

Social Structures of Accumulation, the Rate of Profit, and Economic Crises David M. Kotz

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PREFACE

This working paper is one of a collection of papers, most of which were prepared for and presented at a fest-schrift conference to honor the life's work of Professor Thomas Weisskopf of the University of Michigan, Ann Arbor. The conference took place on September 30 - October 1, 2011 at the Political Economy Research Institute, University of Massachusetts, Amherst. The full collection of papers will be published by Elgar Edward Publishing in February 2013 as a festschrift volume titled, *Capitalism on Trial: Explorations in the Tradition of Thomas E. Weisskopf.* The volume's editors are Jeannette Wicks-Lim and Robert Pollin of PERI.

Since the early 1970s, Tom Weisskopf has been challenging the foundations of mainstream economics and, still more fundamentally, the nature and logic of capitalism. That is, Weisskopf began putting capitalism on trial over 40 years ago. He rapidly established himself as a major contributor within the newly emerging field of radical economics and has remained a giant in the field ever since. The hallmarks of his work are his powerful commitments to both egalitarianism as a moral imperative and rigorous research standards as a means.

We chose the themes and contributors for this working paper series, and the upcoming festschrift, to reflect the main areas of work on which Tom Weisskopf has focused, with the aim of extending research in these areas in productive new directions. The series is divided into eight sections, including closing reflections by our honoree himself, Professor Weisskopf. Each section except for the last includes comments by discussants as well as the papers themselves.

The eight sections are as follows:

- 1. Reflections on Thomas Weisskopf's Contributions to Political Economy
- 2. Issues in Developing Economies
- 3. Power Dynamics in Capitalism
- 4. Trends in U.S. Labor Markets
- 5. Discrimination and the Role of Affirmative Action Policies
- 6. Macroeconomic Issues in the United States
- 7. Applications of Marxist Economic Theory
- 8. Reflections by Thomas Weisskopf

This working paper is 1 of 4 included in Section 7.

- Jeannette Wicks-Lim and Robert Pollin

Social Structures of Accumulation, the Rate of Profit, and Economic Crises

David M. Kotz

INTRODUCTION

From the early 1980s through the early 1990s, Thomas Weisskopf published a series of articles and two books -- most of them coauthored with Samuel Bowles and David Gordon -- that analyzed the crisis of the postwar social structure of accumulation (SSA) in the U.S. in the 1970s based on movements of the profit rate. The earlier SSA literature had viewed the relation between a SSA and capital accumulation as centered around the problem of instability in a capitalist system (Gordon et al., 1982). The central role of the profit rate in Weisskopf's work brought the SSA theory closer to traditional Marxist crisis theory (see Weisskopf 1979).

Weisskopf and his coauthors' work in the SSA literature introduced the idea that an SSA, when it is working effectively, promotes a high rate of profit and that a structural, or SSA, crisis results from a profit rate decline stemming from problems that arise in the SSA and its relation to capital accumulation. In the traditional Marxist crisis theory literature, one finds various possible causes of a decline in the rate of profit, such as a rising organic composition of capital (ratio of value of means of production to labor power) or a rising wage share. In one widely cited empirical study, Weisskopf found the latter, often called the "profit squeeze" crisis tendency, to be the main explanation for a long-term fall in the rate of profit in the postwar decades in the U.S. This suggested an explanation for the 1970s crisis of the post-World War II SSA (Weisskopf 1979).

Many analysts view the current crisis, which began in 2008, as the structural crisis of the neoliberal SSA.² Most analysts view the current crisis as having rather different causes from that of the previous SSA crisis. However, this paper goes further, arguing that the current crisis cannot be effectively analyzed by focusing on movements in the rate of profit. Instead, this crisis results from unsustainable trends that were produced by the neoliberal SSA, which led to a crash in 2008 that ended the ability of the neoliberal SSA to any longer effectively promote capital accumulation.

The analysis presented here draws on strands in Marxist crisis theory that approach crisis not within a rate of profit framework but within a circuit of capital framework. The circuit of capital framework has the advantage of effectively integrating within a single framework several crisis tendencies in capitalism including those not based on profit rate movements. A key lesson drawn from this analysis is that differences between particular SSAs imply a different process of SSA breakdown and different causes of the SSA crisis.

Section 2 uses a circuit of capital framework to consider two different kinds of crisis, one due to a problem in the creation of surplus value and the other due to a problem in its realization. Section 3 considers the role of

movements in the rate of profit in the crisis of the 1970s and that of today in the U.S. Section 4 examines the main features of the last two SSAs, the postwar regulated capitalist SSA and the neoliberal SSA. Section 5 analyzes the crises of the last two SSAs in the U.S., showing why the rate of profit was central to the first crisis but not to the second (current) one. Section 6 offers concluding comments.

THE CIRCUIT OF CAPITAL, THE RATE OF PROFIT, AND REALIZATION PROBLEMS

The most comprehensive framework for analyzing accumulation and crisis is the circuit of capital framework. Developed by Marx, the circuit of capital is represented by the symbols M-C-C'-M'. This process has three steps. The first is an exchange of money capital (M) for productive commodities (C), with no change in value. The second is the production (or labor) process, in which the productive commodities give rise to new commodities (C'), whose value exceeds that of the productive commodities due to the appearance of surplus value at this step. The third and last is another exchange, in which the final commodities are sold for money (M'), which in Marxist terminology is referred to as the *realization* of the value (and surplus value) "contained in" the final commodities.

The capitalist accumulates (uses part of the surplus value to enlarge the capital) to gain increased surplus value in the future. However, the capitalists as a group do not always accumulate -- whether they do depends on the conditions. An interruption of accumulation -- an economic crisis -- can result from one of two different types of problem in the circuit of capital. First, a problem in the creation of surplus value -- at steps 1 or 2 -- can reduce the surplus value created relative to the capital invested. In that case, the profit rate would decline, and, it is assumed, if the decline is big enough the capitalists may "put their money in the bank" rather than throwing it back into the production and accumulation process, waiting for profitability conditions to improve.

The second type of problem is one that arises in the realization of value. If the capitalists as a group cannot realize all of the value, there are two consequences. First, the "realized rate of profit," measured by the ratio of the amount of surplus value realized to the capital invested, would fall below the rate of profit in production. The second is that the very appearance of a realization problem implies that too much has been produced. This in itself would tend to cause the capitalists to immediately reduce the quantity of output. A realization gap would produce some combination of price decline and decline in the quantity of output sold. The latter implies that unwanted inventories of finished goods remain on hand, which would indicate that production should be decreased.

A realization problem cannot be adequately taken into account in an analysis of crisis tendencies by focusing only on the rate of profit, even the realized rate of profit. A realization problem would reduce the realized rate of profit below what it would have been had there been full realization, but it would not necessarily reduce it below the previous period's realized rate of profit. In the face of a realization problem, even if the realized rate of profit has not fallen, the capitalists would have good reason to cut back on production. Furthermore, a mild fall in the realized rate of profit due to a realization problem may be associated with a big drop in the incentive to produce stemming from unsold goods.

Thus, a decline in the rate of profit in production, due to a problem in step 1 or step 2, can set off an economic crisis. However, if the initial problem is in the realization of surplus value, then the crisis is set off by the direct effect on production/accumulation of the realization problem rather than a decline in the rate of profit, either in production or realized.

We will argue below that, for the first postwar SSA in the U.S., the structural crisis that arose in the late 1960s/early 1970s was due to a problem in the creation of surplus value. As a result, a profit rate framework is suitable for determining the underlying cause of the crisis. However, we will argue that, for the neoliberal SSA, the problem was realization rather than creation of surplus value, and hence a profit rate analysis is not appropriate for determining the underlying cause of the structural crisis.

THE RATE OF PROFIT IN TWO SOCIAL STRUCTURES OF ACCUMULATION

Most SSA analysts view the postwar SSA in the U.S. as starting to effectively promote accumulation around 1948, which is conveniently a business cycle peak year. SSA analysts generally view 1966 as the year after which the SSA began to encounter problems, reflected initially in a steep decline in the rate of profit (see figure 1). Some date the SSA "peak" at 1966, while others choose 1973 on the grounds that severe macroeconomic problems began after the latter year. From 1973-79 both inflation and unemployment showed rising trends, the international monetary system exhibited increasing instability, and the dominant Keynesian economic management policies proved unable to rectify the situation. Also, the growth rate of output per hour in the nonfarm business sector, which slowed only modestly from 2.92% per year in 1948-66 to 2.46% per year in 1966-73, dropped by more than half to 1.14% in 1973-79, a fact that was widely noticed at the time (U.S. Bureau of Labor Statistics, 2009). The period 1973-79 is usually viewed as the heart of the postwar SSA crisis phase.

Neoliberal restructuring began around 1979, and this author views the neoliberal SSA as established by the early 1980s.³ The main institutions of the neoliberal SSA had all been put in place by the early 1980s (Kotz and McDonough 2010, Kotz 2009a). Inflation was conquered by 1983, and the long-run profit rate trend shifted from down to up after 1982 (see figure 1). Three long economic expansions followed, in 1982-90, 1991-2000, and 2001-07. In our view, the neoliberal SSA entered its crisis phase abruptly in 2008.

Figure 1 shows both the relevance of the movement of the profit rate for the initiation of the crisis phase of the postwar SSA, as well as showing the failure of the profit rate to register a structural crisis prior to 2008. After 1966 the profit rate fell steeply despite continuing rapid GDP growth through 1969. The extent of the long-term decline can be seen by examining profit rate peak-to-peak declines from 1965-81. From its peak in 1965, the profit rate fell by 30.0% from 1965-72, which was just before the heart of the SSA crisis phase began in 1973. The profit rate declined by another 9.2% from 1972-77, and by 18.3% from 1977-81. Over the whole period 1965-81, the profit rate fell by 48.0%, which is quite a significant decline.

From figure 1 we can see that no such sharp long-term profit rate decline preceded 2008. Again using a profit rate peak-to-peak measure, the profit rate rose from 1981-84, 1984-88, and 1988-97. During the last profit rate peak-to-peak period before 2008 of 1997-2006, the profit rate fell but only by 8.3%.

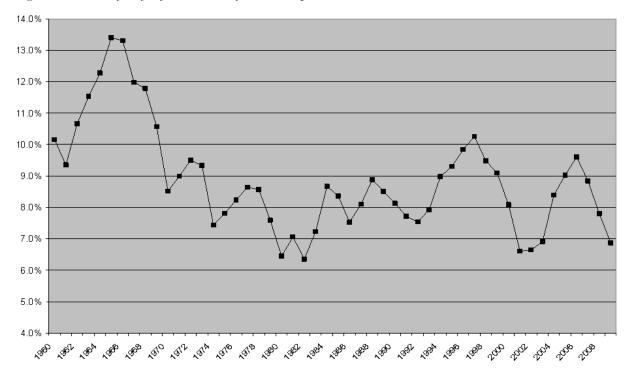


Figure 1. The Rate of Profit of the U.S. Nonfinancial Corporate Business Sector

Note: Pretax profit with inventory valuation and capital consumption adjustments and plus net interest and miscellaneous payments divided by produced assets (structures, equipment and software, and inventories) at reproduction cost.

Source: U.S. Bureau of Economic Analysis (2011b), Fixed Asset table 4.1, table S.5.a, and NIPA table 1.14.

Figure 1 suggests that the profit rate did not play the same key role in the crisis of the neoliberal SSA as it did for that of the postwar SSA. We now turn to an analysis of the two SSAs and their crises to discover why the profit rate played different roles in the two cases.

TWO DIFFERENT SOCIAL STRUCTURES OF ACCUMULATION

The U.S. (and the global capitalist system) has had two quite different SSAs since World War II. The postwar SSA is often called the "regulated capitalist SSA," since economic relations and behaviors were subject to significant regulation, not just by market forces, but by the state, trade unions, and large corporations. The neoliberal SSA has been characterized by a much lesser role for such institutions in regulating economic relations and behaviors, with a correspondingly larger role played by market forces.

The postwar regulated capitalist SSA had 5 key features. First, the capital-labor relation was based on a compromise that granted significant rights and powers to organized labor. Second, the state played an active, interventionist role in the economy through policies to promote growth, high employment, and low inflation; through various forms of regulation of business; by provision of public goods; and via income supplementation programs. Third, capital-capital relations were characterized by a restrained, co-respective form of competition among large corporations. Fourth, the relation between the financial and non-financial sectors con-

strained the financial sector to mainly provide financing for productive activity by the non-financial sector of capital. Fifth, the dominant ideology was that of the "mixed economy," which, while claiming the superiority of a "market economy," also viewed an active state and strong trade unions as necessary to achieve good economic outcomes and to avoid such potential disasters as another Great Depression.

While one can describe the postwar SSA by giving a long list of institutions, the above characterization of it indicates that it had a definite coherence. That is, the various institutions tended to reinforce one another and to work together in promoting accumulation. While in some sense the centerpiece of the postwar SSA was the capital-labor compromise, the principle of coherence of that SSA was active regulation of economic relations and behaviors by various types of institutions other than market forces. The capital-labor compromise would not have been viable without the other features mentioned above.

The neoliberal SSA was so different from the previous SSA that, at first, no one thought it was a new SSA. Instead, many SSA analysts at first viewed neoliberal policies as temporary expedients intended to weaken labor, preparing the way for a future new SSA that would be again based on active state regulation.⁴ However, by the late 1990s it became apparent that neoliberal restructuring had created a coherent, long-lasting institutional structure that appeared to be promoting capital accumulation, and the SSA literature swung toward viewing neoliberalism (or the institutions associated with it such as globalization) as a new SSA.

The neoliberal SSA also has had five key features, each more or less the opposite of the five that characterized the preceding regulated capitalist SSA. First, capital strived to fully dominate labor and increasingly succeeded in doing so over time. Second, the state withdrew from the economy to a significant extent, via renunciation of the pursuit of high employment, deregulation, privatization, reduction in the provision of public goods, and elimination of or cutbacks in income maintenance programs.⁵ Third, capital-capital relations shifted to unrestrained competition among large corporations, bringing price wars back to the world of the large corporation. Fourth, the financial sector, rather than directing funds into productive uses, increasingly separated from the nonfinancial sector to pursue speculative profits via purely financial operations (Kotz 2011b). Fifth, the dominant ideology was a revived and somewhat updated liberal ideology that glorifies individualism, unfettered competition, and market relations, while viewing state intervention as a threat to individual liberty and economic efficiency.

The neoliberal SSA also has a principle of coherence, which is the expansion of market relations at the expense of other forms of economic regulation. In the neoliberal era market relations have penetrated institutions from which they previously been largely excluded, including states and educational institutions. Even the management structure of large corporations, previously governed by bureaucratic relations, was significantly marketized, as top managers came to be hired from the outside in a market for corporate executives, replacing the old bureaucratic system of promotion from within.

TWO DIFFERENT CRISES

Weisskopf and his coauthors argued that the regulated capitalist SSA was undone by successful resistance to exploitation/oppression by workers, other countries that had been dominated by U.S. imperialism, and U.S. citizens who demanded an expansion of their rights including increased state regulation of capitalist activities

that negatively affected the citizenry. These three forms of resistance raised costs for capital, driving down the profit rate after 1966. Capital was unable to successfully beat down this resistance, and begin to restore profitability, until the early 1980s by using contractionary fiscal and monetary policies -- which we view as a part of the construction of the new neoliberal SSA.

How should one regard this process of declining profitability? It is a kind of "profit squeeze," but not the cyclical variety that results from a temporary decline in unemployment. One can argue that the manner of the demise of the regulated SSA was not an accident.

The regulated capitalist SSA empowered labor. It enabled the trade union movement to grow stronger. It enabled labor to win victories not only through economic strength but through political action, expanding social welfare programs that in turn contributed to greater economic bargaining power. Similarly, the acceptance in this SSA of the principle of active state regulation of business provided an opportunity for citizen groups to steadily push back against corporate efforts to impose external costs of production on the citizenry. On the other hand, it is not obvious how the uprising of Third World raw material suppliers can be fitted into such an "endogenous" story. The latter appeared to result from a weakening of U.S. power in the world as U.S. forces became bogged down in Vietnam at the same time as U.S. economic prowess was declining relative to that of its advanced capitalist rivals. But at least a large part of the profit squeeze can be attributed to the normal working of a regulated capitalist SSA over a period of several decades.

In any event, the crisis of the regulated capitalist SSA was clearly a crisis of profitability due to rising costs -that is, a problem in the creation of surplus value. This has implications for the nature of the structural crisis.

A decline in profitability does not set off an immediate crash of the economy, as we can observe during 196679. The U.S. economy continued to expand from 1966-69, apparently due to demand stimulation from rising
Vietnam War spending. Three years later, in 1969, the economy hit a business cycle peak when fiscal policy
turned contractionary, and a mild recession followed in 1970 (GDP fell by only 0.6 percent). The next recession, in 1974-5, was more severe, with GDP falling by 3.2% and the unemployment rate reaching 9.0%. But
the peak to peak GDP growth rates of this period were well above a stagnation level: 3.6% per year in 196973 and 3.0% per year during the heart of the crisis from 1973-79. The crisis of the regulated capitalist SSA, set
off by a decline in the rate of profit, appeared in the macroeconomic indicators in the form of secularly rising
unemployment and inflation and growing international monetary instability, with a modest reduction in the
long-term rate of growth and capital accumulation but not a crash of either the financial or real sector.

That the crisis of the regulated capitalist SSA was a profitability crisis also has implications for the appropriate framework for analyzing the crisis. The regulated capitalist SSA tended to generate rising aggregate demand over time. This was one factor accounting for its inflationary bias. The capital-labor compromise enabled workers, through collective bargaining (and its pressure on non-union employers), to raise their real wages over the long-run in step with rising labor productivity. From 1948-73, real wages of non-supervisory workers rose at 2.2% per year while output per hour only slightly faster, at 2.4% per year, indicating that productivity gains were almost equally shared by labor and capital (U.S. Bureau of Labor Statistics, 2009). Household income distribution became somewhat less unequal over the period, as the share of income received by the top 5% and top 20% fell slightly while that received by the bottom 20% rose slightly from 1948-73 (U.S. Bureau of the Census, 2010). At the same time, government spending on social programs and public goods grew rap-

idly. The result was that there was not a long-run problem in the realization of surplus value under that SSA. Since realization was not a problem, that leaves only a problem in the creation of surplus value as a potential cause of long-run crisis. Hence, a rate of profit framework is suitable for analyzing the source of the crisis for the regulated capitalist SSA.

The neoliberal SSA was a quite different type of SSA. All of its institutions produced favorable conditions for the creation of surplus value (Kotz, 2009a). However, at the same time the institutions of the neoliberal SSA created a problem for the realization of surplus value. From 1979 to 2007 the real average hourly earnings of nonsupervisory workers declined slightly, while output per hour rose at an annual rate of 1.91%, for a total increase of 69.8% over the 28-year period (Kotz, 2009a, p. 308). Total real profit rose at 4.6% per year while total real employee compensation rose by 2.0% per year over the same period, and the gap between the two grew over time -- in 2000-07 profits rose more than 8 times as fast as compensation (Kotz, 2009a, p. 310). Household income became much more unequally distributed over the course of the neoliberal era, reversing the equalizing trend of the regulated capitalist era and, by the mid 2000s, reaching levels not seen since 1928 (Kotz, 2009a, p. 310). Also, cutbacks in state social programs and public goods provision were unfavorable for the realization of surplus value.

At the beginning of the neoliberal era, many Marxist analysts wondered how such a form of capitalism could bring accumulation at all in light of such an apparently severe realization problem. However, the neoliberal SSA did promote accumulation and even particularly long economic expansions, as was noted above. The recessions of 1991 and 2001 were both relatively mild. This record indicated that in some way the neoliberal SSA was resolving, or postponing for decades, the realization problem. Indeed, it must have done so in order to be a SSA.

The key to resolving the realization problem in the neoliberal SSA was that the same institutions that created favorable conditions for the creation of surplus value also produced two features that together resolved -- or rather postponed -- the realization problem created by those institutions. Those two features were a financial sector that became engaged in increasingly speculative and risky activities and a series of large asset bubbles. These features of the neoliberal SSA and their role in postponing the realization problem are described in detail in Kotz (2009a). Briefly, the growing inequality of the neoliberal SSA generated a surplus of investable funds, relative to available productive investment opportunities, that tended to find its way into purchasing assets. That tended to produce asset bubbles. However, a big asset bubble requires a financial sector prepared to finance the speculative, risky activity of investing in an asset whose market price is rapidly rising above what appears to be its economic value -- and the deregulated financial sector of the neoliberal SSA was prepared to do just that. Thus, in every decade of the neoliberal era there was a large asset bubble in the U.S., in the 1980s in Southwestern commercial real estate, in the 1990s in the stock market, and in the 2000s in real estate as a whole.

The asset bubbles postponed the realization problem by enabling a major part of the population to increase its consumption over time based on the rising paper wealth created by the asset bubble. This process also required an accommodating financial sector, ready to lend money to households based on their asset bubble wealth, since if households had to sell the assets to spend their rising value, the bubble would immediately deflate. The asset bubbles also tended to directly promote business investment, by creating an atmosphere of

euphoria and confidence about future profits. This process occurred in the U.S. in the 1990s expansion based on the stock market bubble (Kotz, 2003) and in the 2000s expansion based on the real estate bubble (Kotz, 2009a).

The rate of profit, shown in figure 1, shows no sign of a long-term problem during 1979-2007. While the rate of profit fell after its peak in 1997 through 2001, it then recovered, slowly at first and then steeply through 2006, reaching a level in 2006 that was 92% of its 1997 high for the neoliberal era. However, a problem can be seen in the series on capacity utilization.

Figure 2 shows the capacity utilization rate in manufacturing, which rose from peak to peak for the last three peaks of the regulated capitalist era. By contrast, for the last three business cycle peaks of the neoliberal era the pattern is the reverse, declining from peak to peak. In addition, figure 2 shows that the rate of capacity utilization in 2007 was substantially lower than it had been in 1973, the last year before the start of the heart of the crisis of the regulated capitalist era. This suggests that, while demand growth was not a problem in the regulated capitalist era, it was increasingly problematic over the neoliberal era. While mainstream economists have touted the disappearance of any significant inflation in the neoliberal era, it probably mainly reflected the realization problem endemic to that era, which had been only partially postponed through the bubble and borrowing process described above.

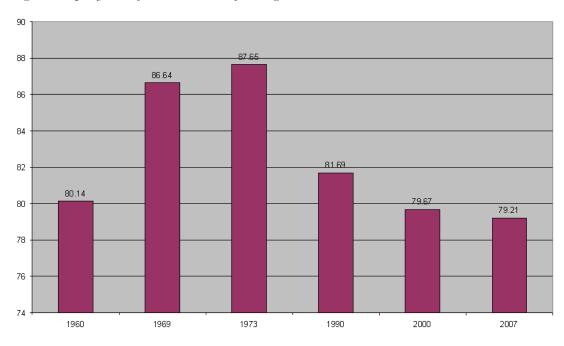


Figure 2. Capacity Utilization Rate in Manufacturing

Note: The years shown are the last three business cycle peak years of the regulated capitalist SSA and of the neoliberal SSA. *Source*: U.S. Federal Reserve System, 2011.

The structural crisis of the neoliberal SSA finally arrived, not due to a falling rate of profit, but due to the collapse of unsustainable trends that were essential features of the neoliberal SSA and of its ability to promote

capital accumulation. Several decades of long expansions made possible by household borrowing, in the face of slow or no growth of household income, produced a long-term increase in household debt relative to household income. In the period 1965-79 the ratio of household debt to disposable income showed no trend, rising in expansions and falling in recessions. However, after 1979 it began a long-term climb, more than doubling from 63.9% of disposable income in 1980 to 128.8% in 2007 (Kotz, 2009a, p. 314). This unsustainable trajectory was driven by the series of asset bubbles; once the real estate bubble collapsed in 2006-7, it was bound to reverse as households would have to then pay down their debt. Thus, once the housing bubble burst, consumer spending was bound to decline, setting the stage for a sharp recession. From 2005 to 2009 consumer spending as a share of disposable income fell from 95.1% to 90.6%, eliminating virtually all of the rise in that ratio that had been produced over two decades by the two big bubbles (Kotz, 2011a, p. 15).

Kotz (2011a) examined quarterly GDP data, showing that the 2008-09 recession, which started in the first quarter of 2008, began with a decline in consumer spending in the first quarter of 2008 while business fixed investment spending was still rising. ¹⁰ As would be expected, business fixed investment quickly followed, starting to decline in the second quarter of 2008 and continuing to decline at an accelerating rate through the first quarter of 2009 and starting to rise only in 2010-I (Kotz, 2011a, p. 19). Since the recession officially ended after 2009-II, GDP growth has been tepid, at 2.5% per year (through 2011-II) with 40% of the growth due to inventory accumulation rather than rising final demand (US Bureau of Economic Analysis, 2012).

What can we conclude about the ultimate cause of the structural crisis of the neoliberal SSA? The collapse of the unsustainable trends, that were necessary for the neoliberal SSA to promote capital accumulation, has rendered that SSA no longer able to promote accumulation. Households cannot take on further debt to raise their spending. The financial collapse of 2008 left the financial sector no longer able to promote large asset bubbles. Among the remains of the neoliberal SSA is its continuing ability to repress wages, and this has led to some increase in profits. However, without a means to further postpone the realization problem, the neoliberal SSA cannot bring high profits and accumulation over the long run. The rate of industrial capacity utilization, which reached a low of 67.7% in 2009 -- the lowest rate on record -- had recovered only to 78.0% by the fourth quarter of 2011 after 2.5 years of "recovery" (U.S. Federal Reserve System, 2012).

The realization problem of neoliberal capitalism might appear to fit the traditional Marxist crisis tendency of underconsumption. The latter crisis tendency occurs when rising profits and stagnating wages lead to inadequate consumer demand. However, based on the above analysis, it was not underconsumption that led to the structural crisis of neoliberal capitalism, since the neoliberal SSA provided a means to avoid underconsumption through rising debt.

The crisis tendency that appears to explain the structural crisis of the neoliberal SSA is a form of over-investment. During the neoliberal era, rising debt maintained consumer spending on a rising trajectory despite stagnating wages, and the capitalists increased productive capacity to serve the rising consumer demand. The data cited above indicating a long-term decline in capacity utilization, at least in the industrial sector, suggest that the series of asset bubbles also directly stimulated business investment, causing the creation of even more productive capacity than was needed to satisfy final demand. Once the last asset bubble burst, causing consumer spending to fall toward a normal relation to disposable income, what had seemed to be necessary productive capacity during the bubbles, or only slightly more capacity than was necessary, suddenly turned out to

be greatly excess productive capacity. Business fixed investment dropped by 22.4% in the recession of 2008-09, and by 2011-IV it was still 7.6% below its previous peak, indicating a seriously depressed incentive to invest on the part of capital 2.5 years after the cyclical trough in 2009 (U.S. Bureau of Economic Analysis, 2012). This is consistent with a large overhang of unusable productive capacity due to excessive investment prior to the crisis.

LESSONS FOR THE SSA THEORY OF CRISIS

A common refrain in the SSA literature is that every SSA, and every SSA crisis, is unique. This paper argues that it is possible to say more than that about SSAs and their crises. If SSAs are either of the regulated or liberal type, as has been suggested here, then we can say something more definite about SSA crises, since a regulated SSA and a liberal SSA each appears to have a characteristic type of crisis.

An earlier paper by this author (Kotz 2009b) found evidence that the periodic business cycle recessions in the U.S. during the regulated capitalist SSA were all caused by a profit squeeze due to real wages rising faster than labor productivity in the late stage of each cyclical expansion, as the unemployment rate fell and labor's bargaining power rose. However, there was no late expansion profit squeeze in the neoliberal era through 2001 (the limit of the data for that paper) but instead each cyclical recession was found to be due to over-investment.

This paper suggests a hypothesis about the form of the structural crisis for each type of SSA. The structural crisis of a regulated SSA takes the form of a profitability crisis stemming from the capital-labor relation and perhaps the relation of capital to other groups, as over time a regulated SSA leads to a loss of power on the part of capital. The resulting crisis tends to involve rising unemployment and inflation and various forms of economic instability rather than a sudden economic collapse. This is not the same as the cyclical profit squeeze due to a declining unemployment rate, although it is in some respects similar to that crisis tendency.

On the other hand, the structural crisis of a liberal SSA is set off by the bursting of a large asset bubble that had been a critical underpinning of economic expansion. The bursting bubble suddenly turns what had been sustainable debt levels into unsustainable ones, and what had been necessary productive capacity into excess capacity. The result is both a financial crisis and collapse in aggregate demand. The crisis of a liberal SSA takes the form of a big bang followed by stagnation rather than a period of economic instability.

It must be admitted that the above hypothesis cannot be definitively demonstrated empirically at this time. There has been only one fully developed regulated capitalist SSA in the U.S., and generalizing from a single example is hazardous even for an economist. One can argue that there have been two liberal SSAs in the U.S. since the start of the 20th century, the first one in the 1920s. The 1920s SSA had many of the same features as the neoliberal SSA, and of course it ended with a collapsing asset bubble and severe depression. However, of course even two examples do not provide a firm basis for generalizations, so the argument of this paper does not yet have strong empirical support. Perhaps the strongest conclusion to be drawn is that any effort to analyze capitalist crises should not be restricted to factors that are expressed through a fall in the profit rate. While a falling profit rate can be the key to a crisis, it is not the only source of either cyclical or structural crises. Crisis analyses should consider possible realization problems as well as profit rate problems if they are to be adequate for explaining the variety of ways capitalism can produce crises.

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¹ As is noted below, what is often called the economic crisis of the 1970s had its roots in the late 1960s.

² It is too early to be certain that the neoliberal SSA entered its crisis phase in 2008. However, several developments suggest that 2008 marks the beginning of the crisis phase, including the following: 1) the dramatic financial and economic collapse of 2008-09; 2) the foreclosure of the possibility of continuing rapid growth in household debt which had been a key part of the neoliberal SSA; and 3) the economic stagnation that has gripped the developed capitalist countries since 2009.

³ There is significant disagreement in the SSA literature about the starting date of the neoliberal SSA, or even whether the contemporary SSA should be identified as "neoliberal." See Kotz and McDonough (2010) for a detailed argument in favor of defining the contemporary SSA as neoliberal.

⁴ For example, this author held that view through the mid 1980s. See also Bowles et al. (1983).

⁵ The state did not go back to its role prior to the Great Depression, when state spending was a tiny percentage of GDP. Some parts of the state budget have grown rapidly in the neoliberal era, including military spending (following a brief reduction upon the end of the Cold War), social security pensions (which so far have survived the neoliberal assault on income maintenance programs), public medical expenses, and incarceration expenses.

⁶ A number of economic indicators suggest that in 1966 the economy was poised to head into a recession, but military spending post-poned the recession for three years.

⁷ The GDP declines are from the peak quarter to the trough quarter. The recession of 1982 was even more severe by some measures, but it was caused by extremely high interest rates, not a falling profit rate. As figure 1 shows, the profit rate actually rose in 1981, the year before the 1982 recession.

⁸ The broader series for the industrial capacity utilization rate, which includes mining and power utilities as well as manufacturing, shows the same trends as the series for manufacturing along. However, the broader industrial utilization rate series begins only in 1967.

⁹ Financial sector debt grew even faster than household debt, as financial institutions used more and more leverage to take maximum advantage of the enormous flow of profits they were gaining during the real estate bubble. This was a major factor in the financial crisis that broke out following the deflation of the housing bubble.

¹⁰ A major revision in GDP series back to 2003 by the U.S. Bureau of Economic Analysis, released on July 29, 2011 (U.S. Bureau of Economic Analysis, 2011a), produced some change in the consumer spending and business fixed investment series. In the newly revised series, in 2008-I consumer spending started to fall, at a 1.0% annual rate (revised from an 0.8% rate of decline). However, business fixed investment, instead of continuing to increase at a 2.0% annual rate in that quarter, was found to decline slightly at a 0.8% annual rate. The decline in consumer spending in 2008-I contributed 38.9% of the decline in GDP in that quarter, while the decline in business fixed investment contributed only 5.6% of the decline in GDP.