be a by-product of the wider crisis, not a cause.)

You need to explain the pattern of investment to explain the deepened crisis – and you can't do that *simply* by referring to the crisis of hegemony. MacEwen seems in part to recognise this. He does refer to 'the domestic economic crisis' within the US, and to the 'fundamental contradiction contained in the capitalist relations of production'. But that is to acknowledge that you have to look elsewhere than to the crisis of hegemony for the basic causes of the general crisis. In his case elsewhere means to the theories of monopoly capitalism put forward by Baran and Sweezy, and which we shall criticise below.

A raw materials crisis?

A sub-variety of the 'crisis of hegemony' theory is to be found in the argument that it is an increased dependence on the advanced countries on raw material supplies – especially oil – located in third world countries that has provoked the crisis. [52] The explanation takes an extreme form, to the effect that shortages of energy sources provide

> an absolute limit to further economic growth. But this explanation falls down, because numerous studies have shown that there are oil reserves greater than the total amount used by humanity in the whole of its history so far, and coal reserves sufficient to last another 200 years. If these have not been tapped, it is because over the last 10–15 years firms and nations have not regarded the rate of return as sufficient to justify the necessary investment: that, for instance, is the main reason that the talk of using US or Japanese technology to exploit Russia's Siberian oil reserves came to nothing in the early 1970s.

Indeed, it is not fanciful to suggest that if the *only* problem facing the world was a drying up of old oil reserves, then what you might expect would be a *boom*, as everywhere governments and firms would spend vast sums on developing alternative energy supplies (After all, it was precisely such periodic needs to branch out into massive new investments of a special sort that Kondratieff used to explain the *upward* sections of his 'long waves'). The international economy would then be marked by very rapid expansion, perhaps of a very unstable sort, but *not* a slide into stagnation.

A more limited explanation looks not at the absolute limits to growth caused by the energy crisis, but at the effects on the advanced western states of having to pay more to the OPEC countries for oil. This is said to cut into the funds available for expansion in the advanced countries themselves (This is essentially Rowthorn's explanation).

But it is an explanation with a line of reasoning missing. The funds from the western countries flow into the coffers of OPEC governments and ruling groups. Why don't they spend the funds, either on expansion of the local industrial base, on consumer goods for themselves or their subject peoples or on investments in the advanced countries? If any of these three things happens, all that results is a redistribution of purchasing power within the world system, without any drop in overall demand, or for that

matter, in the overall level of investable funds. Some capital owning groups (those in the advanced countries) lose out to others (the oil producers) but there should be no diminution in the possibilities of growth for the system as a whole. We are driven back once again to ask *why* investable funds are not invested? If 'recycling' of oil surpluses does not take place, the reason must lie in some factor inside the western economies that makes OPEC governments often feel their wealth is better protected by leaving oil in the ground rather than by exchanging it for a stake in western industry.

Institutional crisis theories

> One way of attempting to fill the gap in theories of the crisis of hegemony has been to consider such crises as simply one expression of a much more widespread crisis in the institutional structure in which capitalist production takes place.

For example, an American Marxist, David Gordon, starting from certain ideas derived from Kondratieff's long waves theory, suggests that historically, capitalism has passed through a number of stages of development, each based upon a different set of structures. Each stage exhausts itself beyond a certain point. The institutional structure no longer fits the needs of accumulation: for instance, all the labour available with a particular structure of the labour market is exhausted; the structure of distribution does not fit the products of some new technology; certain raw materials run out, yet institutional structures are not available to enable the use of new ones.

The changeover from one set of institutions to another cannot easily be accomplished. 'Many of the institutions associated with a stage of accumulation involve mammoth infrastructural costs of organisation and construction. These primarily involve the institutions of market access – access of raw materials, intermediate goods and final consumer demand. These

institutions become part of the "built environment" fixed in concrete and steel. Once these institutions have been built up at enormous cost, the world economy becomes "fixed into these particular infrastructural forms" while their costs are repaid.' [53]

Indeed, even when these costs have been recovered, the 'fixing' continues – since 'many individual capitalists acquire strong vested interests in existing institutional structures.' It takes a massive crisis to shake up these structures and to force individual capitalists into 'abandoning their old and increasingly unprofitable ways'. [54]

According to Gordon, the breakdown of the interwar years can be seen as resulting from a breakdown in the 'prosperous combination' of pre-World War I era:

> 'Reduced competition through mergers, new markets and reduced material costs through imperialist colonisation, and reduced class conflict through a combination of new production relations, progressive social welfare policies and aggressive union busting.
>
>> 'International competition had already intensified before the war, and the peace did not resolve the instabilities. As world trade became increasingly perilous, world commodity flows slackened ... Their disruption threatened production ... Once the bubble burst, prosperity could not resume until the institutional basis for a new stage of expanded reproduction had been laid ...
>>
>> 'World War II helped pave the way for this institutional regeneration. The US emerged from the war with enormous international economic power. The dollar and American power provided a new platform for international stability. War time discipline, post-war anti-Communist ideology and new collective bargaining institutions helped reintegrate workers into the accumulation process. The increased concentration of corporate power promoted more stable relations of competition ...' [55]

The post-war structure began to break down as each of its particular institutions ran into problems. Gordon lists,

> among others: increased borrowing by corporations from government to compensate for loss of earnings; the rebellion of third world peoples – especially Vietnam – against US imperialism, and the costs of countering this to the US; increased trouble caused by unorganised workers; rising interest rates; shifting labour patterns, which make the reproductive use of the school system more and more complicated; increased protests by workers at speed up; the burgeoning success of European capitalism making American corporations face increasingly strong competition ... And so on.

The weakness in Gordon's argument comes out when he lists the factors responsible for the breakdown of the post-war 'prosperity'. Each can be seen as much a result of a wider crisis as a cause of this intensification. Take the argument about 'over-investment in automation'. There is no explanation why this should take place, nor as to why it should not create a market for its own products. And above all there is no explanation why investment can go on for years without running into crisis, and then suddenly run into it in the 1970s. The nearest thing to an explanation is the Kondratieff notion of large fixed investments – but this has all the problems we looked at in Kondratieff himself. In the same way, Gordon's account of the crisis in the labour market has all the problems we encountered above with the theories which see increased union pressure as the cause of the crisis.

The French economist Aglietta provides another version of the 'structural crisis' theory [56], and uses it to give quite a sophisticated explanation of the present crisis – and of that of the 1930s.

His basic argument is that the mechanisation of labour in the last century has gone through three stages, each of which has provided the basis for a stage of capital accumulation:

1. *Taylorism*. This involved raising labour productivity by action within the workplaces to accelerate the speed at which particular tasks were completed and to cut down the time gaps between the performance of tasks.

2. *Fordism*, according to him, went a stage further than Taylorism, by

a. redesigning the whole internal production process to ensure a continual through-flow of work, with the work process simplified down until each worker performed a few repetitive actions. The end point of this development was 'semi-automatic assembly line production', leaving as little time as possible for the worker to 'recuperate' his or her energies during the working day itself.

b. by simultaneously absorbing the worker's consumption time into the production process of capitalism as a whole – i.e. by replacing pre-capitalist forms of consumption by mass consumption provided through the market.

This involves 'a revolutionising of the consumption of the working class', so as to 'reverse all pre-capitalist elements ... Consumption was based on the individual ownership of commodities – especially motor cars and individual housing units – but had to be stabilised so as to provide the recuperation needed for enhanced productivity inside the factory ... It was important for the process of individual consumption to be organised and stable, while remaining compatible with the

> apparent individual and free relationship of commodity exchange.' [57]

> This meant that although consumption was organised through the small family unit, 'It still remained essential to limit the consequences of capitalist insecurity in the formation of the individual wage, so as not to break the continuity of the consumption process ...'

For example, workers had to be able to pay for houses (to 'recuperate' in) and vehicles (to get to work in) – even if they feared a break in their employment. This led to various legislative arrangements, social insurance funds etc.: 'Fordism could regulate the evolution of private working class consumption only by generalising the wage relation to the conditions guaranteeing the maintenance cycle of labour power: provision for the unemployed and sick, covering of family expenses and the means of existence of retired people.' [58]

Aglietta argues that Fordism had quite definite effects on the overall pattern of economic development. The expansion of production in Department I of the economy (i.e. production of means of production) depended upon an increase in the output of Department II (i.e. consumer goods), since cars, houses etc. were the pre-condition for rising labour productivity within the plant.

But this meant that the system could be upset if Department II were allowed to contract: on the one hand, the demand for the output of Department I would decline, on the other the productivity of labour in Department I would fall as living standards fell below 'the social consumption norm'.

So, for Aglietta, there is a sense in which Keynes is the prophet of Fordism. His criticism of neo-classical economics and his notion of 'effective demand' are a partial recognition of the need for production and consumption to be integrated at a certain stage of capitalist development.

> 3. Aglietta's third stage in the mechanisation of labour, '*Neo-Fordism*", is one that has only just begun.

Fordism contained within it three 'internal obstacles' – the lack of integration between different production cycles of differing duration; the stress produced within the individual worker by continued work pressure, leading to absenteeism, industrial militancy etc; and the abolition of any direct tie up between the effort of the individual worker and his remuneration.

Neo-Fordism attempts to deal with these problems by using electronic devices (computers etc.) to coordinate centrally productive units that are themselves small and decentralised. The managerial hierarchy is short-circuited and small groups of workers become apparently responsible only to themselves and electronic equipment for fulfilling centrally set norms. Labour – only subcontracting, and even the workers' cooperative become the basis for labour voluntarily imposing on itself norms of exploitation decided by a distant central management.

Using this framework of three stages of mechanisation, Aglietta then sees the great periods of crisis of the last hundred years as being the transition phases between one stage and the next. They occur when one way of organising labour – and exploitation – has exhausted itself and the next not yet become established.

Hence the great crisis of the 1870s occurred when the form of organisation of labour typical of the first machinofacture had reached its limits of exploitation, and lasted until Taylorism was established; the great crisis of the inter-war years occurred when the limits of exploitation within the framework of Taylorism had been reached, and lasted until Fordism had established itself; the present period of crises arises out of the exhaustion of the possibilities within Fordism and will last until the structure of accumulation is organised in a neo-Fordist mould.

The 'exhaustion' of the possibilities of a structure of accumulation takes the form of a decline in the productivity increases that arise from increased expenditures (whether direct capital expenditures or indirect 'non-productive' expenditures by governments). But what causes the decline in productivity growth?

Here Aglietta falls back on an argument whose weakness we have already examined earlier – he sees a secular rise in the level of class struggle as taking place as the structure of accumulation becomes widespread, cutting into the possibilities for increasing the rate of exploitation:

> 'The crisis of Fordism is first of all the crisis of the mode of labour organisation. It is expressed above all in the intensification of the class struggle at the point of production. By challenging conditions of work bound up with the fragmentation of tasks and intensification of effort, these struggles showed the limits to the increase in the rate of surplus value that were inherent in the relations of production organised in this type of labour process. This was the root of the crisis ...
>
> > 'It can be seen in the halt in the fall of real wage costs that occurred simultaneously with the outbreak of sporadic conflicts and endemic contradictions challenging work disciplines of the kind that Fordism had established.' [59]

From this initial source, the crisis spread throughout the economy. The growth of Department I of the economy is retarded because it no longer produces new techniques capable of increasing productivity and so counteracting the tendency for the organic composition of capital to rise. (We shall discuss this further in Part 2.) There is a decline in investment, growing unemployment and increased job insecurity. At the same time, the failure of productivity to grow in industries producing consumer goods leads management to attack living standards. This attack has to be accompanied by an attack upon 'so-called collective consumption' (i.e. what is often called the 'social wage') – since productivity in the sectors producing 'collective consumption' goods and services rises much more slowly than in the other sectors of the economy.

> 'Either these services are produced by capitalists with under-developed methods, and their costs grow astronomically, as social

demand for them rises (or) these services are produced by public bodies. They then absorb labour which is unproductive from the point of view of surplus value … Far from being complementary to labour that does produce surplus value, this unproductive labour is from the capitalist standpoint antagonistic to it when it absorbs a share of social value that grows more quickly than the sum total of surplus value.'

A point is reached where the 'Fordist' conditions which allowed an expansion of the capitalist system begin instead to throw it into crisis.

'As long as major transformations in the production of standardised commodities and a corresponding upsurge in the mode of consumption were predominant, the collective costs of the reproduction of wage labour could be held steady and the rising rate of surplus value could still be imposed. But these forces themselves generate a more and more rapid increase in the collective costs, at the same time as they exhaust the potentialities contained in the mechanisation of wage labour. It is not surprising, therefore, that the crisis of Fordist work organisation should at the same time have been the occasion for a general drive of the capitalist class to curtail social expenditures …' [60]

Aglietta clearly makes a number of powerful points. But there are weaknesses in his explanation of the onset of deepened crisis, very similar to those of a number of the earlier theorists. He does not really explain why, at a certain point in time the expansive elements in Fordism should suddenly cease to operate. Take, for instance, the possibilities of raising labour productivity. Aglietta seems to imply that a point is reached where the worker can (or will) not work any harder. But labour productivity is not only increased by the worker working harder – indeed, it has to be proven that workers today work that much harder than workers a hundred years ago. What increases labour productivity is a rise in the technical level of production. And Aglietta provides neither proof that the

> technical level of production stopped rising in the mid-1960s, nor any explanation as to why it should have occurred.

Even if 'Fordist' forms of raising labour productivity have been exhausted in the old industrial centres of Western Europe and North America, what about parts of the globe where 'Fordism' has barely been introduced? Should not the system have a new lease of life given to it, on Aglietta's argument, by shifting growing sectors of production to parts of the globe where 'Fordism' can still displace previous forms of organisation of the production process? This is the conclusion that some thinkers who share Aglietta's terminology come to. Why does Aglietta himself argue otherwise? Why does he insist that *global* productivity can no longer be raised on a 'Fordist' basis?

It only needs to be added that key points in Aglietta's argument depend upon dubious generalisations about the growth of 'unproductive' government expenditure, like those of Bacon and Eltis, and an international increase in the level of class struggle, taken from 'wage push' theorists, which, as we have seen earlier, can by no means be taken for granted.

The gaps in Aglietta's argument could be filled in *if* it was first shown that investment had to fall before the beginning of his periods of crisis. Then much else of what he has to say would follow. But you cannot explain a decline in investment on Aglietta's own premises. He cannot really say why, in the heyday of the first forward rush of Fordism, in 1929, the bottom should suddenly have dropped out of capitalist expansion, or why a new wave of 'Fordist' expansion should be grinding to a halt today. So other explanations have to be looked for. Taken by itself, his account is as unconvincing as those which merely talk of 'waves of innovation' or 'long waves' or wage push or rising public expenditure.

Theories of monopoly and stagnation

> The American Marxists, Baran & Sweezy [61], on the one hand, and the neo-Keynesian, Steindl on the other [62], have developed theories that ascribe the onset of generalised crisis to the monopolisation of production. These were not originally intended to be theories of the crisis of the 1970s, but of the earlier great depression of the 1930s. But their theories have been used to explain the new lurch into generalised world crisis since 1973.

Both Baran & Sweezy and Steindl, see a tendency for stagnation of the system as necessarily following from what happens to profit margins with monopolisation.

For Steindl, the growth of oligopoly from the 1890s onwards led to an increase in the level of profit margins, combined with a deliberate policy of protecting profits by developing excess capacity. This in turn led to a lower rate of accumulation, so that in the decade before 1899 the rate of growth of the US economy was 5%, in the 1920s it was 3%, in the 1930 nil. [63] ‘An increased fear of excess capacity, due to the transition to monopoly, will always reduce the limiting rate of growth … I believe this has in fact been the main explanation of the decline in the rate of growth which has been going on in the US from the end of the last century …’ [64]

But reducing investment and cutting the rate of growth does not restore full capacity utilisation and protect profit margins. Instead, it reduces effective demand and leads to still greater excess capacity: ‘A given degree of capacity utilisation can be restored adequately only by the method eliminating capacity by price cutting, but never by the method of reducing investment, because this leads only to an even greater excess capacity …’ [65]

The result is a general crisis, unless other factors mask it: ‘Stagnation did not come overnight, preceding it there had been a long process of secular change which passed almost unnoticed … Hardly anyone during the “New Era” was aware of the fact that the annual rate of growth of business capital was only half what it had been thirty years earlier.’ [66]

For Steindl the ‘masking’ factor since the Second World War has been a much higher level of government expenditure than previously. ‘The post-war economy has been transformed by the unprecedented role which government public policy and politics have played.’ [67] The decline in cold war tension on the one hand, and the preoccupation of governments with inflation and public debt, reduced government willingness to spend. But a fall in government spending in no way leads to a rise in the willingness of industry to invest. So even the new lower level of government spending can only be financed by budget deficits.

Baran & Sweezy’s argument is not fundamentally different, although they express it in Marxist rather than Keynesian language. They argue that under monopoly conditions, price determination is no longer dependent upon the free play of market forces. The trend is for corporations to increase their profits, and for the total ‘surplus’ of society, what remains after workers consumption and depreciation have been accounted for, to grow. The monopolies are disinclined to transfer this surplus to shareholders for private consumption by capitalists, and so, ‘not only the surplus, but also the investment-seeking part of the surplus tends to rise as a proportion of total income.’ [68]

But it is not possible for investment to rise fast enough to absorb this proportion of the surplus that is not privately consumed.

> ‘If total income grows at an accelerating rate, then a larger and larger share has to be devoted to investment and conversely, if a larger and larger share is devoted to investment, total income must grow at an accelerating rate. What this implies, however, is nonsensical from an economic standpoint. It means that a larger and larger volume of producer goods would have to be turned out for the sole purpose of producing a still larger and larger volume of producer goods in the future …
>
> > ‘One is left with the inescapable conclusion that the actual investment of an amount of surplus which rises relative to income must mean that the economy’s capacity to produce rises faster than its income … Sooner or later excess capacity grows so large that it discourages further investment. When investment

declines, so do income and employment and hence the surplus itself.

'In other words, this investment pattern is self-limiting and ends in an economic downturn – the beginning of the recession or depression.' [69]

Again they argue

'These mechanisms tend to generate a steadily rising supply of investment seeking surplus, but ... in the nature of the case they cannot generate a corresponding rise in the magnitude of investment outlets. Hence if the endogenous investment outlets were the only ones available, monopoly capitalism would bog down in a permanent state of depression.

'Fluctuations of the kind associated with the expansion and contraction of inventories would occur, but they would take place within a relatively narrow range, the upper limit of which would be far below the economy's potential.' [70]

This, for them, is the explanation of the 1930s. But they go on to argue that 'exogenous' forms of investment were able, for a time, to counter these pressures towards stagnation in the 40s, 50s and 60s. By this, they mean that some of the surplus was spent in exceptional ways. Such, they argue, was the case when technological innovation necessitated massive new investment – as did the spread of the railways in the last century, and the spread of the automobile in the 1920s and the 40s and 50s. They also see expenditure on the sales effort itself, through advertising and promotion of goods as disposing of some of the 'surplus'. So too does foreign investment.

They conclude, however, that the most important recent form of 'surplus absorption' has in fact been the activity of government, especially its military activity. They show the huge shifts in the pattern of expenditure pre-1929 and post-World War II.

US Government Spending 1929–57 (% GNP) [71]

	1929	1957
Non-defence purchases	7.5	9.2
Transfer payments	1.6	5.9
Defence purchases	0.7	10.3
Total	9.8	25.4

In other words:

‘Some six or seven million workers, more than 9% of the workforce are now dependent for their jobs on the arms budget. If military spending were reduced once again to pre-Second World War proportions the nation’s economy would return to a state of profound depression, characterised by unemployment rates of 15% and up, such as prevailed during the 1930s.’ [72]

They show, in passing, that attempts to end the crisis of the 1930s on bases other than military expenditure, did not succeed.

‘Measured in current dollars, government spending increased from 1929 to 1939 more than 70%. At the same time, GNP declines ... 12.7%, and unemployment rose from 3.2% to 17.2% ... Regarded as a salvage operation for the US economy as a whole, the New Deal was a clear failure ...

> (But) ‘War spending accomplished what welfare spending had failed to accomplish. From 17.2% of the labour force, unemployment declined to a minimum of 1.2% in 1944.’ [73]

Baran & Sweezy’s account has the merit of providing an account of the fluctuations of the world economy in the last 80 years that seems, at first sight, to fit reality. In this respect it has a great advantage over most of the theorists we have looked at so far – and, for that matter, over various writers (from Yaffe to Bleaney) [74] who simply dismiss them out of hand as ‘underconsumptionist’. It is

> true that their theory does depart from Marx's account of capitalist crisis in a 'Keynesian' or 'underconsumptionist' direction, as I will attempt to show later. But they do capture *empirically* some of the major shifts in the dynamic of capitalism as most of their critics do not.

Baran & Sweezy conclude from their analysis that the trend has been towards the stagnation of the world economy ever since the first development of monopoly capital towards the end of the last century. 'If the depressive effects of growing monopoly had operated unchecked, the United States economy would have entered a period of stagnation long before the end of the 19th century, and it is unlikely that capitalism would have survived into the second half of the 20th century.' [75]

But, they argue, this was avoided in the US of the 1880s and 1890s by continuing huge expenditure on railways. 'Census data suggest that from 1850 to 1900 investment in railways exceeded investment in all manufacturing industries combined...Then, 'The crisis of 1907 precipitated a sharp drop in railway investment' which 'remained permanently at a lower level.' [76]

This, they argue, has an immediate effect on the general dynamism of the economy. After 1908, the tendency is for depressions to last longer and for booms to be shorter than previously. Unemployment rose so that even in the 'boom' years of 1909–10 and 1912–13 it was no higher than in the 'slump' years of 1900 and 1904.

The First World War lifted the economy out of this stagnation, and the restructuring of industry associated with the first wave of 'automobilisation' continued to keep stagnation at bay throughout the 1920s. But this first wave soon exhausted itself, and from 1923 onwards, excess capacity accumulated rapidly until in 1920 it hit production and the great slump of the 1930s began.

This, as we have seen, was ended for Baran & Sweezy by World War II. In the post-war years stagnation was again kept at bay as in the 1920s – this time partly by a second wave of

automobilisation, but more importantly by a level of arms spending much higher than at any previous peacetime period.

> 'With the aftermath (i.e. post war – *CH*) boom triggering a great upheaval in the living patterns of tens of millions of people, and with arms spending growing nearly five fold, it it probably safe to say that never since the height of the railway epoch has the American economy been subject in peacetime to such powerful stimuli ...'

Yet it was already running out by the mid-1950s.

> 'What is remarkable is that despite the strength and the persistence of these stimuli, the familiar symptoms of inadequate surplus absorption – unemployment and under-utilisation of capacity – began to appear at an early stage, and, apart from cyclical fluctuations, have been gradually growing more severe ...' [77]

Despite its descriptive power, there are overwhelming objections of both an empirical and a theoretical kind to be made to Baran & Sweezy's account. First, the empirical points.

1. It is by no means certain that 'the surplus' has increased in the secular way suggested by Baran & Sweezy. Their collaborator Phillips purports to give empirical evidence as to its growth. But this depends upon the assumption that *all* government spending is part of the surplus. If some of it is not (for instance, if some is indirectly part of wages or is directly productive as nationalised industry investment) then the figures can show a *fall* not a rise. [78]

Baran & Sweezy try to counter such objections in advance by insisting they are talking about 'potential surplus' – i.e. the surplus which would exist if industry worked at full capacity. But clearly this counter argument cannot apply to periods like 1942–5 or the early 1950s when industry actually *did* work very close to full capacity.

2. The *timing* of the transition from periods of growth to periods of stagnation seems very arbitrary. Why, for

instance, should automobilisation have led to massive new investments in the early 1920s and not in the late 1920s?

Baran & Sweezy provide no real explanation – unless it is the old Keynesian explanation that government did not then understand the needs of the system, and that the war taught them otherwise. The same gap in explanation characterises their account of the move from boom to stagnation over the last 25 years. They seem to suggest it resulted from accidents. [79]

If coincidental factors have produced stagnation, it would seem that other coincidental factors (or changes in government policy) could reverse the trend again. Indeed, it has been suggested by O'Connor that the move from the 'Warfare State' to the 'Warfare-Welfare State' could open up just such a new period of capitalist expansion.

Steindl's account of the 1950s and 1960s discussed above can be faulted on many of the same grounds. The 'theory' of 'maturity and stagnation' becomes so overlaid with 'accidental' countervailing influences as to provide no guide at all to understanding what is likely to happen in future.

3. The whole basis of Baran & Sweezy's (and Steindl's) argument, the notion of 'monopoly profits' as the cause of the 'rising surplus' is open to factual criticism – as the Argentinian Marxist, Alejandro Dabat has shown. He gives figures that indicate that US monopoly concerns do *not* have higher than average profits:

> 'The spheres of business in which the average rate of profit is more than a third above the general corporate average are not, in general, those with a high monopolistic concentration, except for the tobacco industry, the brewing industry and petrol distribution and sales.
>
> 'At the same time, the spheres which obtain a corporate rate of profit a third less than the average are highly concentrated spheres.
>
> 'The most important industries of the North American economy, almost all totally controlled by a very few

> monopoly enterprises (automobiles, aerospace, the electrical industry, the food industry, telephone and electrical utilities, petroleum extraction and coal mining) are found in an intermediate position, close to the average rate of profit.' [80]

These empirical criticisms of Baran & Sweezy are reinforced by criticisms of a theoretical nature.

4. On the basis of Marx's theory of profits, there are clear limits to the growth of the 'surplus' accruing to the monopolies. As Dabat has argued, once monopolisation has proceeded beyond a certain point, it is very difficult for monopoly profits to maintain themselves above the average. For monopoly profits do not come out of this air – but are a result of the ability of some firms, via monopoly prices to force smaller firms to give them an unduly large share of the total surplus value.

But, as the proportion of industry that is monopolised grows, and as the non-monopoly sector correspondingly shrinks, the creation of surplus value comes to take place predominantly in the monopoly sphere itself. That means there is less and less non-monopoly surplus value for the monopolies to gain control of through their pricing policy. A point will eventually be reached at which other factors than monopolisation will determine where any super profits go – especially the extent to which different firms are in the most dynamic, rapidly growing sectors of the economy. But such is the scale of their fixed investment in established industries that many monopolies find it difficult to switch to the newer, more dynamic industries. Non-monopoly firms are as likely to be found there as monopoly firms. [81]

In this way, Dabat destroys the whole theoretical edifice of Baran & Sweezy's theory of monopolisation leading to an ever growing potential surplus. In doing so he also destroys certain corollaries drawn by their followers, for instance, O'Connor, who argues that the workers in monopolies are privileged because the

monopolies' ability to protect their profits leads them to grant wage increases more or less automatically to their workers.

5. Underlying Baron & Sweezy's and Steindl's argument is the assumption that declining *price* competition between monopolies also means a decline on the pressure to use the surplus at their disposal for accumulation. Instead, they can try to protect their profits by not investing and by maintaining surplus capacity. Yet there is much evidence that declining price competition is accompanied by an increase in other forms of competition: pressures for innovation of products, pressures for the expansion of the scale of production so as to reduce costs and raise profits at existing prices, pressures on the state to expand its investment in arms industries so as to provide the military wherewithal to back up the monopolies in their international struggle for markets. At the same time the greater internationalisation of production has very often made the various national markets become the meeting point for competition between the monopolies of different nations.

Taking the international aerospace, car, or chemicals industry over the last decade – a decade which has seen a growing trend towards stagnation – it is difficult to claim that there has been a reduction on competitive pressures for component firms to invest, even though they are near monopolies within national markets. If they have not invested all the 'surplus', it has not been because there was reduced (international) competitive pressure on them – it has been that some other factor has made them frightened to expend the huge sums needed to finance their response to such pressures. [82]

6. A final theoretical point against Baran & Sweezy. They make the mistake of all 'under-consumptionists' of assuming that capitalism has to have a rational goal. What

> else can be meant by their argument that capitalism cannot simply produce means of production in order to produce further means of production?

It certainly can, providing it finds it profitable to do so. Since, for Baran & Sweezy, the 'surplus' goes on rising indefinitely then production of means of production should be able to go on rising indefinitely. The fact that no human beings benefit from this in terms of improved consumption does not prove that capitalism *must* break down. It only proves that capitalism is a dehumanised system, that, as Marx put it in the **Communist Manifesto**, 'in bourgeois society, living labour is but a means to increase accumulated labour.'

The mistake made by Baran & Sweezy is not new. It is the same one made by Rosa Luxemburg [83] to justify her view that capitalism must break down eventually. But it is surprising that Sweezy makes this mistake, since he explicitly denounces the notion, in one of his earlier works, that 'all economic behaviour' under capitalism, 'is directed towards the satisfaction of human need.' [84]

In making this final criticism of Baran & Sweezy we are also, however, indicating the route towards the discovery of the rational core of their mistaken analyses, it could be found that over time the dynamic of capitalist growth, the creation of profit, was somehow slowed down, then regardless of whether 'surplus' grew or contracted, you could expect the conditions for its investment to become more and more unfavourable. And then you would get precisely the stagnation described by Baran & Sweezy.

The second and third parts of this article will be devoted to taking up this quest.

Notes

1. It is true that certain 'third world' countries have found it possible in the last five years to expand into certain markets at the expense of western producers: witness the growth of steel production in Taiwan,

South Korea, Brazil etc. But this growth has not been sufficient to make up for the drift towards stagnation world wide. Indeed, for the 'non-oil developing countries' the rate of economic growth in 1978 seems to have been no higher than the average for 1960–73. For non-oil developing countries it was 6.0% in 1960–73, 5.5% in 1973–77 and 5% (estimate) in 1978. And even for the OPEC countries the corresponding figures are only 8.3%, 8.1% and 4.7%. (Source: **NIESR** 1978/4, p. 4). And this growth has usually been sustained by huge loans from the western banks, the sheer size of which is itself a massive destabilising factor in the world economy.

2. Quoted in the **Morning Star**, 24.10.79. Again as with the 'third world', such growth as there was was often financed by potentially enormously destabilising western loans.

3. **Financial Times**, 13.3.79.

4. International Forecast Service, **Economic Models**, December 1978.

5. The argument followed from Cliff's analysis (first formulated in 1948) that state capital in the USSR competes with the west mainly militarily and through the arms economy (see **State Capitalism in Russia**, London 1975, pp. 209–232). It was first properly formulated with respect to western countries by Kidron in articles in **International Socialism** (first series), Nos. 20 and 28.

6. **British Capitalism, Workers and the Profits Freeze**, Harmondsworth 1972.

7. **Ibid.**, p. 10.

8. **New Left Review** 98, p. 67.

9. E. Mandel, **Late Capitalism**, London 1975, p. 179.

10. See **NIESR** 1978/4.

11. See his article in **Brookings Papers on Economic Activity**, 1977.

12. The figures given are for 'industrial and commercial corporations in the US' *before* tax and after deducting stock appreciation and capital consumption.

But (a) the after tax figure would be likely to show a quite different trend, since 'the level of taxation on US profits has fallen continually throughout the post-war period, and was 48.5% in 1961 and only 26.9% in 1970' (figures given by Victor Perlo in the **Review of Radical

Economics, Fall 1976. I use Perlo's critique of the Nordhaus figures here, although I think he can be faulted on certain points).

(b) Corporations have an incentive to overstate their capital consumption costs, since these are tax deductible. 'During the first five years after World War II corporate profits after taxes were about three times as large as corporate capital consumption allowances. But during the 1970s corporate capital consumption allowances were considerably larger than profits after tax. This did not reflect itself in the real rate of wear and tear on equipment and structures.' (Perlo, **op. cit.**)

(c) The figures exclude interest and rents, which are transferred from industrial capital to financial capital.

(d) The figures exclude from profits all company write-offs for stock appreciation, although in a period of rapid inflation a good proportion of the rising cost of financing stocks will be paid for by borrowing at interest rates which may well be negative in real terms (i.e. less than the rate of inflation). The result is 'double accounting' that *underestimates* the real level of profits (this, incidentally, is the criticism made by the **Cambridge Economic Policy Review**, 1978, p. 65, of the Sandilands procedure for inflation accounting in Britain).

13. Perlo, **op. cit.**

14. Source: **Brookings Papers**, 1977/1, p. 216.

15. Conference of Socialist Economists, **Bulletin**, February 1975, p. 8.

16. **Lloyds Bank Review**, 1974, no. 112, p. 11. It is true, however, that recent issues of the **Bank of England Quarterly Bulletin** have provided figures showing that the share of profits added (for manufacture, service and distribution), after deducting stock appreciation and capital consumption, has been falling for many years. 'They show a significant downward trend in profitability throughout the 1960s and a sharp decline since 1973' (**Bank of England Bulletin**, 1978, p. 517). But these figures must be subject to the same charge of 'double accounting' made by the **Cambridge Economic Policy Review** as the American figures. In any case, the **Bank of England Quarterly** itself points out that this alleged fall in the 'share of profits' in company value added is insufficient in itself to account for the scale of the fall in the rate of profit in recent years. Something else besides the allegedly 'rising share' of wages must be responsible for that, (**ibid.**, p. 517)

17. **Review of Radical Political Economy**, Spring 1975.

18. This point is elaborated in an article by Weeks in **Science and Society**, Fall 1979.

19. US Department of Commerce, **1978 Statistical Abstract of the United States**, p. 429.

20. V. Perlo, **op. cit.**, p. 62. This is hardly consistent with the view that the 'increased strength' of the workers provided the mechanism for the 'squeeze on profits'. Furthermore, in a review of research into US labour productivity, C. Bourdon of the Harvard Business School 'sets out the evidence to show that the power of organised labour has actually diminished during the past decade' (**Financial Times**, 21.11.79).

21. They presented their view first of all in a series of sensational articles in the **Sunday Times** which was later expanded into a book: R. Bacon and W. Eltis, **Britain's Economic Problem: Too few producers**, London 1976.

22. P. Mattick, **Marx and Keynes**, London 1971; D. Yaffe & R. Schmiede, **State Expenditure and the Marxist Theory of the Crisis**, London (IS Internal Publications) 1972.

23. Mattick, **op. cit.**, pp. 161–63.

24. Sources: **British Labour Statistics Year Book** and **Economic Trends**.

25. F.T. Blackaby in F.T. Blackaby (*ed.*), **British Economic Policy 1960–74**, p. 649.

26. **Ibid.**, p. 649.

27. **Ibid.**, p. 650.

28. R. Matthews in the **Economic Journal**, September 1968.

29. Source: D. Glynn in **Lloyds Bank Review**, October 1976, p. 23.

30. Source: **The Economist**, 31.7.76.

31. **New Left Review** 92, pp. 57 & 83.

32. This, effectively, is the argument produced by Glyn in 1975 to justify his claim that it is a 'declining share' of profit that has produced crisis. He argues that the share after tax of profit has declined, even though the share after tax of wages has also declined – because of a rise in the 'social wage' of workers.

He assumes that the 'workers' share' of public expenditure amounts to '92% of current expenditure on housing, health, education and other social services; half expenditure on fire services, a quarter of

expenditure on roads; plus current grants to persons (net of tax) and consumption of social service means of production ...’

Using these proportions he finds that ‘far from there being a fall in the share of the net social product going to labour, there has been a rise from 69.3% in 1955 to 73.7% in 1972.’

Even on his own terms, Glyn’s figures are open to objection. As I have argued elsewhere (**Socialist Review**, no. 10, London 1979) a much larger proportion of the services he lists benefit the ruling class and the petty bourgeoisie (old and new) than he claims. On a rough calculation, revised figures could not produce a total increase in the ‘share’ of workers in the National Income of more than 2% over 20 years – quite insufficient to explain the scale of the crisis.

33. J. O’Connor, **The Fiscal Crisis of the State**, New York 1973, p. 6.

34. **Ibid.**, p. 99.

35. J. Cypher, **Review of Radical Political Economy**, Fall 1974.

36. Source: Steindl, **Cambridge Journal of Economics**, March 1979.

37. **New Left Review** 92, p. 64.

38. **Ibid.**, p. 80.

39. For one version of Konratieff’s theory, see the translation of his *Long Waves in Economic Life*, reprinted in **Lloyds Bank Review**, July 1978.

40. E. Mandel, **Late Capitalism**, London 1975, pp. 141–42.

41. See for instance L. Trotsky, **The First Five Years of the Communist International**, New York 1945, p. 174, and the article by R.B. Day in **New Left Review** 99. In his essay *The Curve of Capitalist Development* (**Fourth International**, May 1941), he argued that ‘It is already possible to refute in advance Professor Kondratieff’s attempt to invest epochs labelled by him “major cycles” with the self same rigid lawful rhythm that is observable in minor cycles. The character and duration (of large sections of the capitalist curve of development) is determined not by the cyclical interplay of capitalist forces, but by those external conditions through whose channel capitalist development flows.’

Trotsky sees these “external conditions” as “the absorption by capitalism of new countries and continents, the discovery of new natural resources, and, in addition, significant factors of a ‘superstructural’ order, such as wars and revolutions ...”

The point at issue between Kondratieff on the one hand and Trotsky on the other was *not* whether there were periods in which the system expanded more rapidly than others. It was whether the periodisation could be explained in terms of waves, of patterns which not only had occurred empirically, but which were bound to recur, with each downturn preparing the way for a new upturn.

Most other contemporary Russian economists were similarly critical of Kondratieff. Oparin pointed out that he had ignored several series of figures which were unfavourable to his thesis. What is more, if you removed effects of price changes from his series for wages and foreign trade, 'the physical series as a whole do not show the long swings which could be considered long cycles in economic life.' (quoted in **ibid.**, p. 211)

Gerzstein went further, and claimed that 'the trends in price levels and in real production levels were not in the same direction.' (**ibid.**)

For Great Britain and the United States, Gerzstein 'Showed that the period 1815–40 (Kondratieff's downswing) was a time of unprecedented development of the productive forces and was really *the* period of the industrial revolution ... The "declining" period of the second price wave coincided with the rapid industrialisation of the US and Germany. Only the decrease in the rate of growth of British industry seemed to support Kondratieff's figures.' (**ibid.**, p. 212)

> 'Finally, in the upswing in the most recent period (1890–1914) Gerzstein found many signs of a general retardation of the growth of the productive forces ... as compared to the preceding decades coinciding with Kondratieff's "downswing".' (**ibid.**, p. 212)

Besides questioning Kondratieff's data, these economists also questioned his attempts to give them a wave-like configuration by using statistical techniques to distinguish a 'trend' from an 'upward' or 'downward' 'deviation from the trends.' (**ibid.**, p. 209–10).

Oparin, for instance, claimed that by using different techniques and material, he could draw 'new curves' that 'differ considerably from those of Kondratieff ... They have different timing and amplitude.' (quoted in **ibid.**, p. 210).

42. In the most recent discussions, doubt has been cast on the basic statistical method used by Kondratieff. But it was not merely his statistical methods that were open to challenge in the 1920s – and remain open to challenge today. It was also his whole approach to capitalism as a system. Most of the Russian economists of the 1920s agreed with Trotsky's criticism of this. Sukhanov, for instance,

concluded that ‘Kondratieff studied economics in the same way as an astronomer might investigate the immutable orbits of heavenly bodies. A more rational approach would be to take into account capitalism’s growth, maturity, decrepitude – and even the likelihood of death …’ (quoted in R.B. Day, **op. cit.**, pp. 78–79)

43. Quoted in R.B. Day, **op. cit.**, p. 77.

44. For a fuller account of Mandel’s views see my review of **Late Capitalism** in **IS** 2 : 1.

45. W. Rostow, *Trend Periods Revisited*, **Journal of Economic History**, 1975, p. 749.

46. **The World in Depression 1929–39**, London 1973, p. 292.

47. **Ibid.**, p. 293.

48. **Ibid.**, p. 307–8.

49. *US Capitalism in Crisis*, **URPE**, 1977, p. 46.

50. **Ibid.**, p. 46.

51. **Ibid.**, p. 51

52. An example is Rowthorn, **op. cit.**

53. D. Gordon, **US Capitalism in Crisis**, p. 31.

54. **Ibid.**, p. 30.

55. **Ibid.**, p. 29.

56. P. Aglietta, **Theory of Capitalist Regulation**, London 1979.

57. **Ibid.**, p. 154.

58. **Ibid.**, p. 165.

59. **Ibid.**, p. 162.

60. **Ibid.**, p. 167.

61. P. Baran & P. Sweezy, **Monopoly Capital**, Harmondsworth.

62. J. Steindl, **Maturity and Stagnation in American Capitalism**, London 1953.

63. **Ibid.**, p. 155 *et. seq*.

64. **Ibid.**, p. 255.

65. **Ibid.**, p. 135.

66. **Ibid.**, p. 166.

67. Steindl, **Cambridge Journal of Economics**, March 1973, p. 8.

68. **Op. cit.**, p. 89.

69. **Ibid.**, p. 70.

70. **Ibid.**, p. 95.

71. **Ibid.**, p. 155.

72. **Ibid.**, pp. 155–56.

73. **Ibid.**, p. 162.

74. **Op. cit.**

75. Baran & Sweezy, **op. cit.**, p. 216.

76. **Ibid.**, pp. 218 and 223.

77. **Ibid.**, p. 240.

78. This is the point made by Bleaney in his **Underconsumptionist Theories**, London 1977, p. 230.

79. See **op. cit.**, p. 243.

80. A. Dabat, **Debate**, May/June 1979, p. 17 (my translation – *CH*).

81. **Ibid.**

82. It is because Baran & Sweezy claim such external pressures are of diminished importance in firms' handling of the product of exploiting labour that they call it a 'surplus' – we follow Marx in calling it surplus value because it is not a self-contained entity, but something continually related, by national and international competitive forces, to the surplus value in the hands of other firms.

83. See R. Luxemburg, **The Accumulation of Capital**, and her **Anti-Critique**.

84. P. Sweezy, **Theory of Capitalist Development**, London 1946, p. 82.