



**State
Capitalism,
Armaments
and the
General
Form of the
Current
Crisis**

Chris Harman

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The greatest sustained boom in its history. That was the experience of the world capitalist system from the 1940s to the early 1970s. Country after country experienced enormous economic growth. The American gross national product grew until it was three times as great in 1970 as it had been in 1940; German industrial output grew five fold from the (depressed) level of 1949; French output four fold. Even the miserable, long declining British economy was producing about twice as much at the end of the long boom as at the beginning.

The new era of growth was not confined to the existing industrialised countries. Japan, still thought of as a third world type country in the 1940s, resumed its pre-war industrial growth; until, with a 1,300% increase in its industrial output, it was the second western economy after the US. Russia's economy likewise grew, until its industrial output was about seven times as high in the mid 70s as in the mid 40s.

Elsewhere the dream of full industrialisation was often not fulfilled. For every success story there were half a dozen failures. India and China built huge centres of industry, but the mass of the population in each case continued to live in rural impoverishment. In Latin America urbanisation often took place more rapidly than industrialisation, creating massive shanty towns of more or less permanently unemployed subproletarians. 'Modernisation' too often meant no more than the creation of an urban elite with western tastes, while the conditions of life of most people remained as appalling as before.

Yet on a world scale, the transformation brought about by the great boom was as great as anything achieved in the previous history of the system. When Marx wrote the **Communist Manifesto**, the factory was characteristic only of some parts of Britain and Belgium. Elsewhere in the world it was hardly known. When Lenin wrote **Imperialism** it was characteristic of western and central Germany, the north east of the US, some of the cities of eastern and central Europe, of Milan and Turin in Italy, of parts of Catalonia. Yet in Italy, Spain, Austria, Poland, Russia, France, and Japan the majority of the population still lived off the land, and even in the industrial giants of US and Germany, a third of the people did. By the end of the great boom, however, there were industrial centres right across the globe, the rural population had shrunk to small minorities in the advanced countries, and even in Spain, Italy or the Irish Republic to less than one third of the total.

Humanity was producing wealth on a scale that had only been dreamed of previously. And the amount grew year after year, decade after decade. If the growing wealth was still very unevenly distributed, if it was accompanied by pockets of enduring poverty in the advanced countries and by vast static pools of misery in the 'third world', people could, nevertheless, believe that changes in the policies of governments would soon put an end to that.

It became the orthodoxy on both the right and the left to proclaim that the contradictions in the system perceived by Marx had been overcome.

Within bourgeois economics, Keynesianism – the belief that governments could ensure sustained economic growth and full employment at no greater cost than a slow rate of inflation – reigned supreme. The doctrine won many converts from those who had been adamant in the 30s that the system was finished. In Britain, John Strachey, who before the war had probably done more than anyone else to popularise Marxist economic doctrines, explained in 1956 in his **Contemporary Capitalism** that Marx had been wrong, that trade union pressure and intervention from enlightened governments could prevent crises indefinitely.

On the left there remained many who wanted to maintain a more traditional Marxist perspective. But in the great majority of cases they did so either by denying the reality of the boom, or by at least half-accepting the Keynesian contention that governments could ward off crisis.

For the veteran German-American revolutionary philosopher, Herbert Marcuse, the system had become 'one dimensional', absorbing all the elements of protest from the workers of the advanced countries. [1] For the radical sociologist, C. Wright Mills [2], it was only nostalgia which led the left to look to the working class; real hope had to lie with intellectuals and students. For the American economists Baran & Sweezy [3], the bulk of the working class in the advanced countries worked in a privileged monopoly sector, and the central contradiction of the system no longer lay in the class struggle in these countries, but rather in the conflicts between imperialism and the peoples of the third world. For the Belgian economist Ernest Mandel, early attempts to deny the possibility of prolonged boom gave way to a notion of 'neo-capitalism' from which tendencies to crisis seemed to have all but disappeared. [4]

Then, in the early 1970s, the great boom came to an end. A short recession which, for the first time since the war hit nearly all the major countries at once, gave an inkling in 1970–71 of what was to come. It was followed by a very sharp, coordinated world boom in 1972–3 – and in turn gave way to a recession the like of which had not been seen in 35 years. As both unemployment rates and inflation rates soared throughout the world, the Keynesian orthodoxy no longer fitted. Suddenly, Keynesian economists found themselves being upstaged in the universities, in business circles and in the quality press by people who mouthed 'monetarists' theories – little more than a rehashing of the views Keynesianism had itself replaced a generation before.

For Marxists the problem should have been less acute. Yet it was not all that easy merely to accept that Marx's theory of crisis had always been correct, when everyone knew it had not explained the real world for 30 years, even if it suddenly did now. Within Marxism debates raged between 'fundamentalists' who insisted that the present crisis could be understood as the crisis Marx had described, but had no explanation of the boom, and 'revisionists' who insisted some account had to be given of the great boom.

There had been, however, a minority current within Marxism, right from the inception of the great boom, that had both explained that boom and argued that there were long term pressures at work which would end it after 20 or 25 years. This current was born out of the writings of an American Marxist economist who wrote under the names W.T. Oakes and T.N. Vance in the mid 40s and early 50s.

Oakes/Vance's first article was written towards the end of the second World War, in 1944. In it, he argued that in Germany since the advent of Hitler and in the US since the inception of the war, a 'new era' of capitalist development had opened up, that of the 'Permanent War Economy'. Previously the single aim of capitalist production had been the production of commodities for the market. But now, 'government expenditures for war become a legitimate and significant end-purpose of economic activity'. [5]

The basic laws of capitalism as analysed by Marx – 'the increasing organic composition of capital and the falling rate of profit' – found expression in new ways in this 'new era'. The result was a *temporary* stabilisation of the system: 'It is not my belief that the Permanent War Economy will provide a lasting solution for capitalism. But it can work for the period under consideration.' [6]

Oakes/Vance further developed this analysis in a series of articles in the semi-Trotskyist magazine **New Internationalist** in 1951 [7], and the analysis was further deepened by Tony Cliff writing in 1957 [8] and by Mike Kidron in 1961 and 1968. [9]

There were important differences in the three formulations of the analysis. [10] But on one crucial point all three, writing at the height of the great boom, concurred: the boom arose from modifications to the system that occur in the period of state capitalism and military competition, but within it contradictions persisted that at a later stage would lead to a new period of crises and intensified class struggle.

The previous parts of this article – *Theories of the crisis* (IS 2 : 9), *Marx and his critics* (IS 2 : 11) and *The crisis last time* (IS 2 : 13) – were based on the theoretical insights of these writers, drawing them together in a coherent framework and linking them with Marx's analysis of the dynamics of capitalism and to the accounts of imperialism provided by Lenin and Bukharin. Now we are in a position to look at the transition from the great boom to a new period of crisis using this framework.

Arms, profits and the great boom

The experience of the first World War and the period 1933–45 was that *provided* the competing groups within any country allowed it, the capitalist state could intervene to ensure that production proceeded on an upward course – even if the rate of profit declined. For, the state could collect into its hands the mass of surplus value and direct it into investment, regardless of estimates of profitability. All the resources of the national capitalism could then be directed to meeting external competitive challenges – whether of the market or the military kind.

The extent to which the state intervened in practice after the second World War varied enormously. In the US and Britain direct state controls over much of the economy were dismantled, in West Germany the ideology of the 'economic miracle' of the 1950s was *laissez faire*, while, by contrast, in Italy the state owned much of large scale industry and in Japan and France strong '*dirigiste*' traditions prevailed under right wing governments.

But in one important respect post war capitalism was almost everywhere more satisfied than anything the system had known before: levels of *military* expenditure were much higher than ever before in peacetime.

Above all this was true in the US – by far the largest economy to emerge from the second World War, with half of world industrial production within its borders and a gross national product about twice that of Western Europe and Japan combined.

Until 1939, the US spent very little on arms – less than one per cent of its national product. In the course of the second World War this figure leapt upwards, until it reached

45% in 1943 and 1944. Even with reconversion to a ‘peace economy’ and disarmament in the early post war years, war outlays never fell back to the pre-1939 figure. In 1948 they were 4.6% of the national product (and 9.8% if direct outlays were taken into account). Expenditure on war in peacetime had quadrupled. And the onset of the Cold War soon meant they were soaring up again, to reach 14.4% in 1951 (21.1% if indirect outlays were taken into account).

This expenditure of vast quantities of surplus value on arms had a peculiar effect on American capitalism, as was already clear in the course of the war. The amount of surplus value remaining in the hands of private capital *after* the state had taken its share for arms was actually *higher* than before, the organic composition of capital tended to fall and the rate of profit rose.

**Mass of profits of US capitalism [11]
Net profit of listed US manufacturing corporations**

	Before tax	After tax
1938	1.6bn	1.3bn
1940	3.7bn	2.6bn
1942	7.0bn	2.6bn
1944	8.2bn	3.0bn
1946	6.0bn	4.1bn

The rise in the net profit remaining in capitalist hands after tax is indisputable.

Organic composition of capital

	1939	1941	1944	1946
Vance’s calculation [12]	72.2	73.7	68.0	74.8
Gillman’s calculation [13]	4.3		2.1	
Mage’s calculation [14]	3.5	2.71	2.03	2.63

The three calculations measure different definitions of the organic composition and express them in different ways. [15] But they also show a trend in the same direction – falling as arms spending rises with the war, then rising a little as disarmament begins.

Rate of profit [16]

	1939	1941	1943	1945	1947
Vance’s calculation	25.6%	28.1%	32.6%	33.3%	27.7%
Mage’s calculation	8.12%	10.3%	11.1%	11.1%	10.23%

Again, the direction of movement is clear – upwards as arms expenditure soared during the war, and then stagnating or falling with disarmament.

The upturn in the level of arms spending during the Korean war (1950–53) was followed by a decline to between two and three times the 1948 level (and six or seven times the 1939 level).

Arms spending as % of GNP [17]

1939	1948	1951	1953	1955	1957	1959	1961	1963	1965	1967	1969
1.5%	4.3%	13.4%	13.6%	9.9%	10.2%	9.7%	9.3%	8.8%	7.6%	9.1%	9.0%

Throughout this period the rate of profit seemed to defy Marx's 'law'. Thus, in an analysis often quoted [18] as proving that the rate of profit fell, Nordhaus gave figures that showed that during the 1950s and early 1960s it stabilised with a narrow range: [19]

	1951-55	1956-60	1961-65	1966-70
Before tax	14.3%	12.2%	14.1%	12.9%
After tax	6.4%	6.2%	8.3%	7.7%

In an analysis critical of Nordhaus's figures, Fieldstein and Summers show, if anything, a small rise for net profits for non-financial corporations, from 11.1% in 1950/9, to 10.9% in 1956/65, to 11.7% in 1960/69. [20]

The picture for Britain in the 40s, 50s and early 60s is not substantially different from that for the US.

The level of arms expenditure was still at a quantitatively higher level than previously in peacetime, accounting for 10% of national output in the early 1950s, from which it slowly slid down to about 6% in the late 1960s.

With so much potentially investable surplus value going on arms, it was not surprising that the level of civilian investment remained fairly low and the organic composition of capital rose only slowly from the low level to which it had been reduced by slump and war. From a high of 2.0 in 1931/8, it fell to 1.61 in 1948/52. From there it rose to 1.68 in 1953/8, 1.78 in 1959/62, and 1.85 in 1963/67. [21] Thus even after 20 odd years of growth it still had not quite reached the level of more than 2.0 which produced the long period of crisis and stagnation of the inter-war years.

Again, the rate of profit before tax showed only a very limited tendency to decline in the first part of this period, from just over 16% in the early 1950s to between 13 and 14% in the early 1960s – and *after tax* it was as high in the later period as in the earlier. [22]

What applied to the US and Britain applied also to the other west European powers. French arms expenditure was above 5% for most of the 1950s and West German between 3 and 4.5%. And, as one Marxist analysis of West Germany notes, there was no increase in the organic composition of capital in the 1950s. [23]

Any honest empirical study of the 40s, 50s and early 60s thus has to see that a historically high level of arms expenditure was accompanied by a stabilisation of the system, an offsetting of the tendencies for the organic composition of capital to rise and the rate of profit to fall, and a prolonged period of boom.

Theory and reality

The factual evidence leads back to the theoretical points we looked at in the second part of this article (*Marx and his critics*, IS 2 : 11). There it was argued that the intensified level of military competition could, temporarily, mitigate some of the elements of contradiction internal to each national economy. A high level of arms

spending meant that the state took control of a substantial portion of the surplus value that would otherwise have sought profitable investment.

The result was that:

1. Part of the investible surplus value that might otherwise have stood idle was ploughed back into the process of production. The state ensured this occurred even if the general rate of profit was low.
2. The goods produced by this state-induced investment neither competed with the consumer good output of the civilian economy (and so did not force down prices and profits rates even more or threaten to bring about overproduction) nor took the form of new means of production that would have raised the ratio of capital to labour throughout the economy (and so again did not reduce the rate of profit). Instead what were turned out were goods destined for self destruction – for ‘non productive consumption’.
3. Even when the state-controlled arms sector was capital-intensive (i.e. had a high organic composition of capital) this did not necessarily serve to reduce further the average rate of profit for non-state capitals because of the ‘von Bortkiewicz effect’. [24]

Of course, the large arms sector represented a massive waste of resources that could otherwise have gone into expanding productive investment. Yet for a long time this did not seem to matter. The burden was shared more or less equally between the great corporations that dominated the US economy, so that the ability of each to expand productive investment was held back by roughly the same amount as the others. And while the result was that short term economic growth never reached the frenetic pace it had in the ‘boom’ part of the economic cycle previously, it did not suffer anything like the stoppages it had endured in the slump parts of the cycle. [25]

Comparing the post-war and the pre-war economy was like comparing the hare and the tortoise of Aesop’s fable. The pre-war economy bounded forward at great speed – and then stopped short, out of breath. The post-war economy, ‘burdened’ by the waste of huge arms expenditure, moved forward more slowly, but did not stop short in the same abrupt way. Its rate of profit was not forced down, and so it could continue going forward, year after year, decade after decade. Its *long term* growth rate was greater than anything the system had ever known before: the world system grew ‘twice as fast between 1950 and 1965 as between 1913 and 1950, and nearly half as fast again as during the generation before that’. [26]

As Vance put it at the beginning of the great boom: ‘enormous production and enormous waste go hand in hand’. [27]

One indication of the success of the capitalist economy from the late 1940s through to the early 1960s was that the remedy the Keynesians had preached as a solution to the crisis of the 1930s – deficit budgeting – was not actually needed. If the government spending – especially arms spending – was at a high level, this was compensated for by a high rate of growth.

For Britain, an examination of government finances concluded in 1968 ‘Throughout the post war period, the government, so far from injecting demand into the system, has

persistently had a large current account surplus ... Fiscal policy as such appears to have been deflationary in the post war period ...' [28]

This only began to change with the Maudling boom of the early 1960s and the Barber boom of the early 1970s (both under Tory governments). Keynesianism may have been the ideology of the post war period – but for a long time it was an ideology divorced from practice.

And, as Megan Desai has noted [29]: 'In the USA Keynesian policies were slow to be officially adopted ... They finally triumphed with the Kennedy-Johnson tax cut of 1964.' That was after the Great Boom had already lasted 15 years (25 years if you exclude the short lived and shallow recession of the late 40s).

The logic of arms based economic expansion has escaped many Marxist economists. It is absurd, they argue, to see a deduction by the state from the total surplus value as somehow overcoming the tendency for surplus value to grow more slowly than total investment costs (i.e. the fall in the rate of profit). Rather than admit to that 'absurdity' they have denied the reality of what happened in the quarter of a century after the second World War.

What they fail to understand is that this 'absurdity' is just part of the greater absurdity of the capitalist system as a whole, of its contradictory nature. [30] They do not see that engaging in military competition can be just as much a 'legitimate' capitalist goal as engaging in economic competition for markets – indeed, *has* to be in the epoch of imperialist conflict between state capitals. Their blindness to the logic of attempting to expand the amount of value embodied in means of destruction is in many ways like the blindness of some previous Marxists (including one of the greatest, Rosa Luxemburg) to the logic of continually trying to expand the values embodied in means of production without, necessarily, producing more means of consumption. Both groups of Marxists were so bemused by the irrationality of what capitalists were doing as to try to deny that this was how the system worked.

The 'irrational' logic which underlay the western arms economies had its parallel in the eastern state capitals. There too arms spending had a contradictory effect – on the one hand, slowing down the short term rates of growth; on the other, creating conditions which prevented entanglement in catastrophic crises.

The central drive of the rulers of these countries was to 'catch up and overtake' the advanced capitalisms of the west. All the internal resources of the territory controlled by the state capital had to be directed to this single goal. The individual production units were too small and too technically backward to relate directly to the rest of the world via market competition without the risk of being forced into subordination to western capitals. Only autarchy – cutting normal market ties between the territory and the rest of the world – could fend off that risk. But autarchy had to be defended by armed might, lest western capitals take direct military measures to 'open up' the territory of the state capital to their penetration.

The state capital could not stop itself being forced into direct market competition with the economically more advanced western capitals except by engaging in military competition with them.

Had it opted for economic competition, then the growth of its economy would have come to depend directly upon the ups and downs of the world economy, on world booms and slumps. The drive for international market competitiveness would have meant an immediate raising of the ratio of means of production to workers to the world average, thus exerting a downward pressure on the rate of profit for each internal production unit. As the rate of profit fell in this way, those controlling investment decisions would have postponed them, waiting for some upturn in the world economy to create a more favourable

investment environment. The pattern of boom and slump would have appeared inside the national economy.

Massive arms spending deflected many of these pressures – although it did not stop there being cycles of investment and economic growth in the eastern states, sometimes as marked as those of the western economies during the Great Boom. [31]

During the 1940s and 1950s the eastern state capitalisms were able to sustain very high growth rates, by investing any mass of surplus value that existed, regardless of its ratio to past investment (the rate of profit). They could do so *only* because arms spending provided the Russian rulers with a means of insulating their sphere of influence from external market pressures. The dimension of military competition enabled them for a long period to downplay the significance of the dimension of market competition.

At the same time, their vast expenditure on arms reduced *world wide investment* in productive industry, and with it the world wide tendency for the organic composition to rise and the rate of profit to fall. Because of Russia's vast expenditure on arms, its industry could never reach the point of being able to undercut western industry in market competition – and of therefore destroying the profitability of western industry. And, by the same token, it stopped itself running into a situation where it suffered the effects of a world wide crisis of overproduction.

In general, state capitalism east *and* west, was not conceivable without the arms economy. Without their arms spending the rival state capitals would have had to relate to each other solely through market competition – and would therefore have reproduced all the elements of crisis of the inter-war years. Indeed, even with their arms spending they were unable to stop the element of market competition between state capitals growing more important – and leading to the eventual re-emergence of crisis.

Arms, the state and imperialism

The basis for the Great Boom was the state capitalist arms economy. Yet the project of state capitalism was built on a contradiction – as Bukharin pointed out in his writings in and soon after the first World War.

The very thing that produced the merger between the state and capital – the fantastic growth in the scale of production and therefore of the units of capital – also produced pressure on the units in which production was organised to break through the constraints of national frontiers. To try to keep state production confined within those frontiers was to ensure that it was carried on inefficiently and that the national economy became increasingly plagued by disproportions between its different component parts.

It was these factors, as we have seen (*The Crisis Last Time*, IS 2 : 11) that led the pre-second World War state capitalisms of Germany and Japan to stretch their boundaries by repartitioning the world in their own favour, until world war was the inevitable result. They lost the war and were dismembered (Germany was permanently divided in two, Japan lost its Taiwanese, Korean and Manchurian possessions and did not achieve a level of economic output higher than that in the 30s until 1953). But that was not the end of pressures to 'partition and repartition the world'. These now emanated from the state capitalisms that had defeated Germany and Japan in the war.

The US and Russia emerged from the war as the two most powerful state capitalisms, both in economic and military terms. Both had become relatively autarchic during the 1930s, as foreign trade dropped to a very small proportion of total product and as ideologies had predominated within the ruling class that belittled the importance of links with the rest of the world (isolationism in the US, 'socialism in one country' in Russia). Both had been

forced into a new awareness of the rest of the world by the attempts of Germany and Japan to repartition it. Both now hastened to absorb the subject peoples of the defeated empires into their own 'spheres of influence'.

This was first done by mutual agreement at the international conferences of 1943–5 (Tehran, Yalta, Potsdam etc.). Apparent harmony reigned at these, with each allowing the other to suppress anti-Nazi resistance movements whose ideological colouration it did not like (thus, the British and Americans were allowed to crush the Communist-led resistance movement in Greece, the Russians the non-Communist Home Army in Poland). But the harmony was, in fact, but a sentimentalisation of cynical *realpolitik* – it reflected the crude calculation by each that it was not strong enough to deny the other what it wanted.

Such harmony was bound to break down within a couple of years. Each power was bound to fear that the other would use the strength it had gained from expanding its sphere of influence so as to expand it even more.

Much ink has been spilt by apologists for both sides (and for none) in arguments as to who started the Cold War. But the whole argument is misplaced. Once American and Russian state capitalism had expanded into the lands of the former German and Japanese empires they were bound to clash with each other. The dividing line between their 'blocs' was based upon a calculation of the existing balance of forces between them. Each was bound to fear that the other would somehow succeed in shifting that balance of forces and then push for a further repartition of the world. The only way to resist that was to apply continual pressure against it, engaging in border wars (e.g. the Korean war) if necessary and preparing for the possibility of world war by a relentless accumulation of military hardware.

There was not, however, a *pure* symmetry between the two dominant powers. Russia emerged from the war the most powerful military force in Europe, but was much weaker economically and certainly did not have the strength to engage in military struggle far beyond the boundaries of its own bloc. Its imperialism therefore consisted in the main in a subjection of the peoples of eastern Europe; engaging in a crude pillage of the area in the years 1945–8, and then forcing through an industrialisation at the expense of workers and peasants so as to increase the military-industrial capacity of the bloc as a whole. [32]

In the years 1949–61 it tried to subordinate the newly independent state capitalism of China to its own imperialist needs, but only succeeded, at the end of the day, in provoking China into breaking from its bloc. [33]

In the 1960s it extended its involvement beyond its own bloc, developing interests in India, Egypt (although it was later to lose these), Syria, Iraq, Somalia (again only for a period), Ethiopia, Angola – and, of course, Cuba. But its overall presence outside of eastern Europe and northern Asia remained a pale shadow of that of the US.

By contrast, as the most powerful *economic* power, the Americans, had less need of a formal empire than the Russians. In the early post war period their economic strength was sufficient to draw within their sphere of influence the ruling classes of most smaller countries unless a direct Russian military presence prevented that.

Thus they easily drew the individual west European state capitalisms into their orbit, picked up most of the pieces of their disintegrating empires (displacing the British in the Middle East, the French in Indochina, the Belgians in central Africa etc.) and were also able at a later stage to pull back countries that had been temporarily allied with the Russians (Egypt, Somalia, especially China). Provided it could effectively maintain the world's existing ruling classes in power, the US could expect to continue to dominate everything outside Russia's immediate control. Its imperialism was indirect [34], with exploitation usually being based upon 'freely' entered into agreements between US companies and companies and rulers elsewhere, its political power safeguarded by bases from which troops would fly to prop up local ruling classes rather than by armies of occupation.

The lack of symmetry explains how the argument as to who was the 'aggressor' could take place. The compact Russian bloc could be presented as 'defensive', the extensive US presence as 'free', depending on one's preference. Yet such arguments concealed the underlying similarity between the two camps.

Both were imperialist, in the sense that in both the needs of competitive accumulation forced the ruling class to exercise military influence outside its own national boundaries. Yet in neither case was the imperialism simply a carbon copy of the imperialism of the 1890s, which could be justified in terms of crude profit and loss calculations, with the expenses of empire being small compared with the much greater increase in profit that it brought in.

In the new period of imperialism, the cost of empire could be much greater than any direct material benefit to the ruling class.

Thus at no stage in the 1940s or 1950s did total US overseas investment (let alone the much smaller *return* on that investment) exceed US spending on arms. Even in the period of 'disarmament' prior to the outbreak of the Korean War:

'Military expenditure totalled something like \$15bn a year. Thus it was not only 25 times as high as the sum of private capital export, but it was also many times greater than the sum of foreign aid. Marshall Aid did not total more than \$5bn in any one year'. [35]

Thirty years later US overseas investment had grown many times over. The total was now about \$500bn (\$200bn of direct investment plus bank loans worth perhaps £300bn). On top of this there were something like £300bn of foreign assets controlled by US multinationals. [36] But total expenditure on 'defence' had also risen, to around \$200bn – less now than total overseas investment, but still substantially more than the profits that could possibly accrue from that investment.

What is more, the *direction* of the overseas investment had also changed. It was no longer predominantly investment by strong, established capitalist powers in countries which were not yet fully capitalist which could provide 'super-profits'. Instead, it was in fully developed capitalist countries – whose ruling classes invested, in turn, in the US. [37]

By the late 1970s only a quarter of the overseas investment of the advanced western countries was in the 'third world' – the rest was in other advanced countries. Each advanced capitalism 'gained' a certain amount of profits from investment in other advanced countries but simultaneously 'lost' a certain amount through their investments in it. The resulting net return could hardly justify by itself the huge expenditure on arms.

The imperialism which necessitated arms spending was not the imperialism of a single empire, in which a few 'finance capitalists' at the centre make huge super profits by holding billions of people down. Rather it was the imperialism of *rival* empires, in which – as Bukharin had described it as early as 1916 – the combined capitalists of the whole of each ruling class have to divert funds from productive investments to military expenditure in order to ensure that they hang on to what they already possess.

In the late 1940s, the calculation in both Washington and Moscow was quite simple. To relax the level of military spending was to risk losing strategic superiority to the rival imperialism, enabling it to seize territory.

So the Russians lived in fear of an attempted US 'roll back' of eastern Europe, which would have seized these economies from Russia's grasp, leaving Russia little choice but to accept terms for the untrammelled entry of US goods into Russian markets – a challenge which Russian state capitalism was too weak to confront. In the same way, the Americans lived in fear of Russia pulling one or other of the western states – in particular West

Germany or Japan – into its sphere of influence, enabling it to vastly increase its military-economic potential for challenging US interests everywhere.

As one US spokesman put it at the time of the Korean War:

‘Were either of the two critical areas on the borders of the Communist world to be overrun – western Europe or Asia – the rest of the free world would be immensely weakened ... in the economic and military strength required to resist further aggression ...

‘If western Europe fell, the Soviet Union would gain control of about 300 million people, including the largest pool of skilled manpower in the world. Its steel production would be increased by 55m tons a year to 94m, a total almost equal to our own ... Its coal production would leap to 950m tons compared to our 550m. Electric energy in the area of Soviet domination would be increased from 130 to 350bn KW hours, or almost up to our 400bn ...’ [38]

The logic of the new imperialism was simple: grab, and exploit as much of the world as possible so as to be able to build up the military potential to stop your rival grabbing and exploiting areas to build up its own military potential. Just as ‘classical’ capitalism as described by Marx was based upon the logic of exploiting workers in order to accumulate means of production so as to defend your ability to exploit more workers, so the logic of state capitalist imperialism was exploit workers in order to accumulate means of destruction that enable you to defend your ability to exploit still more workers and accumulate means of production so as to defend your ability to exploit more workers, so the logic of state capitalist imperialism was exploit workers in order to accumulate means of destruction that enable you to defend your ability to exploit still more workers and accumulate still more means of destruction.

We saw, in examining the second World War in *The crisis last time* that this was a logic which could override all other considerations. It meant, under conditions of total war, that individual capitalists were forced to invest, even if their individual rates of profit were low. All that mattered was the survival of the state capitalist ruling class as a whole, and that necessitated the continued investment of all the surplus value in arms production.

This was the state of affairs that continued to prevail in the USSR in the post war period. It fitted a state capitalism which was both more backward than the American (in terms of the size and development of the means of production it controlled) and more advanced (in terms of the subordination of the interests of individual members of the ruling class to the needs of the state capital as a whole). Economic backwardness meant more pressure to invest regardless of the immediate rate of profit – although, of course, the rate of profit on the whole national economy remained crucial, since it determined the limits of future possible investment.

In the US the competing capitalist concerns were more strongly placed to resist the all-encompassing embrace of the state, while the external pressures for them to accept it were not so great. The short term rate of profit remained crucial in determining investment in many non-military sectors of the economy. However, as we have seen, this hardly mattered, since military expenditure managed to create conditions in which profit rates *even after tax* were relatively high and investment could be sustained *without* direct state control.

Post-war state capitalist imperialism was not ‘profitable’ in terms of leading to ‘super profits’ greater than the cost of imperial defence. It was ‘profitable’ in the sense that it enabled capital to expand for a long period of time without major slumps, avoiding the tendency of the rate of profit to fall.

Finally, this had one very important consequence for the pattern of imperialism in the period of the long boom. It meant a softening of the rivalries between the different west European imperialisms. Twice in a generation these had led to world wars. And it still seemed in the early post war period that a powerful German capitalism could not coexist in Europe alongside British and French capitalisms – hence early attempts to forcibly prevent German industry from recovering from the war. Yet after 1948 German capitalism could grow to be more economically powerful than ever before *without* military confrontation with France or Britain.

The reason was that, just as arms spending of US state capitalism guaranteed the profitability of US civilian industry, so it provided an international economic environment in which the different European capitals could invest profitably and find markets without the need to seize new territories. Those European capitalisms that attempted to hang on to old empires (France up until the loss of Algeria in 1962, Britain until economic weakness forced abandonment of its East of Suez foreign policy and entry into the EEC in the early 1970s) found themselves increasingly less competitive than those who had no empires and based their expansion on an orientation towards the industrialised areas of the globe.

The softening of the rivalries of the various western capitalisms even found its parallel in a softening of the rivalry between the US and the USSR in the last decade of the long boom. With both major powers enjoying ‘prosperity’ and sustained high growth rates the pressures to be driven to repartition the world at the expense of the other seemed very low indeed. Neither a ‘Communist’ takeover of western Europe nor a western ‘rollback’ of eastern Europe seemed credible. And in the third world, both sides seemed to have grown accustomed to states like Egypt, India, Iraq or Algeria swinging from one to the other and back again.

After two last major confrontations – over Berlin in 1961 and Cuba in 1962 – ‘*détente*’ was the order of the day. The rulers of the US and Russia believed that the world was big enough for them both to achieve their ambitions. While the Great Boom lasted nothing was any longer allowed to disturb that belief – not the US war against Vietnam, not the Russian invasion of Czechoslovakia, not the Middle East War fought out by the great powers’ clients in 1973. The US and Russia had larger nuclear stockpiles than ever – but also seemed less likely than ever to use them. Their ‘armed truce’ did indeed seem an alternative to war.

But *détente* in reality depended on the arms economy boom. And as that boom died, so did the dream of everlasting ‘peaceful’ coexistence between the great state capitalist imperialisms.

Contradictions: (1) national capitals and international production

The arms economy was a response to the contradiction between the growing stratification of production and its growing internationalisation.

Yet increasingly it could not resolve that contradiction. In 1914 or even in 1939 it had been possible for rulers to imagine that a quick ‘blitzkrieg’ attack could force their rivals to accept a repartition of the world at minimal cost. In the age of the atom bomb, it was more difficult to even pose the issue in those terms. The drive towards war remained as powerful as ever – but even the craziest capitalist or bureaucrat could see that an atomic war could destroy vast existing accumulations of capital long before it provided control over new masses of capital. The nuclear balance maintained in fact the main outlines of the partition of the world decided in 1944–5, despite occasional rhetoric about ‘rolling back eastern

Europe'. It was to be more than 30 years before the great powers began to think again in terms of what they could win through blitzkrieg type 'theatre wars'.

But the freezing of the boundaries between blocs did not stop the pressure towards internationalisation of the forces of production. With the relentless upward path of global output during the great boom, this pressure became greater than ever. If national state capitals dared not relieve the pressure by turning cold war into hot war, they had to relieve it in another way – by allowing an increasing number of direct linkages between internal production and world production.

In the inter-war years, the trend had been for the state capitalist empires and blocs to try to operate self contained economies, producing internally as great a proportion as possible of the different sorts of output each needed. World trade slumped, and the internationalisation of production was internationalisation within each bloc.

The more economically backward state capitalisms continued in this direction in the 1940s and 1950s – Russia forced its east European satellites to reorient their trade towards itself; Japan used all sorts of measures to 'ration' foreign imports; emerging industrial capitalisms like Brazil and Argentina forced national firms to pursue policies based on 'import substitution'; in both China and India, each in its own way, consciously coped the inter-war Russian experience of five year plans.

But between the old established industrial powers, a new pattern soon emerged. World trade grew at something like twice the rate of growth of world output, and there was a growing tendency for key areas of output to be dominated by *multinational firms*, coordinating investment, production and sales in many different countries.

The multinationals had advantages that no single national capital could match. They could mobilise *world* forces of production, while individual state capitals could only rely upon a fraction of these world forces. And so they tended to be dominant in the most technologically advanced areas of industry – in oil and petrochemicals, in computers, in electronics, in autos. Individual state capitals that wanted to continue to produce the most modern forms of output in the most efficient ways increasingly found they could only do so by establishing links with the multinationals – through joint investment projects, licensing agreements and so on. In the 1960s this was increasingly true of states like Brazil or Argentina, in the 1970s it was increasingly true of Russia and eastern Europe as well.

The growth of trade and the growth of the multinationals led in turn to another form of internationalisation – the massive growth in the late 1960s and the 1970s of vast pools of international finance that had no single national home – Euromoney.

There is an argument between some Marxists as to whether 'statification' or 'multinationalisation' is the predominant feature of capitalist development today. [39] The whole argument is misconceived. One trend implies the other.

The state cannot develop national capital to compete in world terms unless it finds access to productive resources (capital and raw materials) and productive developments (new technology) outside of its own borders. It has to deal with the multinationals and to borrow from the international capital market.

For their part, the multinationals continue to depend upon national home bases (even if some – e.g. Unilever, Shell – have more than one national home base) for the resources states can provide (e.g. finance, research and development undertaken in 'defence' establishments etc.) and for the protection of their interests internationally (e.g. in trade negotiations, against threats from radical governments and so on).

The multinationals and the individual state capitals are mutually dependent on each other. Yet, at the same time, the activities of the one continually interfere with the activities of the other. The multinational depends upon the national state for defence, yet at the same time engages in international operations that can undermine the domestic industrial-

military potential. The national state depends on the multinational for access to the developing world forces of production, yet continually puts obstructions in the way of the free flow of trade and capital (through tax and state procurement policies, through efforts to influence exchange rates etc.) that can only serve to hamper the multinationals' efforts to develop these world forces.

The rise of multinational capital undermines the ability of individual states to impose order on their internal economies: an increasing proportion of 'national' resources are completely outside the control of 'national planning' mechanisms. At the same time the continued existence of the various states, and their enormous military machines continually threatens to disrupt the 'international planning' which operates within each multinational.

Capitalism has always been a system in which 'order' can only emerge through the blind interaction of many competing capitals. In Marx's time the key mechanisms which imposed order were the markets for commodities, labour power and capital, and the crises which served periodically to bring them back in the 'right' proportions to each other. By the late 1930s a different sort of interaction was dominant – that between military state capitals. Yet here too a certain sort of 'order' could emerge. Fear of its rivals forced each state to engage in a 'planned' deployment of its internal resources, and the result was the Great Boom.

The continuing internationalisation of productive forces undercut the ability of national states to deploy their internal resources in this way.

States – regardless of their ideological hue – increasingly required the collaboration of multinational capital. They could only obtain it by delivering an adequate rate of profit to the multinational corporation. And so they could not continue along the old state capitalist path in which investment was maximised, regardless of any decline in the profit rate it produced.

In a multinational world, the state capitals could no longer guarantee fast growth rates and full employment. The 'order' that had emerged in the late 1930s and early 1940s became a thing of the past. Yet the states that had given rise to that 'order' continued to exist – and this in turn prevented any return to the rather different order, based on 'pure' market competition and regulation-through-crisis that had existed in Marx's time.

Contradictions (2): the rise of non-military state capitalisms

So far we have assumed a world in which only *military* state capitalisms exist. This effectively was the world into which the Great Boom was born: economic life internationally was dominated by the industrial nations that had won the second World War – the US, Russia, Britain, and to a lesser extent, France. And these were countries with high levels of arms spending designed to protect empires and spheres of influence.

But in the course of the Great Boom a change occurred. Just as multinational capitals grew up which cut across the boundaries of the state capitals, so too, the state capitals began to have to preoccupy themselves with market as well as military dimensions of competition. In particular, state capitals emerged that devoted almost all their resources to market penetration of their rivals, and which simply refused to engage in military competition.

This was a necessary outcome of the long period of economic expansion. As the system grew, so too did the scale of expenditure required for any state that wanted to play an independent part in military competition. Eventually, only two or three states could claim to be able to do so (the US, Russia, and to some extent, China). Other states had no choice but to throw their lot in with one or other super-power. And it was a short step from that to

deciding they did not need to devote the same proportion of their national output to arms as the superpowers did. The advanced economies began to break into two groups- the high arms spenders and the low arms spenders – with countries like Britain and France occupying an intermediate position.

The result was a double contradiction. There was an equalisation of the burden between the unequal economies of the superpowers (Russia had to match the arms potential of a country, the US, with more than twice its national output, and the relatively backward Chinese economy had to be able to face up to both the US and the USSR). And there was a great disparity in the burden of more or less comparable economies (e.g. Britain has an arms burden something like six times the level of Japan and 50% higher than West Germany).

The two capitalisms which had lost the second World War and which, therefore, had been excluded from the first phase of rearmament in the late 1940s found themselves in a position to benefit from the world arms economy sustained by the ‘victors’ without, however, having to contribute a great portion of their own national output to arms. They could therefore put a higher proportion of output into investment in productive industry, reap corresponding benefits in terms of efficiency and mop up the competition in international markets.

In the case of West Germany: The first post-war boom, which began in 1950, had foreign trade to thank for its intensity’. [40] And: ‘At every stage of reduced or stagnating capital accumulation in the history of the Federal Republic, the export surpluses have had a stimulating effect upon production’. [41]

Japan followed a similar path. Arms spending was on an even smaller scale than West Germany’s, amounting to less than one per cent of national output (while the German figure was between 3 and 4%). This left it resources to sustain the highest proportion of national resources going into productive accumulation of any of the western states, while still benefiting from the international market created by the arms economies of the others.

Thus its long boom – with growth rates nearly twice its rivals -began with the demand created by the western forces fighting in Korea in the early 1950s. As one early account of the boom tells, ‘boom has been produced entirely by the great expansion of foreign demand.’ Between 1952 and 1956, US procurement payments amounted to \$3,331m, ‘equivalent in value to more than a quarter of Japan’s commodity imports in the same period’. ‘Even though there was a tendency for them to decline in subsequent years, procurement expenditure in 1958–9 was sufficient to pay for 14 per cent of imports.’ [42]

After a slight lull, the Japanese economy boomed as never before in the late 1960s. A key contribution to this boom came from ‘the rapid increase in exports especially in North America’. [43] On top of this there was new flood of orders for Japan from the US military – this time in connection with the Vietnam War. In the single year of 1971, this added one billion dollars to Japanese exports. [44]

Low arms spending did not mean a low level of state intervention in the economy. Instead, it tended to mean state intervention to build up *exports*.

Thus in the case of West Germany in the early period, as one Marxist account tells:

‘Far more than in any other capitalist country the bourgeoisie in the Federal Republic made use of the state apparatuses and the monetary and fiscal system to force capital accumulation by means of favourable depreciation rates, credits for reconstruction at favourable rates of interest and finance for investment. All this took place in contradiction to the official neo-liberal economic theory ...’ [45]

In Japan state capitalism advanced further in its influence over civilian industry than almost anywhere else in the western world – despite a low level of direct state ownership.

The state and the largest private firms worked together to ensure that that portion of the national income that had gone into arms before 1945 now went into productive investment:

‘The motive force for rapid growth was fixed investment in plant and equipment. Private fixed investment grew from 7.8% of GNP in 1946 to 21.9% in 1961.’ [46]

In the late 1940s and in the 1950s, for example, imported raw materials were in short supply. The government took charge of their allocation to industries it thought would best contribute to the growth of the economy and the expansion of exports:

‘The “tilting” or “priority projects” system was introduced, with the main expansion in key industries such as coal mining, iron and steel ... Raw materials were allocated to industries by priority.’ [47]

A key role was played by the Ministry of International Trade and Industry (MITI), which issued ‘guidelines’ to industry which they ignored at their peril:

‘MITI formulated and implemented the basic strategy for developing heavy industry in the 1960s and knowledge based industries in the 1970s ... MITI’s goal has been to channel the movement of resources into favoured industries. Domestic and imported financial and technical resources have been allocated preferentially to these industries. Various forms of tax incentives and subsidies have been formulated, enacted and provided by MITI’s efforts ... Additionally, the ministry takes measures to promote rationalisation and reorganisation of industry ...’ [48]

Thus in the early 1970s it pushed for greater concentration of industry in order to prevent foreign takeovers. ‘Administrative guidelines’ allowed it to consolidate 97 shipping companies into six groupings, to merge three different firms into Mitsubishi Heavy Industry, and to achieve the merging of Nissan Motors and Prince Motors, and of Yairata Steel and Fuji Iron and Steel. [49] In addition to the wide powers of MITI, the Central Bank uses its influence to ensure that the individual commercial banks finance certain investments and not others. [50]

Japanese state capitalism has not suffered the enormous tensions that have at times arisen in a country like Britain between the demands of the state and the demands of individual capitalist groups – probably because until recently Japanese investment overseas was relatively low and individual capitalist concerns saw their activities as national rather than multinational (although this is now changing). They could identify with the state in following a path of *national* capital accumulation.

‘Japanese entrepreneurs are vigorous in investing. They will not confine their fixed investment within the limit of gross profits or internal accumulation, unlike the case of entrepreneurs in other advanced countries. Even if the fixed investment is over and above their gross profits, the enterprise will undertake investment so long as bank finance is available ...’ [51]

‘The primary goal of Japanese corporate management is to maintain a high and rising volume of sales ... Maximisation of profits is not a corporate goal’, although ‘maintaining an acceptable level of profits is ...’ [52]

In other words, the heads of big business and the state have worked together to ensure the growth of Japanese national capitalism by mobilising the whole mass of surplus value and directing it towards ‘strategic’ sectors, regardless of considerations of short term profitability. What other state capitals have done when military considerations have been uppermost, has been done by Japanese state capitalism in the interests of overseas market competition. A vice-minister in MITI has summed up the approach:

‘According to Napoleon and Clausewitz the secret of a successful strategy is the concentration of fighting power on the main battlefields; fortunately, Japan has been able to concentrate its scant capital in strategic industries ...’ [53]

The result of this strategy was a more or less continual growth of capital accumulation throughout the 1950s, 1960s and early 1970s – a much faster rate of growth than was possible to those economies bearing the burden of sustaining the world arms economy. As far as the figures for the growth of non-residential business capital are concerned, in Japan 1961–71 it was 11.8% per annum, while in West Germany 1950–62 it was 9.5% per annum. These compare with figures for the US 1948–69 of 3.5% per annum. [54] The figures for fixed investment as a proportion of GNP in 1967 are also striking. In Japan it was 32.3%, in France 21.9%, in West Germany 22.8%, and in the UK 18.2%.

In 1952 the per capita income of Japan was less than that of Brazil, Malaysia or Chile; 40% of the population worked in agriculture; labour productivity in industry was low; the country produced only 1.7% of world exports; it was plagued with balance of payments problems; the maximum predicted rate of economic growth was 5% a year. [55]

By the end of the 1970s the country was the world’s third industrial power; its share of world trade was equal to that of the giant US; it had a huge trade surplus:

Share of combined advanced countries’ GNP [56]

	1953	1977
US	69%	48%
Japan	3.6%	17.7%
W. Germany	6.5%	13.2%
France	8.0%	9.7%
Italy	3.8%	5.0%
UK	8.9%	6.3%

Share of world trade in manufactures [57]

	1961	1978
US	17.9%	11.5%
Japan	5.0%	11.5%
EEC (incl. UK)	46.6%	44.1%

The success of West Germany and Japan might, on the face of it, seem to contradict the Arms Economy thesis. After all, here were the fastest growing economies – one with a low level of arms spending, the other without any significant arms production. But in fact the strategy of a civilian-output state capitalism only made sense if it was assumed that other state capitalisms were producing arms. For they could then provide a market for exports. Had they been civilian-output state capitalisms as well, then they would have had comparable levels of investment to the West Germans and Japanese, so that *either* world

output would have exceeded demand *or* it would have found its demand in a very rapid accumulation of means of production, a rising organic composition of capital and a downward trend in the rate of profit.

Thus the Japanese experience did not contradict the Permanent Arms Economy thesis as an explanation of *world* growth and stability. But the Japanese economy was a contradictory factor in this growth. Its very success meant that a growing chunk of the world economy was not wasting investible output on arms, so reducing the proportion of the world product going to arms.

Nor was that the end of the matter. The very success of the low-arms spending economies put pressure on the high arms spenders to switch resources away from arms and towards productive investment. For only then could they begin to meet the challenge they faced in market competition from Japan and West Germany.

This was most clearly the case for Britain, which faced balance of payments crises every time it tried to expand its economy from the late 1940s right through to the mid 1970s. Successive British governments were forced, reluctantly, to abandon notions of imperial grandeur and to reduce the proportion of the national product going on arms (although not the total arms budget). Defence spending fell from 7.7% of gross domestic product in 1955 to 4.9% in 1970.

In the case of the US, the pressure was less obvious at first, since the country enjoyed a balance of trade surplus throughout the 1950s and 1960s. This enabled it both to sustain a high level of arms spending and to invest overseas on a growing scale. Nevertheless, the level of arms spending declined from the very high figures of the Korean War, to between 9 and 10% of national output in the late 1950s, and to between 7 and 9% in the early 1960s.

The depth of the problems faced by the US was shown during the Vietnam war. In a desperate attempt to ward off defeat, Johnson and Nixon pushed the US arms budget up by about a third. The new level was not, however, anything like that of the Korean war – it moved to around the 9 to 10% of GNP of the late 1950s, not the 13% of the early 1950s. But it was too much for a US industry facing vigorous competition for markets. There was an upsurge of inflation at home, Wall Street turned against the war, and then, in 1971 for the first time since the second World War, US imports exceeded US exports. Nixon was forced into two measures which further undermined the stability of the world economy: he cut US arms spending back to the lowest figure since before the Korean War and he devalued the US dollar, in the process destroying the system of fixed international currency exchange rates that had acted as a framework for the expansion of trade throughout the post war period. US arms spending as a proportion of gross national product thus fell from 13.4% in 1951/7, to 10.7% in 1958/68, to 8.5% in 1969/73, to 6.6% in 1974/77. [58] The dynamic of market competition was relentlessly undercutting the dynamic of military competition.

What some people have called the ‘crisis of hegemony’ [59] of the system in the 1970s was, in fact, the offspring of something else – the inherent instability of a world of state capitalisms engaged in two quite different dimensions of competition with each other.

The difficulties for the US economy have been more than matched by difficulties for the other main arms spender – the USSR.

In the 1930s, 1940s and 1950s it had been able to grow faster than most western economies despite a huge arms budget and a very low level of foreign trade. But in the 1960s it became clear that long term growth rates were falling – from a claimed 11.3% a year in 1950–55 to 6.3% in 1960–65. The very success of past investment was creating difficulties for new investments. Each unit of investment created less additional surplus for the national economy than a decade before [60] – in other words, the rate of profit on the total national investment fell. The resources available to expand the economy and the military machine were thus cut – unless there was an increase in pressure on workers and

collective farmers, denying them improvements in living standards promised in order to prevent a growth of discontent. Without pressure on workers and farmers living standards, either the arms burden had to be reduced or the rate of growth of the economy sacrificed (thus reducing the long term arms potential).

The only other alternative was to try to make investment more efficient, by forming new trade-for-technology links with the western multinationals. But this meant allowing these multinationals to have some say in what happened to the output of the Russian economy – i.e. negating the centralised bureaucratic direction that had allowed all resources to be used for economic expansion even when the rate of profit was low.

The effect on the world system of these contradictory pressures on its different units east and west, was for the amount of global output going on arms to fall – from about 7% in 1953 to about 4% in 1965, according to one estimate. [61] By the mid-1970s the world level of arms spending could have been no higher as a proportion of total output than it was in 1948 – the year in which it was low enough to allow the signs of full blown economic crisis to reappear, briefly.

The new period of crisis

This time crisis was to make more than a fleeting appearance. Throughout the western world there began to proliferate complaints from industrialists and economists that the rate of profit was no longer high enough to sustain investment, growth rates and full employment.

The reasons are not hard to find. There had already been a sharp increase in the level of productive investment per worker in the low-arms spending countries in the 1960s. In Japan, 'capital has grown much more rapidly than the labour force – at more than 9% a year, or more than twice the average rate for the Western industrialised countries ...' [62]

In West Germany, it has been claimed that a static organic composition of capital in the 1950s gave way to a rising one in the 1960s. [63]

But for these individual countries the rising organic composition of capital did not immediately express itself in falling profit rates – providing they could increase exports. Higher capital investment enabled them to out-compete their rivals in export markets. What would otherwise have been falling domestic rates of profit were boosted by the excess profits on foreign sales – excess profits available because international production costs (and therefore international prices) were influenced by the more inefficient productive methods of their rivals. [64]

One of the paradoxes of capitalism is that although a rising organic composition of capital reduces average profit rates, it raises the profits of the first capitalist to introduce it. For high investment gives the first capitalist access to new productive techniques not available to the others and cuts his costs below the average. The total profit of the entire capitalist class declines because of what he has done – but he gets a bigger share of that total profit. It is only when other capitalists copy him and introduce the new capital-intensive technique that he loses his competitive advantage and his profit falls as well. [65]

So the Japanese and West Germans, by engaging in capital intensive forms of investment cut world profit rates, while raising their own national share of world profits. Their increased competitiveness in export markets forced other capitalisms to pay, with falling rates of profit, for the increased Japanese and German organic compositions of capital. But this, in turn, put pressure on these other capitalists to increase their competitiveness by turning to higher organic compositions of capital so as to match Japanese and German technology.

The rising organic composition of capital increased competitiveness between the major economies, and this in turn led to further upward pressure on the organic composition.

So, for example, in the US in 1948, total foreign trade only amounted in value to 12.7% of output and even in 1965 to only 13.7%. Under such circumstances what mattered for the bulk of industry was competitive costs *inside* the country. But by 1979 the ratio had risen to 31.1% [66] – a huge increase in the proportion of industry having to worry about the international comparisons of costs. Whole industries (autos, bulk steel etc.) suddenly found that the value of their output had to be recalculated on the basis of what it cost to produce it with the more advanced techniques of other countries – and that meant it was not high enough to provide ‘adequate’ profits.

This seems to explain the well known stagnation of labour productivity in the US in the 1970s – the value of the machinery on which labour worked was originally reckoned in terms of how much it cost to produce or replace inside the US, not the lower figure that would have obtained if world comparisons were used. [67]

There was only one way in which US capital could respond to this increased competition – it had to raise its own capital-labour ratios. Some such growth seems to have occurred from 1968 onwards: [68]

Annual growth rate of capital/labour ratio in US [69]

	1957–58	1968–73
Manufacturing	1.43	2.24
Non-financial corporations	1.32	1.65

In Britain – as might be expected (other things being equal) for an economy which spent less than the US on arms right through the period – the growth of the organic composition of capital starts earlier:

Capital-output ratio [70]

1948–52	1959–62	1968–71	1972–75
1.61	1.78	1.97	2.19

Interestingly enough, according to these figures, by the early 1970s it had begun to reach the level that preceded the long drawn out British crisis of the inter-war years. The **Bank of England Quarterly** has also given figures showing a rise in the capital-output ratio of 50% between 1960 and the mid-1970s.

‘These changes’, it writes, ‘Mean that the downward trend in the rate of return on capital from 1960 to 1973, and the more dramatic fall since, have been much more marked than the decline of real profits in company value added’. [71]

Samual Brittain, the **Financial Times** columnist, has noted with bewilderment a similar trend.

‘There has been an underlying long term decline in the amount of output per unit of capital in manufacturing ... This is a fairly general experience in the industrial countries ... One can construct a fairly plausible story for any one country, but not for the industrial world as a whole.’ [72]

Such changes in the organic composition were bound to curtail the Great Boom. As investment grew more rapidly than the labour it employed, either the rate of profit had to fall, *or* there had to be a drastic reduction in the proportion of output

going to workers (an increase in the rate of exploitation). Unless the 'workers' share' was hammered down, the pressure for firms (and states) to undertake new and ever more massive investments would be accompanied by a fall in the average level of profits to be expected from those investments – so that any cyclical or other increase in the cost of the investment (an increase in the price of energy or raw materials, upward pressure on wages, a sudden upward surge of interest rates) would make the investments unprofitable. Under those circumstances firms would start huge investment projects, but then curtail them halfway through. But in doing so, they would create precisely the disturbances to the cost calculations of other firms that would destroy their profit possibilities too. A generally low level of investment and a high degree of economic instability would follow.

However, increasing the rate of exploitation of the workforce was not an answer either. It might enable individual capitals to protect their levels of profit. [73] But only by cutting back on the total market for consumer goods, thus making the system ever more dependent upon a high level of investment for its expansion and open to ever greater damage if this was not forthcoming.

This combination of stagnating investment and economic instability was precisely what developed in the 1970s. The oil crisis of 1973 broke the camel's back of a system operating with an increasingly high organic composition of capital.

But to see the form taken by the crisis that ensued, it is necessary to look first at certain of the changes produced in the system by the Great Boom.

Labour power in the Great Boom: the welfare state, the family and immigration

There had been a surplus of labour in almost all countries prior to the second World War. In the western states there had been huge levels of unemployment in the 1920s and especially the 1930s. In the USSR, the high levels of unemployment of the 1920s fell with the arms oriented expansion of heavy industry from 1928–9 onwards – but even then there was sufficient surplus labour for between five and ten million people to be put to work at very low levels of productivity in slave camps.

With the advent of the war economy, unemployment fell to levels experienced by the system before only during brief boom periods. Thus, in the US unemployment fell from 17.1% in 1939 to 1.7% in 1944 and 1.0% in 1945; if it rose to 5.3% with disarmament and the mild recession of 1948–9, it was back down to less than three per cent in the early 1950s. In Britain, the figures had been 10.3% in 1938; it fell to about 1% in the course of the war, and hovered between 1½ and 2% in the 1950s. In Germany, the Nazi war economy virtually abolished unemployment in the mid-1930s; there was a high level of unemployment with the economic dislocation of the early post war years; but the figure fell to 4% in 1957 and a mere 1% in 1960.

For two decades and more, what worried the capitalist state was *not* coping with unemployment, but rather ensuring that employment grew at sufficient speed to keep pace with the ever greater demand for labour power. In the US for instance the number of manual workers grew from 20½m in 1940 to 27½m in 1970; the number of clerical and

sales-workers from 8½m to 18½m. [74] All the advanced countries experienced similar expansions in the working population.

So coping with unemployment was *not* a worry for the main capitalist states for the duration of the long boom. In fact, their problem was quite the opposite – absorbing the previously unemployed into production was not enough, in itself, to feed the long boom's seemingly insatiable appetite for labour power. In the US, for example, the employed workforce rose 60% between 1940 and 1970. Such expansion demanded completely new supplies of labour power. Whether it liked it or not, the state had to bear some of the burden of ensuring these. It had to regulate the labour market as never before.

The role of supplying the raw material, labour, for economic or military competition could no longer be left to the 'free' labour market. The state had to supplement – and even partially *supplant* the wages system with services and subventions provided by itself.

One answer to the shortage of labour power lay in reducing the agricultural workforce still more – whether through state sponsored amalgamations of small farms as in western Europe or through state enforced 'collectivisation' as in Russia and eastern Europe. Another lay in encouraging massive emigration of people from the less developed countries to the cities of the advanced countries (from Turkey, eastern and southern Europe to Germany; from Yugoslavia, Portugal, Spain and Algeria to France, from the West Indies and the Indian subcontinent to Britain, from Puerto Rico to the US). A third – again adopted almost everywhere – was the sucking in of married women into paid employment.

Yet each of the ways of enlarging the labour force created new problems for capital and its various states.

Squeezing labour from agriculture could only work if resources were put into agriculture in order to increase its productivity. This could be very expensive. But the alternative was for the provision of food for the growing urban population and raw materials for industry to suffer, creating working class discontent and bottlenecks to accumulation. While there was a low level of industrial development such problems could be relatively minor. But as expansion proceeded, they could become more and more of a drag on further expansion – as we have seen most vividly in recent years in the eastern bloc countries.

Migration from the Third World was a very cheap way of getting labour power. The advanced country had to bear none of the costs of rearing and educating this part of its labour force – effectively, it was getting a subsidy from their country of origin. The new workforce was usually younger than the 'native' workforce, and demanded less in the way of health care, old age pensions and so on. And its members were usually more prepared to tolerate low wages, harsh working conditions, rigid discipline and so on – in short, to be super-exploited. The pool from which this new labour came was potentially limitless. Yet there were practical limits on the extent which it could be taken advantage of. As migrant workers became accustomed to living and working in their new home, they demanded conditions closer to those of old established workers: they wanted decent accommodation, education and welfare benefits for their children. The state had either to increase its expenditure on these things – or to see growing social tensions that could lead to either intensified class struggles (to a considerable extent the revolt in France in 1968 was a revolt of such new workers) or to 'racial' explosions. Unable to afford the social expenditure needed to head off such sources of social instability, the state usually reacted by imposing controls on further immigrations.

The wholesale entry of married women into the workforce also demanded a certain level of investment by the state. Means had to be found to ensure that it did not lead to neglect of child rearing (i.e. of the socialisation of the next generation of workers) or a breakdown in the provision of food, shelter and clothing to the male workforce. Many of these means could be provided, at relatively low cost, with the application of new technology. The refrigerator, washing machine and the vacuum cleaner, the replacement of the coal fire by

electricity, gas or oil heating, the popularisation of frozen foods, the spread of fast food outlets, even the television set – all had the effect of reducing the amount of effort needed to ensure the reproduction of both present and future labour power. [75] And they usually cost not a penny to the state or capital, being paid for by the family out of the enlarged income it received as the wife took up paid employment. Caring for young children while both their parents worked created greater difficulties since the provision of nursery facilities could be costly for the state – even if these costs too could often be recouped from the wage of the working wife.

So all the methods of expanding the labour force could work up to a certain point – but beyond that they tended to imply quite considerable overhead costs. These costs could be borne while the system was expanding rapidly. But they became a burden once the Great Boom collapsed.

There was another solution available to the labour shortage. But it was even more expensive than these. This was to increase state expenditure on the reproduction of the labour force, so as to increase the average level of skill. [76]

In all the advanced countries there was a considerable increase in educational expenditures during the Great Boom – particularly in the upper grades of secondary education and in higher education. [77] As James O'Connor has noted for the US:

'In the late 1950s and 1960s, this emphasis on technical progress ... stimulated a rapid expansion of low level technical education and the establishment of a vast system of higher education by local and state governments. The state replaced the family as the main socialising agency of the youthful apprentice.'

This fitted a situation where '95% of employment growth was in the "upper half" of the labour market (workers with high school diplomas or better)' [78]

Alongside the growth in 'educational' expenditures there has also been – in most countries – growth in health expenditures. These were necessary if the impact on production of sickness was to be reduced at a time of labour shortage. Hence the trend towards split health services – with one sector very efficient at mending sick or injured workers and getting them back into the workforce, the other concerned with those unlikely to enter productive labour again – the chronically sick, the old and the mentally ill (of course, there is usually a third sector as well: a private sector – or in eastern Europe a privileged part of the state sector – which treats the rich and powerful).

Finally, there was a third area of expansion of state expenditures designed to increase productivity – expenditures designed to provide a feeling of security to employed workers. In this category fell old age pensions (especially those at least partly financed by company schemes) and unemployment benefits. Again O'Connor has correctly noted:

'Although social security contributes to social and political stability by conservatising unemployed and retired workers, the primary purpose is to create a sense of economic security within the ranks of employed workers and thereby raise morale and reinforce discipline'. [79]

Hence it was that in many countries in the late 1960s wage related benefits and redundancy payments were introduced. They were the other side of the 'shake-out' of labour from older industries.

All these measures can be seen as necessary to capital if it was to increase the productivity of the labour force. Yet they are also often seen from another perspective – as concessions made by capital to the political and economic demands of the working class movement. There is no doubt, for instance, that political considerations did play roles in the introduction of the 'welfare state' in Britain at the close of the second World War: as the future Tory cabinet minister Quentin Hogg put in in 1943, 'If you do not give the people reform you will get revolution'. Again, the expansion of welfare with the 'great society'

programme of Johnson in the US in the 1960s owed much to the disturbing experience for the ruling class of the ghetto uprisings of 1964–8.

Yet the spread of welfare services was not just a reaction to working class pressure. Countries with a relatively weak and quiescent working class often had a higher level of services by the late 1960s than those with stronger movements. Japan, for instance, was a country with a low level of welfare expenditure in the 1950s and early 1960s (only a third of that in Europe and the US). Yet by 1980 this expenditure had grown sufficiently to help create a very large public sector deficit as the expansion of the labour force came to depend on the reproduction of urban workers rather than migration from the countryside, the state had to step in.

But the two sorts of explanation of the growth of welfare are not necessarily contradictory. For a long period capital felt that welfare expenditures could satisfy simultaneously two different needs – to buy the acquiescence of the working class, but at the same time to raise productivity so that the cost of doing so was not a burden on accumulation. Just as wages both reproduce labour power *and* are seen by workers as justifying the toil of work, so the ‘social wage’ element in public expenditure both increased the productivity of labour power and made workers believe society cared for them.

This ‘socialisation’ of labour costs had some important consequences for the system as a whole. It meant that from the point of view of the national state capitalism labour was no longer ‘free’ in the traditional sense. In the classical picture of the system workers, cut off from the means of production, were only able to sustain themselves in so far as they sold their labour power. And capitalists paid only for the labour power, without having to sustain the human being who was the bearer of it: this was a great advantage from the point of view of efficient exploitation over slavery, where the human being was the property of the exploiter and had to be looked after like any other piece of property, whether or not he or she was particularly productive.

In a sense the welfare state meant the introduction into the economics of capitalism of an element of the economic calculations relevant to slavery. Under conditions of acute labour shortage, the national capitalist state had to see the national working class as its property, to be tended and cared for as well as exploited if productivity was to match international levels. This was most clearly displayed in the case of the state which built a wall along its border to prevent expensively trained labour fleeing to work elsewhere. But it was visible everywhere, as wages came to constitute only part of the living standard of the worker. This was why the state was repeatedly driven to apply measures designed to force people into the productive workforce – prison sentences for those guilty of ‘parasiticism’ in the USSR, laws against vagrancy and ‘abusing’ social security in Britain, elaborate schemes to make sure that selling ones labour power was always much more remunerative than living on the welfare state safety net. There was a partial negation of the character of free labour – but only a *partial* negation (as was shown by the way in which those previously outside the free labour market – those in the slave camps of Russia, many housewives in the west – were drawn into it).

Yet even this limited ‘negation’ of the free labour market was a burden that put up the overheads of each national capital. It does not matter a lot exactly how these overheads are categorised (whether as expenditure on ‘social capital’, as ‘indirectly productive expenditures’ or as ‘non-productive costs of production’; they all served to raise the level of expenditure that had to be undertaken by the national state in pursuit of international competitiveness. As such they exerted a downward pressure on the rate of return on the total national investment.

For a long period this did not seem to matter. Other factors were at work protecting the rate of profit. But once the upward dynamic of the boom began to weaken, the costs of welfare became a crucial problem. The two functions – of increasing productivity *and*

buying consent – were no longer complementary. Capital had to begin to try to maintain and increase productivity at reduced cost, even if doing so upset its old mechanisms for keeping control over the working class. The trend now was for welfare benefit increasingly to be related to the potential productiveness of the recipients. Those in employment or thought likely to enter or re-enter it in the near future were to get one level of treatment; those who had dropped out of it permanently, a much lower level.

The fact that the ‘social wage’ had become something taken for granted by workers presented problems for governments who tried to follow such a perspective. Just as each individual capital has to worry about keeping workers’ resistance in check when it plans cuts in wages, so governments have to worry about reducing resistance to a minimum when cutting the ‘social wage’. The result is that the creation of ‘two welfare states’ does not proceed nearly as fast as the most ruthless capitalist economists demand.

Hence even the Thatcher government in Britain has not been able to follow capitalist rationality through to the end in its treatment of the unemployed. That logic would mean estimating how many of the unemployed need to be kept as a reserve army for future production needs, providing them with a level of dole able to keep them fit for production (although not so high as to ‘destroy their incentive to work’) – and writing off the rest of the unemployed, forcing them down into pauperage. Instead, in Britain, the government has felt compelled to keep the value of ‘long term’ social security payments close to the level of inflation, even though this has meant that the total costs of welfare payments have risen with mass unemployment leading the public sector deficit to grow, despite all the government’s efforts.

Poland’s ruling class faced a similar problem in 1980. Its attempts to restrict food subsidies so as to ensure that only the most productive workers (and, of course, the completely unproductive bureaucrats, police chiefs and army officers) were adequately fed provoked resistance from the whole working class. The fact that the competitive pressures of the world system demanded a ‘rationalisation’ of the ‘social wage’ did not at all mean that this could simply be imposed. It is true that the dynamic of the system imposed certain pressures on each of its component ruling classes. But it was the class struggle, however, that determined whether they were able to do as those pressures dictated, or whether they got torn apart in the process.

Capital centralisation and the role of the state

The classic mechanism for the centralisation of capital was the crisis. It bankrupted some capitals and enabled others to buy them up on the cheap. In doing so, it enabled the remaining capitals to raise their rate of profit, and it enabled the system as a whole to write off the costs of the depreciation of constant capital due to technical progress.

But for three decades or more there were no major crises. Bankruptcies occurred, of course, but they were of small firms, of little importance to the system as a whole.

Yet capital continued to be concentrated in fewer and larger units:

US: percentage of total assets held by [80]:

	100 biggest firms	200 biggest firms
1925	34.5%	–
1929	38.2%	45.8%

1933	42.5%	49.5%
1939	41.4%	58.7%
1954	41.9%	50.4%
1958	46.0%	55.2%
1962	45.5%	55.1%
1965	45.9%	55.6%
1968	48.4%	60.4%

**UK: Percentage share of largest hundred firms
in net manufacturing output [81]**

1909	1935	1949	1958	1963	1970
16%	24%	21%	32%	37%	46%

This concentration took place, by and large, through mergers and takeover bids which did not, typically, involve the writing-off of the capital of the taken-over firm. In Britain 'Between 1966 and 1968 about 80% of deaths (of firms) were due to merger, and between 1948 and 1972 half of all quoted firms were subject to merger activity.' [82]

And so, in the period, the destruction of capital through crises played a very small role in offsetting the decline in the rate of profit.

It still meant, however, that at the end of the period the system was made up even more than it had been in the 1930s of gigantic, interlinked firms, each very dependent on others for its survival.

Alongside the concentration of capital went an increased dependence on the state. The level of state control tended to increase everywhere as the Great Boom showed the first signs of faltering in the late 60s and early 70s. When, for instance, the US railroad giant, Penn Central, got into trouble in 1970, the US government rushed in to prop it up. When Rolls Royce in Britain went bust, a right wing Tory government nationalised it: hence the paradox of a government committed to denationalisation on principle ending up with more of industry under its control than when it took office. When a host of dubious banking operations throughout the world (ranging from smallish 'secondary banks' right through to the offshore giant IOS) collapsed, the central banks pressurised the rest of the financial institutions to pick up the pieces. Indeed, one of the significant things about the crisis of the mid-1970s was that, because of state and central bank intervention, there were virtually no major bankruptcies.

Increased concentration of capital and growing state intervention to stave off bankruptcies had an important effect upon the overall performance of the system. The old pressures to *reduce* prices during recessions no longer operated. For, firms with a near monopoly position felt able to increase prices so as to protect their profit levels on a reduced level of output.

The radical American economist, Howard Sherman has shown the impact of this monopolisation:

'In almost all the recessions and depressions up to the recession of 1948, prices *fell* in every economic contraction. In the recession of 1948 prices in the non-monopoly industries fell by 7.8%. But the prices of monopoly industries fell by much less, by 1.9%. Since that time, the

competitive [i.e. non-monopoly] prices have still fallen in each recession. But monopoly prices have *risen* in each recession ...' [83]

Thus in the competitive sector prices fell by 1.5%, 0.3% and 3.0% in the recession years of 1953, 1958 and 1969; while the monopoly sector suffered *rises* of 1.9%, 0.5% and 5.9% in the same years.

As a means of actually protecting monopoly profits, the raising of prices became less effective over time. For it could only work while there was a substantial non-monopoly sector whose falling prices cut the costs of the monopolies as their prices went up. Once most of the economy was dominated by monopolies, the costs of goods bought by the monopolies tended to rise as fast as the goods they sold. All they were doing was chasing their own tails. Only cutting *wages* could restore profitability then. And that was difficult with full employment – usually requiring, in fact, state intervention to police wages through incomes policy.

However, the futility of all capitalists raising prices could not stop each feeling compelled to do so. The result was an important new problem for the system. Prices had always risen in capitalist booms – but had then fallen again in slumps. Now they rose in slumps as well as booms. The concentration of capital meant that *inflation* was a permanent feature of ageing capitalism.

Waste

The extreme concentration of capital had one other consequence. It meant, necessarily, an increase in the level of inefficiency and waste.

Capitalist firms had always developed in inefficient and wasteful ways. Production would develop in certain directions and at a certain tempo in response to market needs. The 'relations of production' within the firm – the allocation of resources within the managerial hierarchy, the relations between managers and workers – would be moulded accordingly. But when market needs shifted, there was no automatic adjustment of these internal structures. For a time the firm would go on producing its output in very much the old manner, often using outmoded technology – and in a boom would probably be able to get away with doing so. It was only the crisis which forced the adjustment, as more innovative firms threatened to make the less efficient insolvent.

A prolonged period without crises necessarily meant an increase in inefficiency. Monopolisation exacerbated this trend. A firm with a tight hold over a large chunk of the national market could continue to dispose of its output, even if its technology was increasingly out of date. There were numerous examples of this in the 1950s and 1960s. Thus the world's biggest manufacturing corporation, General Motors, was characterised for years by the turning out of new car models that contained virtually no new technology:

"There hadn't been an important product innovation in the industry since the automatic transmission and power steering in 1949. That was almost a quarter of a century of technical hibernation. In the place of product innovation, the automobile industry went on a two decade marketing binge which generally offered up the same old product under the guise of something new and useful ..." [84]

The reason for this was that a managerial structure had crystallised in which

"The men in power ... put personal loyalties from one executive to another and protection of the system above management skills; and put the use of corporate politics in place of sound business leadership ... There was no forward planning to speak of at GM ..." [85]

Models were launched which did not sell, and parts were produced which only made a 'profit' because other parts of the corporation or its dealers were forced to buy them. All this was possible for several decades because of the firm's hold over the market. Not until the late 70s was it forced to come to terms with gross waste and inefficiency that was already visible 15 or 20 years before.

Inefficiency was not automatically reduced as the boom began to falter. As we have seen, firms could try to protect their profits by upping prices. And if this failed, their sheer size was usually a guarantee that they would not go bust: the state would step in with subsidies first. Instead of the inefficient and wasteful firms being wiped out, the cost of their inefficiency had to be borne via taxation and bank losses, by the efficient.

But waste did not merely arise from a failure to adopt more efficient production methods based on new technology. It also arose from the search for such methods.

Attempts to harness the most advanced technology increasingly required huge levels of capital expenditure. The state was often the only body with the ability to gather together such resources, and so the development of technology was a national effort. Yet the scale of the investment itself had to be determined by the development of the productive forces on a world scale, and so led to a growth of capacity out of all proportion to the national economy in which it was located, twisting its priorities away from balanced development.

Thus the history of the US arms programme is in part a history of very expensive projects undertaken and then abandoned at enormous cost. In the late 50s and the 60s 'at least 68 weapons systems, worth \$9bn had to be abandoned as unworkable ...' The others 'come off the assembly line two years later than promised' [86] and 'of 13 major aircraft and missile programmes with sophisticated electronic systems built for the airforce and the navy since 1955 at a cost of \$40bn, only four, costing \$5b, could be relied on to reach a performance level of 75 per cent or above of their specifications.' [87]

The British aerospace industry – both military and civil – has an equally long list of failures, right through from the Brabazon of the 1940s to the Blue Streak of the 1960s and the Concorde of the 1970s.

The situation in other industries based upon advanced technology is not substantially different – witness the record of civil nuclear projects that have had to be abandoned because of cost or safety precautions or the pathetic attempts of rival governments to get into microchip technology.

Such waste could be borne by the system during the Great Boom. But once the boom faded, there were difficulties in absorbing its cost. And what was worse, the waste of huge advanced technological white elephants multiplied. Thus for instance, British governments of the early and mid 70s poured vast sums into a technological transformation of the steel industry, aiming to produce 32m tons a year in plants as advanced as anything else in the world; at least half this investment was wasted, since by the early 1980s global overproduction meant the industry was not able to dispose of more than 12–16m tons. Instead of acting as a boost for the rest of British based capital, the steel investment was just one more drain on its ability to compete internationally. Things were not that different in the US: there were even cases of regression as firms mothballed large, expensive, technologically modern plants built in the early 70s and instead concentrated production in older plants which, because they were smaller, could produce a lower level of output at lower unit costs. [88]

The smaller the national economy which attempted to marshal the resources for international military and market competition, the greater the burden in terms both of disproportionate economic development and sheer waste. Hence the much remarked scale of waste in the centrally administered economies of the east. [89] Far from proving – as

some writers contend [90] – how different these economies are from those of western capitalism, the level of waste testifies in fact to what east and west have in common. Each of the eastern European states is endeavouring to compete with larger, better established rivals – even the giant USSR has to try to match the arms output of an American economy which is twice its size. The scale of resources going to each investment project is determined, not by what the national economy can sustain, but by what international competition demands. Hence the way in which at the beginning of each five year ‘plan’ more investment projects are started than can be completed. Hence the way that, in an attempt to finish some, others are frozen (leaving vast accumulations of wealth standing idle as unfinished plant) living standards are cut and unbearable strains are put on the balance of payments. Hence too a growing burden of waste which can be less and less afforded as the high growth rates of the 1950s give way to the near-zero growth rates of the 1980s.

Each of the factors we have looked at in the last few pages have added to the costs of national capital has to undertake in order to survive. They mean that a growing proportion of national output does not go *directly* into the means either of market competition or military competition. This is shown by the rising levels of state expenditure in all economies – and within those totals, the relative growth of non-arms spending. In the US, for instance, the share of defence in total federal expenditure declined from 64.6% in 1955, to 47.6% in 1960, to 40.8% in 1965, to 39% in 1970, and to 25.6% in 1975. [91]

Yet none of the factors could, by itself, have caused the crisis. They could all be easily afforded by the system during the Great Boom. However, once the boom faltered with a declining rate of profit, they intensified the crisis. They effectively served to reduce the national rate of profit still more. Attempts to offset them become crucial for national capitals – by cutting back ‘unnecessary’ expenditures and by changes in taxation policy to the detriment of workers (so effectively doubly exploiting workers: once through the sale of their labour power, the second time by state coercion, in a way reminiscent of many pre-capitalist societies).

The new finance capital and the crisis

As individual nationally based capitals have stagnated, so they have attempted to ease the burden on them by moving towards a greater internationalisation of production.

One expression of this is the explosive expansion of banking operations outside the control of national states. This both provides individual, nationally based capitals with the means of transcending national boundaries, but, in turn, it destroys the ability of national states to impose a degree of ‘planning’ upon the capitals associated with them.

The banks began to expand their international operations on an enormous scale at the end of the 1960s. Foreign currency commitments of west European banks rose from about \$25bn in 1968 to about \$200bn in 1974. These had their origin in the US balance of payments deficit – the deficit was paid for with dollars that passed into the reserves of banks (including, of course, overseas branches of US banks) who were then able to use them to make loans outside the controls laid down by their own governments. The system received another tremendous boost after the 1973 oil price rise, when the banks received huge deposits from oil producing states.

However, there was a more fundamental cause for this new banking phenomenon: as the nationally based capitals were led to attempt investments which exceeded their internal funds, they were forced to look towards the banks, which could pool the surpluses obtained by many capitals. In the US, for example, in the fifties and early sixties, only a little over a

quarter of corporate spending was financed externally; by mid-1974 65% was so financed. [92] Long term debt as a percentage of stock investment of US corporations rose from 87% in 1955 to 130% in 1965 and 181% in 1970. [93]

The borrowing of the US corporations was more than matched by borrowing from both the third world and eastern Europe. Between 1965 and the end of 1974 the combined debt of 74 less developed countries rose from \$39b to \$119b; between 1973 and 1975 the total debt of the third world more than doubled; by 1976 these countries owed \$7b to private banks in the US, west Europe and Japan. [94] In the 1970s eastern European borrowing similarly soared – until it exceeded \$60bn. But a price had to be paid for this dependence on the banks: a growing proportion of the surplus value of individual capitals had to be handed back to the banks in interest repayments. And this meant further dependence on the banks for access to the funds for further investment. In the USA, the net interest paid by non-financial corporations as a percentage of profits before tax soared from 5.2% in 1950/59 to 11.5% in 1960/69 and 33.3% in 1970/78. [95]

In eastern Europe the situation was much worse, with debt servicing sometimes consuming a major proportion of the currency earned through exports:

Eastern Europe's debt problem (1980) [96]

	Net debt as % of GNP	Debt service as % of non-Comecon exports
East Germany	9.2%	54%
Bulgaria	11.8%	37%
Poland	17.7%	92%
Romania	18.4%	22%
Hungary	20.2%	37%

This trend has very important implications for the dynamic of the system as a whole. The autarchic state capitalisms that emerged in the 30s and at the end of the second World War could ensure that investment took place, regardless of the expected rate of profit. All that mattered was that there was some surplus value – some *mass of profit* – that the state could channel into military production or productive accumulation.

Now the *rate* of profit regains its old importance. For, only if they get an adequate rate of profit can individual state capitals and individual multinational corporations pay the internationally determined rate of interest they owe to the banks. Nationally based accumulation cannot proceed unless it can match internationally determined standards of profitability.

Unless the national capital or the multinational corporation can meet these minimum standards it is operating at a loss once it has paid off its interest. And for a national economy to operate at a loss is to *contract* rather than expand. The emergence of international finance capital means that we have entered the age of the state capitalist recession.

As in the classical capitalist crisis [97], the tendency is for the internationally prevailing rate of interest to move in the opposite direction to the average international rate of profit. As profitability falls, the supply of funds to the banks gets tighter, yet more capitals get into difficulties which make them look to the banks for yet greater borrowing; the demand for

funds rises faster than the supply, and interest rates soar, putting still further pressure on individual capitals.

The phase of capitalist history in which national capitals could ignore low profit rates by retreating into themselves is over. The old structure of the capital market – and the role played in this by financial capital – has re-emerged, at a higher, international level. Whole states are driven to abandon their half-finished investments at enormous cost, out of fear that they will not yield the level of profitability needed to pay off the bankers. The whole world becomes drawn into a single rhythm of half-hearted expansion of investment and convulsive contraction, of short boomlets and long depressions.

Thus in the early 1970s a number of third world and east European states tried to escape from internal stagnatory pressures by recourse to international borrowing. They – and the banks – assumed they would be able to pay off their debts on the basis of sales to a world economy they expected to boom. Their own investments helped to create the boom conditions – but in doing so, contributed to the forcing up of raw material (especially oil) prices and interest rates that led the boom to collapse. They were left with investments they could not fully complete and interest payments they could only pay by further borrowings. Brazil, Turkey, Romania, and, notably Poland, boomed as never before in the early 70s and managed to sustain relatively high rates of growth through the world recession of the mid-70s, only to come down with a very big bump towards the end of the decade.

The bankers at least recognised the similarities between the different economies which were in hock to them. As one international banking monthly put it:

‘Poland’s commercial bank creditors ... are keenly aware that any agreement will set a precedent not only for the restructuring of Poland itself will need over the next few years, but also for other countries’. [98]

It is as if a film of the pre-war economic crises is being rerun – but with a difference. The competing individual firms which borrowed from banks within a national economy have given way to state capitalisms and multinational firms borrowing from international banks within an international economy.

In 1929–31 the weakness of individual firms forced them to rely increasingly on the banks. The banks were temporarily boosted as a result – but were also weakened, in some cases fatally, as it became clear that firms could not repay all their debts. The crisis in industry created a crisis in banking which then deepened the crisis in industry. In 1982, international bankers are afraid that states and firms have borrowed funds they will be unable to repay. The banks could pressurise their debtors by threatening to drive some into bankruptcy – but implementing their threats might threaten the stability of some of the banks themselves. Yet not to put the pressure on is to accept a lower level of profitability for the whole world banking system and to reduce still further the surplus available for new accumulation on a world scale. The world system is caught between the Scylla of cumulative collapse and the Charybdis of declining profitability and stagnation.

However, the pattern is not simply one of a return to the past. The difference is that in the 1930s the national state could provide a fixed structure within which the interplay of competing firms and banks took place. That meant it could enforce a certain common discipline. Above all, it could restrict the overall level of money and credit in the economy.

The internationalisation of production and banking over the last three decades has destroyed much of the ability of the state to enforce such restriction today. The huge bank funds that flow daily from country to country make it very difficult indeed for national states to control the national supply of buying power. Restrictions on the supply of obvious forms of money (the banknotes etc. which make up what economists call M1) have little impact on the total supply including less obvious forms (M3).

In fact, governments have not attempted to enforce rigid restrictions. For, success in doing so would mean the banks having to refuse credit to large industrial concerns, driving them into bankruptcy. Fear of the impact on the rest of the national economy leads governments to hold back – indeed, to urge the banks to extend still more credits. Hence the spectacle of the ‘monetarist’ government in Britain urging the banks to engage in life boat operations to firms although the result is necessarily an expansion of credit and of the money supply.

The Keynesian perspective of state intervention to sustain the level of production and employment can no longer work because of the internationalisation of the system, but neither can the Friedmanite perspective of state intervention to control the money supply and reduce inflation.

Whatever the ideology professed by the rulers of individual states – Keynesian, Stalinist or Friedmanite – in practice they are more and more forced to forego central control over economic activities. They are reduced merely to responding to external pressures. Each state is like a boxer on his last legs, desperately marshalling all his energies to block this punch and then that, but no longer capable of working out what to do next.

From the outside, the state and its ‘planning’ might seem all powerful. From the inside the picture is quite the opposite: all that can be seen is incompetence, a complete lack of overall planning, people barking out orders in an attempt to overcome the chaos that their own orders have created, departments struggling one against the other, agencies whose actions are determined by forces they believe they control but which have in reality taken control of them.

A study of Poland by critical intellectuals pointed out in 1979:

‘In the real social and economic world there is no such thing as a “central planner”. Rather there is a heterogenous collection of central institutions using a wide range of different standards to arrive at their decisions. We do know very little about how the centre operates, about how it drafts and adopts macroeconomic decisions ... Not only the average citizen but many professional economists and the economic policy makers cannot answer these questions ...’ [99]

Much the same could have been said by a study of the British treasury, the head office of a US multinational corporation or the directing centre of the Pentagon.

A new period of crisis

Since 1973 the world has been in a new period of major economic crises.

The first recession (of 1974–5) did not hit all countries with equal ferocity. A few were able to continue to expand through it either by using oil revenues (Iran, Mexico, Venezuela etc.) or by extensive foreign borrowing (Poland, Brazil etc.). And the others experienced some sort of economic recovery by 1978. The recovery, however, was limited and uneven. Those that had expanded through the first recession now ran into problems of their own, while those that expanded out of the recession most rapidly (especially the US) were soon plagued by inflationary and balance of payments problems that pushed them back towards recession again.

It was not long before a second world wide contraction was underway. If this was not in general as intense as that of 1973–5, for particular countries (Britain, Poland) it was much worse. In this new period, levels of investment were down almost everywhere, growth rates were small and sometimes negative, unemployment doubled and then doubled again, inflation was often in double figures and rarely below 5%.

The crises did not automatically resolve themselves. Eight years after the onset of the first recession, things seemed no more hopeful for the system than at the beginning.

The crisis has not yet, however, been as *deep* so far as the crisis of the 1930s. Even in Britain, where total unemployment is approaching the 1930s level, it is still a smaller proportion of the total labour force than in 1931–2. More significantly, there have not yet been the succession of industrial bankruptcies and bank collapses that characterised the years 1929–31.

There is a connection between the prolonged nature of the present phase of crises and the relative lack of depth compared to the 30s. Whatever the ostensive ideologies of their rulers, states have been intervening to prevent industrial and financial collapse lest it do irreparable harm to the most profitable firms. And they have tended to nudge the banks into doing the same when it comes to whole states collapsing: witness the amazing spectacle early in 1982 of a US government that had called for sanctions against the eastern bloc, handing money over to US banks to prevent them foreclosing on Poland.

Yet unless the crisis forces some of the system's component units into liquidation, there can be no reducing the high organic composition of capital that created the crisis. The losses made by any single large unit of the system have to be spread out among the other units. The world rate of profit falls even more and the pressures towards stagnation get greater.

That does *not* mean that there are *no* countervailing factors at work. Every wage cut, every increase in productivity, every shifting of operations from high wage areas to low wage areas, every weakening of union organisation, serves to increase the rate of exploitation and to pump more surplus value into the possession of individual capitals. Hence the tendency towards an intensification of the struggle of capital against labour. Hence too the tendency towards the migration of labour-intensive industries to parts of the third world and the parallel tendency for there to be a certain revival of sweated labour in all parts of the world: in crisis, capital has always attempted to solve its problems by paying labour power less than its value.

However, the world wide ratio of investment to labour power (the world organic composition of capital) is too high for an increase in the rate of exploitation to have more than a marginal impact on the rate of profit and thus alleviate the problems of the system as a whole – although of course individual capitals can still enjoy spectacular successes through such methods.

Again, rationalisation through bankruptcy has not fully disappeared. Every year a very high percentage of small, often new, firms go bankrupt. But what happens to them is peripheral to a system in which a hundred or two hundred firms in each state control more than half of total production.

Finally, the onset of the crisis has produced new pressures towards higher arms spending. As each of the superpowers has lost the economic leverage to maintain total hegemony within its own sphere of influence, it has tended to revert to militaristic posturing. The US has felt that the only way to restore its old 'leadership' of 'the free world' is to show that it is capable of military intervention whenever it wishes and that it can outface the Russians in any confrontation, however minor. On the one hand there has been the build up of the Rapid Deployment Force, and the indirect intervention in El Salvador, on the other there has been the upsurge of strategic arms spending with cruise missiles, Pershing, and MX. Overall, it has felt that only by increasing the tension between its bloc and the Russians can it frighten its 'allies' into accepting its definition of the things.

For the USSR, the fear of its bloc falling apart is, if anything, even greater. It has seen powerful allies switch camps – first the Chinese in the 1960s, then the Egyptians in the 70s. It can see that the logic of economic development is exerting a pull on its European

satellites away from it. And so it feels it has to compete with the US in the new arms build up.

Yet this new arms spending can provide little relief from the global pressure towards economic crisis. Some sections of unemployed workers get new jobs and some capitals find state guaranteed profits. But the high technological level of modern arms manufacturing means that the employment effect is small in relation to the expenditure undertaken. And most of the cost of the new arms has to be paid for by capitals that are weak when it comes to market competition. The only way for them to offset the cost is to apply further pressures to living standards and to 'non-productive' jobs. So in the US the shift upward in the arms budget in 1981 has been accompanied by the introduction of social welfare cuts that will devastate most of the 'great society' programmes introduced in the 1960s. In Russia and eastern Europe the new arms spending means abandoning all the promises to raise living standards.

While arms spending in the 1940s and 1950s provided an expansion of the economy that enabled governments to tell workers 'You've never had it so good', the arms spending of the 80s occurs under conditions under which many workers begin to feel they have never had it so bad.

All the 'countervailing factors' combined prevent the rate of profit falling to catastrophically low levels and prevent the economy sinking as far down as in the 30s. But they cannot give new life to the system. They leave it stagnating, with all countries experiencing low growth rates and a few suffering deep decline.

If figures suggest that the capital-output ratio (and therefore the organic composition) in the US has stopped rising in the last three or four years, this is not a sign of health for the system. It only indicates that investment is not proceeding at any great speed, so that the 'countervailing factors' are just enough to stop stagnation turning into a downward somersault.

1929–33 saw the last attempt to use the crisis alone as a means of escaping from the pressures that produced crisis. But the rationalisation – the elimination of capitals – needed by the system internationally to solve its problems was too great for the system to bear. Hence the severity of the slump. From then on the state had to intervene to offset the effects of crisis. But it was *effects* not causes it dealt with – something concealed for more than three decades by the rise of military competition. Now that the needs of military competition are continually in conflict with those of international market competition, state intervention to mitigate the crisis can only serve to prolong it indefinitely.

This does not mean that the world economy is doomed simply to decline. An overall tendency towards stagnation can still be accompanied by boomlets, with small but temporary increases in employment. Each boomlet, however, only aggravates the problems of the system as a whole and results in further general stagnation, and extreme devastation for particular parts of the system.

Lenin once remarked that the system could survive any crisis, providing the working class allowed itself to be forced to pay the cost in terms of suffering. That remains true. But to escape from the present phase of crisis, the scale of suffering would have to be very great indeed. The bankruptcy of two or three advanced countries, with their industries grinding to a halt and their workers literally starving, might provide the system with the opportunity to enjoy a new round of rapid accumulation. Were a 'theatre nuclear war' possible, it too might promise a new phase of expansion for those capitals that survived it.

But the thugs who run the competing parts of the system can hardly relish either option. The bankruptcy of any major economy could well bring down the multinationals operating in it or the banks who had lent it money, thus leading to a progressive collapse of other capitals. It could also breed new revolutionary working class movements close to the heart

of the system. And even Reagan's closest advisors cannot be absolutely sure that a 'theatre war' would not develop into a global nuclear confrontation that would destroy virtually all of the US ruling class's capital.

The present phase of crisis is likely to go on and on – until it is resolved either by a plunging of much of the world into barbarism or by a succession of workers' revolutions.

Notes

1. H. Marcuse, **One Dimensional Man**.

2. C. Wright Mills, *Letter to the New Left*, **New Left Review**, 1960, and **The Causes of World War Three**, New York 1960.

3. P. Baran and P. Sweezy, **Monopoly Capital**, Harmondsworth 1973.

4. See his article, *The Economics of Neo-capitalism*, **Socialist Register** 1964.

5. W.T. Oakes, *Towards a Permanent War Economy*, **Politics**, February 1944, cf. also *Reconstruction to what?*, **Politics**, November 1944 and various book reviews in **Politics**, 1944–5.

6. Oakes, **op. cit.** Some of Oakes' formulations have been criticised for being 'non-Marxist' and 'ahistorical' (e.g. by Mandel in **Late Capitalism**). The critics do not seem to have read all of the 1944 article in which these formulations first appeared. He is accused of being 'ahistorical' and 'underconsumptionist' because he says that in any 'class society ... the root of all economic difficulties lies in the fact that the ruling class appropriates a portion of the labour expended by the working class or classes in the form of unpaid labour. The expropriation of this Unpaid labour presents its own problems; generally, however, they do not become critical until a point is reached where it is necessary to pile up accumulations of labour. When these accumulations beget new accumulations... the stability of society is threatened ... To allow these growing ... accumulations means to undermine the very foundations of society ...' Oakes uses the pyramids of Egypt as an example of destroying 'surplus labour' in the same way as the war preparations of ageing capitalism.

Now Oakes' formulation is certainly obscure. It does tend to give the impression that there is nothing specifically *capitalist* about the capitalist crisis. However, to interpret Oakes in this sense is to provide an interpretation which is out of character with his formulations elsewhere in the article, where he deals at length with the question of the specifically capitalist cause of crisis – the falling rate of profit. A more charitable interpretation of this passage is to say that he is arguing, as Marx did, that any class society performs a *progressive* function up to a certain point by developing the forces of production (what, under capitalism, is called accumulation). But any further development beyond that point produces new relations of production that threaten the ruling class. Therefore the ruling class has to find a way of 'freezing' the development of the forces of production – to 'destroy surplus labour'.

There are, undoubtedly, faults with Oakes' way of formulating the matter, but the faults are neither those of 'underconsumptionism' nor of being 'ahistorical'.

There is, however, a more serious error in Oakes' analysis. It assumes that the war economy must mean a fall in workers' living standards. Yet this certainly did not happen for most of the great boom – here his mistake is not to carry far enough his insight into how arms production can allow accumulation in the civilian sector.

7. The articles were reprinted as a collection edited by H. Draper, **The Permanent Arms Economy**, Berkeley 1970. [Note by MIA: See the [T.N. Vance Archive](#).]

8. Tony Cliff, *Perspectives on the Permanent Arms Economy*, **Socialist Review**, May 1957, reprinted in **A Socialist Review**, London 1965.

9. See *Reform or Revolution: Rejoinder to Left Reformism*, **International Socialism** (old series) 7, winter 1961–2, and **Western Capitalism Since the War**, London 1968.

10. Vance advances his earlier analysis (under the name Oakes) by noting that there is a level of arms spending – about 10% of total output – 'that is sufficient, in the short term at any rate, to maintain the average rate of profit at a higher level than existed in 1929 or even 1940', but that if arms spending rises much higher than this it produces powerful inflationary pressures, demanding physical controls on distribution and production.

Cliff takes the argument a little further still (although he *presents* the argument – for simple exposition in a popular publication – in ‘underconsumptionist’ rather than ‘rate of profit’ terms). He points to the factors that can be expected to push arms expenditure too high or too low, and by spelling out how an increasing level of arms spending is needed to maintain full employment – although such a rising level would create other problems for the system.

Kidron provides the first *rounded* analysis, fully integrating these different points, stressing that it is the increased competition for *markets* that over time forces the US to reduce the proportion of its output going on arms just as full employment demands an increasing proportion of arms spending, and underlining the implications of this contradiction for the rate of profit. The only fault in Kidron’s analysis in 1961 was that it mistakenly saw the increased market competition as coming from the USSR rather than Japan and West Germany.

11. Figures given in T.N. Vance, *The Permanent War Economy*, **New International**, Jan.–Feb. 1951, reprinted in Vance *et al.*, **op. cit.**

12. *Ibid.*, p. 32.

13. Gillman, **The Falling Rate of Profit**, London 1956, p. 54.

14. Shane Mage, **The ‘Law of the falling tendency of the rate of profit’, its place in the Marxian theoretical system and its relevance to the US economy**, PhD thesis, Columbia University 1963, distributed by University Microfilms, Ann Arbor, Michigan, pp. 174–5.

15. For a discussion on this, see *The Crisis Last Time*, **IS** 2 : 13, note 7.

16. Vance, **op. cit.**; Mage, **op. cit.**

17. Figures given in Mage, **op. cit.**, and Mandel, **Late Capitalism**, London 1975, p. 276.

18. e.g. by Mandel, **op. cit.**, p. 213.

19. William Nordhaus, *The falling share of profits*, **Brookings Papers on Economic Activity**, 1974 : 1, p. 180.

20. **Brookings Papers**, 1977 : 1, p. 216. For a survey of figures which paint a similar picture, see H.I. Liebling, **US Corporate Profitability and Capital Formation**, New York 1980, pp. 57–60.

21. Various calculations given in Glyn and Sutcliffe, **British capitalism, workers and the profits squeeze**, Harmondsworth 1972, p. 248.

22. *Ibid.*

23. Altvater *et al.*, *On the analysis of imperialism in the metropolitan countries*, **Bulletin of the Conference of Socialist Economists**, Spring 1974, p. 13.

24. To put it as simply as possible: if average rates of profits are earned (or fixed) in an arms sector with a high capital-labour ratio, then some of the surplus value created in the other (wage good and capital good producing) sectors will be transferred to it. This will reduce the prices the capitalists in these sectors get for their output, and this in turn will *initially* reduce profit rates. But wage goods and capital goods are not merely things sold by these sectors; they are also *inputs into them*. If they fall in price, the costs of production fall – tending to restore profitability. What is taken away with one hand is restored by the other. For a fuller discussion of this point and its significance for Marx’s theory of capitalist crisis see C. Harman, *Marx and his critics*, **op. cit.**

25. For comparisons of the pre- and post-war cycles, see R.A. Gordon, **Business Fluctuations**, New York 1961, p. 272.

26. M. Kidron, **Western Capitalism ...**, **op. cit.**, p. 11.

27. Vance, **op. cit.**

28. R. Matthews, *Why has Britain had full employment since the war?*, **Economic Journal**, September 1968.

29. **Testing Monetarism**, London 1981, p. 76.

30. Examples of this failure include D. Yaffe, *State Expenditure and the Marxian theory of crisis*, **IS Internal Bulletin**, 1972, and E. Mandel, **Marxist Economic Theory**, London 1968.

31. See C. Harman, *Poland and the Crisis of State Capitalism*, **IS** (old series) 93 and 94, for a longer discussion on this. For empirical details see Goldman & Korba, **Economic Growth in Czechoslovakia**, Prague 1969, p. 41; Branko Horvat, *Business Cycles in Yugoslavia*, **East European Economics**, vol. X no. 3–4.

32. For details of this process, see C. Harman, **Bureaucracy and Revolution in Eastern Europe**, London 1975, pp. 49–69.
33. For accounts of Russian attempts to exploit China see Y. Gluckstein, **Mao's China**, London 1957, pp. 64–75; C. Harman, *Prospects for the Seventies, The Stalinist States*, **IS** (old series) 42, p. 17.
34. Indeed, at the time of the discussion on the post-war division of the world, the US had at first resisted any formal division into spheres of influence, believing that in the absence of such a division the whole world would fall under its hegemony – the question is discussed fully in G. Kolko, **The Politics of War**.
35. F. Sternberg, **Capitalism and Socialism on Trial**, London 1950, p. 508.
36. Figures given in O.G. Wichel, **Survey of Current Business**, August 1980 p. 18.
37. For an early exposition of the implications of this for the theory of imperialism, see M. Kidron, *Imperialism, the Highest State But One*, **IS** (old series) 9, Summer 1962; for a later exposition, see N. Harris, *Imperialism Today in World Crisis*, (ed. Harris & Palmer), London 1971.
38. **New York Times**, July 5th 1951, quoted in Vance, **op. cit.**, p. 37.
39. See, for instance, Mike Kidron, *Two insights do not make a theory*, **IS** (old series) 100.
40. Altwater *et al.*, **op. cit.**, p. 10.
41. **Ibid.**, p. 20.
42. G.C. Allen, **A Short Economic History of Japan**, London 1971, pp. 174–75.
43. Allen, **op. cit.**, p. 179.
44. Kirame & Sekiguchi, in Patrick and Rosowsky (ed.), **Asia's New Giant**, pp. 418–9.
45. Altwater, **op. cit.**
46. Shonoharu, **Structural Changes in Japan's Economic Development**, Tokyo 1970, p. 2.
47. **Ibid.**
48. K. Hartani, **The Japanese Economic System**, Lexington 1976, p. 135.
49. **Ibid.**
50. See Allen, **op. cit.**, p. 191.
51. Shonoharu, **op. cit.**, p. 22.
52. Hartani, **op. cit.**, p. 92.
53. Quoted in Trezise and Suzulei, in Patrick and Rosowsky, **op. cit.**, p. 793.
54. Figures from Patrick and Rosowsky, **op. cit.**, p. 112.
55. Figures from **ibid.**, pp. 11–12 and 55.
56. OECD figures.
57. OECD figures.
58. US Department of Commerce figures given in Joseph Steindl, *Stagnation Theory and Policy*, **Cambridge Journal of Economics**, vol. 3, March 1979.
59. See the discussion in *Theories of the Crisis*, **IS** 2 : 9, p. 5 et seq.
60. For figures, see C. Harman, *Poland and the Crisis of State Capitalism*, **op. cit.**
61. Kidron, **op. cit.**, p. 62.
62. Patrick and Rosowsky, **op. cit.**, p. 8.
63. Altwater *et al.*, **op. cit.**
64. This is why capital/output figures for Japan can be misleading. The output is measured according to international yardsticks of price, and therefore is higher than it would be if it were a self contained economy, with the price of its output determined by the internal productivity of labour.
65. For an elaboration of this argument see *Marx and his critics*, **op. cit.**
66. Figures from N.M. Bailey, *Productivity and the Services of Labor and Capital*, **Brooking Papers**, 1981 : 1, p. 22.

67. The argument is N.M. Bailey's (although, of course, he does not present it in Marxist terms) on how concrete labour in the US translates itself into value in terms of abstract labour that is fixed at an international level.

68. Measurement of capital/labour ratios are bedevilled by two things:

1. Most published figures include armaments production in the global statistics. But (as explained in *Theories of the Crisis*) armaments production has a quite different effect on the rate of profit to that output destined for productive consumption – i.e. wage and capital goods. If the armaments sector is one with a higher than average capital/labour ratio, it can distort the real picture for the civilian economy.
2. In an economy that was initially virtually self contained, the value of existing capital will have to be marked down once the economy is opened up to the competition of economies with more efficient techniques – and this happened to the US in the 1970s. So the capital/output ratio could appear to grow more slowly than before, whereas in reality it was being measured in a different way, according to world rather than purely local standards. This could explain the apparent slowdown in the growth rate of the US capital/ labour ratio from 1974 onwards.

69. See the figures in Bailey, **op. cit.**, for the ratio of the stock of equipment plus structures to total labour hours. See also figures from P.K. Clarke, *Issues in the Analysis of Capital Formation and Labour Productivity*, **Brookings Papers** 1979 : 2.

70. Colin Clarke, **Oxford Economic Papers**, Nov. 1978, p. 40.

71. **Bank of England Quarterly Bulletin**, 1978, p. 517.

72. **Financial Times**, 3 March 1977.

73. Although only up to a certain point. See the discussion on these questions in *Marx and his critics*, **op. cit.**

74. Figures given in Castells, **The Economic Crisis and American Society**, p. 157.

75. See Ruth Milkman, *Women's work and economic crisis: some lessons of the great depression*, **Review of Radical Political Economy**, vol. 8 no. 1, Spring 1976.

76. This is not contradicted by the impressive evidence of deskilling provided by Braverman, **Labour and Monopoly Capital**. For the other side of deskilling in individual jobs has been an increase in the average level of education required so that people can be trained quickly to do new, not very highly skilled, jobs.

77. For Britain, see, for instance, **Social Trends** 1970, that showed that the vast bulk of increasing educational expenditure was concentrated in these areas, while primary education expenditures grew hardly at all.

78. J. O'Connor, **The Fiscal Crisis of the State**.

79. I.e. in the formula for the rate of profit ($s/(c + v)$) the denominator failed to get bigger (whether the expenditures are included in c or v does not matter here). These expenditures could not, in themselves, increase s . This could only happen if the increase in productivity they brought about reduced the overall cost of labour power, thus causing an increase in the rate of exploitation. But as we saw in *Marx and his Critics*, that could only counteract the decline in the rate of profit to a limited extent.

80. Figures from Aglietta, **op. cit.**, p. 222.

81. S. Aaronovitch and M. Sawyer, *The concentration of British manufacturing*, **Lloyds Bank Review**, 1975, p. 117.

82. M. Campbell, **Capitalism in the UK**, London 1981.

83. Howard Sherman, *Class conflict and macropolicy*, **Review of Radical Political Economy**, Summer 1976, p. 56.

84. J. Patrick Wright, **On a Clear Day You Can See General Motors**, p. 4.
85. **Ibid.**, pp. 7–8.
86. Sidney Lens, **The Military Industrial Complex**, Philadelphia 1970, p. 6.
87. Promine, quoted in **ibid.**, p. 6.
88. R.J. Gordon makes this point on the basis of studies of the US power generating industry, see his comments on Bailey, **Brooking Papers, op. cit.**, p. 54.
89. For accounts of the scale of this see Tony Cliff: **Russia a Marxist Analysis**, London (n.d.) 1963, part II; Hillel Ticktin, **Critique**, no. 1, 1973; C. Harman **Bureaucracy and Revolution, op. cit.**, pp. 258–60.
90. Particularly Ticktin, but also many ‘reform Communists’ in Eastern Europe too.
91. Aglietta, **op. cit.**, p. 240.
92. Figures given in Castells, **op. cit.**, p. 117.
93. Figures given in **Monthly Review**, February 1975.
94. Figures given in J. Hill, *Financial Instability, Debt and the Third World, US Capitalism in Crisis*, New York 1978, pp. 138–9.
95. Liebling, **op. cit.**, p. 78.
96. Shirrel, **op. cit.**
97. See the discussion in *The Crisis Last Time*.
98. Sarah Martin, *The secrets of the Polish memorandum*, **Euromoney**, April 1981.
99. **Poland, The state of the republic**, by the Experiences and Future Discussion Group of Warsaw, ed. Michael Wade, London 1981.
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