

# **MARXIAN CRISIS THEORY AND THE POSTWAR U. S. ECONOMY**

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In the first thirty years after World War II, the United States economy performed remarkably well. The rate of growth averaged 4-5% a year, the rate of unemployment was seldom above 5%, inflation was almost non-existent (1-2% a year), and the living standards of workers improved substantially (the average real wage, or the purchasing power of wages, roughly doubled over this period). This was the “golden age” of US capitalism.

However, this “golden age” ended in the 1970s. Since then, the rate of growth has averaged 2-3%, the rate of unemployment and the rate of inflation have both been higher, and the average real wage has not increased at all (and by some measures has even declined 10%). It is in this sense that we refer to the “stagflation” of the US economy in recent decades.

During the late 1990s, the US economy improved significantly, with the highest rates of growth (3-4%), the lowest rates of unemployment and inflation since the 1960s, and real wages increased modestly. As a result, most economists concluded that the late 90s “boom” marked the end of the long period of stagflation and the beginning of a new prolonged period of sustained prosperity, similar to the early postwar “golden age”. However, this “boom” came to a sudden end this year (2001), and the US economy has fallen again into recession. Now there is widespread concern that this recession will be deep and long, and that it will be accompanied by the first worldwide recession since the 1930s.<sup>i</sup>

This chapter presents a Marxian explanation of the long period of stagflation in the US economy, and will attempt to determine whether or not this period of stagflation is indeed over, or whether the US (and world) economy is instead headed for something even worse.

## **1. The decline of the rate of profit**

According to the Marxian theory presented here, the most important cause of the long period of stagflation in the US economy was a very significant decline in the rate of profit (the

ratio of total profit to the total capital invested) in the economy as a whole.<sup>ii</sup> According to Marxian theory, the rate of profit is the main determinant of the overall condition of capitalist economies. When the rate of profit is high, capitalist economies are generally more prosperous: business investment is high, unemployment is relatively low, and workers living standards increase (such as occurred in the early postwar “golden age”). On the other hand, when the rate of profit is low, prosperity turns into stagnation and depression: business investment is low or non-existent, unemployment is high and living standards decline (such as has occurred in recent decades and during the Great Depression and 19th century depressions).

From 1950 to the mid-1970s, the rate of profit in the US economy declined almost 50%, from around 22% to around 12% (see Figure 1; see Moseley 1991 for a description of the sources and methods used to derive these estimates.) This significant decline in the rate of profit appears to have been part of a general world-wide trend during this period, affecting all major capitalist economies.

FIGURE 1: THE RATE OF PROFIT IN THE POSTWAR U.S. ECONOMY



According to Marxian theory, this very significant decline in the rate of profit was the main cause of both of the “twin evils” of higher unemployment and higher inflation, and hence also of the lower real wages, of recent decades. As in periods of depression of the past, the decline in the rate of profit reduced the rate of business investment, which in turn has resulted in slower growth and higher rates of unemployment. One important new factor in the postwar period is that many governments in the 1970s responded to the higher unemployment by adopting expansionary Keynesian policies (more government spending, lower taxes, lower interest rates) in attempts to reduce unemployment. However, these government policies to reduce unemployment generally resulted in higher rates of inflation, as capitalist firms responded to the government stimulation of demand by raising their prices at a faster rate in order to restore the rate of profit, rather than by increasing output and employment.

In the 1980s, financial capitalists revolted against these higher rates of inflation, and have generally forced government to adopt restrictive policies (less spending, higher interest rates). The result was less inflation, but also higher unemployment. Therefore, government policies have affected the particular combination of unemployment and inflation at a particular time, but the fundamental cause of both of these “twin evils” has been the decline in the rate of profit.

It is striking that mainstream explanations of the stagflation of recent decades has completely ignored the very significant decline in the rate of profit. These mainstream explanations stress “exogenous shocks” (i.e. accidents), such as government policy mistakes, the OPEC oil price increase, a mysterious slowdown in productivity growth, etc. According to Marxian theory, all these factors are not “exogenous shocks”, but are instead themselves caused by the decline in the rate of profit. By ignoring the rate of profit, mainstream explanations miss this fundamental cause and remain on the level of superficial appearances.

## **2. Attempts to increase the rate of profit**

Capitalist enterprises have responded to the decline in the rate of profit by attempting to restore the rate of profit in a variety of ways. We have already mentioned the strategy of

inflation, i.e. of increasing prices at a faster rate. Businesses have also attempted to slow down wage increases, and in some cases even to cut wages. Another strategy to reduce wage costs has been to move their production operations to low-wage areas of the world. This has been the main driving force behind the so-called “globalization” of recent decades: a world-wide search for lower wages in order to increase the rate of profit.

Another strategy has been to make workers work harder and faster; i.e. “speed-up”. Such a “speed-up” in the intensity of labor increases the value produced by workers and therefore increases profit and the rate of profit. The higher unemployment of this period contributed to this “speed-up”, as workers have been forced to compete with each other for the fewer jobs available by working harder. One common business strategy has been “down-sizing”, i.e. layoff 10-20% of a firm’s employees and then require the remaining employees to do the work of the laid-off employees. This method also generally increases the intensity of labor even before the workers are laid off, as all workers work harder so that they will not be among those who are laid off.

We can see that the strategies of capitalist enterprises to increase their rate of profit in recent decades have in general caused suffering for workers - higher unemployment and higher inflation, lower living standards, and increased stress and exhaustion on the job. Marx’s “general law of capitalist accumulation” - that the accumulation of wealth by capitalists is accompanied by the accumulation of misery of workers - has been all too true in recent decades.

However, the startling fact is that, despite the decline in real wages and the “speed-up” of workers’ labor, the rate of profit in the US has not increased very much since the 1970s (see Figure 1). There have been cyclical increases in the rate of profit, especially in the 1990s, but most of these increases have been wiped out in the subsequent downturn, so that overall the rate of profit has recovered only about a third of its previous decline. The rate of profit today (2001) remains about 30 % below the early postwar peaks. This absence of a full recovery in the rate of profit is the main reason why the US economy has not returned in recent decades to the more

prosperous conditions of the “golden age”. My guess is that the same conclusion also applies to other advanced countries.

Therefore, the most important questions to be answered in a further analysis of the causes of the economic stagflation of recent decades have to do with the rate of profit: What were the causes of the significant decline in the rate of profit in the early postwar period? In recent decades, why hasn't the rate profit increased more, as a result of the stagnant real wages and the “speed-up” of labor? And, finally, what is the likely trend in the rate of profit in the future? What are the chances of a significant increase in the rate of profit, which would make possible a full and lasting recovery from the current stagflation and a return to the more prosperous conditions of the early postwar period?

In attempting to answer these key questions about the trends in the rate of profit, mainstream economic theories are of no help, because these theories generally ignore the rate of profit. Mainstream macroeconomics has no theory of profit at all (profit is not a variable in this theory of a capitalist economy!). In microeconomics, the marginal productivity theory of profit (or interest) is completely static (i.e. provides no theory of trends over time) and is also now in general disrepute, because it has been shown to be logically contradictory (as a result of the “capital controversy”). This much-maligned theory is being quietly dropped from microeconomic textbooks at both the undergraduate and the graduate level.

The only economic theory that provides a substantial theory of the rate of profit and its trends over time is Marxian theory. Indeed, the rate of profit and its trends over time is the *main question* of Marxian theory. The rate of profit is the main variable in Marxian theory, in striking contrast to mainstream theories in which profit is not a variable at all.

Therefore, if we want to understand the causes of the decline in the rate of profit and its likely trend in the future, the only economic theory available to us is Marxian theory. It is often said these days that Marxian theory is “dead” or “obsolete”. But this assertion is simply false. As this book itself demonstrates, there are many excellent Marxian economists around the world, using Marxian theory to analyze and understand contemporary capitalism, including the current

world economic crisis. Indeed, Marxian theory is essential if we want to understand the rate of profit and its trends. There is simply no credible alternative theory of the rate of profit available.

Let us turn now to the explanation offered by Marxian theory of the decline in of the rate of profit in the postwar US economy, and of the lack of a full recovery of the rate of profit in recent decades.

### **3. Marxian theory of the decline in the rate of profit**

The main point of the Marxian theory of profit is that profit is produced by workers, by the surplus labor of workers, because the value added to commodities by the labor of workers is greater than the wages the workers are paid (profit is equal to the difference between the value produced by workers and the wages they are paid). This conclusion follows from the labor theory of value, which is usually misinterpreted by mainstream economists as a theory of individual prices, like mainstream microeconomics. But this is a misunderstanding. The Marxian labor theory of value is mainly a macroeconomic theory of the total profit produced in the economy as a whole.

Marxian theory concludes that the rate of profit (the ratio of the total profit to the total capital invested) will decline over time, because technological change - an inherent, ever-present feature of capitalist economies - tends to replace workers with machines, and thus tends to reduce the number of workers employed in relation to the total capital invested in machinery, etc. However, since profit is produced by workers, the reduction in the number of workers employed also reduces the amount of profit produced, in relation to the total capital invested. In other words, the rate of profit will decline. Expressed inversely, technological change causes the total capital invested to increase faster than the number of workers employed, or causes the average *capital invested per worker* to increase, which in turn causes the rate of profit to fall.

Marxian theory argues further that the negative effect on the rate of profit of the increase in the capital per worker can be partially offset by increasing the amount of *profit produced by each worker*, which also tends to increase as a result of technological change, which increases

the productivity of labor. This positive effect of new technology and higher productivity on the profit produced per worker is also reinforced by other ways to increase the profit per worker, such as wage cuts and increases in the intensity of labor, discussed above.

However, Marxian theory argues that there are inherent limits to the increase in the profit produced by each worker. The main limit is that there are only so many hours in the working day, and it becomes harder and harder to increase the profit produced by each worker in a given working day. Another limit is the resistance of workers, who usually fight against wage cuts and fight for higher wages and a share of the benefits of the higher productivity. As a result of these limits, Marxian theory concludes that “labor-saving” technological change will eventually cause the rate of profit to decline. This decline of the rate of profit is no accident or due to “external causes”. Rather, the decline of the rate of profit is the result of capitalism’s own internal dynamics characterized by continual technological change (see Moseley 1991, Chapter 1, for a further discussion of Marx’s theory of the falling rate of profit).

The above trends, predicted by Marxian theory, are essentially what happened in the postwar US economy. Technological change increased the capital invested per worker, and also increased the amount of profit produced by each worker. And, as predicted by Marxian theory, the capital invested per worker increased faster than the profit produced per worker, so that the rate of profit declined significantly, as we have seen above.

Another important determinant of the rate of profit, according to Marxian theory, which Marx himself did not emphasize, but which seems to have been important in the postwar US economy, is the proportion between *productive labor and unproductive labor* in the capitalist economy (see the chapter by Mohun in this volume). According to Marxian theory, profit is not produced by all employees in capitalist firms, but only by workers engaged directly or indirectly in production activities (actually making or designing or transporting something), which Marx called “productive labor”. There are two other main groups of employees who are *not* engaged in production activities, which Marx called “unproductive labor”: “sales” employees (sales and purchasing, accounting, advertising, finance, etc.) and “supervisory” employees (managers,

supervisors, “bosses” in general). These two groups of unproductive labor, although entirely necessary within capitalist firms, nonetheless do not themselves produce value and profit (see Moseley 1991, Chapter 2, for a further discussion of Marx’s concepts of productive and unproductive labor).

According to Marxian theory, if unproductive labor (which does not produce profit) increases faster than productive labor (which does produce profit), this will also cause the rate of profit to fall, because costs are increasing, but profit is not, for the economy as a whole. This is what happened in the postwar US economy: the ratio of unproductive labor to productive labor almost doubled during the “golden age”, and this very significant increase contributed to the decline in the rate of profit. This increase in the ratio of unproductive labor to productive labor also seems to have been due in large part to technological change, which increased the productivity of production workers more rapidly than that of non-production workers, and which therefore required more and more sales workers to sell the more rapidly increasing output of production workers (see Moseley 1991, Chapter 5, for a further discussion of the causes of the relative increase of unproductive labor).<sup>iii</sup>

Therefore, according to the Marxian theory presented here, there were two main causes of the decline of the rate of profit in the postwar US economy from the late 1940s to the mid-1970s: an increase in the capital invested per worker, and an increase in the ratio of unproductive labor to productive labor. According to my estimates, these two trends contributed roughly equally to the total decline in the rate of profit during this period (see Moseley 1991, Chapter 4). Both of these causes were themselves the result of technological change, an inherent feature of capitalist economies. Therefore, the decline of the rate of profit in the postwar US economy was not due to accidental, external causes (“exogenous shocks”), but was instead due to the inherent dynamic of technological change. It is an interesting and important question whether this Marxian explanation of the stagflation of recent decades also applies to other advanced countries. My conjecture is that it does.<sup>iv</sup>

### **3. What is necessary to increase the rate of profit?**

What does the Marxian theory presented above imply about what must be done in order to increase the rate of profit, and thereby make possible a revival of capital investment and a return to the more prosperous conditions of the “golden age”? According to this Marxian theory, the rate of profit varies directly with the profit per worker, and varies inversely with the capital per worker and the ratio of unproductive labor to productive labor. Therefore, there are three main ways to increase the rate of profit: (1) increase the profit per worker, (2) reduce the capital per worker, and (3) reduce the ratio of unproductive labor to productive labor.

Marxian theory suggests further that an increase in the profit produced per worker (by means of wage-cuts, speed-ups, etc.) is not likely by itself to be sufficient to restore the rate of profit to its previous levels, since the prior decline in the rate of profit was not caused by a decline in the profit per worker, but was instead caused by increases in the capital per worker and in the ratio of unproductive labor to productive labor. We have already seen that a significant increase in profit per worker in recent decades has resulted in a relatively small increase in the rate of profit. Marxian theory suggests that what is required to fully restore the rate of profit is to reverse the two trends that caused its decline, i.e. to reduce the capital invested per worker and to reduce the ratio of unproductive labor to productive labor.<sup>v</sup>

The main way capital per worker has been reduced in the past has been through the widespread bankruptcies of capitalist firms, which are caused by the combination of falling profits and rising debts. As a result of bankruptcies, surviving firms are able to purchase the productive assets of the bankrupt firms at a very low price, thereby reducing the amount of capital invested per worker and raising their rate of profit. This process of bankruptcies, etc (which Marx called the “devaluation of capital”) continues until the capital per worker has been reduced enough and the rate of profit increased enough in the economy as a whole for capital investment to resume and for a period of recovery and expansion to begin. Of course, widespread bankruptcies also worsen the economy in the short run, and many times in the past have turned a recession into a depression.

The main way to reduce the ratio of unproductive labor to productive labor would be to lay off large numbers of non-production employees (sales, managers, etc.). Leaving aside the questions of whether such a large reduction of non-production employees is feasible in the US economy today, and how it would be brought about, such a large displacement of non-production employees would sharply increase the rate of unemployment, especially among these occupations. Thus we can see that all the various ways in which the rate of profit could be increased (wage-cuts, bankruptcies, lay-offs, etc.) involve hardships and declining living standards for workers.

Since the mid-1970s, as discussed above, profit per worker has increased significantly (through wage cuts, etc.) and this has indeed contributed to an increase in the rate of profit (while at the same time contributing to an increase in the hardships of workers). However, these other two crucial adjustments necessary to increase the rate of profit have not yet happened in the US economy. The capital invested per worker has remained more or less constant (first decreasing in the 1980s and then increasing in the 1990s) and the ratio of unproductive labor to productive labor has continued to increase (although at a slower rate) and thus has continued to have a negative effect on the rate of profit. This is the main reason why the rate of profit has increased so little since the 1970s, in spite of the significant increase in the profit produced per worker (see Moseley 1997 for a further discussion of the trends in these key variables since the 1970s).

#### **4. What lies ahead?**

What does this Marxian theory imply about the future course of events in the US (and world) economy? In the first place, this theory implies that the future of the US economy, like its past, will depend mainly on the rate of profit. If the rate of profit increases significantly, then perhaps the US economy will return to the more prosperous of the early postwar “golden age”. However, if the rate of profit remains at the current low levels, then a return to prosperity is not very likely. Instead, the US economy will continue to experience subpar growth and higher unemployment, and perhaps even worse.

Furthermore, this theory suggests that the future trend of the rate of profit depends on the three main factors discussed above: the profit produced per worker, the capital invested per worker, and the ratio of unproductive labor to productive labor. Profit per worker will probably continue to increase as in recent years (as slow growth and higher unemployment continues to put downward pressure on wages), which will continue to have a positive effect on the rate of profit. Further, if the economy continues to expand (although slowly), then the capital per worker will probably also increase slowly, which will have a negative effect on the rate of profit. And the ratio of unproductive labor to productive labor will probably continue to increase, which would continue to have a negative effect on the rate of profit. The net effect of these opposing trends is difficult to predict with precision, but extrapolating from the recent past, it does not appear very likely that there will be a significant increase in the rate of profit in the foreseeable future. In the absence of such an increase in the rate of profit, the US economy will at best remain stuck in the stagnation of recent decades (see Moseley 1999 for a further discussion of the likely future trends in these key variables).

Furthermore, according to Marxian theory, there is not much the government can do to avoid this gloomy prospect, because there is not much government economic policies can do to increase the rate of profit. Expansionary fiscal and monetary policies do not increase the profit produced per worker, nor reduce the capital invested per worker, nor reduce the relative proportion of unproductive labor. Therefore, even though expansionary and monetary policies may provide a temporary boost for the economy they are not able to achieve the necessary precondition for a return to a new era of prosperity: a significant increase in the rate of profit.

As this is written, two months after September 11, 2001, the US economy is falling again into recession, which threatens to be a severe one. This recession has not been caused by the September attacks, but rather by a rapid decline in the rate of profit since 1997 (see Figure 1), which has led to a sharp reduction in capital investment beginning in 2000, and then to a spreading recession in recent months (even before September 11). Also, capitalist firms borrowed record amounts of debt in recent years in order to finance the “investment boom” of

the late 1990s (and also to help finance the stock market boom of the late 90s, as firms used about half of the money they borrowed to repurchase their own stock!). This combination of low profits and high debt makes the risk of defaults and bankruptcies today the highest in the postwar period. Also, households have taken on record levels of debt to finance their “consumer spending spree” of the late 90s, and they too face a higher danger of defaults and bankruptcies, which would further worsen the recession.

Another important aspect of the current recession is that the other two major economies in the world are also either in recession (Japan, which has been mostly in recession for the last decade), and or falling into one (Europe). This synchronized recession of the three major economies will in turn have devastating effects on the rest of the world, especially developing countries, who depend very much on exports to the three main economies. Most of the rest of the world - Asia, Latin America and Africa - are already in a deepening recession, as a result of the slowdown of the major economies (e.g. Mexico, which sells 85% of its exports to the US, has been in a recession for over a year). The “Asian crisis” has returned, this time without the capital flight and currency crises, but probably even worse in terms of GDP declines and higher unemployment, because the major economies are also in a recession this time (there is no “US locomotive” to pull these countries out of recession this time). This will be the first global recession in the world economy as a whole since the Great Depression.

Whether the current global recession turns into global depression cannot be predicted with precision. But if Marx’s theory (and history) is any guide, the postwar period of declining profitability and increasing debt will eventually be followed by a period of depression, characterized by significant and widespread bankruptcies which will eventually raise the rate of profit for surviving firms and eliminate much of the existing debt, thereby creating the conditions for another period of expansion and prosperity. In other words, a return to prosperity requires a prior depression. It may be possible to continue to avoid such a depression for a few more years; but without such a depression, Marxian theory suggests that a return to the more prosperous conditions of the early postwar “golden age” is not very likely.

Such a worsening crisis of global capitalism would inflict great suffering - loss of jobs, lower incomes, greater hunger and poverty, greater anxiety and desperation, etc. - on the world's working population, especially in developing countries. How would workers around the world and in the US respond to this widespread and increasing misery? It seems likely that in the next few years workers all over the world will be forced to choose between passively accepting higher unemployment and lower living standards or actively resisting these hardships and striving to defend their economic livelihood. It is possible that, as economic conditions deteriorate, these struggles by workers to maintain their living standards within a capitalism in crisis will lead more and more of them to call into question capitalism itself, and the adequacy of capitalism to meet their basic economic needs. If capitalism requires these attacks on our economic livelihood, then perhaps there is a better economic system that does not require such attacks and which could better satisfy our economic needs and wants.

## REFERENCES

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## ENDNOTES

<sup>i</sup> The rest of the world has experienced a similar deterioration of economic performance in recent decades. The rate of unemployment has been above 10% in Europe for most of the 1990s. Japan has been in a prolonged economic slump for over a decade. The other Asian economies have also fallen into crisis in recent years. Economic conditions have been especially severe in Latin America and Africa, which have suffered two “lost decades”, in which growth has been stagnant and living standards have declined drastically.

<sup>ii</sup> Total profit includes the interest paid to creditors, and hence is a comprehensive measure of the total “return to capital” for capital as a whole, including both non-financial and financial capital.

<sup>iii</sup> Paul Zarembka (in this volume) presents a very different interpretation of the effects of an increase of unproductive labor. Zarembka argues that an increase of unproductive labor *solves the problem of the realization of surplus-value* which is inherent in capital accumulation. In my interpretation, for which there is considerable textual evidence (see Moseley 1992, Chapter 2, and Mohun in this volume), unproductive labor is a cost, a *deduction from surplus-value*. Therefore, an increase of unproductive labor, in relation to productive labor that produces surplus-value, increases the relative deductions from surplus-value, and hence causes the net rate of profit going to capitalists to decline. In other words, a relative increase of unproductive labor is an important *cause* of capitalist crises, not a *solution* to capitalist crises.

Zarembka also argues that the question of a secular decline in the rate of profit is no longer of theoretical interest: “And, while falling profits in the first half of the 19th century encouraged economists to accept it as fact requiring explanation, a century and a half later rising, falling, rising, falling (etc.) rates of profit pushes into the background even searching theoretically for a tendency of profit rates.”

However, the all-important fact is that the rate of profit in the US economy (and other major capitalist countries) *declined significantly* (about 50%) in the 1960s and 1970s, and has not recovered since. I have argued above that this significant decline in the rate of profit was the main cause of the deterioration of economic performance since the 1960s. Therefore, the explanation of this significant decline in the rate of profit is a very important question, both theoretically and practically. It may be that Marx’s theory cannot prove that there is a long-run, secular decline in the rate of profit over centuries (I don’t think that is what Marx was trying to do). But Marx’s theory does provide an explanation of the long-wave decline of the rate of profit in the postwar US economy (and I think other economies as well). According to this Marxian explanation, the decline in the rate of profit was caused in part by the relative increase of unproductive labor. Therefore, the relative increase of unproductive labor in the postwar US economy was a big *problem* for capitalism, not a *solution* to the realization problem.

<sup>iv</sup> For a similar explanation of the decline of the rate of profit in the postwar UK economy, see Freeman 1991.

<sup>v</sup> Japan has been in a prolonged slump for the entire decade of the 1990s, and has fallen again this year (2001) into even deeper recession. According to Marxian theory, the main reasons for this prolonged slump are: a significant decline in the rate of profit and the unwillingness (or inability) of Japanese banks to force money-losing firms into bankruptcy. The Japanese experience seems to suggest, in support of Marxian theory, that these bankruptcies cannot be avoided.

