

Stagnation and Social Structures of Accumulation

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1. Introduction¹

The recovery from the financial crisis and Great Recession of 2008-09 has been sluggish in the United States and more so in a number of other developed countries. This has given rise to a literature about possible secular stagnation (Gordon 2012, 2014, 2016; Krugman 2014; Summers 2014; Ball, DeLong, and Summers 2014; and Ball 2014). This paper proposes an approach to explaining the current stagnation that differs from that found in the above literature. We will argue that the current stagnation stems from the effect of the evolving institutional structure of the economy on long-run macroeconomic performance. This explanation for the current stagnation is based on the social structure of accumulation (SSA) theory (Gordon, Edwards, and Reich, 1982, chapter 2; Kotz et al 1994; and McDonough et al, 2010), which is explained below.

Figure 1 shows the U.S. GDP growth rate for all of the recoveries from quarterly recession troughs since 1949 through the next quarterly cyclical peak. Before 2000 the only recovery that fell below a 4% growth rate is 1991-2000, which was somewhat sluggish through 1995 but then accelerated substantially after 1995.² However, the last two recoveries had growth rates well below that of the previous ones. The recovery from 2009 to date stands out, with a growth rate of only 2.29% per year. This is consistent with the claim that a long-run stagnation emerged after 2008.

Output growth in a capitalist economy is promoted by the capital accumulation drive of enterprises that results from pursuit of profit combined with competition. The capital accumulation drive, particularly if interpreted broadly as including the introduction of new technologies that accompanies enlargement of the value of capital, is a key distinguishing feature of capitalism. It is the underlying cause of capitalism's remarkable record of promoting economic progress, although a rising education and skill level of the workforce also contribute to economic advance. The GDP growth rate can be considered a rough indicator of the strength of the accumulation drive, and we regard a substantial drop in the long-run GDP growth rate to a level well below the norm as evidence of "stagnation." The rate of capital accumulation will also be examined in this chapter.

This chapter proceeds as follows. Section 2 offers an explanation of the social structure of accumulation (SSA) theory and draws some implications from SSA theory about the cause of long-run stagnations. Section 3 presents historical data about SSAs in US history and economic performance. Section 4 presents an argument that the institutional form of capitalism that emerged in the U.S. around 1980, referred to as free-market, or neoliberal, capitalism, can explain the stagnation since 2009. We will show that the character of the last several decades of relatively stable economic expansion prior to 2008 as well as the outbreak of the financial crisis and Great Recession -- and the stagnation that has followed -- all derive from the working, and

1. This chapter is a revised and updated version of Kotz and Basu (2019). Baris Guven provided research assistance for this chapter.

2. The GDP growth rate from 1991-95 was 3.33% per year, rising to 4.30% per year in 1995-2000. The stock market bubble of the second half of that decade accelerated GDP growth after 1995 (Kotz, 2003a).

the evolution over time, of the neoliberal form of capitalism. Section 5 presents empirical evidence for the claim that institutional factors underlie the current stagnation by focusing on the relations among an SSA, the rate of capital accumulation, and the rate of profit. Section 6 offers concluding comments.

2. Social Structure of Accumulation Theory and Stagnation

SSA theory claims that periods of "normal" economic expansion occur when a set of economic and political institutions emerges that is favorable for capital accumulation. Such a set of mutually reinforcing, expansion-promoting institutions is called an SSA. While an SSA can promote normal economic expansion for one or several decades, eventually it turns from a promoter of expansion into an obstacle to further normal expansion, which ushers in a period of stagnation and/or macroeconomic instability, referred to as a long-run economic crisis. Such a crisis can be resolved within capitalism only by the construction of a new SSA. According to this theory, such long-term crises have occurred in the 1870s-1890s, 1930s, 1970s, and again today since 2008.

SSA theory argues that, while capitalism gives rise to a strong accumulation drive, it also presents obstacles to accumulation. Capitalism generates uncertainties and periods of declining profit, which arise from the conflicts and coordination problems that characterize that system. An SSA promotes accumulation by regulating the key relationships of a capitalist system so as to create a condition of relative stability and predictability, to promote a rising rate of profit in the economy as a whole, and to foster growing aggregate demand over time that is essential for sustained accumulation.³ In the absence of an effective SSA, the economy suffers from stagnation and/or instability.

Each past long-run crisis was resolved only after a major restructuring of capitalism, involving transformation of economic and political institutions, leading to the emergence of a new SSA that again promoted normal expansion. The restructuring following the late nineteenth century crisis included the rise of giant corporations and banks and a new state regulation of some sectors of the economy. The crisis of the 1930s was resolved shortly after World War II with the emergence of "regulated capitalism" in which the state and trade unions played an active role in regulating economic activity. The crisis of the 1970s was resolved by the emergence of a relatively free-market and trade union-free form of capitalism, today often called neoliberal capitalism.⁴

Thus, SSA theory attributes long periods of relatively vigorous economic growth to

3. A detailed explanation of how an SSA promotes accumulation and expansion, and why normal expansion is not expected to occur in the absence of an effective SSA, is found in Gordon et al. (1982, ch. 2) and Kotz (1987).

4. Each new SSA also involves a shift in the dominant economic ideas. Keynesian ideas achieved dominance during the period regulated capitalism, while free-market, or neoliberal, economic thought displaced Keynesian ideas in the period of neoliberal capitalism. The shift in economic ideas plays an important role in the rise of a new SSA.

institutional factors, rather than pointing to major new technological advances cited in the widely discussed book by Gordon (2016). SSA theory asserts that, whatever the time pattern of discovery of new technologies, the time pattern of their introduction, imitation, and further development will be mainly determined by economic conditions that may or may not promote long-run capital accumulation. Hence, long periods of strong macroeconomic performance will be associated with new technologies, but the latter are not regarded as the explanation for the timing of such periods. For example, during the 1930s and the first half of the 1940s new technologies continued to appear, but conditions were not favorable for their application, except in weapons production in the later part of that period. After the emergence of an effective SSA following the end of World War II had created favorable conditions for long-run capital accumulation, capitalists were able to draw on the backlog of innovations from the preceding period.

Wolfson and Kotz (2010) offered a critique and reinterpretation of SSA theory. The analysis here is based on their modified version of SSA theory. Following are some of the modifications they proposed:

1) Gordon et al (1982) had argued that each SSA gives rise to a long period of accumulation and economic growth that is rapid by historical comparison. Wolfson and Kotz (2010) argued that both theoretical considerations and historical evidence suggest that not every SSA necessarily brings economic expansion that is rapid. Instead, they proposed that an SSA should be understood to promote stable accumulation and high profits.

2) SSAs come in two varieties, liberal (free-market) and regulated. In the former type of SSA, the institutions reinforce the role of market relations and market forces in the regulation of economic activity while non-market institutions such as states and trade unions play a limited role. In the latter type of SSA, non-market institutions play an active role in regulating economic activity with market relations and market forces playing a lesser role. Furthermore, they argue that a regulated SSA is based on capital-labor compromise while a liberal SSA reinforces the domination of capital over labor. The post-World War II SSA is viewed as a regulated SSA while the current SSA is a liberal type.

3) Regulated SSAs bring faster economic expansion than liberal SSAs.

To the above three claims by Wolfson and Kotz (2010) one more is added here, which is the central argument of this paper:

4) The crisis of a liberal SSA gives rise to long-run stagnation (although this claim is not made for the crisis of a regulated SSA).

To understand the rationale for claim #4, consider that an SSA promotes accumulation through three channels: a) providing stability and predictability; b) promoting a high rate of profit; c) promoting rising demand over the long run. When a liberal SSA enters its crisis phase, it no longer provides stability and predictability and it no longer promotes rising demand. If capital remains strongly dominant over labor, the profit rate is likely to recover after the initial phase of the crisis has passed, but the erosion of the first and third channels for promoting accumulation has the effect of weakening or even breaking the usual link in a capitalist system between profitability and accumulation.

The intuition for this change in responsiveness is the following. As long as the SSA works well, the capitalists are motivated to accumulate. A higher profit rate would increase accumulation through an incentive effect. However, in the crisis phase of a liberal SSA, the SSA no longer creates stability or assures growing markets. Hence, capitalists have no confidence that they can predict the future profit from an investment, so an increase in the current/past profit rate does not necessarily indicate an expectation of a higher profit rate in the future when the investment would bear fruit. Secondly, if the SSA no longer assures growing markets, then a rising profit rate in the recent past would not call for expanding productive capacity through net investment since it is irrational to expand productive capacity if no increase in demand is expected. Hence, we argue that the responsiveness of accumulation to profitability should weaken significantly in the crisis phase of the neoliberal SSA. As a result, even if the profit rate recovers after the initial phase of the crisis of a liberal SSA, accumulation would not return to a normal rate as capitalists sit on their cash instead of investing it.⁵

3. History of SSAs in the United States

U.S. history provides preliminary evidence for the claims we are making. Here we will briefly review the historical evidence starting in 1929. This requires specifying the timing of the emergence of each SSA and the time when it stopped being effective. We will refer to the first period of an SSA during which the SSA effectively promotes accumulation as “phase 1” and the period in which the SSA is an obstacle – the crisis phase -- as “phase 2.” The year of emergence of an SSA should be determined based on the timing of institutional transformation, which is not an exact matter. The boundary year marking the transition from phase 1 to phase 2 of an SSA should be decided based on the start of the deterioration of macroeconomic performance.⁶ The dating of both phases should take account of the business cycle to avoid distortion of the long-run GDP growth rate and other data series by cyclical factors. One way to do this is to select business cycle peak years for the boundaries between SSA phases.

5. In the crisis of a regulated SSA, the SSA is likely to continue to promote growing markets for output, since state spending is likely to increase and, with workers empowered by the regulated SSA, wages are likely to continue to rise. That removes one of the grounds for expecting a weakening of the effect of a rising profit rate on accumulation.

6. Selecting the date of transition from phase 1 to phase 2, when an SSA shifts from promoting good macroeconomic performance to deterring it, by noting the date when macroeconomic performance worsens of course does not excuse the analyst from showing that the worsened performance resulted from institutional factors. In section 5 below we will present an argument linking the evolution of the neoliberal SSA in the U.S. to the 2008 phase shift after which that SSA has no longer promoted good performance.

Based on the above considerations, we will use the following SSA phase timing for the U.S. since 1929, which is the first year for which reliable data on the U.S. macroeconomy are available:

- 1) 1929-37 phase 2 of the post-World War I SSA⁷
- 2) 1948-73 phase 1 of the postwar regulated SSA
- 3) 1973-79 phase 2 of the postwar regulated SSA
- 4) 1979-2007 phase 1 of the neoliberal SSA
- 5) 2007-2018 phase 2 of the neoliberal SSA

The above selection of phase boundaries requires some comment.⁸ All of the above years were business cycle peak years, except for 2018 which is the most recent year for which data are available. The gap between 1937 and 1948 was a special period in the U.S. economy. After two years of normal recovery from the 1937-38 recession, in 1941 government expenditure leaped up by 43% as war preparations began. The following year the federal government took control of the economy, instituting a regime of central planning. Real GDP grew at the rate of 15.3% per year in 1940-44, a rate in excess of China's remarkably rapid growth after 1978. In 1944 the economy hit full capacity utilization, as the unemployment rate fell to 1.2% with the government share of GDP reaching 81.6%. During 1945-47 the economy underwent a painful structural adjustment back to a market economy and civilian production, which was completed by the end of 1947. Thus, we eliminated the period 1937-48 from our analysis.

The year 1948 marked the establishment of the main institutions of the post-World War II SSA in the U.S., which also happens to be a business cycle peak year. However, the end of phase 1 of that SSA has some ambiguity. After 1966 one important indicator, the average rate of profit, began a long downturn that lasted through 1982 (figure 2). However, several other important variables (inflation rate, unemployment rate, severity of the business cycle) indicate that the final year of the effective phase of the postwar SSA was 1973.

Based on institutional considerations, the neoliberal SSA appears to have been established during the late 1970s to early 1980s. The business cycle peak year 1979 was selected as the final year of the regulated SSA, which was a year in which the trend in many economic series shifted.⁹

We regard 2007 as the last year of phase 1 of the neoliberal SSA, with the financial crisis and Great Recession marking the transition to phase 2. The final year of data for the current phase 2 of the neoliberal SSA is 2018, and while that is not a business cycle peak year, it is the ninth year of expansion following the trough in the spring quarter of 2009, an expansion that lowered the unemployment rate below 4 percent in 2018.

7. The early SSA literature viewed the SSA that emerged around 1900 as lasting through the Great Depression. Kotz (2015) argues that a new SSA emerged shortly after World War I. This will be discussed further below.

8. The dating of the SSA phases above is based on the analysis of institutional change and economic performance in Kotz (2015).

9. Kotz and Basu (2019) present a data analysis that supports the claim that a new neoliberal SSA arose in the U.S. around 1979.

Figure 3 shows the GDP growth rates in the five periods under consideration.¹⁰ As figure 3 shows, GDP growth was a robust 4.03% from 1948-73, compared to the severe stagnation of 1929-37 indicated by a GDP growth rate of 0.67%. Indeed, the decades following World War II have been dubbed the "Golden Age of Capitalism" based on the strong macroeconomic performance throughout the developed capitalist world in that period.

The growth rate of the US economy during the crisis phase of regulated capitalism does not suggest stagnation. As figure 3 shows, while the GDP growth rate was one percentage point lower in 1973-79 than it had been in the preceding period, a peak-to-peak growth rate of about 3% cannot be called stagnation for the U.S. economy. If the period 1973-79 is to be considered a long-run crisis, the designation must rest on other variables than the GDP growth rate. As figure 2 showed, that period saw a sharply declining trend in the average rate of profit, one that began in 1967 and lasted through 1982. The 1973-79 period began with a severe recession in 1974-75 that drove GDP down by 3.2% and the unemployment rate up by 4.2 percentage points, a recession that ranks as the most severe since 1950 by both measures (until 2008-09). However, as figure 1 showed, the recovery from 1974-75 recession was relatively robust. The economy experienced a rising trend in unemployment and inflation in the 1970s, with inflation seemingly surging out of control. The international monetary and financial system became very unstable after 1973. This SSA crisis phase was marked by a declining trend in the rate of profit, a high degree of macroeconomic instability, and some slowdown in the rate of GDP growth although not to a rate that could be regarded as stagnation.¹¹

The establishment of the neoliberal SSA did not bring a significant acceleration of the GDP growth rate in the U.S., which was 3.03% in 1979-2007 compared to 2.96% in the crisis phase of the preceding SSA during 1973-79. An increase of 0.07 percentage points in the GDP growth rate cannot be considered significant given the degree of accuracy of GDP growth series. However, at the end of the depressed years 1980-82 the long decline in the rate of profit was arrested, and there followed twenty-five years of long economic expansions punctuated by relatively mild and brief recessions along with little price inflation. The term "Great Moderation" arose to describe this period. The GDP growth rate for phase 2 of the neoliberal SSA, from 2007-2018, was only 1.62%, which qualifies as a condition of stagnation.

The above review of the historical evidence from 1929 to today is consistent with the view that every SSA-induced long-run crisis involves a long-term worsening of macroeconomic performance -- but not always stagnation. The crisis of the 1930s gave rise to long-lasting stagnation as has the current crisis, but that of the 1970s did not, instead taking the form of intense macroeconomic instability.

Kotz (2015, chapter 6) argues that the Great Depression of the 1930s emerged from a decade-long liberal SSA in the U.S. that arose after World War I, replacing the modestly regulated form of capitalism of 1900-18.¹² If that interpretation of the interwar period is adopted,

10. We regard a long-run GDP growth rate (undistorted by cyclical effects) of 2% or below for the U.S. economy as indicating stagnation, a rate of 3% or above as "normal" growth or non-stagnation, while the range of 2-3% is ambiguous. The GDP growth rates shown in figure 1 are for trough-to-peak business cycle recoveries, not long-run peak-to-peak measures.

11. The rate of labor productivity growth also slowed sharply in the 1970s.

12. Kotz (2015, chapter 6) presents a case that the regulated SSA that emerged in the US around

then the historical evidence supports the claim that a crisis of a liberal SSA takes the form of stagnation (the 1930s and today) while the crisis of a regulated form of capitalism takes the form of instability (the 1970s), although of course the number of data points supporting this conclusion is small.

4. The Neoliberal SSA and Stagnation in the U.S.

If the crisis of a liberal SSA gives rise to stagnation, this offers a possible explanation for the current stagnation. The next step is to explain the process through which the neoliberal SSA that emerged by the early 1980s eventually shifted from promoting capital accumulation to obstructing it in a way that gave rise to stagnation.¹³ Table 1 lists the main institutions of the neoliberal SSA in the U.S.

The neoliberal SSA gave rise to three economic developments that, taken together, promoted a long period of stable accumulation and economic expansion: 1) rising income inequality between capital and labor and among households; 2) a financial sector increasingly devoted to speculative, risky activities; and 3) a series of large asset bubbles. Those three developments are well known and need no documentation here (a detailed account is available in Kotz, 2015, chapter 4). Those three developments are not inherent in capitalism. In the preceding period in the U.S., the degree of income inequality declined somewhat, financial institutions were confined to offering traditional financial services, and there were no large asset bubbles.

Rising inequality meant rising profit which encouraged economic expansion, but at the same time rising inequality limited demand growth from households. That, along with the slow growth of government spending in the neoliberal period, threatened to block continuing expansion. However, that potential obstacle was overcome by the other two developments cited above. The large asset bubbles (particularly the 1990s stock market bubble and the 2000s real estate bubble) enabled, and promoted, consumer demand rising faster than disposable income, which occurred in both decades.¹⁴ In the 2000s, the speculatively oriented financial institutions, whose practices were a major cause of the series of big asset bubbles, found ways to lend to even low-income households that were suffering from wage stagnation or decline but owned a home. This enabled a broad section of the population to increase its consumer spending. Several features of the neoliberal SSA promoted price stability, including very limited bargaining power of workers, the more intense competition of neoliberal capitalism, and a tendency for total demand growth to lag behind growing productive capacity despite the promotion of consumer

1900 was replaced by a liberal SSA around 1920 as a result of forces that arose during World War I and its aftermath, which ended the post-1900 regulated SSA before a long-run crisis had emerged.

13. The analysis in this section is based on Kotz (2015, chapters 4 and 5).

14. During 1991-2000, personal consumption expenditures rose from 88.3% to 91.8% of disposable income. During the expansion of 2001-2007 personal consumption expenditures as a share of disposable income rose further, from 91.6% to 92.8% of disposable income (U.S. Bureau of Economic Analysis, 2015, NIPA table 2.1). By contrast, in all but one of the economic recoveries in the regulated capitalist era the ratio of consumer spending to disposable income declined during the expansion.

spending via asset bubbles.

However, this growth mechanism, which no one planned, gave rise to three trends that were unsustainable in the long-run. First, it led to a rising household debt ratio. Household debt relative to disposable income doubled from 1980 to 2007. Second, it led to a rising financial sector debt ratio, as financial institutions could not resist rapidly raising their leverage ratios given the very high profits from their new activities. Third, it led to the spread of toxic financial assets throughout the financial system, whose market values depended on the inflating real estate bubble.

This growth mechanism was dependent on trends that were sustainable only as long as a big asset bubble kept expanding. The 1990s stock market bubble collapsed in 2000, but a real estate bubble quickly arose and began to stimulate economic expansion, reversing a rather sharp decline in business fixed investment that had followed the stock market crash of 2000.¹⁵ Each asset bubble of the neoliberal period was larger than its predecessor, from the bubble in Southwestern commercial real estate in the 1980s to the stock market bubble of the 1990s and the real estate bubble of the 2000s.

However, every asset bubble must eventually deflate. The huge real estate bubble stopped inflating in 2006, and in 2007 it began to collapse. Households could no longer easily borrow against their homes and instead began paying down their debt, leading to a decline in consumer spending in the first quarter of 2008 which initiated the Great Recession. The real estate bubble collapse also caused the toxic financial assets to plummet in value, driving the highly leveraged big financial institutions toward insolvency and causing a financial panic. Declining consumer spending along with plummeting asset values caused investor expectations to turn suddenly negative, and business fixed investment collapsed. The crisis had begun.

The key question here is why this process led, not just to a severe financial crisis and real sector recession, but to a continuing stagnation after the financial panic had subsided and the Great Recession had ended. Our analysis suggests that, once the real estate bubble had burst, the toxic financial assets had collapsed in value, and the speculators who had been driving the series of asset bubbles were humbled, there was no possibility of another big asset bubble arising that could assist in promoting accumulation. The neoliberal SSA has continued to promote rising inequality and continues to allow financial institutions to engage in risky, speculative activities despite the increased oversight under the Dodd-Frank bill. However, this does not amount to an effective growth promoting mechanism. The neoliberal SSA is continuing to suppress demand growth, leaving profit-rich companies with little incentive to expand production. Also, in the aftermath of the big financial crisis and steep recession the neoliberal SSA no longer provides the stability and predictability necessary to promote the long-run investments that bring normal economic expansion.

5. Data Analysis

This section examines the rate of accumulation in the U.S. economy since 1948 to investigate two claims about the causes of stagnation:

15. Nonresidential fixed investment declined at an accelerating pace in 2001 and 2002 and increased by only 1.9% in 2003 before starting to grow rapidly in 2004 through 2006.

1) Stagnation arises in phase II of a liberal SSA but not necessarily in phase II of a regulated SSA.

2) The positive effect of the rate of profit on the rate of accumulation is weakened or eliminated in phase II of a liberal SSA although not in phase II of a regulated SSA.

The large volume of cash held by both banks and nonfinancial corporations suggests something is deterring firms from investing despite the rapid recovery of the rate of profit after 2009, as was shown in figure 2. Figure 4 shows the annual rate of capital accumulation for the nonfinancial corporate business sector from 1948 to 2018. However, it is difficult to draw a firm inference about the relation between the rate of profit and the rate of accumulation from a visual inspection of those two graphs.

The changing relationship between profitability and capital accumulation for the postwar U.S. economy was investigated using a regression of the rate of accumulation on the rate of profit and a constant. The analysis is for the nonfinancial corporate business sector of the US economy during the period 1948-2018. The rate of accumulation is measured as the ratio of the flow of net investment (gross investment less depreciation) to the replacement cost value of nonresidential fixed assets (structures, equipment and intellectual property products) at the beginning of the period. The rate of profit is measured as the ratio of the flow of after-tax profit (profit after tax plus interest paid) to the replacement cost value of fixed assets at the beginning of the period.¹⁶ An explanation of the methodology and data sources for this analysis is presented in Kotz and Basu (2019). In that article the data ran only through 2014. Here only the results of the updated data analysis are presented.

Table 2 provides summary statistics for the rate of accumulation and the rate of profit for four periods: phase 1 and 2 of both regulated and neoliberal capitalism. The average rate accumulation in phase 1 and 2 of regulated capitalism was 3.70 and 3.74 per cent per year, respectively. By contrast, the average rate accumulation in phase 1 and 2 of neoliberal capitalism was 2.86 and 1.89 per cent per year, respectively. This is consistent with the recent version of SSA theory although not with the original version. Note that the average rate of accumulation in both phases of regulated capitalism was higher than the averages in the corresponding phases of neoliberal capitalism. In fact, the average rate of accumulation in phase 2 (crisis phase) of regulated capitalism was higher than the average in phase 1 of neoliberal capitalism. Also, the difference in the average rate of accumulation between the two phases is significant in neoliberal capitalism but not in regulated capitalism. These data are in line with the claim that phase 2 of a liberal SSA witnesses stagnation (in output and capital accumulation) but stagnation does not necessarily arise in the corresponding phase of a regulated SSA.

Turning to the rate of profit, we see that the average in phases 1 and 2 of regulated capitalism was 7.98 and 7.34 per cent per year respectively. The average of the rate of profit in the corresponding phases of neoliberal capitalism was 7.52 and 8.15 per cent per year. The most striking aspect of these numbers is that the average of the rate of profit is highest in phase 2 of neoliberal capitalism. When we juxtapose this to the fact that this regime also saw the weakest capital accumulation, we see an interesting phenomenon: the weakening of the link of

16. Since total fixed assets are in the denominator of the profit rate, which includes assets acquired with borrowed funds, the numerator of this profit rate measure should include interest paid.

profitability and capital accumulation. This is preliminary evidence in support of the hypothesis about the changing relationship between capital accumulation and profitability over SSAs and across different phases within each SSA. We now turn to results from the econometric analysis to see if this preliminary evidence has further support in the data.

Table 3 shows that the responsiveness of capital accumulation to the rate of profit in phase 1 of regulated capitalism is 0.551 (this is statistically significant). This means that a 1 percentage point increase in the rate of profit was associated with a 0.551 percentage point increase in the rate of accumulation during phase 1 of postwar regulated capitalism, which is a sizeable effect in relation to the average rate of capital accumulation over that period. The corresponding responsiveness in phase 2 of postwar regulated capitalism was 0.596 (this is also statistically significantly different from zero). Although this is numerically larger than the responsiveness in phase 1, the difference is not statistically significant. This supports the conclusion that phases 1 and 2 of the postwar regulated SSA display similar responsiveness of capital accumulation to profitability.

Turning to neoliberal capitalism, we see a very different picture. From Table 3 we see that responsiveness of the rate of accumulation to the rate of profit in phase 1 of the neoliberal SSA was 0.492 and statistically significant. The corresponding effect during phase 2 fell to 0.338 and was not statistically significant (p -value = 0.058). Moreover, the difference between these two effects was itself statistically significant.

Thus, bringing together the results in Table 2 and 3, we have the following. First, capital accumulation did indeed slow down significantly in phase 2 of the neoliberal SSA but not in phase 2 of the regulated SSA. Second, for neoliberal capitalism the responsiveness of the rate of accumulation to the rate of profit declines and is not statistically significant in phase 2, an effect that was not observed in phase 2 of regulated capitalism. This is consistent with our claim that phase 2 of a liberal SSA indirectly leads to stagnation by weakening or eliminating the impact of a rising profit rate on accumulation.

6. Concluding Comments

In our view, the current stagnation in the U.S. economy ultimately results from the persistence of an SSA that can no longer promote normal accumulation and instead obstructs it. This kind of condition of the U.S. economy has arisen before, in the Great Depression of the 1930s, although the features of the current stagnation differ in important ways from those of the 1930s mainly due to the greatly increased size of the state relative to the economy along with a readiness to undertake state intervention as soon as a severe crisis develops. But both the stagnation of the 1930s and that of today derive from a transition in a liberal SSA from the phase that promotes accumulation to the phase that is a barrier to it.

SSA theory claims that no automatic corrective mechanism in a capitalist economy will end the stagnation and/or instability that emerges in phase 2 of an SSA. Another round of expansionary fiscal policy at this time might increase the GDP growth rate of the U.S. for a few years, but according to this analysis it would not overcome the powerful stagnation tendency in the private sector of the economy. Only the construction of a new SSA can end the stagnation and give rise to normal capital accumulation and economic expansion.

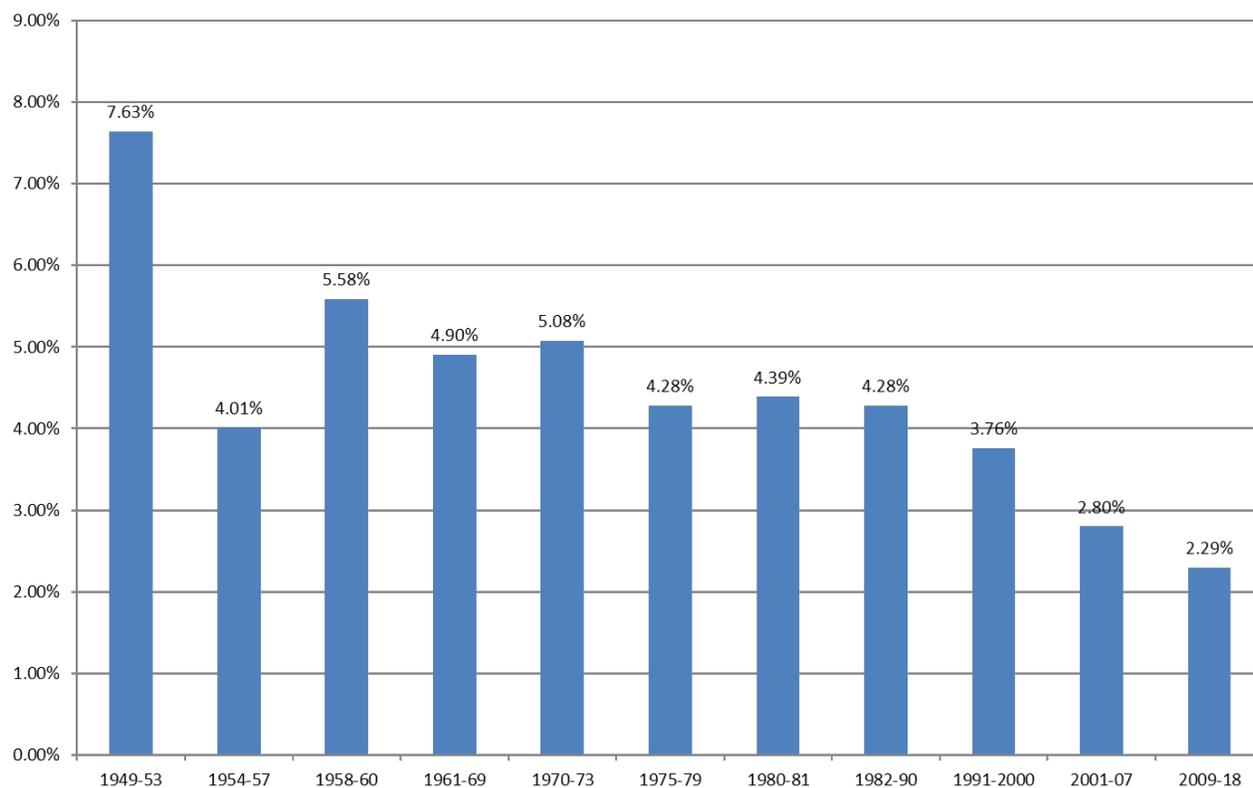
Both history and SSA theory suggest that there is a tendency for regulated and liberal SSAs to alternate, with each type of SSA resolving the obstacles to normal capital accumulation that arose in phase two of the preceding SSA.¹⁷ The construction of a new regulated SSA takes some time to complete, given the complexities of achieving a capital-labor compromise and establishing an active state role in the economy that is acceptable to big business. For those reasons, SSA theory suggests that the current stagnation will be a long-lasting one. The previous regulated SSA took almost twenty years to construct following the start of the Great Depression in 1929.

However, SSA theory does suggest that the current stagnation, while likely to last for a long period, will not be permanent. Although the construction of a new SSA during the crisis phase of the preceding one is not guaranteed, there are powerful forces that push in the direction of constructing a new SSA. As long as the neoliberal SSA lasts, stagnation will continue, and stagnation is a dangerous condition for U.S. capitalism. A persistent stagnation, with a continuing increase in inequality, tends to generate rising anti-establishment sentiment on both the left and the right. Both represent threats to the stability of U.S. capitalism. We saw this in the U.S. presidential campaign in 2016, as the Republican nomination and the presidency were won by a candidate well to the right of what has been the U.S. political mainstream, while a self-identified democratic socialist was a serious contender for the Democratic Presidential nomination for the first time in U.S. history.

It is likely that powerful groups will begin to propose significant institutional change in the U.S. to address the obstacles to normal economic expansion, leading eventually to a new regulated SSA that would again promote normal economic expansion (Kotz, 2015, chapter 7). If that does emerge in the next five to ten years, the current stagnation will have been a long-term one but not a permanent condition of the U.S. economy.

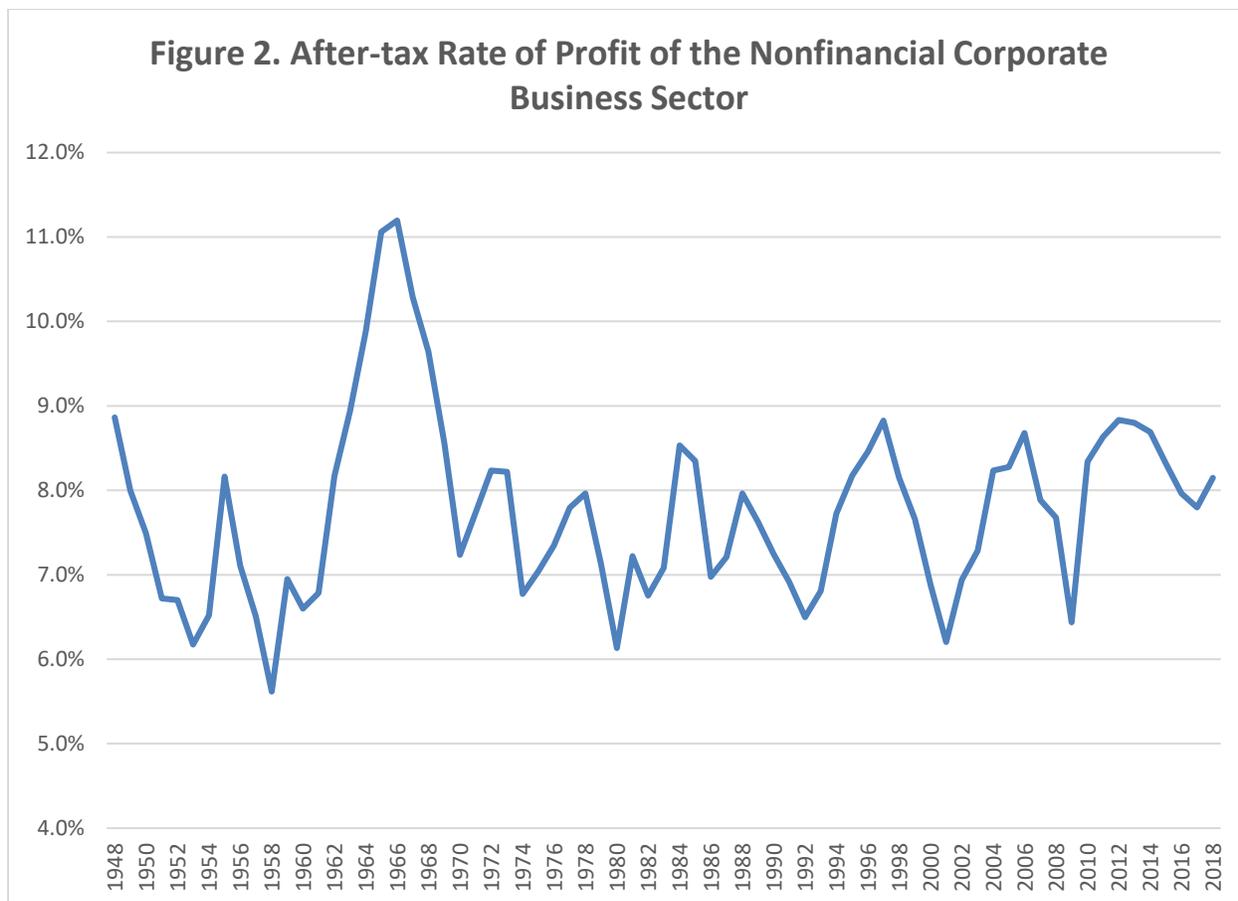
17. Wolfson and Kotz (2010) provide a justification for expecting an alternation of regulated and liberal SSAs.

Figures and Tables for “Stagnation and Institutional Structures”

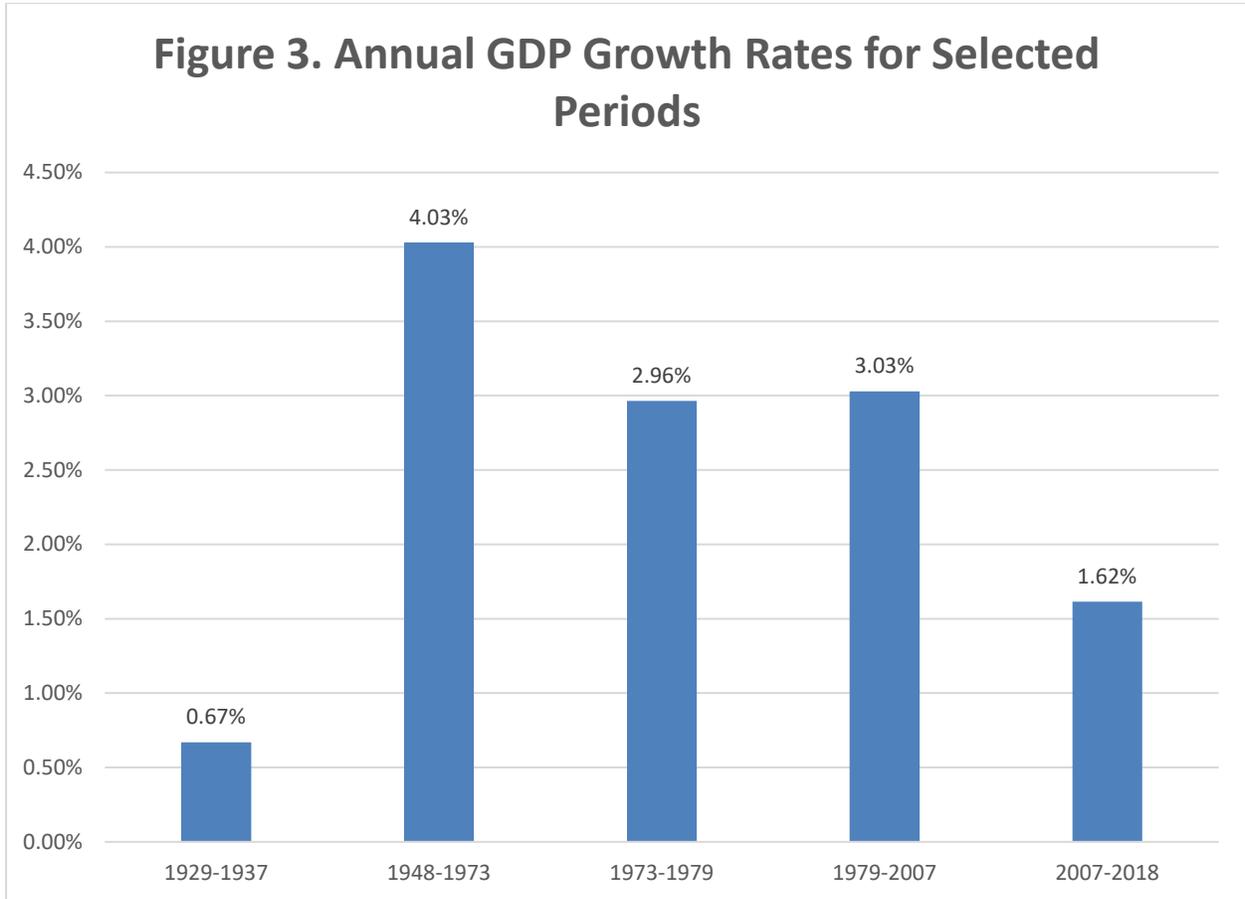
Figure 1. Annual Growth Rate of GDP from Trough Quarter to Following Peak Quarter or Most Recent Quarter, 1949-2018

Note: Compounded annual growth rate from trough quarter to next peak quarter, or most recent quarter for 2009-2018.

Source: U.S. Bureau of Economic Analysis, 2019, NIPA table 1.1.6.

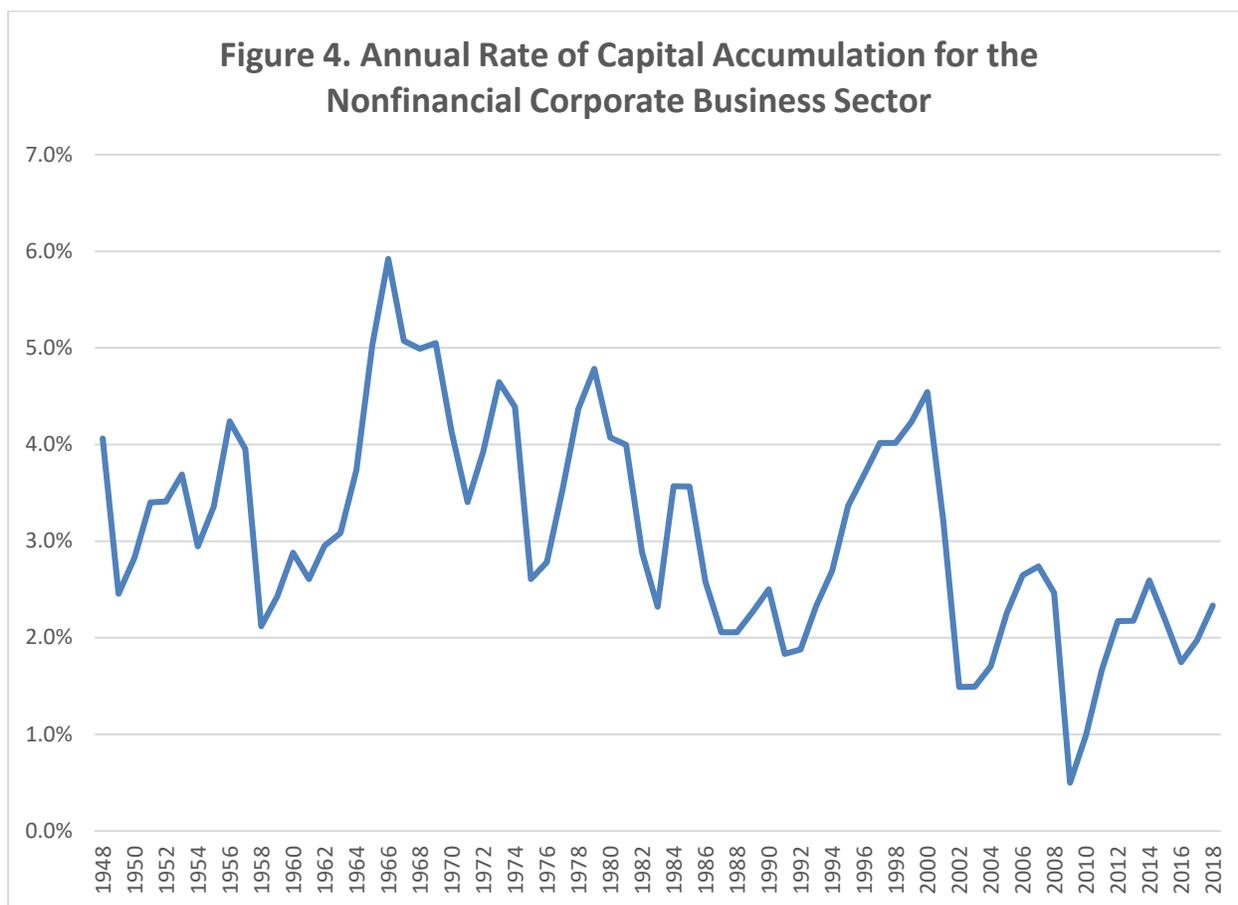


Note: Profit after tax plus net interest paid divided by beginning-of-year value of net fixed assets.
 Source: U.S. Bureau of Economic Analysis, 2019, table 1.14 and Fixed Assets table 4.1.



Note: Compounded annual growth rate from initial year to final year using annual GDP data.

Source: U.S. Bureau of Economic Analysis, 2019, NIPA table 1.1.6.



Note: Net investment divided by beginning-of-year net stock of fixed assets.

Source: U.S. Bureau of Economic Analysis, 2019, Fixed Assets tables 4.1, 4.4, 4.7.

Table 1. Ideas and Institutions of Neoliberal Capitalism in the U.S.

1. Dominance of economic ideas and theories that view an unregulated market system as optimal and view state intervention as a threat to economic efficiency and individual liberty.
2. The Global Economy: Relatively free movement of goods, services, and capital across national boundaries.
3. The Role of Government in the Economy
 - a) Macropolicy aimed solely at inflation control through monetary policy
 - b) Deregulation of infrastructure sectors (transportation, communication, electric power)
 - c) Deregulation of the financial sector
 - d) Reduced regulation of consumer product safety, job safety, and the environment
 - e) Privatization and contracting out of public goods and services
 - f) Cutbacks in or elimination of social welfare programs
 - g) Tax cuts for business and the rich
4. The Labor Market
 - a) Determination of wages and working conditions by employers instead of based on compromise with labor
 - b) Job tenure determined by employers rather than bureaucratic rules and seniority
5. The Corporate Sector
 - a) Unrestrained competition
 - b) Corporate CEOs hired from outside the corporation in a market for CEOs

Source: Adapted from Kotz (2015, Table 2.1, p. 42).

Table 2: Summary Statistics

	Regulated SSA		Neoliberal SSA	
	Phase 1	Phase 2	Phase 1	Phase 2
	(Mean/SD)	(Mean/SD)	(Mean/SD)	(Mean/SD)
Rate of Accumulation (%)	3.70	3.74	2.86	1.89
	0.98	0.91	0.91	0.64
Rate of Profit (%)	7.98	7.34	7.52	8.15
	1.50	0.46	0.76	0.69
Observations	26	6	28	11

Notes. Regulated SSA: 1948-1979 (Phase 1: 1948-1973; Phase 2: 1974-79). Neoliberal SSA: 1980-2018 (Phase 1: 1980-2007; Phase 2: 2008-2018).

Table 3: Responsiveness of the Rate of Accumulation to the Rate of Profit

Regulated Capitalism: Phase 1	
Estimate	0.551
p-value	0.000
Regulated Capitalism: Phase 2	
Estimate	0.596
p-value	0.000
Neoliberal Capitalism: Phase 1	
Estimate	0.492
p-value	0.011
Neoliberal Capitalism: Phase 2	
Estimate	0.338
p-value	0.058

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