The world market in upswing and turbulence

Abstract:

Robert Brenner's *Economics of Global Turbulence* advances our understanding both of the long capitalist upswing of 1950-73, and of the troubled development since then, by directing attention to, and providing keen factual analysis of, the varying structures of world markets. Its claim that troubled development has been due to ruinous international competition in manufacturing emerging and then getting "stuck" is doubtful. Sharpened competition cuts profit rates in a major way only when combined with at least limited "wage-push. However, Brenner is right to reject accounts based on a Tendency of the Rate of Profit to Fall, or on presenting abstract elements of crisis detected by Marx as templates for all capitalist development. Marx's writings on crisis, though illuminating, did not complete the theoretical work Marx himself proposed – to trace the concatenation of all the various contradictions in the capitalist mode of production. The *instability* of capitalism in the period since 1973 may stem (as suggested by E A Brett) from the replacement by a more febrile regime of the "symbiosis" between unevenly-developing sectors of capital seen by Brenner as permitting the long upswing, and the *reduced rates of profit* (as suggested by Fred Moseley) from hypertrophy of unproductive sectors.

1 - Ruinous competition

The first service of Robert Brenner's book-length study of *The Economics of Global Turbulence* (New Left Review no.229) is a demolition of the myth of unparallelled US prosperity in the 1990s. Output, investment, and productivity all grew unusually slowly for a boom phase in the regular boom-slump cycle. Wages mostly stagnated. The limited advances in profit rates, and their exaggerated reflection in the gaudy rise of the stock market, were only the flipside of a punishing war against labour, described well by Brenner.

Brenner's book also does two other major services. It presents a lot of information about the direct capital-versus-labour dimension of the various phases of the post-1945 economies as well as the capital-to-capital dimensions more usually documented by economists. It reflects a volume of research and reading possible only for someone who as well as being committed to active Marxist politics[1] also holds a major university position and has a range of capable academic associates and assistants. And the book establishes a central idea for Marxist economic analysis, never before, I think, as clear as here: that analysis must proceed not from a blurred outline of a "typical" capitalist economy, but from the complex reality of a world economy with its own structure and within it national economies substantially different in pattern both from the global structure and from each other[2].

The book has greater ambitions. It seeks to be a comprehensive reworking of a Marxist theory of economic crisis and depression for our times, explaining the big picture of capitalist development over the last half-century in a way which orthodox economics does not even attempt.

Brenner clears the ground with a criticism of the main Marxist theories previously advanced to explain world capitalism's lurch into trouble around 1970. The so-called "fundamentalist" school, which saw the root of the turmoil in the Tendency of the Rate of Profit to Fall discussed by Marx in volume 3 of *Capital*, is dismissed by Brenner abruptly, but, I think, with good reason[3]. I will return to that argument later.

Another argument, the "wage-push", was pioneered by Andrew Glyn and Bob Sutcliffe (Glyn and Sutcliffe 1972). They argued that it was the strength of the trade unions, and their ability to win wage rises higher than suited capital, that had squeezed profit rates in the 1960s to the point where even small disturbances would trigger crisis.

With their picture of an inexorably, ruinously falling rate of profit, both wage-push theorists and fundamentalists shared a view of a world driven by iron laws towards apocalypse. "The crisis" – they didn't differentiate much between cyclical downturns and longer periods of depression – was bound to climax soon in revolution or in ruinous trade wars or worse. The wage-push theorists gave trade-union struggle a central revolutionary role while the fundamentalists tended more towards socialist preaching, but the apocalyptic perspective was more or less common.

It didn't happen that way. In the last 30 years there have been many crises and horrors, but no single Big Bang. A third response, that of the Regulation School of French Marxists, has become more influential than either the fundamentalists or the wage-push theorists. For them, world capitalism's lurch into slow growth and repeated crisis after 1969-71 was the product neither of an apparently extraneous factor (wage-push) nor of mechanical true-for-all-seasons trends like the Tendency of the Rate of Profit to Fall. It happened because the productivity-improving potential of the "Fordist" mass-uniform-production paradigm was becoming exhausted in manufacturing, and because the not-yet-Fordist nature of most labour in the welfare state (health, education) was provoking financial crises for the state. The world was moving into another messy, floundering transition period in which no integrated "regime of accumulation" was established.

The Regulation School seemed to provide a more rounded and fluid picture of capitalism as a social as well as economic system, shaped by class struggle as well as by abstract economic laws. But, where the wage-push theorists and the fundamentalists were revolutionaries, the Regulationists leaned towards reformism. Their best-known writer, Alain Lipietz, a former "soft Maoist", has long been a leading figure of the French Greens. They tend to advocate an immediate economic programme of re-regulation, not very different from left Keynesianism.

Brenner wrote a thorough criticism of the Regulationists in 1991 (Brenner and Glick, 1991) and in the new book Brenner also argues in detail that the picture of productivity-exhaustion in the late 1960s and early 1970s is false to reality.

Political choices always need much more than economic analysis, and, equally, almost always have to be made without clarity of economic analysis. But Brenner's aim in his book, if I've understood it right, is to construct an account of modern capitalism which both comprehends its fluidity and malleability in detail and shows the link between current economic turmoil and the basics of the private-profit system – an account which can help to inform a socialist politics which is revolutionary but free of mechanical "catastrophism". I believe that his aim is right, but this first shot has missed the target.

All the 1970s theories, fundamentalist, wage-push, and Regulationist, focused on contradictions burgeoning in an "average" or "typical" leading capitalist economy, each national economy being that average type written small, and the world economy being it written large.

Brenner criticises that approach and explains the turning-point in capitalism around 1965-73, from "Golden Age" to trouble, from a change in the interactions between national economies: specifically, sharpened international competition in manufacturing.

The industrial growth of West Germany and Japan, and the freeing and cheapening of international trade, reached a threshhold above which their lower-cost manufacturers could suddenly step up their export drive into the US market. They did so by accepting their current profit rates, not trying to secure higher profit rates from their lower costs, and thus undercutting US firms. US manufacturers, with their huge resources sunk in equipment and in know-how, networks of suppliers and customers, etc., could compete with them by accepting lower profit rates. Instead of making 20%, say, on their whole accumulated investment, they could cut their prices and make just 20% on the capital investment necessary each year to maintain production on the basis of the huge already-acquired assets. The net result, though, was a lower average rate of profit and over-capacity across manufacturing.

The dip in profit rates would have been only temporary if in the longer term the US manufacturers either went out of business or re-equipped to establish costs as low as the Germans or Japanese. In fact great world-wide overcapacity in manufacturing has persisted since the 1970s. Government economic policies both expansionary and restrictive ("monetarist") have sustained it. The expansionary policies have allowed excess-capacity manufacturers to remain in their old line of business at the price of increased debt, which then makes any drastic switch to a new line more difficult. The restrictive policies, by depressing demand across the board, have inhibited capital from risky switches to new lines of business. The consequent deficiency of "exit" from manufacturing industries has been compounded since the 1980s by the dramatic "entry" of manufacturers based in Korea, Taiwan, China, etc. into world trade. Thus continued mutual ruin by competition.

Brenner's is a heroic effort to integrate a great mass of information (about capital-versus-labour battles as well as capital-versus-capital) into a coherent story, but I find it ultimately unsatisfactory both on how the increased competition reduced profit rates, and on overcapacity "sticking".

Any individual capitalist is likely to have to take a lower profit rate if competition in their market increases. It seems obvious, then, that increased competition overall means lower profit rates overall. But it does not[4]. Suppose increased competition forces all capitalists to cut their prices by ten per cent. Then all capitalists' income falls ten per cent – but all their costs fall ten per cent too, unless workers are strong enough to make the ten per cent cut in the cost of all they buy into a rise of real wages rather than a cut in money wages. There is no drop in the share of profits in income unless it is due to a rise of real wages uncorrelated with a rise in productivity. For profits to fall, workers must gain a cut in the rate of exploitation, and do it in the less-favourable conditions for labour which must result from the increased competition, where the weight of other capitalists stands more solidly behind each individual capitalist in their disputes with workers, and workers suffer greater insecurity. Brenner responds that "conditions do not ordinarily exist that could enable capitalists to prevent workers from securing any gains from the reduced price...", but why not?

If actual dollar prices are reduced, workers may be able to improve real wages without an autonomous shift in the general balance of class forces. It is harder for bosses to cut dollar wages than to resist an equivalent increase in real wages at a time of generally rising prices. Workers will have already absorbed the improved conditions arising from lower prices (at the same dollar wage) before the bosses attempt the wage cut, and, all other things being equal, will be stronger resisting the dollar-wage cut than they would be in pressing for an equivalent rise in real wages through an above-inflation dollar-wage rise. But in the late 1960s prices in the US were not generally falling. They were rising faster than they had done in previous years. The effect of international competition squeezing manufacturing prices was only to make the general increase in prices smaller than it would hypothetically have been without that competition. I do not see how that hypothetical comparison could shape wages. To suppose that the squeezed prices would not, all other things being equal, push up real wages, all we have to assume is that wage-bargaining based itself on actual price inflation and productivity.

Competition equalises profit rates. It does so more or less completely depending on whether competition is fierce across the board, or some firms have monopolised, rigged, or protected markets. Fiercer competition can wipe out the excess profits of firms with monopolised, rigged, or protected markets, to the benefit of the rest. It does not, however, tell you anything about the average rate of profit. Or, rather, longer-term, its tendency will paradoxically be to *increase* profit rates, by sharpening the capitalists' drive to cut costs. Especially so if it includes sharper competition between workers to sell their labour-power, as it has done since the early 1970s[5].

Brenner focuses on German and Japanese manufacturers with lower costs (essentially lower wages) entering the US market on a large scale in the late 1960s. US manufacturers reduced their mark-up to compete. But then US workers got cheaper cars, TVs and so on, and US manufacturers got cheaper steel and machine-tools. Profit rates for US manufacturers fell from 1965 onwards, but this can be attributed to the increased competition only if US workers were strong enough to use the turbulence to reduce their rate of exploitation at the same time as they were suffering loss of bonuses, short-time, insecurity, and increased management pressure because of the increased competition. Increased international competition alone cannot explain the development.

Brenner is as harsh against the wage-push theory as he is against the "fundamentalists" and the Regulationists. He argues in detail that wages militancy in the 1970s was more a response by workers to the crisis than a cause of it. If there was a heyday of autonomous wage-push in the USA, it was in the 1950s, and then the capitalists quickly managed to set countervailing forces in motion to keep profit rates up. His own account, however, in fact relies on wage-push. It relies on the implicit assumption that the workers "pushed" at least enough for the less-increased-than-otherwise prices brought by increased competition to produce higher real wages rather than less-increased-than-otherwise money wages, and for that to happen when increased competition was tilting the general economic determinants of the balance of class forces against labour.

Conversely, the detailed text of Glyn and Sutcliffe's book (and of later works on the same lines, such as Armstrong et al 1991) presents the squeeze on profit rates as a pincer-operation by wage-push and fiercer international competition, with the movement coming as much if not more from competition. The theory was "headlined" as wage-push less for strictly economic reasons than for political ones. It was a defiant reply to

bourgeois arguments about wages militancy ruining capitalism. Yes, it was, and a good thing too! Paradoxically, Brenner's "ruinous-competition" theory is really a wage-push theory, and Glyn and Sutcliffe's wage-push theory was really a "ruinous-competition" theory.

Now, unlike increased competition, increased wages must cut profit rates, all other things being equal. Yet other things rarely are equal. Capitalists can and do respond to wage-push not just by accepting lower profit rates, but with new technologies and production methods which restore the rate of exploitation (ratio of surplus-value produced to outlay on wages) while leaving the increased real wages intact. Often the countries with the highest real wages – like the US from 1945 to the early 1970s, at least – also have comparatively high profit rates. Successful wage-push demands favourable conditions – low unemployment, full order books – which are also those favourable to the capitalist response. Long-term, real wages tend to rise, but so does the rate of exploitation. Short-term, wages rise in booms and fall or stagnate in slumps – but the ratio of wages to (much-increased) profits in booms is often lower than in slumps. Wages are more a dependent than an independent variable in capitalist accumulation – as Brenner's detailed examinations confirm.

In short, fiercer competition in the US and world markets, in the 1960s, from German and Japanese (or German and Japanese based) manufacturers would explain a trend to economic levelling between the US, Germany and Japan. But it does not explain lower global profit rates unless there was also wage-push. And there are both theoretical and empirical arguments against taking wage-push as a generally decisive autonomous factor.

German and Japanese manufacturers' profit rates also fell, from 1968, rather more sharply than US rates. Why? Brenner's explanation rests heavily on the effect of currency exchange-rate movements after 1971 (the dollar came to buy fewer marks or yen), but how could exchange-rate movements *create* rather than just *redistribute* a fall in profit rates?

Yet US manufacturing profit rates did fall sharply from 1965 to 1970. And they did so without any very sharp drop in demand. Capacity utilisation in manufacturing dropped from its very high level of 92% in 1966, but remained at boomtime levels, above 85%, until late 1969. Only in 1970-1, as the US government cut back Vietnam war spending, did it drop towards 76%. Before 1970, US manufacturing capital evidently managed to keep its production lines rolling, even if its output prices were squeezed.

Brenner's evidence suggests, to my mind, that there *was* an autonomous wage-push in the late 1960s. He records "a major increase in strike activity in these years", which he describes as "a lagging response on the part of labour to a spectacular increase in profitability between 1958 and 1965". This would not have been an independent factor sufficient to mark an epochal turn in capitalist development (as in the full-blown "wage-push" theory), but it was *a response*, an active intervention by workers with some autonomy from the movements of capital at the same time, which could have been sufficient to hinder manufacturing capital from making sufficiently quick adjustments to the onrush of international competition, and to prevent non-manufacturing capital from scoring increased profit rates from the lower prices at which they could buy manufactured supplies[6].

This reading, however, would reduce the sharpened-competition-plus-wage-push of the late 1960s to the status of an essentially episodic blow at the profit rate, due to be reversed (by re-equipment, closure of weaker firms, pressure against wages, and so on) unless other and more fundamental developments intervened[7].

The economic levelling between the US and Germany and Japan has generated movement of currency exchange rates. You get a lot fewer marks or yen for a dollar today than you did in 1968. Consequently, dollar wages in the US are now lower than dollar wages in Germany or Japan, rather than being twice or four times as high, as they were in 1968. Germany and Japan's low-cost advantage has disappeared. Brenner's graphs show that profit rates in the three countries have become similar, instead of Japanese rates being much higher than US rates, and German rates lower, as before 1965.

Profit rates evened out – but why did they do so at a markedly *lower level,* long-term? Why did profit rates decline and remain low after the early 1970s, recovering only to a limited extent in the late 1990s? Because of wage-push? Hardly. Real wage rates have stagnated in the USA. Among the leading economies, they have risen most in Japan – which has also, until its recent slump, had the highest profit rates.

Brenner deals with this question by tracing in some detail the movements of currency exchange rates (which include many erratic ups and downs as well as the long-term trends), and successive government policies in the USA, Germany and Japan. The gist of his argument, if I've understood right, is that the "ruinous competition" which suddenly hit capitalism in 1965-73 then became semi-permanent. As the big capitalist manufacturing corporations sought to make good on their huge fixed assets, tangible or intangible; as governments and banks aided them by allowing a great rise in debt; as other government policies restricted home markets everywhere and sent manufacturers everywhere on a no-win chase to export to a consequently depressed global market; and as new manufacturing-export bases emerged in East Asia – as all these trends persisted, there were always lower-cost producers somewhere (where, at each moment, depended on the movement of currency exchange rates) pushing down prices, and higher-cost producers elsewhere ready and able to accept lower profit rates to stay in business. Thus "the further strategies individual capitalists found it best to adopt… continued to bring about an insufficiency of exit and too much entry, exacerbating the initial problem of manufacturing overcapacity and overproduction". The competition was ruinous, but *not (or not allowed to be) ruinous enough*, and so it remained ruinous.

I see several problems here.

In the first place, impressionistically, if what has happened has not been ruin enough, what would be? We have had a quarter-century of "deindustrialisation". There were great waves of bankruptcies and closures in the USA under Paul Volcker's direction of the Federal Reserve in 1979-83, and in Britain under Thatcher simultaneously. Brenner documents "a vast restructuring" of Japanese industry after the oil shock of 1973 (which hit Japan especially hard). Everywhere there has been drastic economic and technological reorganisation. Although most Marxists in the early 1970s (including me) expected the economic turmoil to lead to increased tariffs and import controls if not trade wars, the actual development has been the opposite, to deregulation and freer-flowing trade. Capitalist governments have responded to ruinous competition – if that was the crux of the problem – not by trying to stifle it but by making large economic areas "free-fire" zones.

Secondly, in detailed statistics – as noted above, US manufacturing capacity utilisation remained at boomtime

levels until late 1969. There was no overcapacity. Over the whole period 1967-96, capacity utilisation has averaged 81.1%, only slightly down from its 1948-65 average of 82.4%. It does seem that changes in the system have prevented it from having booms as exuberant as the 1953 and 1966 war-economy peaks of 92% capacity utilisation; and some industries do have heavy overcapacity. Overall, though, it does not seem that the *general* problem for capital is that there are simply too many factories in proportion to other sectors of the economy.

Even if the official statistics are misleading, and there is chronic and aberrant excess capacity, it is not so obvious that it should generate depressions or crises. An economy running at 75% capacity is more wasteful and poorer than one running at 85%, but is it less stable or even slower-growing? Once it has settled down to running at 75% capacity, why should it have a downward trend of profits? The Stalinist economies from the 1950s to the 1970s almost never scrapped old factories or equipment, yet industry grew fast, and their crises then and more drastically in the 1980s did not stem just from excess capacity. China notoriously has great excess capacity in inefficient state factories, but its industry has grown fast.

Brenner alleges a "great ledge of high-cost, low-profit means of production" resulted from "the intensification of international competition". On one level this could be just a restatement of the fact of lower profit rates. If average profit rates are lower, then (unless the range of difference of profit rates between enterprises has narrowed in the same way as the range between average profit rates in different countries) there will be more factories operating at “low profit” (by any predetermined definition). But then the larger number of low-profit factories cannot be cited as the cause of the lower general profit rates. That the “tail” of low-profit factories comes to include some old-established US firms in place of German enterprises is not necessarily a cause of crisis.

If, on the contrary, the “ledge” of “low-profit” factories is not just the “tail” of the usual scatter of profit rates between more successful and less successful enterprises, but rather represents capital saved from bankruptcy, sell-off and scrapping only by deliberate government policy (like the Chinese state enterprises), then why is it a cause of crisis for the higher-profit firms rather than just a cause of irksomely higher supply prices and higher taxes?

At one point (p.151) Brenner refers to "the survival of those high-cost, low-profit firms which perpetuated overcapacity and overproduction" and then in the next paragraph to "the unprecedented growth of debt of all types – government, corporate, and consumer – which kept up capacity utilisation". But what is an “overcapacity” which exists even when capacity utilisation is kept up? Is the idea that demand kept up by the growth of debt is “artificial”? It is, but then so is demand kept down by “tight-money” policies. The free-market “no gain without pain” course is no less “artificial” than the Keynesian one. The Keynesian expansion of debt may lead to a crash (the collapse of debt-financed demand, and the emergence of actual “overcapacity”), but it may not.

In some passages, however, Brenner seems to *assume* that a lower profit rate *means* that there are "too many" producers and "too much" competition in a particular line of business. In which case, don’t the profit rates in non-manufacturing (consistently lower than in manufacturing, on Brenner’s figures) indicate an even greater excess of producers and of competition there, too? If the lower profit rates do prove that there were "too many" firms in business and thus "overcapacity", then “too many” and “over” *relative to what?* Here, Brenner’s careful initial argument about how competition becomes ruinous *in certain circumstances* slides over into far too general an argument about overcompetition, overcapacity and lower profit rates being synonymous[8].

There are always established but out-competed capitalists preferring to hold on in their current line of business rather than up and off. There are always new competitors. Easy government policies always allow some out-competed firms to remain in business – while also easing capitalist entry into new lines. Tight government policies always tend to inhibit new businesses – while also clearing away out-competed firms. A narrative can highlight chosen aspects of these generalities in such a way as to create the appearance of an empirically-detailed, specific explanation – "in these-and-those years there was easy government policy, which allowed out-competed firms to survive; then in such-and-such years there was tight government policy, which depressed demand" – but it really does not explain why the overall outcome should be depression. “Slow-adjusting” individual responses do not necessarily make for greater global depression or crisis than a more “market-rational”, “fast-adjusting” pattern where capitalists “exit” faster and “enter” more cautiously. The “fast-adjusting” pattern, by triggering a chain of demand cutbacks and of defaults, can very well convert previously “viable” firms into “unviable” ones and convert previously manageable competition into ruinous.

Brenner's picture is one of a world economy adjusting too "stickily" to the shock of fiercer competition brought by the freeing-up of world trade and the rise or revival of new industrial centres. Wages did not adjust downwards to lower high-competition prices; and then manufacturing capacity did not adjust downwards to more crowded markets. The question is, was adjustment really so “sticky”? In any case, doesn’t “sticky” adjustment sometimes *limit* slumps, downturns or depressions, as compared to quicker free-market adjustment? [9] If there were such “sticky” adjustment as to create a permanent pool of outdated capital subsisting only on subsidies, then that would produce a one-off slowdown in capital accumulation. But why should that pool have a depressive or crisis-producing effect long-term greater than, for example, the pool of outdated capital existing in Japan’s notoriously inefficient agricultural sector throughout its tremendous upswing after 1945?

In the "Great Depression" of the late 19th century, capitalist firms and governments responded to "ruinous competition" by trying to stifle it (tariffs, cartels, etc.), and yet the system did adjust to the rise of new world-competitive firms in Germany and the USA. In the late 20th century, capitalist governments and business strategists worldwide have made a vigorous and varied set of attempts to "unstick" the adjustment of industry to sharper global competition – deregulation, subsidies to speed the rundown of old industries or to promote "sunrise" sectors, moves to smash union strength and break up large-scale nationalised industries, shifts to "greenfield" sites.... And yet, on Brenner's account, these policies add up to a "failure to adjust". They have even been counterproductive. Brenner speculates at the end of his book that the US industry may have finally established the conditions to escape depression, but that, apparently, would only be because even "sticky" adjustments get made eventually.

Either the bosses botched it drastically – different government policies would have speeded adjustment and averted the long depression – *or* late 20th century capitalism had *no possible* smooth (or at least relatively

smooth) way of adjusting to fiercer competition. If the latter (and I suspect Brenner's view would lean that way), then we must explain the impossibility before we get into any of the details of different governments' policies. And the explanation cannot be that capitalism can *never* deal with fiercer competition.

It seems to me that Brenner's argument "overstates" the failure to adjust, and by doing so obscures the question of what it was in late 20th century capitalism that made its adjustments, failed or successful, so hurtful. Brenner paints a picture of capital as having become cripplingly inflexible, but has it not generally in fact become more flexible?[10] – with its ill-health maybe due to an impossible-to-win race in which flexible productive capital tries to keep pace with always-more-flexible money capital?

What Brenner has done, however, is re-focus our attention, as we try to understand the trends of capitalist development, on the *structures and patterns of the world market*, and away from calculations about the evolutions of capital in a vaguely-envisaged "average" capitalist economy. That fact alone makes his work the most valuable and important in its field for many years.

2 - The Tendency of the Rate of Profit to Fall

In volume 1 of *Capital* Marx argued in some detail that capital would squeeze down living labour and replace it by machines, not just to reduce costs but also to increase its control over the process of production. This drive, wrote Marx, would produce an increasing ratio of c/v (outlay on means of production/outlay on labour-power). In his unfinished volume 3 Marx deduced, as a simple mathematical consequence of increasing c/v, that s/(c+v), the ratio of surplus value to total costs, would tend to decrease. Thus the Tendency of the Rate of Profit to Fall. Many of critics have relied on this as "the Marxist theory of crisis" to answer Brenner, but I believe they are wrong.

Marx erred, I believe, in assuming too rapidly that the social tendency to squeeze down living labour would clearly reflect itself in a statistical trend (c/v, whose rough equivalent in available statistics is the capital/output ratio). He also erred in not seeing that what he cited as "countervailing tendencies" to the Falling Rate of Profit – increased exploitation (s/v) and cheapening of constant capital – were so entwined with the "tendency" as to annul it. The factual evidence confirms this. Over the whole of the last century, there is no clear long-term tendency for profit rates to fall[11].

Consider a capitalist making desktop computers, for example, who introduces a new technique cutting his costs. For a while he can sell his computers at the price established by the old technique, making super-profits. Then the new technique spreads, and he has to cut his prices and accept only an average rate of profit. The argument of the Tendency of the Rate of Profit to Fall is that the new average rate of profit will be below the old average, because of increased c/v. The individual capitalist's short-term profit-maximising decision cuts profits longer-term for all capitalists.

But if the new technique offers lower costs to the individual pioneering capitalist, then it must also, once generalised, cheapen constant capital (by enabling all capitalists to buy computers for their businesses cheaper) and increase the rate of exploitation (by reducing the labour-time required to produce the total of the commodities consumed by workers – including those desktop computers bought by workers – while workers' total hours of labour remain unchanged). And those effects must be sufficient to raise the general rate of profit. At any rate of profit lower than the superprofits won by the pioneer when he first launches his new technique, every other capitalist will enjoy a cut in the outlay (on means of production and wage costs) they must make in order to mobilise a worker's labour-power for a standard week. Either their profits are raised, or their capital-stock outlay is cheapened, or both. Their rate of profit rises above the old average. As the price of desktop computers falls, the superprofits of the pioneer are reduced, but the profit rates of other capitalists are raised. The point at which those two tendencies meet, and a new general rate of profit is established, must be above the old general profit rate.

This argument (the "Okishio theorem") can be formalised mathematically. It shows that profit-maximising technical innovation, in and of itself, cannot push down the general rate of profit. Even if increased real wages come with the technical innovation, as they usually will in periods of high-investment boom, the general rate of profit will be cut only if workers capture all the cost-cutting benefits of the new techniques plus a bit more. Profit rates cannot fall as a simple and direct result of profit-maximising technical innovation alone. If the technical innovation is in a line producing luxury goods, or armaments, consumed only by the capitalists or their state, then it has no cost-cutting effect for the rest of capital, and the new general rate of profit is the same as the old. All the cost-cutting benefits of the new technique are captured by the capitalists for their private consumption or by the military. But even then the new profit rate is not lower.

None of this means that a development centred on technical innovation cannot reduce profit-rates or lead to crisis. Innovating capitalists may make mistakes – from the point of view of profit-maximisation – in their urgent drive to outstrip their competitors or to gain greater control over labour through mechanisation. Capitalists may collectively "overinvest" in a particular sector when they see a new profit opportunity – without any individual making an obvious mistake – and thus drive a large number of the higher-cost businesses in that sector to bankruptcy and trigger a devastating chain of defaults. Generally, the industrial rate of profit derives from the ratio of surplus value to capital outlay only indirectly and after a series of deductions (taxes, interest, rent, fees, other unproductive costs, losses on goods unsold or sold cut-price, etc.), and thus may fall when that ratio rises.

Anwar Shaikh, another Marxist economist associated with Robert Brenner's magazine *Against the Current*, contends that the warlike character of capitalist competition means that capitalists will generally make massive investments in fixed assets which enable them to produce extra *at reduced extra current cost* and thus drive their rivals out of business but reduce their *ratio of profit to total investment* (Shaikh 1978). Shaikh, however, offers no empirical evidence that capitalists do this generally, rather than exceptionally. He assumes an "excessively" fast rate of innovation, while a large volume of socialist comment, from Marx onwards, has rather found cause to indict capitalism for failing to introduce new techniques which cut labour-time but may not cut wage-costs.

In any case, the pattern described by Shaikh, or that of innovation propelling a profit-rate-cutting rise in real wages, would develop only in a period of exuberant capitalist boom. The Falling Rate of Profit might then explain why that boom would slow down. It might explain a gradual downward drift of the rate of profit, but not the sudden downturn typical of a capitalist crisis. There is no "natural" rate of profit below which crisis kicks in. At an average rate of profit of 10% per year, capital will grow

slower than at a profit rate of 20% per year, but it will not necessarily plunge into crisis. Moreover, even in the "best" case for the advocates of the Tendency of the Rate of Profit to Fall, it is unlikely that the Tendency can bring the rate very low. The physical image of a vast mass of fixed assets overshadowing a relatively small workforce is an optical illusion. In value terms, at any time, all the recent additions to fixed capital are simply congealed portions of the previous few years' surplus value. If the mass of surplus value is increasing – and Marx, in his exposition of the Tendency of the Rate of Profit to Fall, explicitly expects that it will – then the value ratio of current surplus to the congealed portions of previous years' smaller surpluses cannot fall very low, however impressive the physical embodiments of those previous years' surplus value[12].

What then of the idea that the Tendency of the Rate of Profit to Fall is "the Marxist" explanation of economic crises? Without it, argues Shane Mage, "the central argument of 'scientific socialism'... would fall to the ground. There might still be a case for socialism, but it would have to be argued exclusively on a moral, not an economic, basis" (Mage 1963). But a moral basis is the right one for arguing the case for socialism, so long as "moral" is understood in the broad sense as "in relation to human history". "Logical" proofs that any economic model satisfying the general properties of Marx's theory of capitalism must break down are no help to working-class socialism. Whom are they meant to convince? Why should we accept the implication that humanity should scrap capitalism only if it breaks down irreparably and cannot be got to work at all, at any cost? In any case there is only one capitalist system, the actually existing one, and it can be "broken down" only by political action, not by logical demonstrations on paper.

Marx never referred to the Tendency in any writings that he completed for publication. Nor did Engels cite it in his *Anti-Duhring*, which was written in consultation with Marx as a summary of their common doctrine and which included a section on crises. In Marx's unpublished writings, the longest connected discussion of crises, in *Theories of Surplus Value* volume 2, scarcely mentions the Tendency. His discussion of the Tendency in his unfinished volume 3 of *Capital* notes that "it is only under certain circumstances and only after long periods that its effects become strikingly pronounced".

Almost all economists at the time reckoned that in fact the rate of profit did tend to fall. Adam Smith and David Ricardo both believed that there were iron laws depressing the rate of profit. (So did Keynes, in his *General Theory*). What is special to Marx, as against other economists of his day, is not that he saw a tendency of the rate of profit to fall, but that he saw the tendency as a social one, operating through and modified by class struggle, rather than an inescapable law of nature; and that he stressed the "countervailing tendencies". Marx was keen to derive further indictments of capitalism from a tendency which seemed to be established as solid fact by many other writers' work. He did not make his indictment hang or fall on that tendency, see it as his special role to demonstrate the tendency's existence, or present the tendency as the prime cause of all capitalist crises.

In volume 3 Marx does essay an account of the Tendency generating crisis through its specific effect on small capitalists, whose ruin, at a certain stage of the fall of profit-rates, unleashes a chain of collapses. This is, however, an unfinished speculation of Marx's, unintegrated with his other writings on crisis – and both theoretically and empirically unsound[13].

Plekhanov, Kautsky, Lenin, Luxemburg, and Trotsky never, as I far as I know, propounded the Tendency of the Rate of Profit to Fall as central to their Marxism. None of the early Communist International's accounts of the catastrophic crisis of world capitalism after World War 1 attributed it to the Tendency. The Tendency was referred to in works like Hilferding's *Finance Capital* and Bukharin's *Imperialism and World Economy*, but only in a subsidiary role. It became "the Marxist theory of crisis" only in the 1930s, under Stalinism.

Emile Burns's Stalinist primer (Burns 1935) gave over a big part of its space available for extracts from *Capital* to the section on the Tendency of the Rate of Profit to Fall from *Capital* volume 3, and included nothing else on crisis. The picture of capitalism as driven to ruin by a mechanical iron law, so that progress depended on an alternative being sufficiently powerful, stable, and "realistic", suited Stalinism.

From the Popular Front period onwards, reformist or underconsumptionist accounts of crisis became more prominent in Stalinist literature; but the Tendency of the Rate of Profit to Fall remained as an esoteric doctrine for the "cadres", and it also became an icon for many Trotskyists. Many Trotskyists, too poor and ill-connected to produce their own literature, would have educated themselves on volumes like Burns's *Handbook*, spurning only the sections by Stalin. Also, the picture of an iron law of crisis suited the apocalyptic and millenialist perspectives of many Trotskyists who looked for their political isolation to be broken by an impending catastrophe in which the mass of workers would be hurled into revolt, the old bureaucratic leaderships of the labour movement would be put in disarray, and revolution would result just so long as the alternative leadership had built itself up sufficiently (Matgamna 19981, p.63-4; 1998b, p.16-17).

To rebuild working-class socialism today, we must escape the spell of such ideologies. Brenner's critical contribution is an important step along the road.

3 – Marx

A survey of Marx's comments on capitalist crises indicates, I think, that many of the ex-cathedra condemnations of Brenner made by his critics are misplaced.

In 1858, when Marx set out his plan for what he meant to write on economics, he envisaged six books – Capital, Landed Property, Wage Labour, The State, International Trade, and, lastly, the World Market and Crises. Crises, the condensations of all the contradictions in the capitalist mode of production, could only be understood when the concatenations were elucidated. Marx never came anywhere near completing that plan. His ideas on crises were left as scattered fragments, mostly in unfinished writings. "Here... was no finished draft, not even a scheme whose outlines might have been filled out, but... often just a disorderly mass of notes, comments and extracts. I had no choice but... confining myself to as orderly an arrangement of available matter as possible". So Engels reported on the section of *Capital* volume 3 dealing with credit, one of the most important for Marx's ideas about capitalist crises.

There is much to learn from Marx's notes and comments. But crises cannot be adequately understood – nor Marx loyally interpreted – just by slapping everyday facts into the framework of one or another of the abstract elements of crisis which Marx discussed at various points in his writings, and calling that abstract element "the Marxist theory of crisis".

Early on in volume 1 of *Capital* (chapter 3, section 2a) Marx argues that the *possibility* of crisis exists in any money economy. The "metamorphosis of commodities" – through sale and purchase, from commodity to money to commodity – implies that possibility. Those with money are under no immediate compulsion to buy. But if they don't, then those with commodities cannot sell. There is, not just mishap or miscalculation and overproduction of one particular commodity, but general overproduction of all commodities.

Marx expounds this as an expression of "the antithesis, use-value and value; the contradiction that private labour is bound to manifest itself as direct social labour; that a particularised concrete kind of labour has to pass for abstract human labour; the contradiction between the personification of objects and the representation of persons by things; all these antitheses and contradictions, which are immanent in commodities..." Commodities are commodities only because they are equated with money. Money is money only because it is equated with commodities. Yet commodities and money are also distinct and separate entities.

In a crisis, unsold commodities pile up on one side, money remains idle on the other. The possibility of this is incipient even in the simplest money economy, because, contrary to the impression given by simplistic accounts, money is not just an intermediary in such an economy which vanishes once its job is done of transferring commodities from hand to hand. Money does not vanish. It only goes from hand to hand. "Circulation sweats money at every pore". At the end of market day, the population takes away at least as much money, unspent, as it brought to that day. A money economy necessarily includes at least some "incipient" hoarding.

Nor should we suppose that only a population of crazed misers piling gold coins under their beds could produce a reluctance to advance money for commodities sufficient for a crisis. In the USA in the year 2000, the total stock of money on the narrowest definition (about $1100 billion) was enough to buy 40 days' net national output. On broader definitions (M2 and M3) the stock was enough to buy 180 days', and 250 days', output, respectively. A slight variation in the speed at which money is thrown into circulation can in principle produce a crisis.

Yet all this – Marx emphasises – implies "*the possibility, and no more than the possibility*, of crises. The conversion of this mere possibility into a reality is the result of a long series of relations that, from the present standpoint of simple circulation, have as yet no existence".

Marx made his most comprehensive attempt to look at how – through what "long series of relations" – the possibility of crises becomes reality in *Theories of Surplus Value*, volume 2 (Marx 1963, p.492-535. Much the same argument is also developed in the *Grundrisse*, p.401-447). His approach there suggests that he envisaged developing successive approximations, or successively less abstract and more complex expositions, through which the whole anatomy of crises would finally be presented. Thus, for example, when he points to the part played by the "intertwining and coalescence of the processes of reproduction or circulation of different capitals" in crises (essentially what Keynes would later call the "multiplier effect"), Marx comments that "the definition of the content of crises is already fuller".

Marx polemicises repeatedly against two schools of orthodox economics. One is the followers of "Say's Law", the doctrine according to which, since every sale is a purchase, sales and purchases must balance, and general overproduction is impossible. "But... trade is not barter, and... the seller of a commodity is necessarily at the same time the buyer of another. This whole subterfuge... rests on abstracting from money..." (p.532). Again, Marx's idea here is one later to be rediscovered by Keynes, and then again after Keynes by the economists of the "Keynesian reappraisal".

The other school against which Marx polemicises is those who, he says, reduce the question of crises to the mere possibility inherent in the separation of sale and purchase. "How insipid the economists are who... are content to says that these forms contain the possibility of crises, that it is therefore accidental whether or not crises occur and consequently their occurrence is itself merely a matter of chance". Marx thus sets himself the task of explaining why capitalism develops much more than the mere *possibilities* inherent in simple circulation of money – which "come[s] into being long before capitalist production, while there are no crises" (p.512) – and makes crises systematic. He does not complete that explanation in these pages, or anywhere else, but he gives some pointers.

Marx starts his discussion simply by pointing to empirical examples where general overproduction happens (p.494-6). In so doing he adds content to the discussion of the abstract possibilities of crisis in any money economy by introducing the concepts of *capital* and of *time.* "The immediate purpose of *capitalist* production is not 'the possession of other goods', but the appropriation of value, of money, of abstract wealth" (p.503, emphasis added). Under capitalist conditions, a slowness of money-holders to exchange money for commodities may have nothing to do with any "miserly" reluctance to consume. The capitalists must at all times, with urgency, turn their commodities into money; their decisions to turn money into commodities ("to invest") are always dependent on prospects of profit. There is asymmetry.

Secondly, capitalist production necessarily has a dimension of time, time in which the future is always uncertain. "The comparison of value in one period with... value... in a later period is no scholastic illusion... but rather forms the fundamental principle of the circulation process of capital" (p.503). If conditions for immediate profit are poor (falling prices, for example), then: "Surplus-value amassed in the form of money... could only be transformed into capital at a loss. It therefore lies idle as a hoard..." (p.494). Or: "A person [specifically, a capitalist] may sell in order to pay, and... these forced sales play a very significant role in the crises" (p.503). Prices are pushed down by these forced sales – and then despite their frenzy to sell the capitalists are still unable, or only just able, to meet the payments (supplies, debt interest and repayments, rent) they are already committed to on the basis of old prices. And: "Since the circulation process of capital is not completed in one day but extends over a fairly long period... it is quite clear that between the starting-point.. and... the end... elements of crisis must have gathered and develop" (p.495). If all capitalist decisions to order or commission buildings and equipment had instantaneous effect and were "tested" against the market immediately, the question of crisis would look quite different. But they are not.

Marx's point here is similar to Keynes's: "Our social and business organisation separates financial provision for the future from physical provision for the future", but with an added critical insight. The "provision for the future", financial or physical, is never correlated to future needs, but to immediate prospects of gain. Thus, in the

boom, "excessive" physical provision for the future because profits are good and every capitalist wants to get in on the game; in the slump, "excessive" financial provision for the future because capitalists want to see a recovery of markets before they will transform their wealth from the "liquid" form of cash into fixed assets, or they are tied down by debts.

Once Marx has also introduced the "intertwining and coalescence of the processes of reproduction or circulation of different capitals" – the idea that overproduction in one major branch of industry, can, via that industry's reductions in wages paid out and supplies bought, depress the level of demand for other industries, and *redefine* those other industries' production as "overproduction", he comments that "the definition of the content of crises is fuller". All this, however, still demonstrates only possibilities, and does not show why crises should be more than accidental. In these pages Marx repeatedly refers to the possibility of crises being triggered by poor harvests or other such causes of crisis "accidental" relative to the basic mechanics of capitalism. Obviously he is far from thinking that every crisis must be the expression of some one Law of Capitalist Crisis.

As regards a general driving force, or mechanism, which will persistently, repeatedly, systematically trigger the possibilities, Marx writes this: "The whole aim of capitalist production is appropriation of the greatest possible amount of surplus-labour, in other words, the realisation of the greatest possible amount of immediate labour-time with the given capital, be it through the prolongation of the labour-day or the reduction of the necessary labour-time, through the development of the productive power of labour by... mass production. It is thus in the nature of capitalist production to produce without regard to the limits of the market" (p.522).

Or again, what happens is that "too much has been produced for the purpose of enrichment, or that too great a part of the product is intended not for consumption as revenue, but for making more money (for accumulation); not to satisfy the personal needs of its owner, but to give him money, abstract social riches and capital, more power over the labour of others, i.e. to increase this power" (p.533-4).

All this is still very abstract. At least two problems are posed here for further discussion. First, Marx says flatly that: "permanent crises do not exist", and that the idea of "over-abundance [glut] of capital... [as] a permanent effect" is wrong (p.497). He is referring to Adam Smith's notion (shared, for example, by no less than Keynes) that capital may become no longer scarce in much the same way as potatoes may become no longer scarce, and thus may lie idle or yield little profit "permanently". It seems plain that Marx rejects the vision of capitalism sometime entering a "final" crisis, in which it must forever wallow until released from its agony by revolution. He refers in these pages, and elsewhere, to "the almost regular periodicity of crises on the world market" (p.498). Crises are periodic. But nothing in the argument so far explains this periodicity. What does?

Secondly, Marx repeatedly refers to the relative poverty of the working class ("underconsumption") as an important factor in limiting the market. What is the role, and what are the limits of the role, of "underconsumption" in crises?

Marx's general argument here, however, does indicate that any "theory of crisis" relying solely on "commodity-side" relations must be unsound – and this applies, for example, to the "orthodox" Tendency of the Rate of Profit to Fall theories (based on the proportions in production between capital-stock, wage-bill, and surplus value) and to the usual "underconsumption" theories (based on the proportions in production between wage-bill and total product). Crises do not arise directly from such abstract "snapshot" proportions in production. They arise from proportions between production and markets (which are connected to proportions between different sectors of production) and from proportions between past, present and future.

To analyse those proportions, Marx must examine *fixed capital* and *credit*. He does that in *Capital* volume 2 chapters 8 and 9 (also chapter 16 section 3 and, briefly, chapter 20) and volume 3, chapter 30.

By its very nature, capital seeks maximum fluidity and the quickest returns; but equally, and also by its very nature, a large, generally increasing, proportion of it must be tied up in instruments of production which transfer their value to products only piecemeal and over a length of time, i.e. in fixed capital. In a period of strong capitalist expansion, fixed capital – new machinery and buildings, etc. – is expanded disproportionately.

"The market is... stripped of labour-power, means of subsistence for this labour-power, fixed capital in the form of instruments of labour... and of materials of production, and to replace them an equivalent in money is thrown on the market; but during the year no product is thrown on the market [by the big projects of building new factories, installing new machinery, etc.] with which to replace the material elements of productive capital withdrawn from it.

"If we conceive society as being not capitalistic but communistic, there will be no money-capital at all in the first place, not the disguises cloaking the transactions arising on account of it. The question then comes down to the need of society to calculate beforehand how much labour, means of production, and means of subsistence it can invest, without detriment, in such lines of business as for instance the building of railways, which do not furnish any means of production or subsistence, nor produce any useful effect for a long time, a year or more, while they extract labour, means of production and means of subsistence from the total annual production.

"In capitalist society however where social reason always asserts itself only post festum great disturbances may and must constantly occur. On the one hand pressure is brought to bear on the money-market, while on the other, an easy money-market calls such enterprises into being en masse, thus creating the very circumstances which later give rise to pressure on the money-market. Pressure is brought to bear on the money-market, since large advances of money-capital are constantly needed here for long periods of time...

"The effective demand rises without itself furnishing any element of supply. Hence a rise in the prices of productive materials as well as means of subsistence... A band of speculators, contractors, engineers, lawyers, etc., enrich themselves. They create a strong demand for articles of consumption on the market, wages rising at the same time... A portion of the reserve army of labourers, which keep wages down, is absorbed. A general rise in wages ensues, even in the hitherto well employed sections of the labour-market. This lasts until the inevitable crash again releases the reserve army of labour and wages are once more depressed to their minimum, and lower". (*Capital* 2 chapter 16).

One element in "the inevitable crash" will be that a mass of commodities produced by the new factories and equipment comes on to the market while there can be no corresponding increase in wages, consumption by capitalists and their hangers-on, or productive-investment projects to create demand. On the contrary, as the big construction and re-equipment projects are completed,

workers will be laid off, fees for engineers and lawyers will diminish, and so will demand for new construction or re-equipment.

"The cycle of interconnected turnovers embracing a number of years, in which capital is held fast by its fixed constituent part, furnishes a material basis for the periodic crises. During this cycle business undergoes successive periods of depression, medium activity, precipitancy, crisis. True, periods in which capital is invested differ greatly and far from coincide in time. But a crisis always forms the starting-point of large new investments. Therefore, from the point of view of society as a whole, more or less, a new material basis for the next turnover cycle". (*Capital* 2 chapter 9, emphasis added).

Large fixed-capital projects would hardly be possible without credit. The credit system gives greater elasticity both to capitalist production – and to capitalist overproduction. "The credit system appears as the main lever of over-production and over-speculation in commerce... the reproduction process, which is elastic by nature, is here forced to its extreme limits... The credit system accelerates the material development of the productive forces and the establishment of the world-market... At the same time credit accelerates the violent eruptions of this contradiction – crises – and thereby the elements of disintegration of the old mode of production". (*Capital* 3 chapter 27).

Marx also polemicises much against the follies of a "tight-money" school of thought influential in Britain in the mid-19th century, called the "Currency School". These people, notably Samuel Lloyd, later Lord Overstone, got a law passed in 1844 to restrict the Bank of England's issue of banknotes to a fixed proportion to its gold reserves. In 1847, recovery from a serious economic slump was made possible only by a special decision by Parliament to suspend that law and allow the Bank to issue more notes. Amidst dated references and polemics, however, some important ideas can be found in the chapters on credit of *Capital* volume 3.

In Chapter 30 Marx describes the typical pattern of the boom-slump cycle.

"After the reproduction process has again reached that state of prosperity which precedes that of over-exertion, commercial credit becomes very much extended [i.e. trade credit between capitalist firms is easy and extensive]... The rate of interest is still low, although it rises above its minimum...

"[But] those cavaliers who work without any reserve capital or without any capital at all and thus operate completely on a money credit basis begain to appear... in considerable numbers. To this is now added the great expansion of fixed capital in all forms, and the opening of new enterprises on a vast and far-reaching scale. The interest now rises to its average level. It reaches its maximum again as soon as the new crisis sets in".

Marx has not yet indicated why, exactly, the "new crisis" sets in, but he continues:

"Credit suddenly stops then... the reproduction process is paralysed, and... a superabundance of idle industrial capital appears side by side with an almost absolute absence of loan capital....

"The industrial cycle is of such a nature that the same circuit must periodically reproduce itself, once the first impulse has been given. During a period of slack, production sinks below the level which it had attained in the preceding cycle and for which the technical basis has now been laid. During prosperity – the middle period – it continues to develop on this basis. In the period of over-production and exertion, it strains the productive forces to the utmost, until it exceeds the capitalistic limits of the production process".

But why do the contradictions express themselves in a sudden crisis and not in gradual corrections? Because a decline of credit is by its very nature self-multiplying – no capitalist can afford to offer easy credit when others are tightening – and comes at a point when many business failures or outright swindles have developed and remain hidden only because of easy credit.

"In a system of production, where the entire continuity of the reproduction process rests upon credit, a crisis must obviously occur – a tremendous rush for means of payment – when credit suddenly ceases and only cash payments have validity. At first glance... the whole crisis seems to be merely a credit and money crisis.... But the majority of these bills [bills of exchange, or invoices, which cannot be converted into cash] represent actual sales and purchases, whose extension far beyond the needs of society is... the basis of the whole crisis". (By "needs", here, Marx does not mean human needs. Elsewhere he has commented that by that criterion capitalism is a system of constant underproduction. He means effective demand).

Further indications on the suddenness of crisis are given earlier in chapter 30.

"The whole process becomes so complicated [with a developed credit system]... that the semblance of a very solvent business with a smooth flow of returns can easily persist even long after returns actually come in only at the expense of swindled money-lenders and partly of swindled producers. Thus business always appears almost excessively sound right on the eve of a crash... Business is always thoroughly sound and the campaign in full swing, until suddenly the debacle takes place".

And then again in chapter 32:

"It is a basic principle of capitalist production that money, as an independent form of value, stands in opposition to commodities, or that exchange-value must assume an independent form in money... [Thus] in times of a squeeze, when credit contracts... money suddenly stands as the only means of payment and true existence of value in absolute opposition to all other commodities....

"Secondly, however, credit-money itself is only money to the extent that it absolutely takes the place of actual money to the amount of its nominal value. With a drain on gold its convertibility, i.e. its identity with actual gold, becomes problematic. Hence coercive measures, raising the rate of interest, etc., for the purpose of safeguarding the conditions of this convertibility. This can be carried more or less to extremes by mistaken legislation [here Marx refers to the Bank Act of 1844 – he would probably have similar comments on Paul Volcker's policies at the Federal Reserve in the early 1980s, or on "monetarism" in Thatcher's Britain]... The basis, however, is given with the basis of the mode of production itself. A depreciation of credit-money... would unsettle all existing relations. Therefore, the value of commodities is sacrificed for the purpose of safeguarding the fantastic and independent existence of this value in money... For a few millions in money, many millions in commodities must therefore be sacrificed. This is inevitable under capitalist production and constitutes one of its beauties".

On “underconsumption”, Marx writes: "The replacement of the capital invested in production depends largely upon the consuming power of the non-producing classes; while the consuming power of the workers is limited partly by the laws of wages, partly by the fact that they are used only as long as they can be profitably employed by the capitalist classes. *The ultimate reason for all real crises always remains the poverty and*

restricted consumption of the masses as opposed to the drive of capitalist production to develop the productive forces as though only the absolute consuming power of society constituted their limit" (*Capital* 3 chapter 30, emphasis added).

But also (*Capital* 2 chapter 20, emphasis added):

"In proportion as the luxury part of the annual product grows, as therefore an increasing share of the labour-power is absorbed in the production of luxuries... the existence and reproduction of [a] part of the working-class... depends upon the prodigality of the capitalist class, upon the exchange of a considerable portion of their surplus-value for articles of luxury.

"Every crisis at once lessens the consumption of luxuries... thus throwing a certain number of the labourers employed in the production of luxuries out of work, while on the other hand it thus clogs the sale of consumer necessities and reduces it. And this without mentioning the unproductive labourers who are dismissed at the same time, labourers who receive for their services a portion of the capitalists' luxury expense...

"That commodities are unsaleable means only that no effective purchasers have been found for them, i.e., consumers (since commodities are bought in the final analysis for productive or individual consumption). But if one were to attempt to give this tautology the semblance of a profounder justification by saying that the working-class receives too small a portion of its own product and the evil would be remedied as soon as it receives a larger share of it and its wages increase in consequence, one could only remark that crises are always prepared by precisely a period in which wages rise generally and the working-class actually gets a larger share of that part of the annual product which is intended for consumption. From the point of view of these advocates of sound and "simple" (!) common sense, such a period should rather remove the crisis. *It appears, then, that capitalist production comprises conditions independent of good or bad will, conditions which permit the working-class to enjoy that relative prosperity only momentarily, and at that always only as the harbinger of a coming crisis"*.

Both italicised passages have been much-quoted – the first to prop up theories in which workers' "underconsumption" is presented as central to crises, and the second to knock them down. Both ideas here – that the relative poverty of the working class is central to crises, and that the immediate run-up to crisis is a period of relatively high wages – are repeated by Marx in many other places.

However, the preceding argument (not so often quoted) is *identical* for the two "contradictory" passages. Because the workers' effective demand can vary only within narrow limits, continued capitalist expansion depends heavily on the capitalists' effective demand. When that sags – and it does sag first, before the workers' effective demand does – then it brings the whole process down with it. Crises are rooted in the general limitation of workers' effective demand, but not in a special limitation of it prior to the immediate point of crisis.

Marx's argument here is, however, deficient. Most of the capitalists' effective demand is for means of production, not for their own individual consumption. And the factual evidence is that the decisive shortfall in demand at the onset of crises is a shortfall of demand for the elements of fixed capital. Many fixed-capital projects initiated in the boom have come on stream. Credit has become more expensive. It is the sudden changes in the credit system, due to the nature of that system, which make for a sudden downturn in demand. A downturn in capitalists' individual consumption (and in government expenditures on armaments, welfare, etc., which fall into the same category) may follow, and have repercussions, but is not the decisive first step.

Marx never wrote anything of any weight introducing *the state* or *international trade* into his discussion of crises – though his discussion of the 1844 Bank Act alone indicates that Marx thought that the state, and government policy, were factors of some weight. No cut-and-dried "Marxist theory of crisis" can be derived by exegesis alone. What we can do is learn from Marx's approach, and the important indications he gave for understanding the roles of *capital*, of *time*, of *fixed capital* specifically, and of *credit* in crises.

In *Capital* 3 chapter 30 Engels adds a footnote repeating an idea which he also develops at the end of his 1886 preface to the English edition of *Capital* 1. Those brief notes are the only example in the writings of Marx and Engels of an attempt by them to analyse what seemed to be a shift from one era to another in capitalist development – in other words, to do work analogous to what we must do in understanding the great upswing from the late 1940s to 1973, and the subsequent "global turbulence". They are modest and tentative, rather than profound. Maybe it is from their lack of dogmatic preconceptions, and their willingness to take all levels of analysis seriously rather than reducing "the crisis" immediately to an expression of one or another contradiction of capital-in-general, that we have most to learn.

"The decennial cycle of stagnation, prosperity, overproduction and crisis, ever-recurrent from 1825 to 1867, seems indeed to have run its course; but only to land us in the slough of despond of permanent and chronic depression".

In *Capital* 1 Engels attributes this to two things: international competition (yes, indeed, he does refer to competition and not to capital-in-general – "Foreign production, rapidly developing, stares English production in the face everywhere..."); and a supposed inbuilt tendency for production to outstrip markets long-term ("While the productive power increases in a geometric, the extension of markets proceeds at best in an arithmetic ratio").

The second argument, despite the long reach of its influence in Marxist discussion, is wrong. Long-term, increased production means more wages paid out, more orders from suppliers, more surplus-value in the hands of capitalists – i.e. increased markets, to exactly the same extent.

"Universal overproduction in the absolute sense would not be over-production, but only a greater than usual development of the productive forces in all spheres of production". Quoting this argument from capitalist "apologetics" in *Theories of Surplus Value* volume 2, Marx *agrees* that "this non-existent, self-abrogating overproduction", based on a general, uniform, long-term increase of production beyond markets, *cannot exist*. "Actual overproduction" does, *because capitalism develops unevenly and sequentially* ("there could be no capitalist production at all if it had to develop simultaneously and evenly in all spheres"). The unevenness, industry-to-industry and period-to-period, creates sectoral overproduction, and sectoral overproduction snowballs into (temporary) general overproduction.

Crises cannot be rooted in a static comparison – too much production here, too little money there. There is no ideal static balance between production and money. The relations are always dynamic.

Writing later, in *Capital* 3, Engels is more hesitant and considers more aspects.

1. Perhaps, he writes, the cycle is still there, but has become longer, not synchronised between different industrial countries, and for the time being less marked, oscillating between "slight improvement" and "indecisive depression". (But only for the time being – maybe "a new world crash of unparalleled vehemence" is coming).

2. "The colossal expansion of the means of transportation and communication" has done away with some old causes of crisis arising from the uncertainty of distant markets (English textiles in India).

3. "Competition in the domestic market recedes before the cartels and trusts, while in the foreign market it is restricted by protective tariffs".

4. He refers again to the fact that "the monopoly of England in industry has been challenged by a number of competing industrial countries". "Infinitely greater and varied fields" have opened up for capital. The conclusion, I suppose, is that this development, combined with the cartels, trusts, and tariffs, could dampen crises by making it likely that a downturn in Britain would be offset by expansion in Germany or the USA, or vice versa.

Certainly, capitalist crises are not a mechanical pattern. And, though "permanent crises do not exist", "permanent and chronic depression" (high unemployment, etc.) can very well exist. The fruitful suggestion by Engels, I think, is that the regime of crises and depression is shaped by the way capital is organised – within countries (how the state and big capitalist cartels or trusts deal with their difficulties) and between countries (industrial supremacy of one nation or competition of several, protection or free trade, etc.)

4 - The critics criticised

Historical Materialism no.4 gives most of its 320 pages to 10 reviews of Robert Brenner's *Economics of Global Turbulence.* The most extreme, but thus clearest, representative of the general trend is the review by Gugliemo Carchedi, who hotly denounces Brenner as insufficiently Marxist and insists that the "global turbulence" since the early 1970s can and must be explained by the Tendency of the Rate of Profit to Fall expounded by Marx in volume 3 of *Capital*.

Carchedi starts by condemning "Brenner's choice of orthodox economics instead of Marx's value theory". Brenner is an active Marxist of long standing. Though he makes no solemn avowals about it in his book (and why should he?), he follows Marx's theory of value (Brenner 1999). He chose to expound his ideas using the jargon of orthodox economics more than Marxist idioms – I suppose because, like it or not, far more people are familiar with the orthodox jargon than with the Marxist. I do think that choice may have helped to blur over some gaps in Brenner's thesis that the roots of capitalist trouble since about 1973 are in ruinous competition. I would condemn myself as a superstitious word-fetishist if I pretended that my criticism was proved by the very fact that Brenner uses terms like "the productivity of capital", without trying loyally to understand what arguments Brenner is making with those terms.

Yet that pretence is pretty much Carchedi's approach. He states forthwith: "that Brenner has renounced Marx's value theory and has opted for orthodox economics is easily shown. For example… Brenner accepts orthodox economics' definition: 'the profit rate, r, is defined… as the ratio of profits, P, to the capital stock, K…'… Exploitation as expropriation of surplus value is absent by definition from a notion of rate of profit… in which it is capital stock rather than labour which generates profits…". In fact Marx himself, defining "rate of profit" in volume 3 of *Capital*, explains that *"the formula s/C expresses the degree of self-expansion of the total capital advanced"*. By noting that surplus value *expresses itself as* a rate of profit which appears *in proportion to the capital advanced*, Marx is noting only that values produced by labour nevertheless exchange as apparent products of capital.

Carchedi goes on to dismiss Brenner's admittedly too-brief, maybe even cryptic, argument against the idea that the Tendency of the Rate of Profit to Fall is the basis of capitalist crises – by giving a list of references to books and articles disputing the Okishio theorem, yet without give any brief summary of their argument that makes any sense. He claims that the Okishio theorem is based on "a misreading of Marx", because it sees capitalists as making technical innovation to cut costs rather than to cut labour-time. In volume 1 of *Capital* Marx notes: "It is possible for the difference between the price of the machinery and the price of the labour-power replaced by that machinery to vary very much, although the difference between the quantity of labour requisite to produce the machine and the total quantity replaced by it, remain constant. *But it is the former difference alone that determines the cost, to the capitalist, of producing a commodity, and, through the pressure of competition, influences his action*. Hence the invention now-a-days of machines in England that are employed only in North America…" [Emphasis added]. Everyday observation suggests Marx was right: technical innovation *is* decided by cost-reduction.

Carchedi, however, deduces that since technical innovation is about reducing labour-time, it must reduce surplus value, which comes from labour-time. This holds true only if the mass of commodities produced and the rate of exploitation rise slowly enough. In the chapters of *Capital* volume 3 discussing the Tendency of the Rate of Profit to Fall, Marx predicted that the *mass* of surplus value would tend to *rise*. Everyday observation suggests that Marx was right about that, too. And if Carchedi is right, and total surplus value does inexorably tend to fall, even that does not settle the question. If the cheapening of capitalist costs is fast enough, then the rate of profit can rise even while surplus value produced is falling.

Carchedi is not alone on this point. Alex Callinicos, likewise, cites a string of references against Okishio, but gives his readers no substantial summary of what these references prove. He writes that: "I have no desire to go very deeply into [this] issue… It is, nevertheless, worth making a couple of points". The first point is that the Okishio theorem is based on "static equilibrium analysis". The usual mathematical rendition of it is (because the maths becomes too complex without such simplifying assumptions) – but no more and no less so than the formal mathematical rendition of the Tendency of Rate of Profit to Fall. Callinicos's second point is that Okishio omits technical innovation's effect of devaluing old equipment. That is true. A firm which invests heavily in one "generation" of technology just before a new generation suddenly makes it drastically obsolete will lose out. But this is a phenomenon of unusual sudden changes, not a constant long-term tendency of capitalist development. And whether it is a serious factor in crises remains to be proved. (If it were, it would suggest that capitalist development would run into trouble mostly at times of great technical innovation, and boom at times of technical stagnation).

Much of the argument against the Okishio theorem, in my view, is of the same sort as Callinicos's two points. It throws ad-hoc factors which depress profit rates (of which

there are, of course, many), or deep-sounding methodological considerations, in the general direction of the theorem, without ever actually hitting it or even taking a good look at it in order to aim accurately.

Chris Harman asserts that the Okishio theorem "rests on a crude confusion between firms and sectors of production…" It does not, and Harman makes no effort to show that it does. Instead he continues with the usual sort of footnote: "Okishio has an apparently more sophisticated argument… which I do not have space to deal with here" – followed by a series of references. Murray Smith claims that the error in the Okishio theorem is "a refusal to recognise the critical distinction that Marx makes between the production of *material output* and the production of *value* and *surplus-value*". On similar lines to Carchedi, Smith goes on to claim that surplus-value produced will decrease while the mass of products increases. The real confusion between values and material use-values here, however, lies, I think, with the defenders of the Tendency of the Rate of Profit to Fall who jump too readily from the visual image of increasing masses of complex machinery to a conclusion that the *value* ratios C/v and C/s must increase.

Carchedi, Callinicos, Harman, Smith – and other contributors, too – make great play of claims that Brenner is *methodologically* disreputable, tainted by affinity to Sraffian economics or analytical-Marxist philosophy. The tone of their condemnations varies from the anathematising with Carchedi to the unctuous with Callinicos and Harman. There is, however, something of the religious in them all. For science, method is validated and developed in continually-revising practice. It is not laid down by prior revelation. Scientific criticism should proceed by analysing and testing substantive theory, and making methodological condemnations only when both substantive errors and their connection to dubious methodological assumptions have been established.

Carchedi expounds his positive alternative to Brenner's account through an arithmetical example in which he *assumes*, just by choosing the figures for illustration that way, that technical innovation brings a bigger c, a smaller v, and a smaller s. Obviously s/(c+v) will then decline. Carchedi makes his argument more tricksy by supposing that in a first period an expanded money-supply will enable even capitalists with obsolete techniques to sell at some profit, thanks to their output prices rising with inflation while their input prices lag. Then the money-supply is restricted "to avoid runaway inflation". Prices crash, the capitalists with obsolete techniques go bust, and the capitalists with new techniques are reduced to a profit rate below the previous general one, in line with the reduced s/(c+v). There are some quirks in Carchedi's exposition (he seems to assume that the same commodity can have two different values simultaneously), but the gist of it is the proof-by-arithmetical-example.

If the Tendency of the Rate of Profit to Fall is a *constant* of capitalist development, then at the very least something must be added to it to explain specific periods. If the profit-rate has been tending downwards ever since the Industrial Revolution, why was there an era of general capitalist upswing after 1945? If the Tendency is a general law, operating just as much up to the late 1960s as after the early 1970s, then what made that general law produce such different results in those different periods?

Carchedi offers no answer to this question. Smith relies essentially on Fred Moseley's thesis about unproductive labour, on which more later. Callinicos and Harman resort to the old SWP-IS catchphrase of the Permanent Arms Economy (see below).

Simon Clarke is the author of an important book on *Marx's Theory of Crisis* (Clarke 1994) in which he comprehensively demolishes the idea that the Tendency of the Rate of Profit to Fall can be the foundation of any Marxist theory of capitalist crises. Yet Clarke summarises himself as "criticis[ing] Brenner's enterprise from the perspective of *Marx's own* analysis" (emphasis added). There is only one Marx, and Clarke is his prophet.

Substantively, Clarke makes two main critical points, on the same lines as an earlier long review of Brenner from Ben Fine, Costas Lapavitsas and Dimitris Milonakis in *Capital and Class*. Clarke claims that ruinous competition – where new, more efficient producers confront older-established firms which cannot produce as cheaply, but the older firms are motivated to stay in business by their vast mass of "sunk capital" and can do by accepting a lower profit rate – cannot operate as Brenner claims to reduce the average profit rate. Or, at least, it cannot do so *generally. Generally,* there is no reason why such competition should lead to anything but a gradual, smooth replacement of old equipment by new. Maybe a sudden great burst of technical innovation, all at once, could provoke disturbances. But that idea, as Clarke points out, takes us into "long wave theory" – the notion that capitalist development has a regular rhythm of long eras of upswing and downturn, maybe 25 years each, marked out by bursts of new technology. (It also takes us in by an odd back entrance. Usually in "long wave theory", the burst of technical innovation marks the beginning of the long *upswing*, not the downturn!)

Some similar points are made by David Laibman, in a much shorter contribution. He queries "the central argument leading from the presence of fixed capital faced with cost-cutting technical change to a fall in the economy-wide profit rate". Why can't the established firms just replace their old fixed capital a bit quicker? Won't they replace it fast anyway? What about increases in total demand (allowing new firms to gain markets without the old firms losing) or the ability of capital to move from one sector to another?

There are parts of Brenner's account, I think, where he does slide towards the idea that intensified competition from innovators more-or-less automatically reduces profit rates. Clarke's and Laibman's criticisms, and the more detailed ones, on which more later, from Gérard Duménil and Dominique Lévy, have some relevance here. But they do not get to grips with the more careful thesis about profit rates being pushed down by *particular* forms of intensified competition, in *particular* circumstances, which Brenner develops in other parts of his account.

In the late 1960s, Brenner argues, various long-term trends – the rise of German and Japanese manufacturing industry, the cheapening of international transport costs, and the decline of tariffs – reached critical levels around the same time, and US manufacturing industry was thus exposed to a *quite sudden* incursion of German and Japanese competition into the US market. The German and Japanese firms outcompeted the Americans *not* essentially through higher technology but through much lower wage costs. The Germans and Japanese wanted to undercut US firms' prices – taking only an average profit rate, rather than superprofits – in order to set themselves up in the new markets. In the short term the Americans, unable to cut wage costs immediately and at will, had no choice but to accept lower profit rates. Hence a lower *average* rate of profit.

Clarke, however, argues that if the profit rate does fall, that "does not provide an explanation for a tendency to stagnation and/or crisis". A lower profit rate may be a *symptom* of crisis, but not a cause. Lower profit rates do

not necessarily depress investment. A small profit is better than none.

It is true that there is no naturally-given rate of profit. A slow, steady decline of the rate of profit would mean only that capitalist development would slow down, not necessarily that there would be a crisis. However, I think that Clarke (following Fine, Lapavitsas and Milonakis) overdoes the argument against the "common-sense" view of almost all Marxists, and many mainstream economists, that reduced profits create conditions for crises and depressions. A sharp and sudden fall in the profit rate will convince many capitalists to hold on to their cash for the time being and await better or at least clearer conditions. Such a sudden fall *cannot* follow simply from the general Tendency of the Rate of Profit to Fall – even if that tendency is valid, it can only produce a gradual reduction in profit rates – but it may follow from many other mechanisms within capitalism. Even a slow reduction in average profit rates will tend to slow the expansion of capital, first by reducing the funds available, secondly by reducing the scope for people successfully to start new businesses. It will also make capital more vulnerable to downturns in market demand, by reducing the percentage reduction in sales necessary for their fixed overheads to push capitalist enterprises into the red[14].

Clarke follows his critique of Brenner by outlining a version of Marx's ideas on crisis. Here, he paraphrases his own book, *Marx's Theory of Crisis*, emphasising two drives within capitalism, "the tendency to expand production without regard for the limits of the market", and "the uneven development of the forces of production". A few quibbles aside, I find Clarke's exegesis careful and intelligent. Its shortcoming, I think, is not sufficiently to take into account that Marx's texts only give a sketchy list of abstract tendencies that can combine in a crisis, without developing a comprehensive framework for studying their specific concatenations. As Marx himself indicated: "The real crisis can only be educed from the real movement of capitalist production, competition, and credit" (Marx 1963, p.512).

Michael Lebowitz, too, criticises Brenner mainly by claiming to be the voice from Marx's grave. Lebowitz's argument is that "emphasis upon the competition of capitals to explain the dynamics of the system is precisely what Marx rejected". Instead, explanation must be based on an elucidation of the logic of "capital-in-general" or "capital-as-a-whole".

Lebowitz can assemble plenty of quotations from Marx to back him up. As a matter of exegesis, however, I think that Marx's polemic on this point was chiefly against bourgeois economists who explained capitalists' chase for profits, or introduction of machinery, from the competition of other capitals, thus doing no more than shifting the burden of explanation from one capital to another. Ellen Wood, in her contribution, disputes Lebowitz by arguing that, historically, market competition is central to capital's drive for accumulation *even before* the "mature" relation between capital and labour is established. In any case, Lebowitz's polemic, whether "authorised" by Marx or not, fails to grip on Brenner's detailed argument, which derives its explanations not from competition in general, but from specific arguments about specific forms of competition in specific circumstances.

Lebowitz, like Clarke, concludes his review by expounding a version of Marx. Lebowitz's is that "capital's tendency to increase the rate of surplus-value beyond the level warranted by the conditions for realisation – i.e. its tendency to produce more surplus-value than can be realised – generates the crisis according to Marx's overproduction theory". I cannot see how this is more than a dressed-up version of traditional "underconsumptionism" – the idea that capitalism falls into crises because workers' wages are too low to enable them to buy enough of what they produce. Theoretically, this idea fails to explain why the capitalists cannot find sufficient markets by selling to themselves (both producer and consumer goods) and to the sizeable number of their hangers-on and the middle classes. It fails to explain why crises generally start with a sharp fall in demand for *producer* goods, rather than an initial fall in workers' demand for consumer goods. More particularly, Lebowitz's idea fails to explain why the great post-1945 capitalist upswing should end, in the late 1960s and early 1970s, at a time when workers' ability to resist "capital's tendency to increase the rate of surplus value" was generally pretty strong, so strong that some Marxists explained the downturn from the fact that wages had been pushed up *"too high"* for capital.

The most interesting contributions in *Historical Materialism*, for me, were those from Gérard Duménil and Dominique Lévy and from Fred Moseley. Duménil and Lévy identify an almost-hidden assumption in Brenner's account of sharpened competition pushing down profit rates. "Price competition among firms within one industry can diminish the profit rate of this industry… However, this… price will benefit… either firms within other industries or wage earners… The profit rate for the entire economy will decline, following… competitive warfare… if and only if wage-earners benefit to some extent from the diminished price".

Brenner's conclusion thus assumes that the real wage is (at least partly) "determined by the mark-up rate of firms", i.e. that if firms are forced to make smaller mark-ups then real wages will rise. "This analysis is puzzling. Pushing this theory to the extreme, one could contend that workers should only fight against monopolies and oligopolies…" This "pushing to the extreme" is fanciful. Brenner nowhere suggests that the mark-up rate is the *only* factor determining real wages! Nevertheless, the idea that sharpened competition, all other things being equal, boosts real wages, is questionable. Sharpened competition between capitalists generally means a harder stance against the workers by individual capitalists (because the weight of capital in general bears more heavily on them). Privatisation, deregulation, and other competition-sharpening measures by governments in recent decades have generally made it harder, not easier, to maintain or improve real wages.

Duménil and Lévy look in detail at Brenner's account of the fall in the average profit rate of US manufacturing between 1965 and 1973. The share of profits in total output did fall sharply in that period. But much of that fall, argue Duménil and Lévy, must be considered a "normal" cyclical fall. If we construct a trend line for the share of profits in total output, that shows a slow decline since 1948 *which becomes slower and slower* and then reverses into an increase after 1985.

Duménil and Lévy seem to me unnecessarily wordy and ponderous – there is a great deal of algebra in their article, to little purpose – and their indication of their own view is very vague (a "degradation of the conditions of technical change"), but they raise substantial questions.

Fred Moseley's is, to my mind, the contribution that stands out, both for its serious engagement with Brenner's arguments, and for its effort to propose an alternative view. He makes the same point as Duménil and Lévy, that Brenner's argument about sharpened competition reducing the general rate of profit must assume that *real wages* rise – "in this sense, Brenner's theory appears to be a very strong version of the profit-

squeeze [by wages] theory, in spite of his criticism of the latter".

Further, argues Moseley, the general rate of profit cannot be tracked by analysing profit rates in various sectors and then averaging them out. We must first study the general determinants of the rate of profit, in the general conditions and relations of capital and labour, and then look at sectoral variants. Here, Moseley makes a similar point to Lebowitz about capital-in-general and competition, but in much less abstract and bombastic form. He *agrees* with Brenner that sharpened international competition in the late 1960s and 1970s was important, but puts its effects in a different context. There was, Moseley argues, a prior trend pushing down the rate of profit (on which more below). "The decline of the general rate of profit… resulted in declines in both the rate of profit in manufacturing and the rate of profit in non-manufacturing. The decline of the rate of profit in manufacturing was much greater than the decline in non-manufacturing precisely because of the causes that Brenner emphasises: increased competition… What Brenner has explained is the loss of monopoly profits in the manufacturing sector of the economy, not the decline of the general rate of profit…" (If Moseley is right, by the way, then the development is not so much *over*-competition in manufacturing since the late 1960s, but *under*-competition – monopoly profits – before then).

Moseley writes mainly in the voice of one fallible human being debating with another, rather than that of Authority condemning a heretic, though even he feels oddly obliged to label his ideas as "Marx's theory" or "the Marxian theory". Those ideas – though inspired by Marx – are in fact Moseley's own work, and of great interest.

The prior general trend pushing down profit rates, he argues, was the increasing proportion of labour which is *capitalistically unproductive*. In his review Moseley does not take account of capitalistically unproductive labour working for the government, but rather enumerates workers employed in management and in *circulating* (rather than producing) commodities – retail, wholesale, advertising, finance, insurance, legal, etc. Workers in these sectors are paid wages – and are exploited in the sense that they are forced to work for capital for longer hours than would be necessary to produce the equivalent of the value of their labour-power – but nevertheless produce no new value for capital. They only facilitate the realisation of surplus-value. They may help their employers gain profits, but only out of the surplus-value produced by other, capitalistically productive, workers. According to Moseley, the ratio of unproductive costs (wages of capitalistically unproductive labour, plus costs of materials used by them) to the wage-bill of productive labour rose from 54% to 1947 to 94% in 1977 and 146% in 1994.

4. World structures and unproductive labour

Almost all the wide debate around Brenner's book has centred on his ruinous-competition thesis about the depressed development of the big capitalist economies since 1965-73. Just as noteworthy, however, is his account of the conditions which permitted the "Golden Age", the big capitalist upswing from the late 1940s to 1973.

There are, in broad outline, three well-known Marxist arguments about those conditions. According to the Regulation School of French Marxists, the key was the evolution, over previous decades of travail, of a set of social institutions which allowed capitalism to gain an economic balance impossible from its market economic mechanisms alone. That regime, "Fordism", had begun to emerge between the world wars, but became four-square established after 1945. It combined permanent rapid innovation in mass-production industry with wage-fixing and welfare-state arrangements which guaranteed against "underconsumption".

But Brenner has criticised this view keenly (Brenner and Glick 1991; for a response see the introduction to Boyer 1990). Some of the features of the supposed "Fordist" regime, such as capitalist innovation, long predated it; others, such as the fixing of wages and welfare spending to maintain high demand, did not exist generally within Fordism, but only episodically in a few industries and countries. Despite their claim to analyse in more specific detail than other Marxists, taking account of the mediation of general economic laws through particular social institutions, the Regulationists actually constructed a pastiche of elements, chosen from particular industries or countries or from the general trends of capitalism, in place of reality. How and why such elements fitted together into a relatively coherent and stable whole, a "regime", and how and why such regimes should rise, fall and replace each other, was left vague.

According to writers associated with the SWP-IS – Tony Cliff, Michael Kidron, Chris Harman – the Permanent Arms Economy was the key. In its first formulations the Permanent Arms Economy was a Keynesian idea. Heavy military spending kept up overall demand and thus reduced capital's propensity to slump. As such the theory had some limited validity. Then, in line with a general shift to present itself as more "orthodox", from the late 1960s, the SWP-IS made successive efforts to re-render the Permanent Arms Economy theory in Marxist terms. Heavy military spending drained off some of the capital accumulation that would otherwise contribute to increasing C/v and pushing on the Tendency of the Rate of Profit to Fall.

But then the Permanent Arms Economy theory would be an explanation of *slow accumulation*, i.e. *depression*, not of a great upswing! It would put off crises only to the extent that it put off capital accumulation generally. Harman explains the shift from upswing to instability and depression, around the late 1960s, as resulting from a decline in US military spending. But that decline, on his own account, was caused by the US capitalist class coming to think that military spending was a *burden*, a *depressive factor*, for US-based capital when faced by competition from capitals based in Germany and Japan, states with much less military spending.

According to Ernest Mandel's thesis, elaborated with many refinements in his book *Late Capitalism* (Mandel 1975), the essential impulse was a big wave of technical innovation after 1945. But Mandel's technical-innovation thesis also has problems. In the first place, technical innovation is permanent in capitalism. How do we measure when there is a particular surge of innovations? If by high rates of capital investment, then the argument is circular – a period of rapid capital accumulation (high investment) is by definition a period of innovation-surge. If we resort to the orthodox economic measure of "joint factor productivity" (which is, very roughly, a measure of how new equipment boosts output more than just in proportion to its sheer bulk), then, in the USA, the chief centre of technical innovations, that measure rose in 1950-73 much more slowly in than in 1938-50, and not much faster than in 1913-29 (Maddison 1971, p.71).

If, instead, we look at the history of technology and try to identify the most important moves (railways, electricity, internal combustion engine, etc.), then we face further problems. By such measures, the period since the 1980s

has brought a major technical revolution, through microelectronics. Yet it has been one of troubled capitalist development. Technical innovation, by devaluing old capital stock and sharpening competition, brings its own problems for capital. If we maintain that technical innovation must on balance be an autonomous force for dynamising capital, but its effects show themselves only with delay (as the technology spreads, its use is refined and linked with other technologies, and so on), then – so long as we are unable to quantify that delay – we introduce a large measure of arbitrariness into the argument. Any capitalist upswing can be put down to the "delayed" effects of whatever seems to be the most recent big technical innovation.

Finally, the argument about delayed benefits – not without validity in itself – suggests that the dynamic effect of any technical innovation is not an autonomous force, but rather something conditioned by other technical developments and by social and economic conditions. In short, rapid capitalist accumulation promotes dynamic technical innovation, rather than dynamic technical innovation determining rapid accumulation of capital.

Brenner's own account is that the key conditions for the great upswing were "a highly dynamic, but ultimately highly unstable, symbiosis". "Both the German and Japanese economies prospered to no small degree by virtue of their ability to dynamise rapidly progressing regional economic blocs in Europe and East Asia by supplying them with increasingly high-powered capital goods. Still, it was the ability of German and Japanese manufacturers to wrest *ever greater shares* of the world market from US (and UK) producers that ultimately made possible their post-war economic 'miracles'. Again, however, this capacity to seize market share could only come into play because of the willingness of the US government to tolerate not only the broad opening of the US economy to overseas penetration, but even a certain decline in US manufacturing competitiveness in the interests of US military and political hegemony, international economic stability, and the rapid expansion overseas of US multinational corporations and banks" (p.46-7).

To the crucial rule of this self-subverting *uneven development* in the upswing must be added an account of why the US economy faltered so little. Its growth was slower than the other advanced capitalist countries (except the UK), it was wobbly before the Korean war boom of the early 1950s, and it suffered a downturn in 1958 much sharper than any of the advanced capitalist countries had in the 1950s and 60s. Yet grow it did, and fairly fast and steadily, without a slump equivalent to that of the early 1930s, or even 1974-5, 1980-2, 1908, or 1893-4.

Brenner mentions the extremely high rate of profit in the US at the end of World War 2 (resulting from the pushing-down of wages in the 1930s slump and in wartime), which led to high rates of investment and the rapid utilisation of technical innovations developed inter-war or by the war industries. (Mandel emphasises these same points in his scheme). But World War 1 was followed in the US by a boom which ended in the crash of 1929. Why was it not the same after World War 2?

The slump-dampening, demand-sustaining role of high military spending, and higher state spending generally, played a role. Many Marxists, eager to demonstrate the worthlessness of Keynesianism, deny this, and point to the "failure" of Keynesian policies in the 1970s. However, to argue that Keynesian policies (the state acting to sustain effective demand in the economy) cannot ensure an indefinite smooth capitalist upswing is one thing. To contend that they can play no role in dampening recessions is another. In my view, Keynesian policies did not fail at all – from the point of view of their capitalist promoters – in the 1970s. They engineered a remarkably rapid recovery from the 1974-5 slump, and sufficient revival to avert a further radicalisation of the workers' movements – all at a cost, of course, but was there any way of doing those things without cost? Their success prepared the conditions for capitalist governments to shift to the aggressive "tight-money" policies of the 1980s and 90s.

But the international framework was also important. After 1945 the US capitalist class, trying to learn from the experiences of 1917-29, deliberately set about reconstructing Europe, and the framework of international trade, on different lines. Instead of the crippling reparations payments demanded from Germany after World War 1, there was the Marshall Plan. And there was the Bretton Woods system of gradually-freer international trade, based on a dollar guaranteed against gold.

The peculiar "symbiosis" of great US military and economic hegemony, and of a push by capital in Western Europe and Japan to get a corner of US-dominated markets, drove forward a gradual freeing of trade between the big capitalist powers, which in itself had a dynamising effect on those economies. Although the US was losing markets (relatively) to German, Japanese (etc.) capital, it still dominated. Its exports rose. Almost every year until 1976, the US ran a trade surplus, and every year until 1966, a large one. When markets in the US slumped, US corporations could find other markets overseas. They were also cushioned by a steadily-rising flow of income from their expanding assets overseas. The dollar's role as world money allowed the US to send overseas, in military spending, aid to client governments, and investments, much larger sums that warranted by its trade surplus. Effectively, it supplied credit to the world market by printing dollars. Until the late 1960s, the US government did not have to worry about its balance of payments. It was not condemned to "stop-go" like British governments.

At the watershed of the late 1960s and early 70s, the conditions broke down for the "highly dynamic symbiosis" of unevenly-developing segments of the advanced capitalist world. US industrial hegemony had been whittled back, as Brenner records. The combined effects of that fact, of the economic drain of the Vietnam war, and of the steadily-accumulating mass of "Eurodollars" at large, broke the Bretton Woods framework. The dollar was devalued. Exchange rates floated free.

Despite considerable pressures for protectionism, the big capitalist governments maintained fairly free trade. "Globalist", internationalised, interests had achieved hegemony in the various ruling classes. This would be demonstrated most spectacularly under the Thatcher government in Britain in the early 1980s, when one-quarter of all manufacturing employment was trashed through an economic policy whose main pay-back was the scope it gave to big UK-based firms to buy assets overseas (which they did at an enormous rate).

However, German and Japanese manufacturing capital could no longer expand smoothly by gobbling up US markets. The US now needed to bother about its balance of payments and the level of the dollar, which dived alarmingly in the late 1970s. Its balance of trade went into deficit.

In the new regime of floating exchange rates the multinational corporations whose power had expanded in the great upswing wanted freedom to move funds from one country to another at will. Otherwise they would risk

huge losses on funds held in the “wrong” country at the “wrong” time. Exchange controls were scrapped, and global financial markets expanded dizzily.

Finance, which in the great upswing had been the meek handmaiden of industry, stepped forward. Interest rates rose higher for longer, and became more unstable, than ever before in the history of capitalism (Thomas 1997). Where the reserves of the world’s central banks (excluding gold) had risen by a modest 3.4% a year between 1950 and 1969, they surged by 21% a year between 1970 and 1979. For non-financial corporations in the US, in the 1960s, net interest accounted for less than a tenth of the amount of profits from production; by the 1980s and 90s, for 30 or 40% as much as profits from production[15].

It is not the case – despite what some Marxists argue[16] – that the new rise of finance directly depresses output by diverting capital from production to speculation. Financial speculators cannot work just by swindling each other. They have to siphon off some of the surplus value generated in production, and they do that by buying shares and bonds issued by productive capitalist firms. A doubling, or trebling, of “fictitious capital” swirling round the financial markets does not mean a diminution of the capital invested in production. However, the domination of finance does give a depressive bias to the economy. Any exuberant expansion in any country is liable to be choked off by that country’s government, muttering about “overheating” and “price stability”, because the balance-of-payments problems it gives rise to could work quickly and drastically to crash the currency. The US is still a partial exception, but only partial.

The new structure is also unstable. The world market, more and more important for individual capitalists, is increasingly synchronised. There is still some room for capitalists facing a slump of demand in one country to look to another – as we saw when US demand remained buoyant through the 1997-9 crisis centred in Asia – but less than there was. The world market has only the flimsiest of stabilisers in the IMF and the World Bank and coordinated action through the G8 – even assuming those bodies do not act to accentuate slumps, as the IMF is widely reckoned to have done in Asia in 1997-8. A movement from protectionism to free trade tends to dynamise a capitalist world; the free-trade regime, once arrived at, tends to destabilise it.

The increased *instability* since the early 1970s may thus be due to the breakdown of the “symbiosis” of the great upswing – which was, as Brenner points out, “*ultimately* highly unstable”, but also, *immediately*, relatively stable and stabilising (Brett 1985).

All that does not, however, explain the persistent decline or stagnation of profit rates. For that, another explanation, worked out in most detail by the US Marxist Fred Moseley, seems most suggestive to me (see Moseley’s review of Brenner in *Historical Materialism* 4, and his previous writings, cited there). He argues that the underlying trend is an increase in the proportion of labour which is *capitalistically unproductive* in the sense defined by Marx, i.e. it does not produce surplus-value. Not only public-service workers producing no marketed output, but also workers involved in the *circulation* rather than production (or transport) of commodities (wholesale, retail, advertising, finance) and in management overhead costs, are unproductive. Even though they do wage-labour, enable their bosses to appropriate profits, and are exploited in the sense that they have to labour longer than required to reproduce the value of their labour-power, they do not produce surplus-value for capital in general. Workers in military industries are also unproductive in a broader sense: they produce surplus-value for their employers, but that surplus-value is then diverted to purposes outside the accumulation of capital.

There are many twists and conundrums to do with unproductive and productive labour, and appeals to the authority of Marx’s scattered comments on the question are not enough to resolve them. However, the distinction – nonsensical to orthodox economics – is not nonsensical in fact. Suppose expenditure on advertising (for example) rises for some global reason (say, sharpened competition, which means that fewer producers have "safe" markets where they need not advertise much). Likewise expenditure on financial manipulation, for another global reason (faster-moving and more risky international financial markets). Each individual capitalist spends more on advertising and financial and legal advice because otherwise they lose out. However, none of the advertising, finance or legal labour produces new value. The general rate of profit falls. The apparent reason is lower "productivity of capital" and a lower profit-share (because the productive capitalists have higher costs, the value-added in their enterprises has a smaller ratio to capital-stock and wage-bill), but the underlying reason is more unproductive labour.

In his debunking of the claims for great progress by US capital in the 1990s, Brenner has cause to emphasise “the sheer size of the movement away from production and towards unproductive expenditures… Between 1982 and 1990, almost a *quarter* of all the plant and equipment investment that took place in the private business economy was devoted to finance, insurance and real estate”. Between 1959 and 1994, although the proportion of US GDP attributed to wholesale and retail trade dropped slightly, the proportion attributed to finance, insurance and real estate rose from 13.6% to 18.4%, the proportion attributed to “business services” (which includes advertising) from 1.2% to 3.7%, and the proportion attributed to “legal services” from 0.5% to 1.4%. Add those three categories, and you have an increase from 15.3% to 23.6%.

Marx predicted a rise in the proportion of unproductive labour, but only in passing comments, without developing much theory about it. The main example he cited was domestic servants – a category re-emerging today. Moseley reckons that “the main cause” for the rising proportion of unproductive labour has been “that the ‘productivity’ of circulation labour increased slower than the productivity of productive labour, which seems to be due to the inherent difficulties of mechanising the functions of buying and selling”. This seems doubtful on two grounds. Firstly, new technologies have been put into retail (for example) on a very large scale (supermarkets, shopping malls, computerised stock-control and electronic-payment systems). Secondly, suppose technology were stagnant throughout the economy. All other things (value of labour power, rate of exploitation and so on) being equal, the rate of profit would remain steady. Suppose profit-raising technical innovations are adopted by some productive capitalists. As with the general “Okishio” argument, those innovations will (all other things being equal) raise not only short-term profit rates for the innovating capitalists, but the general profit rate in the whole economy, even if the unproductive sectors stagnate technically and have a proportionately greater depressing effect on that general profit rate. The ratio of surplus value less unproductive costs to total capital employed can rise even if unproductive costs take an increasing proportion of that surplus value.

Marx’s own thought on the expansion of unproductive labour seems to have been that an increasing mass of

surplus value, together with a concentration and centralisation of capital, must lead the magnates to employ an increasing number of hangers-on, not only housemaids but also lawyers and the like. And maybe as capital develops, retinues of marketing people, advertising agencies, lawyers, tax accountants, financial advisers and so on become not merely an indulged luxury but a competitive necessity.

The other trend inflating unproductive labour – apart from militarism, the economics of which were discussed by writers such as Rosa Luxemburg before World War 1 – has been the increase of real wages, or rather of working-class needs and standards. Health-care and education expand, mostly either as public services or as private services paid for from state funds (social insurance). Through welfare cuts and contracting-out, governments since the 1980s have striven to reduce this drain on surplus-value (as well as to break trade-union strength in the public services and to create new opportunities for profit-making).

The indication from Moseley's calculations is that the trend from competition and amassed surplus value to *increase* unproductive labour is still outstripping the trend from public-service cuts to *reduce* unproductive labour. In his review of Brenner, Moseley asks about whether new technologies in the circulation of commodities (on-line buying, etc.) could economise enough to reduce the total of unproductive labour and allow profits to revive. No-one knows – any more than we know whether the rate of exploitation will or will not be raised sufficiently to bring profit rates back to boomtime levels. On general grounds, however, it seems unlikely. The growth of unproductive labour depends not only on definable necessary tasks, but also on the hypertrophy of sectors for which it would be very hard to define "socially necessary" quantities even within capitalism.

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1 Brenner is a member of the US Marxist group Solidarity and an editor of its journal *Against the Current*. His roots are in the "Third Camp" tradition of Hal Draper.

2 The argument that "the pattern of capitalism... cannot be deduced from changes in the 'shape' of capital in the leading countries alone, but only from the entire regime of the world economy, which has a structure of its own, more anarchic and complex than the structure of any national capitalist economy", I made myself in Thomas 1996a and 1996b. I did, however, make the error of assuming that all the leading countries can be treated only as secondary deviations from an "average" trend of capitalism.

3 The surprisingly influential epitome of this school was David Yaffe with his journal *Revolutionary Communist*. But modified versions of the same supposed orthodoxy have been taken up by many others, for example by the British SWP and others in Harman 1984 and in the issue of *Historical Materialism*, no.4, responding to Brenner.

4 The argument adduced here is also put forward at greater length by Duménil and Lévy 1999a and forthcoming, though I think they overdo it in some respects.

5 Fine et al 1999 claim that Brenner's approach is "not at all value-theoretic". Brenner uses the jargon of orthodox economics ("productivity of capital", "human capital", etc.). Presumably, and reasonably, he wants to make his book accessible to the readership trained in that jargon, which sadly is much larger than that trained in Marxian terminology ("value composition of capital", "labour-power"). He explicitly denies that his argument "violate[s] either the theory of value or of surplus value" and insists "that the source of capitalist profits [is] to be found solely in the exploitation of workers". (Brenner 1999). I think, however, that his use of conventional jargon helps to blur the inadequacy of the idea "increased competition causes lower profit rates". In the conventional

terminology, it is hard to register any forces shaping profit rates other than competition (limiting the capitalists' ability to raise prices) and wage-push (increasing their costs). One of the reasons why Marx's value theory cannot be dismissed as "metaphysical" juggling of concepts without empirical reference is that it offers an account of the social proportions which shape the rate of profit – the rate of exploitation and the composition of capital. Orthodox economists can offer little more than the observation that the average rate of profit is whatever it is because capitalists demand and expect that percentage. Why that percentage and no other, and why the capitalists can usually get what they demand but sometimes not get it, they really cannot tell.

6 . Manufacturing capital would also have suffered because construction costs (which were still, in 1960, a bigger part of fixed-capital investment than equipment, though the long-term trend was towards equipment becoming more important) would not have been squeezed by international competition in the same way as manufacturing prices.

7 A reworking of the statistics (Duménil and Lévy 1999b and 1999c) would reduce its status even further. Brenner's graphs show a big gap between US manufacturing and non-manufacturing profit rates before 1965, closed somewhat in later years. They also show manufacturing profit rates essentially stable before they start turning down after 1965. Duménil and Lévy claim that the long-term trend of manufacturing profit rates was more or less equally downward before and after 1965. Moreover, if we take out transportation, mining, and public utilities from "non-manufacturing", then the gap between manufacturing and non-manufacturing profit rates vanishes (though manufacturing remains more volatile). The excluded sectors have very big stocks of very durable fixed capital, and according to Duménil and Lévy their apparently very low profit rates may be in part artefacts of the way that US government statisticians estimate fixed capital.

Duménil and Lévy do show the US manufacturing profit rate dipping sharply from 20% in 1965 to 10% in 1970, while non-manufacturing (minus the excluded sectors) went only from 17% to 14%. But on their figures that was little more a blip – and certainly not an epochal turn in capitalist development.

8 Maybe the over-general argument here tips over into the old "underconsumptionist" thesis, that market demand in a capitalist economy must always (and not just periodically) lag behind production. See below on Marx's argument that *permanent* overabundance of capital is a nonsense.

9 Brenner also claims, in his account of 1970s price inflation, that the overcapacity meant that any boosts to aggregate demand generated less increase in output, more increase in prices. But why? On the face of it, over-capacity should mean quicker, lower-cost increases in output, given increased demand, than fully-used capacity.

10 I owe this point to Jeff Rickertt.

11 See references cited in Thomas 1981. There is, according to the figures presented by Maddison 1991, a gentle tendency for the capital-output ratio (the rough equivalent, in official statistics, of c/v) to rise. But that tendency will only push down the rate of profit, long-term, if innovations increasing c/v are generally *not* accompanied by boosts to labour productivity enabling the capitalists (all other things being equal) to increase s/v enough to raise or maintain profit rates. And why should capitalists introduce such innovations, reducing the "productivity of capital", without adequate recompense to them in labour productivity?

12 The "classic" exposition from the 1930s of the Tendency of the Rate of Profit to Fall, Grossman 1992, is vitiated by this fact. Its schemes depend on a rate of increase of fixed capital faster than would be possible even if every scrap of surplus value were ploughed into increasing fixed capital.

13 If the rate of surplus-value is rising, as in Marx's picture it is doing, then the small capitalist, employing two or three workers, will still be making enough to keep himself or herself at a standard above the working-class average. There is no reason at all to suppose that the Tendency could produce a sudden dramatic collapse of small capitalists, rather than a steady erosion. And crises do not generally start with the ruin of small capitalists.

14 Do not suppose that this observation provides a backdoor route for crises to be explained directly from a rising ratio of C/v (roughly speaking, of capital to output). That ratio does tend to rise gently over the long term – see Maddison 1991, p.67 – but Maddison's figures yield an average cost of fixed capital of only about $4,000 per year per worker for the USA in 1987 ($85,000 fixed capital divided by a 20-year average life for the fixed capital), and other fixed costs would be bigger for most enterprises.

15 The apogee of this trend was in the late 1980s and early 1990s, and it has eased in recent years, with profit rates rising and interest rates settling back.

16 Hillel Ticktin, and (quite independently, as far as I know) the French Marxists round *Lutte Ouvriere*.