THE ECONOMICS OF GLOBAL TURBULENCE

The Advanced Capitalist Economies from Long Boom to Long Downturn, 1945–2005

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To Alfred and Elizabeth Brenner

THE PUZZLE OF THE LONG DOWNTURN

At the end of the 1960s, in the wake of the longest stretch of uninterrupted economic expansion in US history, Nobel prize economists Robert Solow and Paul Samuelson pronounced exultant obituaries on destructive capitalist economic instability. 'The old notion of a ... "business cycle" is not very interesting any more', said Solow. 'Today's graduate students have never heard of Schumpeter's apparatus of Kondratieffs, Juglars, and Kitchins, and they would find it quaint if they had.' After fifty years of study, joked Samuelson, the National Bureau of Economic Research had 'worked itself out of one of its jobs, the business cycle.'[1] With the neoclassical-Keynesian synthesis now in the hands of every enlightened government, recessions, according to top Kennedy–Johnson advisor Arthur Okun, were 'now ... preventable, like airplane crashes', and business fluctuations as a threat to the smooth operation of the modern economy were 'obsolete'.[2]

Economic policy-makers had become so confident in their ability to effectively control the capitalist economy that, just past the peak of the boom, the OECD could predict without qualification that the future would be indistinguishable from the recent golden past. As it concluded in its early 1970s study on the prospects of the advanced capitalist world, 'The output of goods and services in the OECD area as a whole has nearly doubled in the past decade and a half. There is little evidence of any general slowing-down in the rate of growth, so that there is a strong presumption that the gross domestic product of the OECD area may again double in the next decade and a half ... Nor is it likely that the sources of the high rates of growth expected in the 1970s will quickly disappear; on the contrary ... Governments, therefore, need to frame their policies on the assumption that the forces making for rapid economic growth are likely to continue and that potential GDP for the OECD area might quadruple between now and the end of the century.'[3] The miracle of the market, superintended by the state, could now virtually guarantee perpetual growth.

1 *Economic History Review*, 2nd series, vol. xxiii, August 1970, p. 410; V. Zarnowitz, ed., *The Business Cycle Today*, New York 1972, p. 167. Samuelson made this remark at a conference marking the Bureau's fiftieth anniversary.

2 Arthur Okun, *The Political Economy of Prosperity*, Washington, DC 1970, p. 33. Okun was one of the main architects of the 'New Economics' of the 1960s and a chairman of the Council of Economic Advisors under Lyndon Johnson. His book was completed in November 1969. With the nation, at that point, as he put it, 'in its one-hundred-and-fifth month of unparalleled, unprecedented, and uninterrupted economic expansion', Okun had no hesitation in referring to 'The Obsolescence of the Business Cycle Pattern' (p. 32).

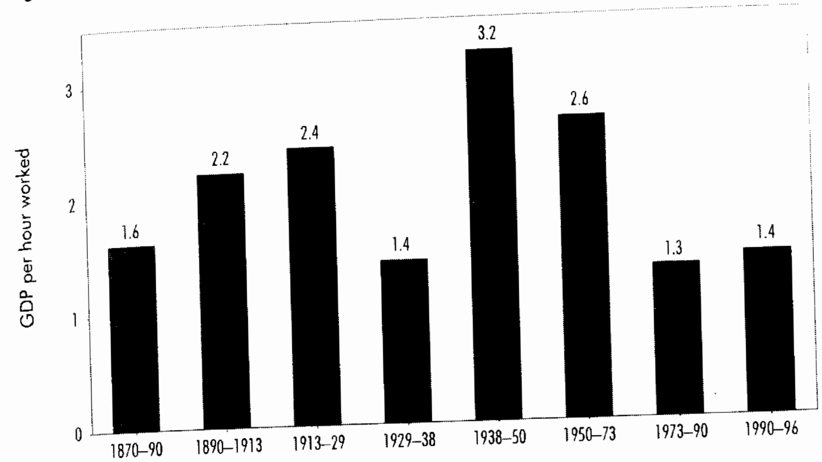
3 OECD, *The Growth of Output 1960–80. Retrospect, Prospect and Problems for Policy*, Paris 1974, p. 166.

The triumphalism of Samuelson, Solow, Okun, and the OECD could hardly have been more ill-timed. At the very moment that they were making their remarks, the world economy was entering into a long and increasingly serious downturn, which, even now, a quarter-century later, shows only a few signs of abating. Reports of a cure for periodic capitalist economic crisis, indeed secular stagnation, were premature. Today, as the world economy enjoys its recovery from the fourth major recession since the end of the 1960s, the average rate of unemployment in the leading capitalist economies—leaving out the US—is at least as high as the average during the Great Depression decade of the 1930s.[4] As international equities prices soar daily to new records, moreover, most of the economy of East Asia (excluding Japan)—the site during 1996 of as much investment as took place that year in the US, and source of perhaps 20 per cent of the world's exports—languishes in depression. Japan itself teeters on the brink, threatening to pull the rest of the world down with it.

In the US, it is true, the unemployment rate has fallen to 4.3 per cent and inflation is back down to the levels of the mid 1960s. The rate of profit on capital stock, depressed for more than two decades, has, moreover, been creeping back up toward the high levels of the postwar boom, and 1997 was indeed a banner year. The fact remains that the marked improvement in the condition of US capital has been achieved to a very large degree at the direct expense of its main economic rivals and especially its working class, and has occurred against a background of fundamentally dismal economic performance right through 1996. The recovery of manufacturing vitality, perhaps the central achievement of the US economic revival, was made possible only on the basis of the most massive, decade-long devaluation of the dollar against the yen and the mark. It could not, moreover, prevent the growth of productivity for the economy as a whole—perhaps the best available indicator of an economy's dynamism—from falling to its lowest levels in US history, for the near-quarter-century between 1973 and 1996. During that period, the growth of GDP per hour worked has averaged 1.3 per cent. This is *barely two-thirds* the historic average for the previous century, and the average for the 1990s (through 1996) has been no higher. In this context, the defence of profitability throughout the period, and its partial recovery in the 1990s, has been predicated upon a repression of wages without precedent during the last century, and perhaps since the Civil War. Between 1973—when they reached their peak—and 1990, real hourly wages (leaving aside benefits) for production and non-supervisory workers in the private business economy *fell* by 12 per cent, declining at an average annual rate of 0.7 per cent, and they failed to rise *at all* during the decade of the 1990s, up to 1997. Real hourly wages (excluding benefits) for production and non-supervisory workers in the manufacturing sector had pretty much the same trajectory, declining at an average annual rate of 0.8 per cent, or a total of 14 per cent, between their 1977 peak and 1990, and also failing to rise at all during the 1990s. In the year 1997, real wages in the private business economy and in manufacturing were, respectively, at the

4 In 1996, unemployment in the eleven countries of the European Union averaged 11.3 per cent, for the twenty-eight OECD countries including the US 7.3 per cent, in the US, 5.0 per cent. OECD, *Economic Outlook*, no. 62, December 1997, p. a24, Table 21. The average annual rate of unemployment for the sixteen leading capitalist economies for the years 1930–38 (inclusive) was 10.3 per cent. A. Maddison, *Dynamic Forces in Capitalist Development*, Oxford 1991, pp. 170–1, Table 6.2.

Figure 0.1. The growth of labour productivity in the US, 1870–1996.



Sources: A. Madison, *Dynamic Forces in Capitalist Development*, 1991, p. 71, Table 3.13; BLS Industry Analytical Ratios and Basic Data for the Total Economy. See also Appendix II.

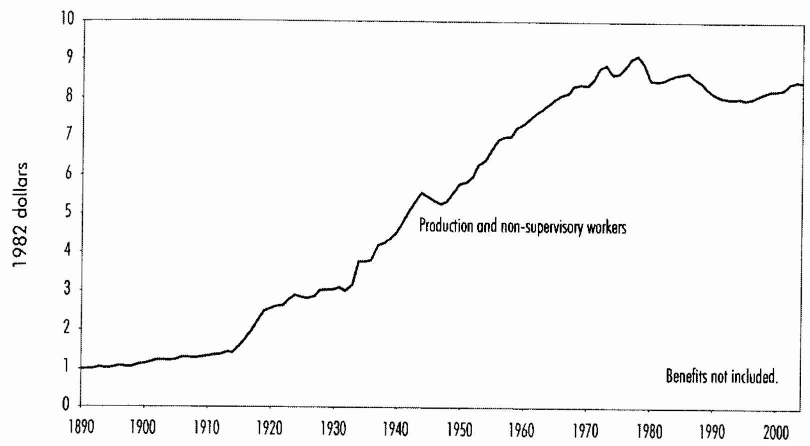
same levels that they had been in 1967 and 1972! In total contrast, between 1890 and 1973, the average annual growth of real hourly wages in manufacturing was 2 per cent, and there was no decade during that entire period, including that of the 1930s, in which it was less than 1.2 per cent.[5]

Even US Deputy Treasury Secretary Lawrence Summers, a leading apostle of the US economic model, has been obliged to acknowledge 'the ironies of the current economic boom'. As he noted in a recent speech before a large crowd of Silicon Valley executives, 'a child born today in New York is less likely to live to the age of five than a child born in Shanghai'.[6] Summers might have added that the cyclical upturn of the 1990s has done little or nothing to improve the lot of the poor. In 1996 the poverty rate was 13.7 per cent (36.5 million people), clearly higher than in 1989, and at the end of 1997, the extent of hunger and homelessness was actually rising. Perhaps most telling in light of current celebrations of a supposed American economic miracle, the current cyclical upturn of the 1990s has, in terms of the main macroeconomic indicators of growth—output, investment, productivity, and real compensation— been even less dynamic than its relatively weak predecessors of the 1980s and the 1970s (not to mention those of the 1950s and 1960s). As the *Financial*

5 A. Rees, *Real Wages in Manufacturing, 1890–1914*, Princeton 1961, p. 120. Henceforth, all wage data is for compensation – that is, included wages and salaries plus benefits – and is for all employees, not just production and non-supervisory workers, unless otherwise stated. Moreover, the terms 'wages' and 'compensation' are used interchangeably to mean compensation, unless otherwise stated.

6 'Treasury Official Warns Against Complacency, Cites Great Depression', *Los Angeles Times*, 29 April 1998; F. Fiore and R. Brownstein, 'All But the Poor Got Richer in '96', *Los Angeles Times*, 30 September 1997; N. Timmins, 'Poverty on the Increase in US', *Financial Times*, 11 December 1997.

Figure 0.2. The growth of real wages in US manufacturing, 1890–2004.



Sources: A. Rees, *Real Wages in Manufacturing*, p. 120; BLS National Employment, Hours, and Earnings Series. See also Appendix II.

Times editorialized at the start of 1997, 'Conventional wisdom is that the US economy has been motoring along in the 1990s, while Europe and Japan have been left behind in its dust. Not so. US performance has been mediocre at best, while the difference between it and the other two has been largely cyclical.'[7]

The brute fact that has thus made a mockery of the pretensions to prescience and control of mainstream economists and capitalist governments alike has been the reality of *long-term* and *system-wide* economic downturn, the seriousness of which can be demonstrated merely by comparing the macroeconomic profiles of the leading advanced capitalist economies in two successive phases, from 1950 through 1970 and from 1970/1973 through to the present. The sharp deterioration in the economic performance of the advanced capitalist economies over the last quarter-century, compared to that of the first quarter-century of the postwar epoch, is self-evident. Throughout these economies, average rates of growth of output, capital stock (investment), labour productivity, and real wages for the years 1973 to the present have been one-third to one-half of those for the years 1950–73, while the average unemployment rate has been more than double. (See p. 5, Table 0.1.)

The reduction in the average rate of profit on capital stock, particularly in manufacturing, over the past quarter-century is particularly striking because the rate of profit is not only the basic indicator but also the central determinant of

7 'The Leader and the Laggards', *Financial Times*, 9 January 1997. For example, between 1990 and 1996, whereas in the 'booming' US real hourly compensation (including benefits) in manufacturing rose by a total of 3 per cent, in recession-bound Germany and Japan, they rose, respectively, by totals of 15 and 17 per cent. See also below "Declining Economic Dynamism, p. 269, Table 17.

Table 0.1. Comparing the postwar boom and the long downturn.
(Average annual rates of change, except for net profit and unemployment rates, which are averages.)

Manufacturing

	Net Profit Rate		Output		Net Capital Stock		Gross Capital Stock		Labour Productivity		Real Wage	
	1950–70	1970–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93
US	24.4	14.5	4.3	1.9	3.8	2.3	–	–	3.0	2.4	2.6	0.5
Germany	23.1	10.9	5.1	0.9	5.7	0.9	6.4	1.7	4.8	1.7	5.7	2.4
Japan	40.4	20.4	14.1	5.0	14.5	5.0	14.7	5.0	10.2	5.1	6.1	2.7
G-7	26.2	15.7	5.5	2.1	–	–	4.8	3.7	3.9	3.1	–	–

G-7 net profit rate extends to 1990; German net capital stock covers 1955–1993; Japanese net profit rates and net capital stock cover in manufacturing 1955–1991.

Private Business

	Net Profit Rate		Net Output		Capital Stock		Gross Capital Stock		Labour Productivity		Real Wage		Unemployment Rate	
	1950–70	1970–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93	1950–73	1973–93
US	12.9	9.9	4.2	2.6	3.8	3.0	–	–	2.7	1.1	2.7	0.2	4.2	6.7
Germany	23.2	13.8	4.5	2.2	6.0	2.6	5.1	3.0	4.6	2.2	5.7	1.9	2.3	5.7
Japan	21.6	17.2	9.1	4.1	–	–	9.4	7.1	5.6	3.1	6.3	2.7	1.6	2.1
G7	17.6	13.3	4.5	2.2	–	–	4.5	4.3	3.6	1.3	–	–	3.1	6.2

G-7 net profit rate extends to 1990; German net capital stock covers 1955–1993.

Sources: OECD, *National Accounts, 1960–1997*, volume II, Detailed Tables; OECD, *Flows and Stocks of Fixed Capital*, various issues; P. Armstrong, A. Glyn, and J. Harrison, *Capitalism Since 1945*, Oxford 1991, data appendix, and their 'Accumulation, Profits, State Spending: Data for Advanced Capitalist Countries 1952–83', Oxford Institute of Economics and Statistics, July 1986 (updated by A. Glyn). (Henceforth, AGH).

the system's health.[8] The average rate of profit expresses the economy's capacity to generate a surplus from its capital stock and therefore constitutes a good first approximation of its potential to accumulate capital (invest), and thereby increase productivity and grow.[9] The average rate of profit also expresses the degree to which the system is vulnerable to economic shocks: if the dispersion of profit rates is held constant, the (changing) average rate of profit will determine the proportion of firms on the edge of survival and thereby the potential for serious recession or depression. Finally, because investors are unable to predict or control the market, they must, as a rule, rely on the *realized* rate of profit to estimate the expected rate of profit and, on that basis, to decide how to allocate their funds.[10] The rate of profit will thus determine the relative attractiveness of sinking one's funds in capital stock, which implies productive commitment and furnishes returns only over the long run, compared with shorter-term placements in employing labour only, in the purchase and sale of goods, in speculation, or in personal consumption.[11]

Between 1970 and 1990, the manufacturing rate of profit for the G-7 economies taken together was, on average, about 40 per cent lower than between 1950 and 1970. In 1990, it remained about 27 per cent below its level in 1973 and about 45 per cent below its peak in 1965.[12] These changes were tell-tale signs, as well as key determinants, of the marked deterioration of the whole economy in the period after the early 1970s. As I shall try to demonstrate, the major decline in the profit rate throughout the advanced capitalist world has been the basic cause of the parallel, major decline in the rate of growth of investment, and with it the growth of output, especially in manufacturing, over the same period. The sharp decline in the

8 The profit rate, r, is defined, standardly, as the ratio of profits, P, to the capital stock, K, ($r = P/K$). The output-capital ratio (Y/K) is the ratio of nominal output, or value added, Y, to the capital stock. The profit share (P/Y) is the ratio of profits to output, or value added. (In this text, all of the foregoing variables are always presented in net terms, that is, with depreciation taken out, unless otherwise indicated). Thus, by de-composing, the profit rate equals the profit share times the output-capital ratio: $r = P/Y \times Y/K$. Changes in profitability can be effected only through changes in the profit share or the output-capital ratio (or through the impact of changes in capacity utilization on these components). All profit rates given are pre-corporate profits tax (but post-indirect business tax), unless otherwise specified. Profit rates (and other basic data) are standardly given for the 'private business economy' (or the 'private economy'), which refers to the whole non-farm economy minus the government sector and also minus government enterprises. Sometimes profit rates (and other basic data) are given for the 'business economy', which refers to the whole non-farm economy, minus the government sector but including government enterprises. Capital stock equals plant and equipment and in this text is always non-residential, unless otherwise stated. For a full exposition, see Appendix 1 on 'Profit Rates and Productivity Growth: Definitions and Sources'.

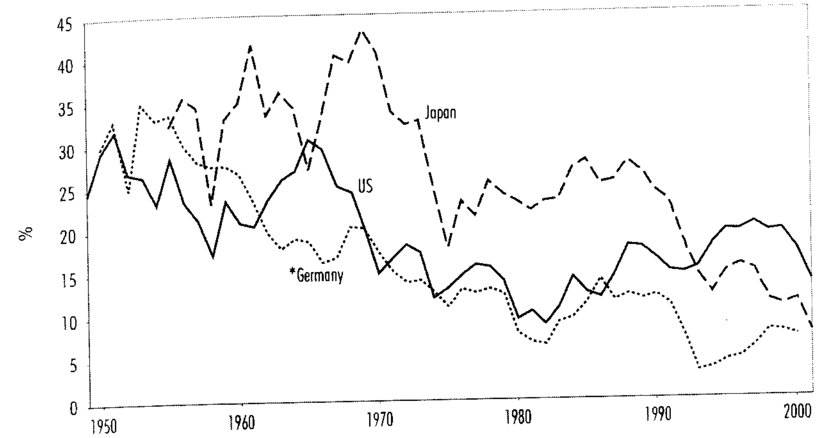
9 Those who wish to invest can of course also draw on existing sources of credit, so it is necessary to take into account the interest rate, as well as the realized profit rate, in explaining how much investment takes place.

10 Preventing the theory from more directly grasping reality is the fact that investors know, or at least think they know, aspects of the future bearing on the profit rate, with the result that the expected rate of profit on the basis of which they make their decisions reflects the realized rate of profit, but with certain modifications.

11 For systematic discussions of the significance of the rate of profit, see the major work by G. Duménil and D. Lévy, *The Economics of the Profit Rate. Competition, Crises and Historical Tendencies of Capitalism*, Aldershot 1993, as well as Andrew Glyn's important recent article, 'Does Aggregate Profitability Still Matter?', *Cambridge Journal of Economics*, vol. xxi, September 1997.

12 The G-7 economies are the US, Germany, Japan, the UK, France, Italy, and Canada. The calculations of the aggregate profit rate, the aggregate profit share, and the aggregate capital stock for the G-7 economies are from P. Armstrong, A. Glyn, and J. Harrison, *Capitalism Since 1945*, London 1984; second edition, Oxford 1991, data appendix.

Figure 0.3. US, Japanese, and German manufacturing net profit rates, 1949–2001.



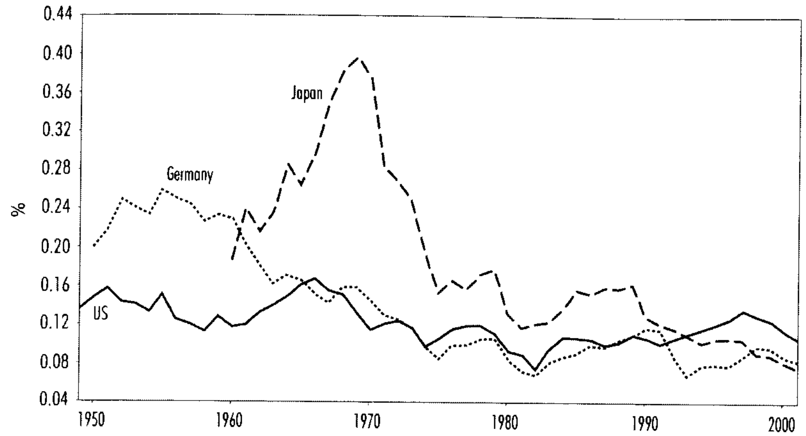
Source: See Appendix 1 on Profit Rates. *Profit rate for Germany covers West Germany 1950–90 and Germany 1991–2000.

rate of growth of investment—along with that of output itself—is, I shall argue, the primary source of the decline in the rate of growth of productivity, as well as a major determinant of the increase of unemployment. The declines in the rate of growth of employment and productivity are at the root of the sharp slowdown in the growth of real wages.

To explain the origins and evolution of the long downturn through an analysis of the causes and effects of changes in profitability is thus the objective of this study. In Chapter One, my point of departure is the family of *supply-side* theories which constitute the consensus interpretation. These theories, simply put, attribute the downturn and failure of recovery to increased pressure on profits from workers. Because pressure from labour grew, direct and indirect wage growth outran productivity growth, setting off the downturn; then, because pressure from labour failed to decline sufficiently, direct and indirect wage growth failed to adjust downward enough to match the decline in productivity growth, thereby perpetuating the downturn. After noting variations on this basic interpretation, I specify several fundamental conceptual problems with it, and point to a number of basic empirical trends that impugn its ability to explain the long downturn. Then, using the general standpoint from which I criticized the supply-side interpretation, I offer an alternative approach which takes as its point of departure the *unplanned, uncoordinated, and competitive* nature of capitalist production, and in particular individual investors' unconcern for and inability to take account of the effects of their own profit-seeking on the profitability of other producers and of the economy as a whole.

In this view, the fall in *aggregate* profitability that was responsible for the long downturn was the result of not so much an autonomous vertical squeeze by labour

Figure 0.4. US, Japanese, and German private sector net profit rates, 1949–2001.



Source: See Appendix 1 on Profit Rates.

on capital, as the over-capacity and over-production that resulted from intensified, horizontal intercapitalist competition. The heightening of intercapitalist competition was itself brought about by the introduction of lower-cost, lower-price goods into the world market, especially in manufacturing, at the expense of already existing higher-cost, higher-price producers, their profitability and their productive capacity. The long downturn, from this standpoint, has persisted largely because the advanced capitalist economies have proved unable to accomplish profitably sufficient reductions and reallocations of productive power so as to overcome over-capacity and over-production in manufacturing lines, and thereby to restore profitability, especially given the growing presence of East Asia in world markets. With profitability failing to recover, investment growth and in turn output growth has fallen over the long term, bringing about secularly reduced productivity growth and wage growth, and rising unemployment.

In the remainder of this text, focusing for practical reasons on the US, German, and Japanese cases, I try to show that the foregoing approach can comprehend the economic evolution of the advanced capitalist world, providing a better account of the data than the supply-side theories.[13] In Parts Two, Three, and Four, therefore, I offer interpretations, respectively, of the long boom (1950–65), the fall in profitability and the turn from boom to crisis (1965–73), and the long downturn (1973–present), in terms of the systematically *uneven development* of the advanced capitalist economies in the postwar years—manifested, through most though not all of the epoch, in slow growth in the earlier-developing leader economy of the US in relationship to accelerated expansion in the later-developing follower economies of Japan and Germany, and in turn East Asia. I attempt to demonstrate that the way in which this pattern of uneven development worked itself out supports my more general interpretation of the long downturn in terms of intensified competition leading to over-capacity and over-production and a secular fall in profitability, especially in manufacturing.

13 Concentrating on these three economies does introduce distortions. Still, in 1950, taken together, they accounted for 60 per cent of the output (in terms of purchasing-power parities) of the seventeen leading capitalist economies and by 1994 that figure had risen to 66 per cent. A. Maddison, *Monitoring the World Economy 1820–1992*, Paris 1995, Table C-16a. Each of these economies stood, moreover, at the hub of great regional blocs, which they effectively dynamized and dominated. In addition, the interaction among these three economies was, as I shall argue, one of the keys to the evolution of the advanced capitalist world throughout the postwar period.

PART ONE
The Trajectory of the Profit Rate

Chapter 1

SUPPLY-SIDE EXPLANATIONS: A CRITIQUE

To begin at a very general level, the capitalist mode of production distinguishes itself from all previous forms by its tendency to relentless and systematic development of the productive forces. This tendency derives from a system of social-property relations in which economic units—unlike those in previous historical epochs—must depend on the market for everything they need and are unable to secure income by means of systems of surplus extraction by extra-economic coercion, such as serfdom, slavery, or the tax-office state. The result is twofold. First, individual units, to maintain and improve their condition, adopt the strategy of maximizing their rates of profit by means of increasing specialization, accumulating surpluses, adopting the lowest-cost technique, and moving from line to line in response to changes in demand with respect to supply for goods and services. Second, the economy as a whole constitutes a field of natural selection by means of competition on the market which weeds out those units that fail to produce at a sufficient rate of profit.

The combination of individual price-cost maximizing and systemic natural selection through competition could have been expected to make for an extremely productive system, and, over the long historical run, it surely has. The accumulation of capital brings about the growth of the size of the labour force. It also brings about the growth of the productiveness of the labour force, meaning that the labour force is able to produce the consumption goods it needs and the tools it needs to produce those goods in less and less time, with the result that capitalists have to pay relatively less and less for the reproduction of their labour power, on the assumption (for purposes of exposition) that real wages remain constant. The outcome should be a dual tendency, doubly favourable to capital. If they have no trouble selling what they produce, capitalists should net both a rising mass of profits, proportional to the growth of the labour force, and a rising rate of profit, resulting from the increased productivity of the labour force.

The Persistence of Malthusianism

The inherent dynamism of the capitalist economy over the long run, its tendency to improve the productive forces, would seem to rule out that well-known form of crisis, which was built into virtually all pre-capitalist agricultural economies—the Malthusian/Ricardian type of crisis, brought about by the secular tendency to the declining growth of labour productivity, especially in agriculture, under the pressure of population growth. But, if that is the case, we confront a basic question: if a tendency to declining productivity growth is *not* at the root of capitalist crises, what is?

Historically and currently, the most common response to this question has been simply to deny its premise and to find the source of economic crisis under capitalism precisely in the economy's declining capacity to develop the productive forces. Malthus and Ricardo, of course, saw an inevitable tendency to stagnation or crisis as resulting from an apparently inexorable tendency to falling labour productivity in agriculture. As poorer and poorer soil was brought into cultivation in response to population growth, profits were bound to be squeezed between rising rents and subsistence wages that had to increase as food became more costly to produce. In its original guise, this classical position has been rendered obsolete by the application of science-based technologies to agriculture; but, in more up-to-date forms, it has retained much of its original allure.

Even today, most accounts of the onset and persistence of the current long downturn in the world economy take as their point of departure the successive oil crises of the early and late 1970s, and especially the so-called 'productivity crisis'. This is true of explanations emanating not only from the Right but from the Left as well. According to several major left-wing schools, the fall in profitability responsible for the long downturn originated in a secular decline in productivity growth which was itself the consequence either of the declining effectiveness of the so-called Fordist system of organizing the labour process, or of rising worker resistance and slacking on the shop floor, or of a combination of the two. These 'social Malthusian' accounts actually dovetail rather closely, in practice—though not, of course, in their underlying rationale—with orthodox Marxist theory, which sees the economy's tendency to increase productivity by relying to an ever greater extent on indirect relative to direct labour as leading inexorably to a fall in the rate of profit. Paradoxically, this theory, too, has a Malthusian character, because it also posits a decline in profitability as resulting from declining productivity. According to the orthodox Marxist thesis, in order to compete, capitalists must cut costs by increasing mechanization, manifested in a rising organic composition of capital (capital-labour ratio). But, in so doing, they cannot avoid bringing about a fall in the aggregate rate of profit because the rise in the organic composition of capital issues in an increase in the output-labour ratio that is insufficient to counteract the parallel fall in the output-capital ratio that it also brings about. The rate of profit falls, from this perspective, because, with the real wage assumed constant, investment in mechanization cannot but result in an increase in labour productivity (real output-labour ratio) that is more than cancelled out by a decrease in capital productivity (real output-capital ratio). Were this theory correct, what would logically be entailed is the impeccably Malthusian proposition that the rate of profit can be expected to fall because, as a direct result of capital accumulation, overall productivity—productivity *taking into account both labour and capital inputs*—can be expected to decline.[1]

1 As Marx liked to put it, the rise in the organic composition of capital brings about a fall in the rate of profit in the very process of bringing about an increase in *labour* productivity, the ratio of output to labour (by bringing about, as he failed to emphasize, an even greater decrease in the ratio output to capital). 'The rate of profit falls, although the rate of surplus-value remains the same or rises, because the proportion of variable capital to constant capital decreases with the development of the productive power of labour. The rate of profit thus falls, not because labour becomes less productive, but because it becomes more productive.' *Theories of Surplus Value*, Vol. II, Moscow 1971, p. 439. Marx was, of course, fiercely anti-Malthusian. The Malthusian character of his theory of the fall of the rate of profit is therefore highly incongruous, though logically unavoidable, given that it has the decline in profitability result from a decline in productivity, taking into account both capital and labour inputs. It also flies in the face of commonsense. For, if, as Marx himself seemed to take for granted (see *Capital*, Vol. III, New York 1967, pp. 264–65) capitalists are assumed, in response to competition, to adopt technical changes that raise their own rate of profit by reducing their total cost (labour plus capital, or direct and indirect labour) per commodity, it seems intuitively obvious that the ultimate result of their innovation, when it is generally adopted in their line, can only be to reduce the exchange value of the goods produced in their line and thus, directly or indirectly, to reduce the exchange value of the wage, and thus to *raise* the average rate of profit, given again the (Marxian) assumption that the real wage remains constant. It certainly cannot be to reduce the rate of profit. Formal proofs of this result can be found in N. Okishio, 'Technical Change and the Rate of Profit', *Kobe University Economic Review*, vol. vii, 1961, as well as in J. Roemer, 'Technical Change and the "Tendency of the Rate of Profit to Fall"', *Journal of Economic Theory*, vol. ii, March 1978, and 'The Effects of Technological Change and the Real Wage on Marx's Falling Rate of Profit', *Australian Economic Papers*, June 1978. For the orthodox Marxist thesis to hold, therefore, requires the assumption—again paradoxical in terms of Marx's own premises—that capitalists adopt new techniques that *decrease their own rate of profit*—and, again, end up reducing overall productivity. This implication of Marx's falling profit rate thesis is recognized and embraced by A. Shaikh, who advances the argument that the rate of profit falls because individual firms are obliged to maximize their profit *margin* (that is, their rate of return on circulating capital) in order to effectively compete in terms of prices and so are indeed obliged to adopt techniques which raise their organic composition of capital and thereby increase their total cost per commodity, even though this brings down their profit rate on total capital—both circulating and fixed. 'Political Economy and Capitalism: Notes on Dobb's Theory of Crisis', *Cambridge Journal of Economics*, vol. ii, 1978; 'Marxian Competition Versus Perfect Competition: Further Comments on the So-Called Choice of Technique', *Cambridge Journal of Economics*, vol. iv, 1980; 'Organic Composition of Capital', in *The New Palgrave. A Dictionary of Economics*, ed. J. Eatwell et al., London 1987, Vol. iii, pp. 755–7.

The Wage-Squeeze Thesis

Of course, as any economist will aver, no decline in productivity growth, however severe, is sufficient in itself to cause problems for the macroeconomy. Falling productivity growth can result in a squeeze on profitability only if there is a failure of real wage growth to adjust downward in tandem. The fact is, however, that today an extraordinarily wide range of economists believe that a slowdown in productivity growth to which (direct and indirect) wage growth failed to adjust is *precisely what happened* over the last two decades or so in the advanced capitalist economies, and that exactly this development is at the root of our economic troubles.

The consensus of today's economists thus explains the long downturn in terms of the failure of wage growth to fall in line with declining productivity growth by combining the theses of Malthusianism ('the productivity crisis' and 'the oil crisis') and of downward 'wage inflexibility' (resulting from a politicized labour market). That it does so is hardly surprising, for mainstream economics has implicit faith in the market as a self-sufficient, self-regulating mechanism for the economy. It can therefore conceive of major problems for the economy as arising only 'exogenously' to the market: either as a consequence of political interference which prevents the market mechanism from bringing about the necessary economic adjustment or as a consequence of a failure of technological progress, the origins of which are separate from the economy's own functioning.

To the extent, then, that the problem of the long downturn in the world economy has been systematically posed, it has called forth a paradoxical near-consensus. Marxists and radicals have joined liberals and conservatives in explaining the long downturn as a 'supply-side' crisis, resulting from a squeeze on profits, reflecting pressure on capital from labour that is 'too strong'. In so doing, they have characterized the current crisis in terms just the opposite of those that have often been used to characterize the long downturn of the interwar period, a crisis widely viewed as a 'demand-side' or 'under-consumption' crisis, resulting from an overly high profit rate, reflecting pressure from labour that was 'too weak'.

A series of variations on the supply-side theme have been argued by a large number of analysts across a broad political spectrum. The standard, or classical, version of the theory—what could be called the Full Employment Profit Squeeze theory—finds its origins over a century ago, and is still advocated today.[2] This boils down to the proposition that, in the medium run, capital accumulation leads to crisis because it proceeds without sufficient regard for the material conditions necessary for its continuation: the supply of labour (and raw materials) thus fails to keep up with the demand that results from ongoing investment, leading to rising labour (and primary commodity) costs, which begin to interfere with satisfactory profit-making.[3]

1. The 'Contradictions of Keynesianism'

Nevertheless, the majority of contemporary versions of the supply-side approach distinguish themselves from the classical statement by arguing that the enhanced power of labour purportedly behind the secular squeeze on profits has been the result not merely of tight labour markets, but also the operation of certain historically specific institutional arrangements and government policies first put into effect in the period following World War II. Indeed, in its most fully developed form, the thesis is that the long downturn finds its roots in what might be loosely called the contradictions of Keynesianism. The operation of those very institutional arrangements and government policies that ostensibly made possible the postwar boom by solving the problem of effective demand are thus claimed to be responsible for the supply-side problems that have brought about the long downturn.[4]

The Key to the Boom

In the supply-side, 'contradictions of Keynesianism' view, the foundations of the long boom are thus to be found in the continuous growth of demand, which made possible both the transcendence of the under-consumption supposedly behind the interwar crisis and the emergence of a high level of business confidence in the postwar epoch.[5] The key to the growth of demand was, according to the theory, the rise of labour after 1945 to a recognized place in the political economy of the advanced capitalist countries. The rise of labour found its expression in the establishment of, often government-sanctioned, arrangements between capital and labour to ensure that the growth of wages would keep up with the growth of productivity and prices—the so-called 'capital-labour accord'. The emergence of the welfare state—notably, the growth of unemployment insurance which tended to operate in counter-cyclical fashion—was also deemed critical, although not so much for increasing demand, since it was financed largely out of workers' taxes, as for stabilizing it. Governments' adoption of Keynesian fiscal and monetary policies also stabilized demand, smoothing out the business cycle and maintaining high employment.[6]

Nevertheless, according to the supply-side, 'contradictions of Keynesianism' thesis, success in securing economic growth proved to be self-undermining in the long run because the operation of those very arrangements which, by hypothesis, brought about that expansion of demand which underpinned the postwar boom had the long-term effect of skewing the balance of market and socio-political power in favour of labour and broadly speaking the citizenry, and against capital.

Problems on the Supply Side

In the classical statement of this position, Michal Kalecki found the contradictions of Keynesianism to lie—somewhat paradoxically in light of later appropriations of his theme—primarily outside the boundaries of the economy per se. In line with the 'Keynesian' theory that he had originated—independently from Keynes—Kalecki argued that there was no economic limit to the degree to which Keynesian policies of demand management could extend a boom. There were, however, in his view, very definite *political* limits to the degree to which it could do so. The growing power of labour on the shop floor and in the economy more generally (which would result from demand-subsidized full employment) and the encroachment of the state on the private sector (which would result from increased government spending) would eventually undermine that business confidence which the implementation of Keynesian policies had originally secured. Increasingly alarmed businessmen would press government to cut back on spending and would feel obliged to reduce investment, despite the still high rate of profit. Their politically motivated economic

2 K. Marx, 'The Law of the Accumulation of Capital', *Capital*, Vol. 1, ch. 25, sec. 1, But see below, p. 24, footnote 14.

3 For variations on this basic position, see A. Glyn and B. Sutcliffe, *British Capitalism, Workers, and the Profits Squeeze*, London 1972, and 'The Critical Condition of British Capital', *New Left Review* 66, March–April 1971; Armstrong et al., *Capitalism Since 1945*; R. Boddy and J. Crotty, 'Class Conflict and Macro-Policy: The Political Business Cycle', *Review of Radical Political Economics*, vol. ii, 1975; 'Class Conflict, Keynesian Policies and the Business Cycle', *Monthly Review*, vol. xxvi, October 1974; Makoto Itoh, *The World Economic Crisis and Japanese Capitalism*, London 1990.

4 Leading advocates of this viewpoint from the Left include representatives of the US Social Structure of Accumulation (SSA) School (notably Samuel Bowles, the late David Gordon, and Tom Weisskopf) and representatives of the French Regulation School (notably Michel Aglietta, Robert Boyer, and Alain Lipietz). The advocates of the Full Employment Profit Squeeze thesis joined representatives of the SSA and the French Regulation Schools in presenting a fully elaborated version of the theory in the collective work *The Golden Age* (ed. Stephen Marglin and Juliet Schor, Oxford 1990). See especially the essay by A. Glyn, A. Lipietz, A. Hughes, and A. Singh, 'The Rise and Fall of the Golden Age'. Standard-bearers of pretty much the same position from the liberal centre include Jeffrey Sachs. See, in particular, Sachs's interesting early formulation in 'Wages, Profits, and Macroeconomic Adjustment', *Brookings Papers on Economic Activity*, no. 2, 1979. Among the major economists of the Right associated with the position is Assar Lindbeck of Sweden.

5 For the under-consumptionist interpretation of the interwar crisis as a corollary of the supply-side interpretation of the long downturn, see S. Bowles, D. Gordon, and T. Weisskopf, *After the Wasteland. A Democratic Economics for the Year 2000*, Armonk 1990, pp. 29–30; M. Aglietta, *The Theory of Capitalist Regulation. The US Experience*, London 1979, pp. 94, 285–6; R. Boyer, 'Technical Change and the "Theory of 'Regulation"', in G. Dosi et al., ed., *Technical Change and Economic Theory*, London 1988, pp. 82–3. For a critique, see R. Brenner and M. Glick, 'The Regulation Approach: Theory and History', *NLR* 188, July–August 1991, pp. 76–86.

6 Left-wing advocates of the 'contradictions of Keynesianism' approach tend to play down the significance of government fiscal policy in providing the demand that made for postwar stability and growth, emphasizing instead the expansion of the welfare state, especially unemployment insurance, and new institutions regulating labour-capital relations, which ostensibly kept wages up with prices and productivity. But I use the term Keynesianism more generally to refer to all of these aspects.

response would thus bring about a downturn even though the economic conditions for it were not present.[7]

Subsequent advocates of the 'contradictions of Keynesianism' argument have followed the broad outline laid out by Kalecki but with two important differences. First, they have gone beyond Kalecki in their account of those institutional mechanisms which, according to the theory, provided the foundations of the postwar boom and, in so doing, increased the market and socio-political power of labour. Second, *contra* Kalecki, they have argued that the enhancement of the power of labour and the citizenry *directly* undermined the accumulation process by bringing about a squeeze on profits. From the perspective of today's 'contradictions of Keynesianism' theorists, the operation of the capital-labour accord, the growth of the welfare state, and the commitment on the part of governments to Keynesian policies were, by the later 1960s, both maintaining the growth of demand so as to further bring down unemployment and making for enhanced confidence on the part of workers that the weapon of increased unemployment would not be invoked in the future. Meanwhile, the increased availability and level of unemployment insurance was reducing not only the risk, but also the cost, of job loss. At the same time, contractually sanctioned arrangements between capital and labour that provided for keeping wages up with both productivity and the cost of living were making it increasingly difficult for employers to compensate for rising labour costs by raising prices. Finally, the cost of the welfare state was weighing increasingly heavily on the national income.

As the boom reached its peak and labour demand outran labour supply, workers exploited their enhanced leverage to launch a powerful wave of labour militancy across the advanced capitalist economies. The outcome was an 'explosion of wages'.[8] At the same time, according to some accounts, workers withheld their energy and care on the shop floor, setting off a long-term decline in the growth of productivity.[9] The result was the onset of a secular wages-productivity squeeze on profits, made worse by the failure of the welfare state to shrink sufficiently.

Nor, according to the supply-side theory, did reduced profitability lead to adjustment via the reduction of working-class pressure. Over the course of the 1970s, 1980s and beyond, in response to reduced profitability, employers unleashed an offensive, aiming to curb the growth of wage and other costs, while reducing investment and bringing about the growth of unemployment. Meanwhile, governments throughout the advanced capitalist economies sought to get costs under control in both the private and public sectors by introducing tight credit policies, as well as major cuts in welfare-state spending. The resulting reduction in the subsidy of demand further forced up unemployment. Even so, according to the supply-side theory, there was no successful process of adjustment. Despite reduced growth and hugely increased joblessness, workers were able to maintain and make use of the institutionally based power that was the legacy of the postwar boom to prevent the restoration of labour market 'flexibility' and sufficient reductions in social-welfare costs. They thereby prevented the recovery of profitability. According to the theory, the continuing power of workers also precluded the use of Keynesian measures to restore growth and employment. For, by hypothesis—given the continuing untoward influence, direct and indirect, of organized workers over the labour market—increased government subsidy of demand to reduce unemployment would lead once more either to runaway inflation or a renewed squeeze by wages on profits.[10]

7 M. Kalecki, 'Political Aspects of Full Employment' (1943), in *Selected Essays on the Dynamics of the Capitalist Economy, 1933–70*, Cambridge 1971.

8 For early arguments concerning the wage explosion, see W.D. Nordhaus, 'The Worldwide Wage Explosion', *Brookings Papers on Economic Activity*, 1972; P. Wiles, 'Cost Inflation and the State of Economic Theory', *Economic Journal*, vol. lxxxiii, June 1973.

9 See, for instance, Bowles et al., *After the Wasteland*, pp. 53–4, 69–72, 83, 100–4, 111–14; R. Boyer, 'Technical Change and the Theory of Regulation', p. 86; Armstrong et al., *Capitalism Since 1945*, p. 179.

2. Conceptual Difficulties with the Supply-Side Thesis

There is, of course, no reason to deny that, *all else held constant*, ongoing capital accumulation tends to increase the demand for labour relative to supply and thus to increase wages, probably the rate of growth of wages, and, more generally, the bargaining position of workers. It follows that, to the extent that policies and institutions subsidize demand and thereby bring about increased levels of capital accumulation, *all else being equal*, the resulting reduction of unemployment will further enhance workers' capacity to squeeze profits, all the more so if the availability and level of government unemployment insurance, as well as institutionalized arrangements with employers, reduce the risk and cost of job loss. The question is, however, whether it is legitimate to hold that all else is equal. This question has two aspects which need to be carefully distinguished. There is first an issue concerning *origins or onset*: can an extended process of capital accumulation leading to full employment be expected to bring down profitability? But, second and more decisive, there is an issue concerning *endurance and non-adjustment*: even supposing that full employment does lead to wage growth outrunning productivity growth, can the resulting fall in profitability be expected to persist, and thereby bring about a *temporally extended* economic downturn?

From Full Employment to Squeeze on Profits?

Full Employment as Profit-Enhancing: The Kaleckian Objection. While the growth of demand leading to full employment will tend to strengthen labour's bargaining position, it will, as it does so, tend to bring about counterbalancing effects that enhance profitability. As Michal Kalecki, the originator of the 'contradictions of Keynesianism' thesis, pointed out, increased employment tends not only to bring about upward pressure on wages, but also to lead to higher sales and capacity utilization, thereby lowering unit costs and raising profitability. As an economy approaches full employment, it may very well experience a heightening of profitability, even as wage growth accelerates.[11]

10 For critical introductions to the mainstream explanations of the downturn's continuance, see R. Z. Lawrence and C. L. Schultz, 'Overview', and P. R. Krugman, 'Slow Growth in Europe: Conceptual Issues', in Lawrence and Schultz, eds, *Barriers to European Growth*, Washington, DC 1987. For Left versions, see S. Bowles, D. Gordon, and T. Weisskopf, 'Business Ascendancy and Economic Impasse: A Structural Retrospective on Conservative Economics, 1979–87', *Journal of Economic Perspectives*, vol. iii, Winter 1989; A. Glyn, 'The Costs of Stability: The Advanced Capitalist Countries in the 1980s', *NLR* 195, September–October 1992.

11 M. Kalecki, 'Political Aspects of Full Employment', p. 138. 'The attitude [of business in opposing the maintenance of full employment through government spending financed by loans] is not easy to explain. Clearly higher output and employment benefits not only workers, but businessmen as well, because their profits rise.'

The Substitution of Capital for Labour Leading to Relatively Reduced Labour Demand and to Increased Productivity Growth. While the acceleration of real wage growth—resulting from increased demand for labour with respect to supply—tends to directly squeeze profits by outrunning productivity growth, it tends simultaneously to encourage the substitution of capital for labour, thus speeding up technical innovation.[12] Technical innovation induced by rising wages tends to reduce the pressure of labour demand with respect to labour supply in two ways. First, it tends to be labour saving. Second, it tends to increase overall productivity (the ratio of output to total input, including both labour and capital inputs), thereby reducing the amount of labour required, and therefore the amount of labour demanded, for any given level of output.

To look at the other side of the same coin, technical change tends not only to increase the relative availability of labour, it also tends to increase efficiency, reducing total (capital plus labour) costs for any given output. The fact, then, that real wages grow, or even accelerate, clearly does not automatically mean that profitability falls. Why shouldn't the growth of productivity, driven both by wage growth leading to the substitution of capital for labour and by the pressures of inter-firm competition, be rapid enough to keep the rate of return from falling?

The Growth of the Supply of Labour: Immigration and the Export of Capital. When the demand for labour rises, the resulting increase in wages tends to provoke an increase in labour supply by way of the action of the labour and capital markets themselves. Workers from abroad find it more attractive to immigrate, and—unless they are restrained by political means—their entry will reduce the tightness of the labour market. Simultaneously, the profitability of combining means of production with lower-waged labour elsewhere increases; as a result, either more capital is exported or capitalists in other places accelerate their investment. The effective size of the labour pool thus tends to expand relative to supply, and wage pressure is reduced. I am making the assumption here that there will in fact be available other, cheaper labour that can be combined with means of production embodying something like the current level of technology without a loss of efficiency (that is, at lower unit cost). But this assumption appears warranted in light of what seems to be a double reality.

First, in the course of any historically extended wave of capital accumulation, as a consequence of the growth of demand for labour and of competition for labour between more efficient and less efficient producers, labour forces inevitably secure increases in wages far greater than can be understood as compensation for their increased skill—the increased productiveness of the workers themselves, aside from the machinery they operate. More generally, labour forces in regions with long histories of economic development tend to receive wages which are substantially higher than can be explained simply by reference to their relative level of productiveness. Second, over similarly extended time periods, technical change tends to reduce the skill required to produce any given array of products, with the result that the labour force that can make those products without loss of efficiency is continually enlarged, and the wage required to pay it correspondingly reduced.[13] The outcome is that, as their wages rise over the course of a boom, workers in the most advanced, longest developing regions tend to price themselves out of the market in consequence of the relative rise of what might be called their wages-skill ratio.

In sum, it cannot be assumed that a trend to full employment will in any straightforward way put a squeeze on profits. The very processes of extensive capital accumulation and institutionally founded enhancements of the power of labour which the supply-side theorists understand to bring down the profit rate tend, in so doing, to call forth counteracting tendencies that make for the increase of profitability and thereby tend to prevent an actual profit squeeze from taking place. Still, it would be absurd to deny that full employment leading to an enhancement of labour's leverage can ever precipitate a fall in the profit rate, and I shall have occasion to refer to several historical instances of this phenomenon. But, even if the Full Employment Profit Squeeze thesis can sometimes explain a significant fall in profitability, it is hard to see how it could account for a long-term reduction in the profit rate of the sort that has produced the long downturn.

Can the Power of Labour Prevent Adjustment?

From Tight Labour Market to Economic Crisis? The point is that where tight labour markets do make for declining profitability, firms will inevitably respond to their reduced rates of return by reducing investment. As a result, sooner rather than later, the labour market will loosen sufficiently to allow for a reduction of pressure on wages and thus for the restoration of profitability and the renewal of capital accumulation. Under capitalism, the taking of profits and wages does not occur merely as an outcome of the immediate interaction between capital and labour, although that surely is an important aspect of the distributional process. Rather, production, employment, and distribution are themselves dependent upon prior, autonomous decisions to invest, and these are entirely under the control of capital. Employers will find no motivation to invest at any given place and time unless they can secure a satisfactory rate of return. Employers must, in other words, demand a satisfactory rate of profit *as the condition for investing*, because a satisfactory rate of return is the fundamental condition for competitiveness and thus the continuing viability of the firm. In shifting distribution back in their own favour, employers are not confined to confronting their workers directly, but can respond to profit-reducing increases in labour costs by decreasing the rate of capital accumulation, thereby bringing about, in aggregate, a reduction in the growth of demand with respect to the supply of labour which produces a rise in unemployment sufficient to moderate labour's demands. The implication is that capital accumulation leading to the outrunning of labour supply by labour demand can be expected to squeeze profits only in *the short run* and therefore seems incapable of precipitating a secular, system-wide long downturn. The Full Employment Profit Squeeze theory can

12 For this line of criticism of the consensus view, see R. J. Gordon, 'Productivity, Wages, and Prices Inside and Outside of Manufacturing in the US, Japan, and Europe', *European Economic Review*, vol. xxxi, 1987.

13 See K. Akamatsu, 'A Theory of Unbalanced Growth in the World Economy' (1938), *Weltwirschaftliches Archiv*, vol. lxxxvi, 1961, as well as the literature on the product cycle, starting from R. Vernon, 'International Investment and International Trade in the Product Cycle', *The Quarterly Journal of Economics*, vol. lxxx, May 1966. See also M. Shinohara, *Industrial Growth, Trade, and Dynamic Patterns in the Japanese Economy*, Tokyo 1982.

account for some instances of reduction in profitability, but it cannot explain a long downturn.[14]

The 'Inflexible' Labour Market and the Power of Labour. The more elaborated versions of the 'contradictions of Keynesianism' approach—those centred more explicitly on the welfare state and postwar institutions regulating capital-labour relations—were formulated precisely to remedy the foregoing weaknesses of the straightforward Full Employment Profit Squeeze theory in accounting for a long-term, system-wide economic downturn. Supply-side theorists have thus taken it as their task to argue that the rise of unemployment which normally results from the reduction of investment set off by reduced profitability cannot in fact be expected to function as a disciplinary device sufficient to restore the conditions for capital accumulation. Their central contention is that, over the course of the postwar epoch, rising unemployment became insufficient to oblige labour to moderate its wage claims because workers succeeded in institutionalizing sufficient power at various levels—the shop floor, the industry or union and the state—to prevent the proper functioning of the labour market. Governments, say the supply-side theorists, were so committed to the maintenance of full employment and/or the provision of high unemployment benefits that the threat of being fired lost its teeth. Unions, they contend, have found ways to control their labour markets even in the face of high unemployment, protecting their own 'insiders' at the expense of 'outsiders'.[15] As a result, they conclude, 'disequilibrium' or profit-squeezing wages have been able to persist alongside high levels of unemployment for an extended period of time. Put another way, the economy does not return to full employment because, were it to do so, wage growth would again outrun productivity growth and squeeze profits.[16]

There is nothing logically wrong with the idea that the power of labour, exercised either on the basis of its own institutions and norms or through the state, can skew the operation of the labour market in favour of workers—for *given* firms, industries, regions, or even national economies, for *given* periods of time. The fact remains that this conclusion, even where it holds empirically, is of limited relevance. The operation of the labour market does, of course, have an irreducible political aspect; wages are, in significant respects, determined 'politically' by class conflict, as well as the operation of social norms and values, along with state intervention. But it is one thing to assert that strategic socio-political action always plays a part in determining the wage, quite another to argue that such action can so squeeze profits as to cause a *long-term, system-wide downturn*. Labour cannot, as a rule, bring about a temporally extended, systemic downturn because, as a rule, what might be called the potential sphere of investment for capital in any line of production generally extends beyond the labour market that is affected by unions and/or political parties or is regulated by norms, values, and institutions supported by the state. So firms can generally circumvent and thereby undermine the institutionalized strength of workers at any given point by investing where workers lack the capacity to resist. Indeed, they must do so, or they will find themselves outflanked and competitively defeated by other capitalists who will.

This basic dynamic may be slowed but not fundamentally transformed by state institutions. If government intervention is making for a significant squeeze by labour on profits either indirectly (as a consequence, for example, of maintaining high levels of unemployment insurance or implementing Keynesian policies for full employment) or directly (as a result, for example, of taxing capital and allocating increased public services to labour) the outcome will be the same as if labour were acting alone. In the first instance, capitalists will find their competitive position undercut; in the longer run, they will either redirect their investments to points of higher profitability or find themselves unable to compete because other capitalists have done so.

Because all elements of society depend on private investment for economic growth, for employment, and for tax revenue to finance state expenditures, governments are obliged to make the profitability of 'their' capitalists a priority, at least given that capitalist property relations are unchallenged. One of the more paradoxical consequences of this reality is that, especially since World War II, trade unions and social-democratic parties have generally accepted the principle of the primacy of profits and sought to enforce it on their followers. In direct proportion to the degree they have been well-organized, powerful, and representative of the working class as a whole, trade unions and social-democratic parties have thus consciously and systematically sought to keep wage growth from threatening profitability in the interest of the capital accumulation and growth that they deem to be the precondition for working-class material gains. To the extent that an increase in workers' material demands had been responsible for the decline in profitability over the past couple of decades, official trade unions and social-democratic parties would certainly have used their power precisely to reverse that development.[17]

The general principle may be stated as follows: victories by labour in economic conflicts tend to be relatively localized; reductions in profitability resulting from the successful exertion of workers' power tend therefore to be correspondingly localized; nevertheless, there is a generalized, system-wide pressure on employers to make the average rate of profit on pain of extinction. To the extent therefore that workers' gains reduce their employers' rate of profit below the average, they undercut capital accumulation, creating the conditions, in the medium run, for their own eradication.

14 Marx certainly did not see his rising-employment profit-squeeze dynamic as directly applicable to—or likely to lead to crisis in—the real world. He presented it, quite explicitly, in abstraction from what he believed to be the system's inexorable (counter-) tendencies both to productivity increase (through the growth of the organic composition of capital leading to technical change) and the expansion of the available labour force (through the growth of the surplus army of unemployed). He saw it, moreover, as strictly limited by capitalists' ability to predicate investment on a satisfactory rate of return. See *Capital*, Vol. I, ch. 25, sections 2–5, as well as 1. 'Nothing is more absurd, then, than to explain the fall in the rate of profit in terms of a rise in wage rates, even though this too may be an exceptional case.' *Capital*, Vol. III, ch. 14, section 5.

15 A sharp statement of the argument can be found in A. Lindbeck, 'What is Wrong with the West European Economies?', *The World Economy*, vol. viii, June 1985. See also A. Lindbeck and D. J. Snower, 'Wage Setting, Unemployment, and Inside-Outside Relations', *American Economic Review*, vol. lxxvi, May 1986; J.B. Donges, 'Chronic Unemployment in Western Europe Forever?' *The World Economy*, vol. viii, December 1985; Bowles, Gordon, Weisskopf, 'Business Ascendancy and Economic Impasse'.

16 See also below, pp. 160ff.

17 'Wage restraint was an essential feature of the Golden Age model [in the countries ruled by social-democratic parties] and, if anything, it became more central to the efforts of these countries to deal with the new difficulties of the seventies and eighties.' E. Huber and J. Stephens, 'Internationalization and the Social Democratic Model: Crisis and Future Prospects', *Comparative Political Studies*, vol. xxxi, 1998.

Workers' action may certainly reduce profitability in given locales in the short run, but it cannot, generally speaking, make for an extended downturn because it cannot, as a rule, bring about a spatially generalized (system-wide) and temporally extended decline in profitability. Nevertheless, what needs to be explained in the current case is precisely a squeeze on profits and a corresponding downturn in the advanced capitalist economies from which no economy has been immune, which has enveloped all economies at the roughly the same time and same pace, and which has been temporally very extended.

3. Basic Evidence Against the Supply-Side Argument

Because the supply-side theorists explain the long downturn in terms of the operation of institutions and impact of policies, they are obliged to explain it in historically and nationally specific terms. They must therefore interpret the onset and subsequent outcomes of the squeezes on profitability that afflicted each of the advanced capitalist economies essentially on a case-by-case basis, in terms of the specific historical evolution of institutions and policies in those economies that ostensibly led to the enhancement of labour's economic and political leverage. But how can such interpretations be successfully accomplished, in view of the obvious facts that the downturn has been *universal, simultaneous* and *long-term*?

The Universality of the Long Downturn. It is a reality worth conjuring with that none of the advanced capitalist economies was able to escape the long downturn. Neither the weakest economies with the strongest labour movements, like Great Britain, nor the strongest economies with the weakest labour movements, like Japan, remained immune. Is it plausible that what explains the downturn is that workers *everywhere* accumulated sufficient power to squeeze profits?

The Simultaneity of the Onset and Various Phases. The advanced capitalist economies experienced the onset of the long downturn at the same moment—between 1965 and 1973. These economies have, moreover, experienced the successive stages of the long downturn more or less in lock step, sustaining simultaneous recessions in 1970–1, 1974–75, 1979–82 and from 1990–91. It is one thing to argue that economic and institutional developments among the advanced capitalist countries were rather similar in the postwar epoch—although if one considers the Japanese case, or compares the US with most European cases, even that may seem less than obvious. But it is quite another to contend that the paths of institutional development and policy formation, the experience of capital accumulation and technological change, and the evolution of capital-labour relations—and politics more generally—could have been so similar in the major capitalist economies as to have brought about, at the same moment, virtually identical shifts in the labour market situation and the balance of class forces so as to determine essentially the same *evolution of profitability* in those economies. In view of the very high degree to which labour's power has been differentially determined by conditions within and circumscribed by national boundaries, it is difficult to understand how the exertion of power by labour could explain the internationally coordinated evolution of the long downturn.

The Length of the Downturn. Finally, the fact that the downturn has gone on for so very long would seem to be fatal for the supply-side approach. It is not hard to believe that particular unions, workers movements, or social-democratic governments could have brought down the profit rate in given places for given periods. But, if one takes into account both the alternatives available to employers (specifically their ability to reallocate investment away from points where profits have been squeezed) and labour's long-term interests (specifically its dependence upon and concern for—in the absence of any alternative—the continuation of capital accumulation), it is almost impossible to believe that the assertion of workers' power has been both so effective and so unyielding as to have caused the downturn to continue throughout the advanced capitalist world for close to a quarter-century.

4. From Criticism to an Alternative

My alternative approach to the long downturn takes as its point of departure the results of the foregoing critique. The attempts of the supply-side theorists to understand crises essentially in terms of maldistribution—under-consumption in the case of the interwar crisis, a profit squeeze in the case of the current downturn—has led them to focus too exclusively upon the 'vertical' (market and socio-political) power relations between capitalists and workers. As a result, they have tended to underplay not only the productive benefits, but also the economic contradictions, that arise from the 'horizontal' competition among firms that constitutes the capitalist system's economic mainspring. My point of departure is thus simultaneously that capitalism tends to develop the productive forces to an unprecedented degree, and that it tends to do so in a destructive, because *unplanned and competitive*, manner.

Relatedly, the emphasis of the supply-side theorists on institutions, policy and power has led them to frame their analyses too heavily on a country-by-country basis, in terms of national states and national economies—to view the international economy as a sort of spill-over of national ones and to see systemic economic problems as stemming from an agglomeration of local ones. In contrast, I shall take the international economy—*the capital accumulation and profitability of the system as a whole*—as a theoretical vantage point from which to analyze both its booms and its crises, and those of its national components.

Finally, while the supply-side theorists specify processes that *could* lead to rising costs and a squeeze on profits in *given locales* over the *short run*, they have failed to take sufficiently into account the *compensatory* economic, political, and social mechanisms that are set off, more or less automatically, precisely as a consequence of any squeeze by labour or the citizenry on profits—mechanisms by which rising costs, through their negative effect on profitability and on the inducement to invest, create pressures both to bring about cost reductions in the 'affected' regions and to redirect investment beyond them.

To put this final point more positively, an adequate theory of crisis must explain not only why what individuals and collectivities do in pursuit of their interests leads to an aggregate pattern of production and distribution in which profitability is undermined, thereby reducing the capacity and incentive to invest. It must also explain why that same pattern leads producers to take remedial action that fails to bring about an adjustment and ends up exacerbating the difficulties of the initial situation. If we are to understand not only the historical regularity of secular capitalist development, but also the historical regularity of secular capitalist downturn, we therefore need a theory of a malign invisible hand to go along with Adam Smith's benign one—a theory which can encompass a self-generating *series of steps* resulting from individual (and collective) profit maximizing which leads not towards adjustment, but rather away from it.

In line with this prescription, I shall present an account of the long downturn which finds the source of the profitability decline, schematically speaking, in the tendency of producers to develop the productive forces and increase economic productiveness by means of the installation of increasingly cheap and effective methods of production, without regard for existing investments and their requirements for realization, with the result that aggregate profitability is squeezed by reduced prices in the face of downwardly inflexible costs. I shall explain the perpetuation of the crisis by demonstrating that the profit-maximizing steps capitals find it rational to take in response to the reduction in their profitability not only fail to resolve the problem that brought down profitability in the first place, but have the effect, in aggregate, of making necessary and rational additional responses which further undercut aggregate profitability. In the face of their reduced profitability, numbers of firms thus find that it makes most sense to persist in their line rather than leave it and search for a better alternative; meanwhile, numbers of other still lower-cost producers find it individually profitable to enter into those same lines despite the lines' reduced profitability. As a consequence of the resulting consolidation of over-capacity and over-production and of reduced profitability (or the even further fall thereof), investment and output growth will decline and wage growth will be cut back, leading, in turn, to both a decline of productivity growth and a decline in the growth of effective demand (both investment and consumption), which put still further downward pressure on profitability. This sequence, as shall be seen, can be reversed and profitability restored only when sufficient high-cost, low-profit means of production can be forced from lines affected by over-capacity/over-production and reduced profitability, and successfully reallocated to sufficiently high-profit lines.

Chapter 2

AN ALTERNATIVE APPROACH TO THE LONG DOWNTURN

I start from the premise that, under capitalist social-property relations, the generalization of the individual norm of profitability maximization combined with the pressure of competition on a system-wide scale tends to bring about the growth of the productive forces and overall productivity, with the result that, on the assumption that the real wage remains constant, both the rate and the mass of profit *rise*, assuming there are no problems of realization.[1] But, given capitalism's unplanned, competitive nature, realization problems cannot be assumed away. The same cost-cutting by firms which creates the potential for aggregate profitability to rise creates the potential for aggregate profitability to fall, leading to macroeconomic difficulties.

1. Cost-Cutting Technology Leading to Over-Production

In a world where firms can predict what their competitors will do and perfectly adjust, cost-cutting technical change poses no problem. Cost-cutting firms will add output so as exactly to fill the space of demand left unoccupied by the decreased output resulting from the using up of means of production by higher-cost producers. The outcome, initially, is a higher rate of profit in the line because the cost-cutter needs fewer inputs to produce, so enjoys a higher rate of profit on, its output than was hitherto garnered on the exactly equivalent output by the firm reducing its output. The output of the cost-cutting firm has thus been produced at a lower cost than the same output had been hitherto produced by the other (higher-cost) firms in the line; since aggregate output and by assumption aggregate demand remain the same and aggregate cost has been reduced, the average rate of profit in the line rises. From this point, the higher-cost firms will either emulate the cost-cutter or will cede space to it by reducing their means of production in the line precisely to the extent that the cost-cutter increases its capacity. The price for the line's output will thus fall to reflect the reduced cost required to produce it and purchasers outside the line will share the gain, as capitalists pay less than before for inputs and/or workers are able to purchase more goods than previously with their money wage. The outcome, so long as workers do not secure all of the gains from the reduced price in the form of increased real wages, will be an increase in the rate of profit for the economy as a whole.

Nevertheless, in the real world of economic competition, individual capitalist producers can neither control nor predict the market for their goods; investments

1 I wish to thank Mark Glick and Michael Howard for their invaluable help with formulations in this chapter.