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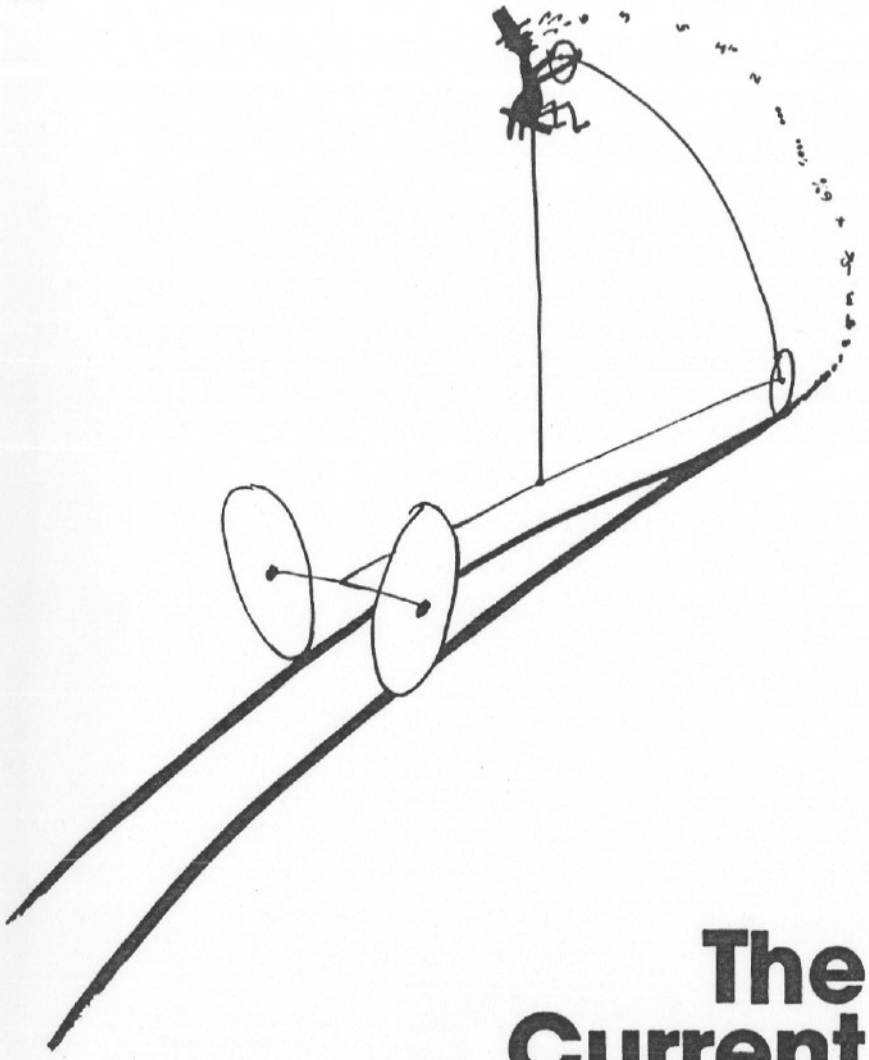

The Current Economic Crisis:

Causes & Implications

by
Anwar Shaikh

AN AGAINST THE CURRENT PAMPHLET

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THE CURRENT ECONOMIC CRISIS: CAUSES AND IMPLICATIONS

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January, 1989

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Preface

by Mary Malloy and Charles Post

The stock market crash of October 19, 1987 showed the world how fragile the state policy induced "Reagan boom" of 1982-87 actually was. This boom seemed to promise a return to the rapid and sustained growth of the 1950s and 1960s. But underlying it lay a long-term stagnation of accumulation, which the entire capitalist world economy entered in the late 1960s and from which it has yet to emerge.

Every capitalist country has seen higher and higher levels of unemployment, even during the recovery phase of the business cycle; sharpening competition among capitals to preserve or expand shares of a shrinking world market for goods and services; and the displacement of investment from the production of goods and services to the speculation in bonds, stocks and currencies.

This global economic crisis has had similar political effects in all capitalist countries in the 1970s and 1980s. On the one hand, every bourgeoisie has launched an employers' offensive against labor. Among the ways capital has attempted to lower production costs at the expense of workers have been the speed-up of production, increased part-time work, cuts in wages and fringe benefits and two-tier wage and benefit systems. On the other hand, every capitalist state has imposed austerity, attempting to place the entire costs of unemployment and social welfare on the individual worker and her/his family.

The long-term crisis of capitalism and the likelihood of a severe recession or even a full-scale depression in the coming period poses many challenges to the U.S. left, especially the revolutionary left. One important challenge is to locate the underlying causes of the current world economic crisis. While there is no one-to-one relationship between a given theory of the capitalist crisis and a political program and strategy, the left's understanding of the crisis influences its political strategy. Specifically, any understanding of the origins of the contemporary economic crisis defines the *range of possible resolutions* of the crisis, the *concrete program* fought for, and the *social forces* expected to implement that program.

Against the Current publishes Anwar Shaikh's article on the current capitalist crisis as a contribution to the much needed debate and discussion on crisis theory. As a journal of revolutionary socialist debate and discussion, *ATC* does not endorse Shaikh's or any other theory of the world economic crisis. However, we believe that Shaikh's popular presentation of Marxist theory of crisis and his attempt to provide an empirical foundation for this thesis will promote debate and discussion.

Introduction

The developed capitalist world entered a crisis phase in the early 1970s. It came a bit earlier in the countries with the relatively less developed capitals, such as England; and it came a bit later in those with relatively advanced capitals, such as West Germany. The United States was just in the middle. And Japan of course was virtually the last to feel the effects of the crisis.

Why? Why does the system periodically go into these convulsive phases? Why now, after forty years of prosperity in the developed capitalist world? Above all, what does this imply for the economics and politics of the decade facing us? These are the questions with which this paper is concerned.

The answer, as we shall see, lies in the very nature of the profit motive. The worldwide crisis is basically a crisis of profitability. It is the result of a mechanism that is built in to capitalist growth itself.

What is true of the world is in this case also true of the United States. The economic and financial crisis of U.S. capitalism is primarily due to this same general decline in profitability, and only secondarily to any slippage of U.S. productivity relative to that of its most advanced competitors such as Japan and West Germany.

The empirical evidence provides strong support for the above argument, as I will illustrate. More importantly, this analysis has important implications for the tactics and strategy of various struggles in the coming decade. Even in the best of times there are strict limits on how much capitalism can be altered through reforms and how much government policy can really change the course of events. But a crisis of profitability drastically narrows even these limits, while at the same time it leads to intensified attacks on labor.

It therefore becomes necessary to recognize that the best defense requires a good offense, that the government will not be able to "manage" its way out of this crisis without being forced by circumstances to attack labor so as to enhance profits, and that individual defensive struggles will not succeed unless they connect up with each other and take on the task of changing the rules of the game. To understand what this might mean, we must trace the buildup of the current crisis.

In what follows I will proceed in three stages. First, I will try to show how and why the profit motive leads to periodic and devastating general crises. Second, I will present and analyze the empirical evidence. The main focus will be on the United States but we also examine similar trends in other major capitalist countries. And third, I will try and draw out some of the implications of all this for ongoing struggles in the United States.

Profit and Technical Change

Profit is the veritable bottom line of the whole capitalist system. And in order to get as much profit as possible, individual firms must constantly struggle on two fronts: against workers, in the labor process; and against other capitalists, in the battle for sales.

In the labor process, the potential productivity of labor is determined by the technology being used, while the actual productivity depends on how hard and fast workers can be made to actually work. Given the particular method in use, firms try to keep up a steady pressure on workers to make them work as long and hard as they can be persuaded and/or menaced into doing. Productivity schemes, piecework and threats are all part of this bag of tricks.

But even more important than getting the actual productivity as close as possible to the potential, is the possibility of raising this potential itself. There are limits to how far the work effort can be pushed, but there are virtually no limits to how much the potential productivity can be raised through technical change. And so it becomes increasingly important to continually raise the productivity of labor by switching to ever more advanced methods of production.

On the other front, in the battle over sales, firms must use every available method and trick. Advertising, whether true or false, works just fine. So does bribery, espionage and even a little industrial sabotage every now and then.

However, in the end the cost of the product emerges as an absolutely crucial variable. The lower the price for a product of a given quality, the better the chances of success (higher quality for a given price is the same as selling a given quality for a lower price). It comes as no surprise, therefore, that businesses are continually preoccupied with the idea of lowering costs; increasing the productivity of labor to get the most out of the labor process; reducing unit costs to get the most out the market. This is how the profit motive is put into practice.

The drive to raise productivity leads above all to the *mechanization of production*. Machines replace workers, materialized labor replaces living labor. More fixed capital is required per worker.

But if mechanization is to be successful as a weapon against other capitalists, it must also reduce unit costs. And once again, it is fixed capital that comes to the rescue. Larger-scale plant and equipment tie up greater amounts of fixed capital per unit product in the initial investment, which is precisely what makes it possible for them to achieve lower operating costs per unit product. Higher fixed costs are traded off in return for lower variable costs—as long as the overall costs per unit output are reduced. This is the *capitalization of production*.

Consider the following illustration. An established computer company (which we will arbitrarily call IBM) currently produces a personal computer at a cost of $4000 and sells it at a price of $7500. In order to make these PC's, it took an investment of $150,000,000 to purchase the necessary plant and equipment and for each plant to turn out up to 10,000 units per year. Per computer, the annual investment cost is therefore $15,000, while, as noted before, the annual production cost is $4000 for each plant.

Now suppose that engineering studies reveal that it is possible to build a larger, more modern plant that requires an initial investment of $300,000,000 but can turn out up to 15,000 computers per year at a production cost of only $3000 per unit. In this case, the annual investment cost would rise to $20,000 per unit (an investment of $300 million divided by an output of 15,000 units per year), but this would make it possible to lower the unit production cost to $3000. Higher amounts of capital would be tied up per unit output in the initial investment, precisely in order to achieve larger scale production and lower production costs. Table 1 below summarizes all of this.

TABLE 1

	Initial Investment	Annual Output	Investment per unit	Production Costs per unit
Existing Plant	$150 Mill	10,000	$15,000	$4000
New Plant	$300 Mill	15,000	$20,000	$3000

Once a new, lower-cost method of production becomes feasible, then the whole investment picture changes. Any company (say one called Compaq) that adopts the new method will be in a position to lower the selling price of computers, undersell its competitors and expand its own share of the market.

In terms of the above example, Compaq's more modern plant can produce computers at a unit cost of only $3000, as opposed to the $4000 cost incurred by IBM. By lowering its selling price, Compaq can expand its sales. If IBM does not match prices, its market share suffers. If it does lower prices, its profit margin suffers. Either way, its profitability will suffer.

Under the above conditions, all firms can expect that prices will be driven downward (relative to the trend of the price level, which has other determinants as well). Compaq's lower unit costs will give it an important advantage under these circumstances, because price reductions will damage the anticipated profit rates of the higher-cost

methods more than those of the lower-cost ones.

While profit rates as a whole might fall, Compaq's profit rate *would rise relative to all others* because it would fall proportionately less (its elasticity with respect to price would be smaller, other things being equal).

Indeed, Compaq could always drive the selling price down to the point where its own profit rate was the highest one in the industry. This means that the very existence of a cheaper method of production would change the investment picture in such a way as to make its expected rate of return the highest now available. Since capitalist investment is motivated by the highest expected rate of return, competition among capitals would enforce the adoption of the lowest-cost production methods.

The critical issue is the reduction of prices in the face of falling costs. At the old selling price of $7500, IBM dominates the market and each of its many plants in operation would yield a profit rate of 23.3%. This is calculated by noting that the profit rate, the ratio of total profits to total investment, can also be expressed as the ratio of profits per unit output (the profit margin) to investment per unit output. The profit margin per unit output is defined as the difference between the selling price and unit production costs.

From Table 1 we see that IBM produces the computer at a production cost of $4000, so that if it sells at $7500, the profit margin is $3500. Also from Table 1, IBM's investment cost per unit output is $15000. Therefore its rate of profit, the profit margin divided by the unit investment costs, is 3500/15000 = .233 = 23.3%.

But now Compaq is coming onto the market with a computer that costs only $3000. If it matched IBM's selling price of $7500, its profit margin would be $4500 per machine sold and its profit rate would be 22.5%, which is a little bit lower than IBM's because of the relatively higher capitalization required for Compaq's more modern plants.

But of course, at this price Compaq would have (say) only one plant operating, since it would have trouble breaking into IBM's market. So it *must* lower its selling price in order to make room for itself. As it does so, it takes over market share and IBM is forced to defend its remaining share by also lowering prices. The battle of competition is on.

As prices fall, both companies will suffer a decline in profit rates, other things being equal. But Compaq is gaining market share, and its operations are becoming *relatively* more profitable than IBM's. For instance, at a price of $7000, both Compaq and IBM would have the same profit rate of 20% on an average plant, while at some lower price, say $6500, Compaq's plants will actually be more profitable (17.5%) than

those of IBM (16.6%). Table 2 below illustrates this final situation.

Table 2

	(1) Invest. per unit	(2) Prod. costs per unit	(3) Selling price	[(3)-(2)]/(1) Rate of Profit
IBM	$15000	$4000	$6500	2500/15000 = 16.6%
Compaq	$20000	$3000	$6500	3500/20000 = 17.5%

It should be evident from the above that while more heavily capitalized methods of production benefit individual capitalists by lowering their unit costs of production, they nonetheless also tend to lower the average rate of profit for the economy as a whole. Thus the same factor that fuels the competitive struggle among individual capitalists also produces a *slow but steady downward drift in the economy-wide average rate of profit* (Shaikh 1978B, 1987; Nakatani 1979).

It is important to emphasize here that this built-in tendency toward a falling rate of profit is not generated by rising real wages. Insofar as workers are successful in their struggles for higher wages, they may *accelerate* the fall in the rate of profit. But this effect is limited because rising real wages are generally constrained by the growth of productivity. No firm can sustain rising unit-labor costs (real wages rising faster than productivity) for any length of time without risking extinction. Thus, whereas class struggles over the length and intensity of the working day and over wages are vital in determining the exact level of real wages and the rate of profit, they operate within limits regulated by the built-in tendencies of the system.

These tendencies are the result of the class relation itself, of capitalist production as a characteristic form of exploitation and of the systematic mechanization and capitalization of production to which it gives rise. Class struggles that aim to overthrow them must therefore take on the system itself.

Lastly, we note that the process described above depends on two essential elements: the competition of capitals, which enforces the adoption of methods with lower unit cost of production; and the capitalization of production, in which lower unit variable costs are generally achieved at the expense of higher unit fixed costs.

It is interesting to note that these processes are so familiar to the business world that they have come to represent the standard pattern of technical change not only in empirical studies (Pratten 1971, 306-7) but also in some management textbooks (Weston and Brigham, 1982, 145-147).

Yet academic writings tend to present a very different picture.

Most neo-Ricardian and neo-Marxian authors, like their neoclassical colleagues, implicitly or explicitly analyze capitalist competition and technical change within the profoundly ideological framework of "perfect competition." This framework is constructed in such a way as to rule out the kinds of price-cutting competitive behavior described above.

Not surprisingly, within the harmonious world of "perfect competition," a secularly falling rate of profit *can only be caused by workers* through some combination of excessive wage demands (wage squeeze) and reduced effort (productivity slowdown).

While it is understandable that neoclassical economists would adopt a framework that is tailored to portray capitalism in the most favorable of lights, it is somewhat deplorable that many radical economists insist on doing the very same thing (Roemer 1979; Steedman, Armstrong and Glyn, et al. 1980; Laibman 1982).

The Falling Rate of Profit, Cycles, and Crises

Capitalist growth is a turbulent and erratic process in which demand and supply constantly fluctuate around various inner tendencies. It is therefore important to separate out the different levels operating in this process. This means distinguishing between partial crises, business cycles and general crises.

First of all, the anarchy and turbulence inherent in capitalist reproduction give rise to all sorts of disturbances and partial crises due to specific events such as crop failures, monetary disruptions, stock market panics.

Secondly, below the surface of these erratic disturbances are a series of more rhythmic fluctuations that we call business cycles. Research points to at least three distinct patterns that continue to exist up to the present time: a short (3-4 year) inventory investment cycle, which these days is usually called "the" business cycle; a medium (7-11 year) fixed-capital equipment cycle, which is what the term business cycle referred to in the nineteenth and early twentieth centuries; and a longer (15-25 year) fixed-capital structures cycle.

Finally, underlying all of the above disruptions and cycles is a long (45-60 year) rhythm in which accumulation first accelerates, then decelerates and finally stagnates (van Duijn 1983, Ch. 1).

It is in this last stagnant phase that the system tends toward general economic crises: extended periods of stagnation, stagflation (stagnant accumulation with inflation) and/or depression, with attendant social and political problems (Mandel 1975, Ch. 4). The theory of the falling rate of profit addresses itself to this long rhythm of accumulation and its associated general crises.

Cycles and contractions are perfectly "normal" in the capitalist system. In the United States, for instance, there have been *thirty-four* business cycles and contractions in the 150 years from 1834 to the present. Yet in all this time, there have been only two general crises: the Great Depression of 1873-1893, and the Great Depression of 1929-1941.

When the system is healthy, it recovers rapidly from its cycles and contractions. But as its health deteriorates, it stays on the bottom longer, its recoveries get weaker and the likelihood of its entering into a real crisis gets greater. Just like a person whose heart is getting progressively weaker, the normal daily events become more and more dangerous, until one day some perfectly common stress can set off a heart attack.

Profit is the heart-beat of the capitalist system, the tendency for the rate of profit to fall is its built-in heart disease and the crisis is its heart attack.

This brings us to the question of just when and how the crisis comes about. Basically, a falling rate of profit leads to a crisis through its effect on the total amount of profit. Suppose the existing rate of profit is 20%, and the capital stock in the economy is $1000 billion. Then the total amount of profit is $200 billion. Now suppose that half of this profit (that is, $100 billion) is reinvested, so that by the end of the next year the capital stock has grown to $1100 billion, but that in the meantime the rate of profit has fallen to 18%. This year's total profit is now $198 billion (an 18% return on $1100 billion), which is *lower than last year's.*

Even though the economy has grown, the total amount of profit has actually fallen because the growth in the capital stock due to new investment is not able to offset the decline in profitability due to the falling rate of profit. From the point of view of the capitalist class as a whole this means that a portion of their capital stock is really redundant: they added $100 billion in new investment to the existing capital stock, and they ended up with even less profit than before![1]

If this situation persisted, as it would if it was the result of a long-term decline in the rate of profit, then investment would be cut back, excess capacity would become widespread and workers would be laid off in droves. This is an all too familiar picture in recent times.

The above example is designed to illustrate a general point. As the economy grows, two things are going on. On the one hand, the fall in the rate of profit lowers the total amount of profit earned by a given stock of capital. On the other hand, new investment adds to the stock of capital, and the profit on this new capital increases total profit.

The overall level of total profits therefore depends on the relative weights of the two effects. The falling profit rate tends to lower total profits; and investment tends to raise them.

The trouble is that investment itself depends fundamentally on the rate of profit. This means that as the rate of profit falls, the incentive to invest gets progressively weaker and the rate of growth of investment slows down. The positive effect of investment on total profits therefore becomes less and less able to offset the negative effects of a declining profit rate. At some point the negative effect overtakes the positive one, and the total amount of profit stagnates or even declines. We are then in the situation pictured earlier, in which the crisis phase begins.

Once the crisis breaks out, the whole dynamic changes. Investment is cut back and persistent excess capacity builds up. Inventories pile up and profits fall, often quite sharply. Firms increase their borrowing to tide them over the bad times, and this drives up interest rates—which only makes matters worse for the firms, though of course the banks are happy. On the other hand, as businesses start to fail, they default on their debts, and this puts the banks into jeopardy. The rising tide of business bankruptcies begins to trigger bank failures. The stock-market index slides downward.

For workers, matters are even worse. Layoffs and business failures give rise to widespread unemployment and increasing hardship as savings and unemployment benefits run out in the face of a persistent lack of jobs. On the other hand, those workers who do still have jobs come under severe pressure to make major concessions on wages and working conditions in order to save their jobs. In all of this, it is of course the ones on the bottom—nonwhites, women, teenagers, the non-unionized—who usually get hit the hardest.

Profits, real wages and stock market shares all fall. Bankruptcies, unemployment and general social misery all increase sharply. Interest rates rise at first as borrowing jumps and then, in the later stages, begin to fall as defaults and bankruptcies decimate the ranks of both lenders and borrowers.

How long does this last, and how bad does it get? Well, that depends precisely on how severe the problem is in the first place. Much of what I described above also takes place in a business cycle. But a business cycle is really a matter of a speedup and then a slowdown in the *growth* of the economy. In the period when profits are generally booming the contractions tend to be mild and the recoveries relatively rapid.

A general crisis, on the other hand, only comes after a long period of falling profitability, when total profits are stagnant and investment is weak. The "overhang" of problems is very great by then, so to speak, and the collapse is generally devastating. To paraphrase Marx, the crisis precipitates a wholesale slaughter of capitals and widespread attacks on labor. It produces great social turmoil and also broad institutional changes.

Just as the system has built-in tendencies towards crises, *so too does it have built-in recovery mechanisms*. All the misery, distress and destruction produced by a crisis is precisely how the capitalist system solves the problems generated by its internal contradictions—until the next time.

The Empirical Evidence on the Falling Rate of Profit

The theory of the falling rate of profit is concerned with the long-term movements that underlie various cyclical or conjunctural fluctuations. We must therefore empirically separate out the latter from the former, in order to assess the significance of the theoretical argument.

Since the latter fluctuations generally show up as variations in capacity utilization, we must adjust stock-flow ratios such as the rate of profit and the capital-output ratio for short-, medium- and long-run changes in capacity utilization. This is a fairly standard procedure, provided one has an adequate measure of capacity utilization.

The problem is that most available measures tend to focus on short-run fluctuations, so that adjustments that use them fail to remove the effects of longer-term fluctuations in capacity utilization. This problem applies to survey measures of operating rates (BEA, Census, and Rinfret Associates), to the Federal Reserve Board measure (which gets its trend of capacity from survey data on operating rates) and to Wharton-type peak-to- peak measures (Schnader 1984 and Rost 1983).

The sole exception occurs with the capacity-utilization index initially developed by Foss and subsequently improved by others (Christensen and Jorgenson 1969). This index is based upon the utilization rates of the electric motors that drive capital equipment and therefore picks up not only short-run but also medium- and long-term fluctuations in capacity utilization.

Unfortunately, the data series needed to construct this index was discontinued in 1963. But it turns out that the McGraw-Hill survey data on expansion investment and on annual additions to capacity can be used to construct a new measure of capacity utilization. A strong independent check of the validity of this new measure is provided by

the fact that it is remarkably similar to the Foss electric-motor utilization index over the period of their overlap from 1947 to 1963.

Moreover, when put alongside the widely used Federal Reserve Board index of capacity utilization, even though all three measures behave alike in the short run, the Federal Reserve Board index diverges considerably from the other two in the long run (see Figure 8 in Appendix B). This bears out our comments on the deficiencies of conventional measures for long-run analysis. (Appendix B outlines the construction of the new capacity- utilization index, and a more detailed paper on the subject is available from the author upon request.)

We are now ready to address the empirical patterns implied in the theory of the falling rate of profit. According to the previous arguments, we would expect the following trends, partitioned into the boom and crisis phases of accumulation. The former address the intrinsic causes of the crisis, the latter its characteristic phenomena.

During the Boom Phase:

1. Rising ratios of fixed capital to output and to wages. In Marxian terms, these ratios represent the money-forms of rising materialized and value compositions of capital, respectively (Shaikh 1987).
2. Productivity rising faster than real wages (in Marxian terms, a rising rate of exploitation).
3. A falling rate of profit even in the boom years.
4. The falling rate of profit leading to an eventual stagnation in the total amount of profit.

During the Crisis Phase:

1. The stagnation of profit signaling the beginning of the crisis phase, in which there is a qualitative change in the patterns of the system.
2. Within the crisis phase itself, real (that is, inflation-adjusted) profits, wages and stock-market shares all falling. At the same time, rising bankruptcies and unemployment and increasing social misery.
3. As a response to the crisis, sharply stepped-up attacks on wages and benefits, working conditions and social programs.

As we shall see, *these are exactly the patterns one finds* for the postwar period. Figures 1-6 below show that the basic predictions of the theory of the falling rate of profit are borne out by the data for the postwar period (1947-1986). Figure 7 then presents some evidence on other major capitalist countries. All data sources and methods are described in the appendices.

The first four graphs address the intrinsic causes of the crisis.

Figure 1 shows that, adjusting for fluctuations in capacity utilization, the ratio of capital to production-worker wages K/Wp* (the value composition of capital) rises by 147%, while the capital-output ratio K/Y* (the materialized composition of capital) rises by 55%.

Figure 1: The Capital-Intensity of Production

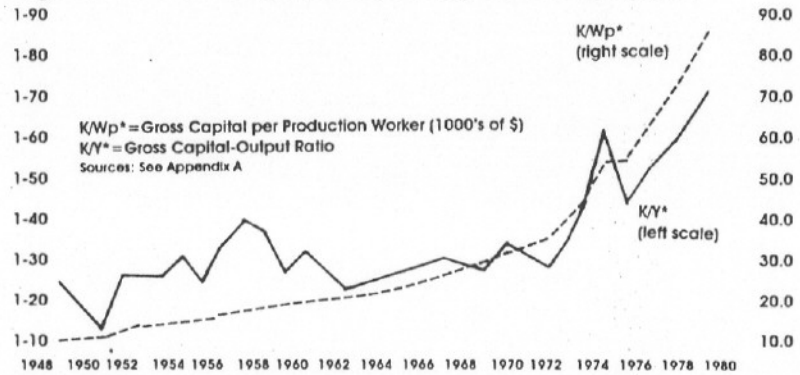


Figure 2 shows that productivity y rises faster than real wages rwp, just as the theory anticipates. From a Marxist point of view, the ratio of y to rwp is an index of the rate of exploitation of workers, and this index *rises* 49% in 39 years.

Figure 2: Productivity and Real Wages

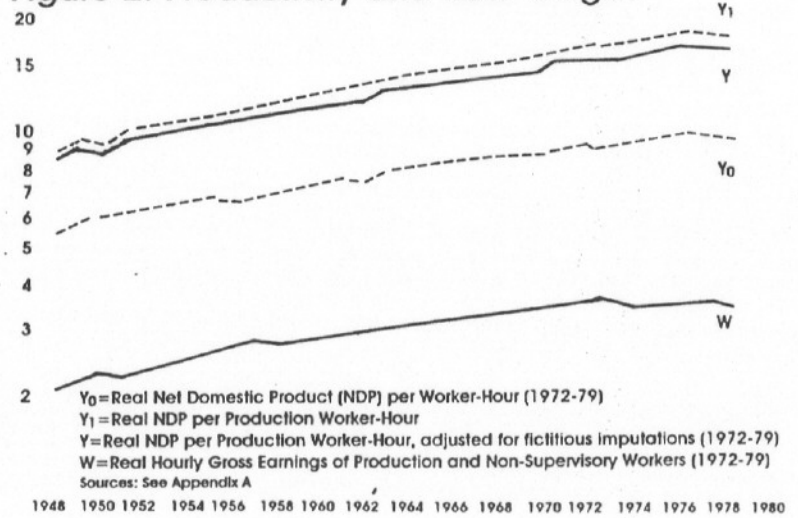
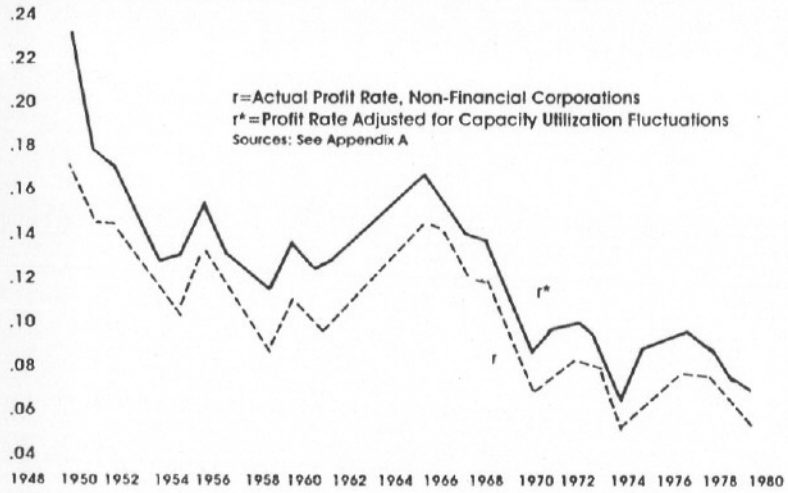


Figure 3 shows that the profit rate adjusted for variations in capacity utilization falls by 55% over the postwar period. Since the ratio of profits to production-worker wages actually rises slightly over this period (from .40 in 1947 to .45 in 1986), *the fall in the rate of profit is entirely explained by the rise in fixed capital relative to production-worker wages (that is, by the rise in the value composition of capital).*[2] This is an absolutely central result.

Figure 3:
U.S. Profit Rate, Non-Financial Corporations



The unadjusted (actual) profit rate is also depicted, and one can see that it oscillates around the adjusted (potential) rate. This too is an expectation of the theory. Taken together, Figures 1-3 provide strong empirical support for the basic Marxian analysis of the structural tendencies of capitalist accumulation (Shaikh 1987).

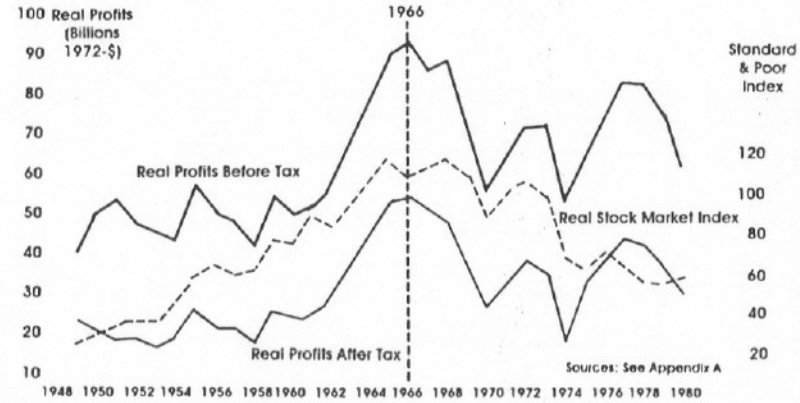
Figure 4 addresses the connection between a secularly falling rate of profit and a general economic crisis. It will be recalled that according to theoretical expectations, a falling rate of profit leads to an eventual stagnation in the total amount of profit, which in turn signals the beginning of the crisis phase. The top series in Figure 4 shows that the total amount of real pre-tax corporate profits peaks between 1966 and 1968, and then starts to fluctuate ever more sharply around a basically stagnant trend (post-tax profits behave in roughly the same way).

This would imply that the United States entered a crisis phase around 1967 (the dividing line shown in the graph). It is particularly

striking that the second series in Figure 4, which represents the real stock-market index, *also* stagnates around the same time (actually a bit earlier, as befitting its role in attempting to forecast profitability) and then starts falling steadily. From its early peak in 1965 to its low in 1982, the stock-market index fell *over 56% in real terms, which is about the same as it fell in the worst part of the previous Great Depression.*

It is a sobering fact that the current Dow Jones would have to stand at 3000 in order to simply catch up to 1965 in real terms. [The world-wide stock market crash of Black Monday, October 19, 1987, occurred after this pamphlet was written. The crash was very much in line with the analysis of this paper. The subsequent partial recovery is not a sign of the return of good times, because the underlying recovery process is far from complete.]

Figure 4:
U.S. Real Profits and Stock Market Index



The preceding analysis leads us to expect a qualitative change in the behavior of the system after 1967. And the data amply confirms this. Figure 5 shows that the growth of real wages slows sharply after 1965, and the level itself starts to fall after 1973. From 1947 to 1967, real wages of production workers *grew* at an average rate of 2% per year, while from 1968 to 1986 they *fell* at an average rate of 0.5% per year. By the end of 1986, the real wage had fallen back to its level of 24 years earlier.

Correlated with all this is an opposite movement in the unemployment rate, which remains constant around 4% in the 1947-1967 period, but then shoots up to almost 10% in 1982, before settling at the historically high plateau of 7-8%. It should be noted, incidentally, that both the sharp rise in unemployment from 1966 to 1973 and the paral-

lel slowdown in the growth of real wages cast serious doubt on any story that traces the problem back to the wage demands and work effort of labor over this same period. We will return to this issue shortly.

Figure 5: Real Wage and Unemployment

Figure 6 depicts an even more striking manifestation of the qualitative difference between the boom and crisis phases. From 1947 to 1967, the average annual federal-budget deficit was a mere $1.7 billion. But from 1968 to 1986, it mushrooms to an average annual rate of $77.7 billion. This is an increase of over 4500%!

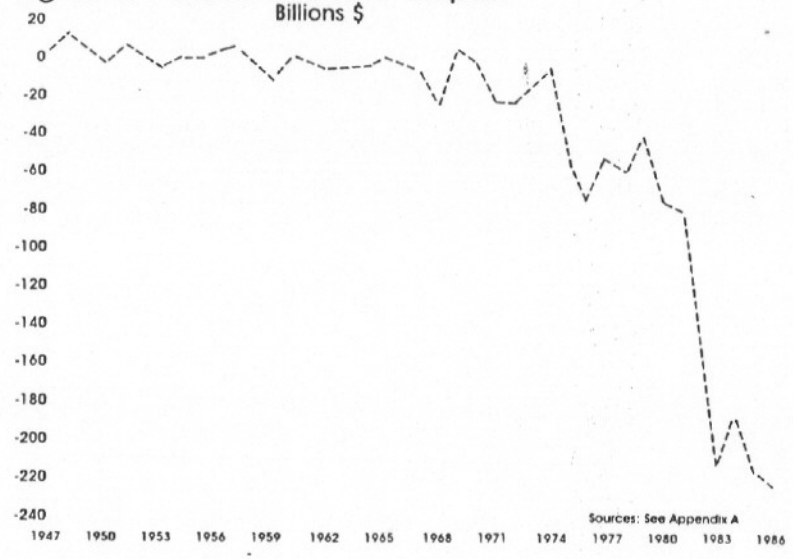
The greatest proportion of this is accounted for by the direct effects of the crisis, which slows down tax revenues even as it requires increased social expenditures to mitigate rising unemployment and poverty, and by various indirect effects that spur the buildup of the military apparatus of the state.

All in all, in the boom phase of 1947-1967, the United States grew at a healthy pace: unemployment averaged 4.8%, real wages per production worker grew by almost 50%, and the average annual federal-budget deficit was a mere 0.16%.

By way of contrast, during the second phase, 1968-1985, unemployment rises sharply to a peak of almost 10% in 1982 and then ends up hovering around the historically high level of 7%. Real wages actually *fall* by almost 9% over the whole period, so that by 1986 they

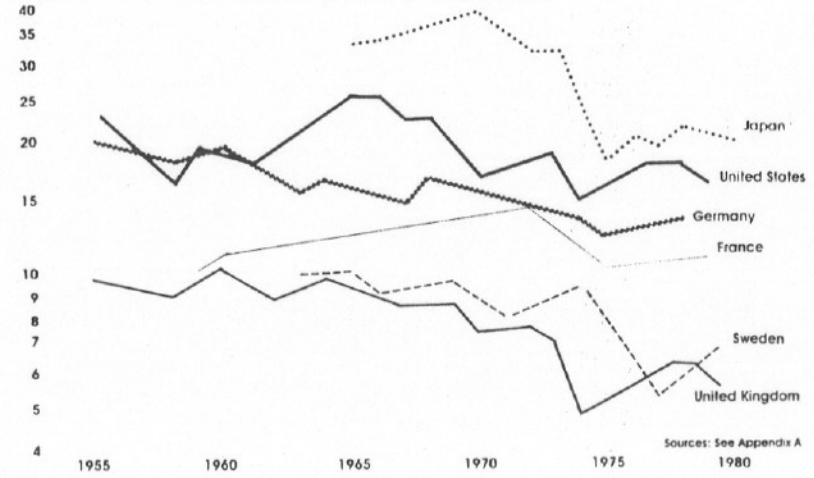
have fallen back to the levels of twenty-four years earlier, and the average federal-budget deficit jumps to forty-five times its level in the boom phase.

Figure 6: Federal Deficit or Surplus



Finally, Figure 7 looks at profit rates in several other major capitalist countries, in addition to the United States.

Figure 7: Profit Rates, O.E.C.D. Countries



Once again we see the same basic pattern, though of course the levels and timings differ. In competition, the progress of any capital or group of capitals depends not only on what's happening to the average, but also on their own particular position relative to this average. Japan's high productivity and relatively low unit-labor costs enabled it to go against the tide for quite a while before it eventually succumbed.

The United Kingdom, at the other extreme, started sinking relatively early on. Overall, we find *declines* in the rate of profit of 43% in the U.K. (1955-1981), of 39% in Japan (1963-1980), of 33% in Germany (1955-1978) and of 29% in Sweden (1963-1980). Only France seems to have escaped the overall trend.

The preceding figures also enable us to briefly address three alternate explanations of the present economic crisis.[3] The first of these is the *underconsumption/stagnation* approach (Sweezy 1981), which argues that the crisis originates in a deficiency of demand that leads to falling capacity utilization, falling profits, slowed growth and eventual crisis. If this theory is correct, the rate of profit falls largely after demand and hence capacity utilization falls off. Thus adjusting the rate of profit for capacity utilization should produce a stable or even rising rate of profit.

But the data show just the opposite. The adjusted rate of profit falls strongly throughout the postwar period (Figure 3), even in the boom phase of 1947-1967 when demand is strong and capacity utilization is rising (Appendix, Figure 8). Indeed, once these critical facts are recognized, it becomes possible to see that the fall-off in demand and hence in capacity utilization occurs in the crisis phase itself, as a consequence of the falling rate of profit, rather than as its cause.

The second explanation, called the *wage-squeeze* approach, traces the crisis back to some combination of excessive growth in real wages (Glyn and Sutcliffe 1972) and a slowdown in productivity growth due to a reduction in worker effort in the late 1960s (Bowles, Gordon and Weisskopf 1983). From the latter point of view, the root of the problem can be found in a supposed upsurge of worker resistance and alienation in the late 1960s, buttressed by the greater security afforded by high employment and a benign welfare state.

But this notion loses all of its force once we recognize that the slowdown in productivity originates directly in a slowdown in the rate of capital accumulation, which in turn has its roots in the already noted decline in profitability. Capital accumulation means the introduction of new, more modern methods of production with correspondingly higher levels of productivity, so that when the former slows down the latter does so also. In fact, the rate of growth of fixed

capital peaks in 1966, and then begins to decline thereafter (Kopcke 1982). This suggests that the observed slowdown in productivity growth is an effect, not a basic cause, of the onset of the crisis.

It should be noted, incidentally, that the sharp rise in unemployment from 1968 to 1973 and the parallel slowdown in real-wage growth cast serious doubt on any story that roots the whole problem in the putative strength and security of workers in this same period (Bowles, Gordon, Weisskopf 1983).

The third explanation relies on the damaging effects of *foreign competition*, particularly on the notion that the gains made by Japan and Germany cause U.S. profitability to decline and thus eventually trigger a worldwide decline (Brenner 1986). But this argument confuses secondary factors with primary ones. First of all, such international competition cannot explain the persistent decline in the U.S. rate of profit over the whole postwar period.

Secondly, over the 1965-78 period, for which there exists comparable data for all three countries and during which competition is supposedly the most intense, the Japanese rate of profit *declines* somewhat more (33%) than the U.S. rate (30%), while the German declines somewhat less (19%) (OECD 1982). This hardly supports the notion that the evolution of profit rates is primarily explained by the competitive positions of these countries.

There are many other subsidiary facts that reinforce the basic argument made in this paper. Beginning in 1982 the number of business failures per year have been nearly three times the yearly average recorded from 1947-1981. Such high levels of business failures are only surpassed by those reached in the Great Depression of the 1930s (Dun and Bradstreet Corporation, *Business Failure Record*, 1988, 2).

Signs of crises are also apparent in the financial sector. The number of banks shut down because of financial difficulties in 1987 alone equaled the *total* number of failures from 1954-1982. Again, such high levels of insolvency have not been experienced since the 1930s (Federal Deposit Insurance Corporation, *1987 Annual Report*, 49). And today taxpayers face a bailout of the Savings and Loan industry that could dwarf the Marshal Plan (*Business Week*, Oct. 31, 1988, 130). Workers suffer the most here because they carry most of the tax burden and in 80% of bankruptcies the jobs are lost altogether.

And of course, throughout all of this the Reagan government was actively dismantling the social support system, rather than trying to strengthen it. In recent years, the problem has shifted to the farm sector, and from there to the farm banks themselves. All in all, the situation has become so dangerous that it has become increasingly commonplace to see business press headlines such as "Under Major Banks,

Land Mines" (*New York Times*, Jan. 11, 1985) and "Scenario for Disaster?" (*Financial World*, Nov. 26, 1985: 12).

Virtually the same pattern can be found in Europe, where business and bank failures have also begun to approach the historic highs only seen before in the Great Depression.

Worst of all, because of the international scope of the modern banking system, the fate of hundreds of U.S. and foreign banks is directly tied to that of dozens of debt-ridden Third World nations. Whole nations, most notably Mexico, the Philippines, Argentina and Brazil, are already over the edge of bankruptcy.

A default by any one of them could trigger a whole round of such defaults, which in turn could easily lead to the collapse of the worldwide banking system. The nine largest U.S. banks alone have over $76 billion tied up in loans to Third World countries, and many of whom are not even able to pay the interest, let alone the principal, on their debts.

State Policies and the Current Crisis

Conventional economic theory teaches us that the government has the objective power to control the capitalist economy through the application of Keynesian fiscal and monetary policies. In the 1950s and 1960s, most economists gave the state and its Keynesian policies the bulk of the credit for the great post-war boom.

But as this boom slowly changed into *stagnation* accompanied by rising prices, that is, into a prolonged period of stagflation, more and more economists now began to put the blame on the state. After all, since the state was in principle capable of maintaining booms and preventing slumps, the fact that the system was slouching towards a depression was quite naturally seen as the fault of the state. And so economists gathered in increasingly large numbers at conferences all over the world to argue over appropriate solutions to the problem. In the meantime, the situation continued to deteriorate.

The whole premise of these exercises was based on a myth, however. The state and its Keynesian policies were not the primary cause of the worldwide post-war boom with its attendant high profitability and high employment levels. By the same token, the state was not the primary cause of the current crisis. On the contrary, both the boom and the slump were regulated by the movements of profitability, and the basic pattern of these movements is built into the system.

When profitability was still high and the total amount of profit growing rapidly, as in the 1950s and 1960s, then the state rode this wave upwards, basically smoothing out fluctuations and easing the

social strains of poverty and of the relatively low (by U.S. standards) unemployment rate. The objective limits of its ability to actually control the economy were never really tested because the underlying patterns were sound and no real changes were attempted.

But from 1968-1970 onward, as the slump began to build up, as unemployment began to rise sharply and as real wages and profits both began to decline, the real limits to the economic intervention of the state became increasingly clear *in practice*, in the evident inability of capitalist states all over the world to turn the situation around.

Governments rose to power on their promises to change things, and fell again when they could not deliver the goods. Orthodox economists invented new explanations and new cures by the hour, which in turn became obsolete just as fast. None of them cared to face the possibility that the fault might lie with the system itself.

Once the mythology of the power of Keynesian policies has been dispensed with, it is possible to see the actual history of state intervention in a new light. During the 1950s and 1960s the state rode the boom upward, while basically trying to keep the economy on an even keel.

But as cracks in the system began to appear, and the problems of rising unemployment and declining profitability became more severe, the state was increasingly forced to intervene to pump up the economy in order to try to maintain employment and shore up the credit system.

The trouble with all this is that although state spending, particularly state deficit spending, is indeed able to pump up capacity utilization, this by itself does little to change the normal-capacity rate of profit. But as the latter declines, the rate of capital accumulation and hence the normal-capacity rate of expansion of the system both tend to fall.

Thus the State is confronted on one hand with a growing need to pump up the system to try and maintain employment and output growth, while on the other, the system itself becomes ever more unresponsive to any given level of stimulus. Increasingly, the demand stimulus translates into inflation rather than actual expansion, and stagflation becomes the order of the day.

On the other hand, if this policy is abandoned in the face of its increasing inadequacy (and in the face of the corresponding soaring budget deficits), then inflation abates only to be replaced by the even more serious problem of high unemployment.

None of this should in any way be taken to mean that things would have been better without state intervention. On the contrary, by propping up credit, by covering up for bankruptcies and by ex-

panding social welfare and unemployment payments, the state has managed so far to stave off the collapse of accumulation. Though it has not eliminated the buildup of the crisis, it has nonetheless managed to transform the way this crisis manifests itself. Instead of a disastrous collapse of the 1930s type, we have (so far) had the lingering death of modern stagflation.

Even with all the state intervention, the collapse may still come. But if the conservative elements have their way in slashing the social and financial "safety nets," a devastating collapse is guaranteed. The conservative ideologues *correctly* see that Keynesian policies are implicated in stagflation. But because they cannot possibly admit that the root of the problem lies in the profit motive itself, they peddle the fantasy that the system will snap back to some golden path once the state has been cut down to size. Their medicine is a prescription for disaster.

Summary and Conclusions

The depression of 1873 (the original "Great Depression") lasted twenty years. This was a period of seething social turmoil and of wide restructuring of the capitalist system. It was marked by widespread concentration and centralization of capital and culminated in the age of imperialism.

The Great Crash of 1929 punctuated a crisis phase that also lasted roughly twenty years (van Duijn 1983, 163). It too was a period of great social change and turmoil, bracketed by two bloody world wars. And now, the profit motive that dominates this system has once again brought us to the brink of another devastating collapse.

So far, the state has managed to stave off such a collapse by propping up the credit and banking system and by occasionally pumping up the economy. It has therefore succeeded in *stretching out* the crisis, transforming potential collapse and deflation (as in the 1930s) into stagnation.

A crisis is not only a period of great distress but also one of great possibility. One way or another, the capitalist system will be changed. The current corporate strategy is clearly attempting to place the burden of the crisis on the backs of working people and to restructure the system so as to greatly increase profitability. As the crisis drags on, the attempts to divide the working class continue to mount: the employed against the unemployed, men against women, Black against white, and unions against environmental and antinuclear forces.

We do not have to submit to this. Once we recognize that the problem stems from the very nature of the profit motive, from capital

itself, then we can attempt to go beyond the automatic defense of liberal Keynesian policies and prescriptions, beyond the myth of an all-powerful state, which can somehow save us from the devastation of a crisis, and beyond individual or local defensive struggles.

This means attempting to rebuild the broad ties that were forged among working people in the last Great Depression; attempting to join our separate struggles for jobs, for civil rights for women and nonwhites, for the preservation of the environment, and for the struggle against imperialism; and above all, attempting to create a social system that is regulated by the needs of people instead of by profit.

It is clear in many parts of the capitalist world that the current world crisis is an objectively revolutionary situation. We need to bring the message home. Either we fight to make socialism possible, or we submit to corporate rule. This is, in the end, an issue of class struggle.

NOTES

1. The cyclically adjusted rate of profit $r^* = P^*/K$, where P^* = capacity utilization adjusted profit = Pu, P = profits, u = capacity utilization, and K = the capital stock. This can always be decomposed in into the ratio of two basic Marxian measures:

$$r^* = \frac{P^*}{K} = \frac{P^*/W_P^*}{K/W_P^*} = \frac{P/W_P}{K/W_P^*}$$

2. The above description corresponds to the highest level of abstraction. Once we introduce the rate of interest into the analysis, then total industrial profit can be separated into two components: the amount equivalent to interest that could be earned on the total capital invested; and the amount of profit above that, which Marx calls profit-of-enterprise.
At this more concrete level of analysis, the critical point comes when the mass of profit-of-enterprise stagnates—that is, when the incremental rate of return on capital equals the interest rate. This is the point at which financial investment and speculation becomes more lucrative than investment in industrial capital.
3. For more detailed discussions of underconsumption/stagnation and wage-squeeze theories of the crisis, see Shaikh 1978A, 1986.

APPENDIX A:
MAIN DATA SOURCES AND METHODS

The data covers the nonagricultural and nonresidential sector. We leave out agriculture because there is no data available on production workers in agriculture, and we leave out the residential business sector because it includes a very large fictitious component (national accounts treat homeowners as residential businesses renting out their homes to themselves).

Figure 1: K/Y*, K/Wp*, where K = fixed nonresidential, nonagricultural capital stock (bill $), from the Office of Business Economics (OBE), Dept. of Commerce, for 1947-1980, extended to 1986 by regressing the OBE series on the corresponding Bureau of Economic Analysis (BEA) series (R squared = .99938) and using the BEA data to extrapolate. U = a new capacity utilization index described on p. 9 and Appendix B, graphed in Figure 8 below. Y* = Y/U, where Y = current-$ nonresidential nonagricultural GDP, calculated as GDP - Farm - Gross Housing Product in *National Income and Product Accounts of the U.S., 1929- 1982*, (*NIPA*) Table 1.7, lines 2,7 and Table 1.23, line 7. Updates to 1986 are from various issues of *Survey of Current Business* (SCB). Wp* = Wp/U, where Wp = wp x Lp, wp = the annual wage of production workers, *Economic Report of the President*, (ERP) 1987, Table B42, Col. 1, p. 293, multiplied by 52 (weeks), and Lp = no. of production workers in mining, constr., manuf., transp./utilities, and services, *Employment and Training Report of the President*, 1987, Table C-2.

Figure 2: y, rwp, where y = productivity = real nonagric. nonresidential output per production worker = (Y/pgnp)/Lp, pgnp = implicit price deflator for GNP, *SCB*, Feb. 1986, Table 5, p. 22, and July, 1987, Table 1.7, p. 22; and rwp = annual real wage of production workers, *ERP*, Table B42, Col 2, p. 293.

Figure 3: r*, r where r* = r/U = adjusted (potential) rate of profit, r = P/K = unadjusted (actual) rate of profit, where P = Corporate Profits with IVA and CCA, *ERP*, Table B84, Col 1, p. 343. This profit data does not come in sufficient detail to allow us to exclude the agricultural and residential sectors, but related data in Table 6.19A indicate that altogether these sectors probably account for less 3% of total profits.

Figure 4: Real Profit = P/pgdpi, Real Stock Market Index = ST/pgdpi where pgdpi = implicit price deflator for gross private domestic investment, 1982 = 100, *ERP*, Table B3, Total Nonresidential investment, p. 248, and ST = Standard and Poors Composite index, *ERP*, Table B91.

Figure 5: Real wages are as in Figure 2 above, while the unemployment rate is of "All Civilian Workers," from *ERP*, 1987, Table B-35, p. 285.

Figure 6: Federal deficits and surpluses are from *ERP*, 1987, Table B-73, col 3, p.331.

Figure 7: The profit rates are gross operating surplus over gross capital stock, both in current-$, from *National Accounts, 1963-1980*, Vol. II, Annex III, *OECD*, July, 1982. I wish to thank T.P. Hill for making available unpublished corrected and revised figures. Since not all countries had the same coverage, I have tried to use the broadest coverage available for any given country: France and the U.K., nonfinancial corporations; Germany and Sweden, Industry, Transport and Communications; U.S. and Japan, Manufacturing. Note that these profit rates are not adjusted for capacity utilization.

Our experience with U.S. data indicates that an adequate measure of capacity utilization is important in bringing out the long-term trend, which may otherwise be masked by great swings in capacity utilization over the short and medium term. Adequate capacity-utilization data for other O.E.C.D. countries still remains to be developed.

Finally, the business failure rates discussed in the text are from *Historical Statistics of the U.S.: Colonial Times to 1970*, Series V23, p. 912, and *ERP*, Table B92, p. 351.

APPENDIX B:
CAPACITY UTILIZATION INDEXES

Our index of capacity utilization is created by dividing the Federal Reserve Board (FRB) index of industrial production by an index of industrial capacity. This is the procedure that also underlies the widely used Federal Reserve Board index of capacity utilization (FRBCU). The difference arises from the fact that our index of capacity is based on a new use of annual McGraw-Hill (MH) survey data on business plans. We wish to particularly thank Ken Kline of DRI for making the original questionnaires and data available to us.

Among other things, the MH survey provides two widely used series: the annual additions to capacity in manufacturing (DCAP) and the annual proportion of gross investment (E) that goes toward the expansion of capacity (as opposed to its replacement). Up to now, these two series have been used independently. By combining them, we have been able to correct for a major deficiency in the existing MH capacity index.

McGraw-Hill creates this published series by simply cumulating the annual additions to capacity to arrive at an index of the level of capacity, *on the assumption* that the survey responses on additions to capacity refer to *net*, not gross, additions. But it soon became clear to some researchers that the resulting capacity index had a strong upward bias because firms seemed to interpret the survey question in terms of *gross* additions to capacity—which is hardly surprising since all the prior questions on the survey form refer to gross additions to capital stock, that is, to gross investment (Rost 1983).

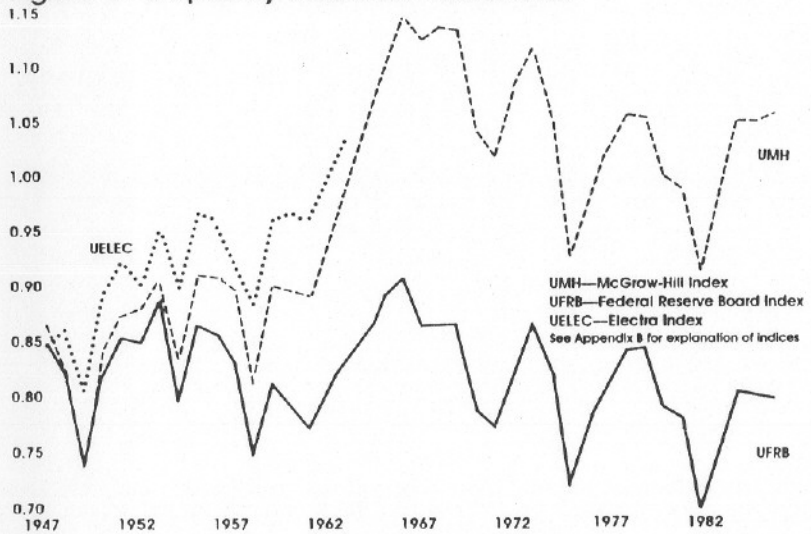
In order to address the above ambiguity in the survey response, we assume that of the total additions to capacity (DCAP), a yet unknown fraction p represents gross additions (GDCAP = pDCAP) and the rest, net (NDCAP = (1-p)DCAP). The gross additions were multiplied by the capacity expansion proportion of gross investment (E), in order to convert gross into net, and then added to the previously assumed net additions (NDCAP). The result is a new measure of net additions to capacity NDCAP* = p(DCAP)E + (1-p)DCAP, which can then be cumulated to create the new index of capacity upon which our capacity-utilization index is based.

It is worth noting that the existing MH and the FRB procedures implicitly assume that p = 0 (all additions are net), while Rost of the FRB's Division of Research and Statistics concludes that p = 1 (all additions are gross) (Rost 1983,

520). Rost's conclusion was tested by creating a series with p = 1, and comparing it with the Foss measure of electric motor utilization (described earlier in the text and recalculated by us) over their period of overlap, 1950-1963.

Since the Foss index is the only other direct measure of capacity utilization, it is of considerable interest to note that the "Rost version" of our capacity-utilization index tracks the Foss measure extremely well. In order to improve on Rost's estimate of p = 1, we estimate p by finding the particular value that makes our measure correspond most closely to the Foss index over the period of their overlap, 1950-1962. This is done by means of a nonlinear least squares estimation procedure, with p constrained to be $0 \leq p \leq 1$. Interestingly, the optimal value turns out to be p = 1, just as Rost suggests. Calculations are available from the author upon request.

Figure 8: Capacity Utilization Measures



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