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# The Bush Business Cycle Profit Rate: Support in a Theoretical Debate and Implications for the Future

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#### **Abstract**

This paper looks at the most recent aggregate profit rate data for the United States. It then makes five arguments. First, the new data reinforce the rejection of "neoliberalism as successful capitalist restructuring that could possibly restore or surpass the pre 1970s rate of profit." Second, when the new data are viewed together with the rest of the post-WWII data, it reinforces the appearance of the fall in the rate of profit as a one-step fall between an earlier and a later period. Third, this result argues against understanding the fall in the rate of profit in terms of an increasing organic composition of capital. Fourth, the one-step fall understanding is consistent with understanding profit rate dynamics in terms of the change of economic regimes between the "Keynesian compromise" period and the neoliberal period. These first four results are all consistent with, though certainly not broad enough to claim to be a proof of all of, the recently reformulated social structures of accumulation theory by Kotz and Wolfson. Finally, when the new data are considered together with several now widely held general beliefs about the near-term performance of the U.S. economy, this paper makes arguments about some likely characteristics of the behavior of the aggregate profit rate over the next business cycle.

JEL classification: B51; E32; J30

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### I. Introduction

As this article is being written in December, 2008, both the business press and most academics have come to accept that i) the economic downturn already unfolding has not yet reached its bottom, ii) there is a strong possibility that by the time it does it will have become the worst economic downturn in the United States since the Great Depression, and iii) the recovery will be slow. Interestingly, while there has been a general theme in the business press that profit rates are falling and will likely have a bleak near-term future,

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there has been almost nothing quantitative on this in either the business press or academic journals and conferences. Not surprisingly, even progressive economists, sensing major fractures in the near-consensus neoliberal fairy-tale that has dominated economic discourse for thirty years, have focused on the issues of immediate concern for mitigating the harsh effects of this downturn on the general population: output and jobs, the role of government in promoting these, and ending economic domination by finance. See for example Ash *et al.* (2009).

As is accepted by neoclassicals, Marxists, and many other schools of economic thought, the rate of profit is an important indicator of the health of capitalism. It is also of central importance to the capitalists who decide what economic actions will be taken next, both as individual owners of capital and as the class that controls the government. With phase B (late expansion) of the current business cycle now complete and phase C (contraction) that we are now in widely expected to involve seriously harmful results for the aggregate profit rate, this paper will discuss what the now almost complete data on this most recent business cycle reflect about the current dynamics of the rate of profit in the United States.

In line with a large part of the literature on the aggregate profit rate, we will use as a proxy for the rate of return on private capital the nonfinancial corporate profit rate. Our construction of this profit rate is very similar to what has now become a somewhat common approach (with small variations), as used for example in Weisskopf (1978, 1979); Michl (1988); Goldstein (1996, 1999); Wolff (2003); Dumenil and Levy (2002a, 2002b, 2004); Brenner (2002); Harvey (2005); and Glyn (2006). We fully described the technical details in Bakir (2006).

The rest of this short paper is as follows. The next section will look at the data on the recent developments in the profit rate and comment on what they argue against, and possibly suggest, concerning the nature of their trend since WWII. Section III will consider a plausible development of the near-term rate of profit based on recent profit rate performance combined with economic considerations of today's economic situation. The final section concludes.

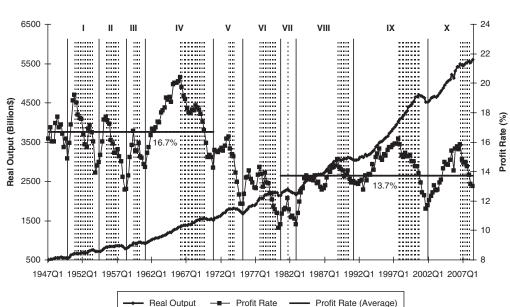
# II. The Bush Business Cycle Rate of Profit and the Post-WWII Trend

Figure 1 presents the aggregate rate of profit in the United States, computed quarterly since 1947. It also includes the GDP, which is the primary (though not only) consideration for the determination of business cycles by the National Bureau of Economic Analysis.

We have divided each of the ten post-WWII business cycles in Figure 1 into three phases. In phase A, the recovery after a downturn, both output and the profit rate increase. Phase B (indicated by background shading) indicates an important characteristic of capitalist business cycles: profit rates start to fall before, and usually well before, the output contraction that constitutes a recession. Phase C is a recession where output falls, and profit rates almost always fall in this period as well.

<sup>1.</sup> Note that in Figure 1 only in cycle VII did the output contraction start in the same quarter as the profit rate decline, and so there is no phase B in that cycle.

<sup>2.</sup> The reason for this, and both its continuity and change under neoliberalism from the earlier period, is the topic of Bakir and Campbell (2006).



# Profit Rate and Real Output in Business Cycles

Figure 1.

Aggregate Rate of Profit and GDP in the U.S. since 1947

Probably the feature of the profit rate in Figure 1 that strikes most observers first is the long decline in the profit rate from 20.4 percent in Q1 1966 (the first quarter of 1966) to 10.4 percent in Q3 1980 (which it returned to in Q4 1982). From the mid-1970s to the late 1980s a debate occurred (also involving a number of non-academic Marxists) as to whether this represented a permanent secular decline, supporting a particular understanding of Marx's "law of the tendency of the rate of profit to fall." Some people argued for that thesis, some people against it, and some people just investigated what had caused the decline. See for example Nordhaus (1974); Weisskopf (1978, 1979); Wolff (1986); Dumenil, Glick, and Rangel (1987); Henley (1987); Michl (1988); and Moseley (1988).

The fifteen year recovery of the profit rate to 16.2 percent in Q3 1997 under the new (more fully) neoliberal economy led to a number of papers that considered if this recovery was the result of a successful (for capital) restructuring of capitalism under neoliberalism, in which case one could expect it to maintain this recovered rate of profit and perhaps increase it further. For a number of papers that argued against that thesis, see for example Baker (1996); Ducca (1997); Wolff (2003); and Dumenil and Levy (2002a, 2002b). The first argument of this paper is that the inclusion of the Bush business cycle in Figure 1 strongly reinforces the rejection of this successful restructuring hypothesis, which was already somewhat discredited by the extent of the profit rate fall in cycle IX.

The onset of neoliberalism was a process, and so there is some arbitrariness to assigning a date to its beginning. Many people date it with the "Volcker shock" of 1979. Other people argue it began in the early 1970s (the end of Bretton Woods, the Nixon wage controls and the subsequent onset of stagnant real wages, the decision of the United States to promote a floating international exchange system instead of re-establishing a pegged system, etc.). Given the nature of its onset as a process, some people like to refer to three

periods in the post-WWII U.S. economy: the "Keynesian compromise" period, a transition (roughly the 1970s), and then neoliberalism.

The second argument of this paper is that with the new data from the now nearly complete Bush business cycle, the long-term trend of the post-WWII profit rate is best understood as a one-step decline<sup>3</sup> in the rate of profit. The following four simple tests all support this interpretation. First, we argue that Figure 1 with the inclusion of the tenth business cycle strongly visually suggests this one-step drop interpretation. Second, building on this visual impression, one can pick some data point near the middle of the long decline, and compute the average of the period before and the period after. Picking Q1 1974, one gets the average for Q1 1947 to Q4 1973 is 16.6 percent while the average for Q1 1974 to Q2 2008 is 13.6 percent.<sup>5</sup> Similarly, if one chooses to model the process with a transition period that starts with Nixon's various August 1971 measures and ends with the Volcker shock, and discard that transitional data, one gets 16.7 percent for the "Keynesian compromise" period and 13.7 percent for the neoliberal period. Finally, a different test<sup>7</sup> would be to run a regression of the profit rate against time with a dummy variable. If we put the dummy at Q1 1974 onwards, as suggested by the graph and to facilitate comparison with the earlier tests, we get an almost flat8 best fit line (now from the data and not by an imposed constraint from computing averages) and a comparable one-step drop, with a highly significant t-statistic of -12.8. 10

Next we will consider the consistency of this post-WWII data with two profit rate theories. One common (though certainly not universal) argument in Marxist economic studies is that the process of continual capital accumulation will cause a fall in the rate of profit. This occurs through a "rising organic composition of capital" (roughly more capital per hour of living labor in the production process) and is a long-term theory. Capital (real, measured in constant dollars) has accumulated in the United States relatively constantly, when viewed on the long-term time scale of the last sixty years. For the profit rate data in Figure 1 to be consistent with this theory, they would need to have an approximately constantly declining trend line. We have just argued to the contrary that the data appear much

<sup>3.</sup> One could of course have separate trends such as for 1947 - 62, 62 - 66, 66 - 82, 82 - 97, 97 - present (or other possible segmenting), but our concern is the long-term trend.

<sup>4.</sup> This test and the next one do not establish that the two periods are relatively flat. Rather, they only build on the visual observation and give quantitative measures of the apparent drop.

<sup>5.</sup> Of course using any other nearby point for the break would give very similar results.

<sup>6.</sup> This is what is graphed in Figure 1.

<sup>7.</sup> The previous tests would be this test with the added restriction of a zero slope for the regression line both before and after the break.

<sup>8.</sup> It increases 0.05 percentage points per annum.

<sup>9.</sup> Because of the slight upward slope of the regression line before and after the break, the drop has to be slightly larger, -4.9 percentage points.

<sup>10.</sup> As compared to a simple regression against time, including the break dummy dramatically improves the adjusted R-squared from .25 to .55. Again, one could know this would be a much better fit from the visual nature of the graph, our first argument for conceptualizing the data this way.

<sup>11.</sup> These Marxists usually argue that in the "short-run," this "law of the tendency of the rate of profit to fall" can be offset by a number of possible "countervailing tendencies," resulting in short-term increases in the aggregate rate of profit.

more as a one-step decline. Hence the third argument of this paper is that the data displayed in Figure 1 are basically 12 inconsistent with this theory.

The fourth argument of this paper is that the nature of the data, particularly once one has included the Bush business cycle, best supports the idea of an economic regime change as the cause of the fall in the rate of profit. At the simplest level, this theory holds that the average rate of profit in the United States was greater under the "Keynesian compromise" than under neoliberalism. At a more theoretical level, we argue that our results are consistent with (though far from "proving" the appropriateness of) the reformulated social structures of accumulation (SSA) approach recently advanced by Kotz and Wolfson.

Wolfson and Kotz (forthcoming) refer to an SSA of the nature of the "Keynesian compromise" as a "constrained market" SSA and an SSA of the nature of neoliberalism as a "liberal" SSA. They argue that a liberal SSA will tend to have a lower profit rate than a constrained market SSA. They argue that a liberal SSA will tend to have a lower profit rate than a constrained market SSA. Kotz (2003) supports this claim with five specific reasons, which affect profits through both aggregate demand and investment channels.

# III. Considerations of Plausible Near-Term Dynamics of the Aggregate Rate of Profit

Here we will briefly relate three pieces of the current intense social discussion on the future of the U.S. economy to the picture of the profit rate that we have developed above.

1) The last entry in Figure 1, Q2 2008, was before the major intensification of the world economic crisis that occurred in Q3 and Q4. Even conservative spokespeople such as the *Economist* magazine are talking about the possibility of this recession lasting through the first half of 2009 or longer, and representing (at least in some dimensions) the worst economic downturn since the Great Depression.

<sup>12.</sup> We say "basically" because with enough convoluted specifics one can generally defend most theories, like the epicycles in the final models of the geocentric solar system. Such specific theoretical "patches" usually eventually become untenable as more and more data concerning the issue accumulate.

<sup>13.</sup> Stating this more carefully to avoid confusion, the constitution of the new institutional structure of neoliberalism indeed improved the rate of profit from where it had fallen by the end of the transitional period. What is claimed, however, is that this new stable institutional structure generated a lower aggregate rate of profit than the previous stable "Keynesian compromise" institutional structure.

<sup>14.</sup> The original SSA approach developed at the end of the 1970s conflated the issue of a (medium-term) sustainable set of institutions (a circuits of capital issue) with the issue of a required rapid rate of capital accumulation (a rate of accumulation of capital issue). It is possible to understand the longevity of neoliberalism (it has lasted as long as the "Keynesian compromise") with its relatively low rate of capital accumulation only when one understands that an SSA necessarily involves only the former.

<sup>15.</sup> Actually they argue it will have a lower rate of accumulation, because their reformulation of the SSA theory specifically involves jettisoning the requirement of rapid capital accumulation that was part of the original formulation. Not only is there no theoretical automatic link between earned profits and accumulation, Dumenil and Levy (2004) make one important part of their explanation of the relatively weak performance of neoliberalism that as the profit rate began to recover after 1982, the accumulation rate recovered more slowly; neoliberalism was not transforming profits into productive investment and accumulation as much as had the previous "Keynesian compromise" structure.

This would suggest that the low point for the beginning of the profit rate recovery in the next business cycle is likely to be below the low point of 11.7 percent in Q4 2001. Hence the starting point for the next profit rate recovery is likely to be lower than any recovery starting value since 1982, and it could easily be below even that value of 10.4 percent.

- 2) Looking at Figure 1, we see that the profit rate recoveries after the 1990/91 and 2001 recessions were fairly healthy<sup>16</sup> as measured by their total increases in phase A (the product of their rate of increase and the duration of phase A). But it is now widely held that these recoveries were driven by bubbles, in the stock market and in housing, respectively. The combination of a realization by some policy-makers that these bubbles appear to have been important in causing the present crisis, with the lack of a clear candidate for the basis for another bubble,<sup>17</sup> suggests that there will be no such bubble-driven strong profit rate recovery. This in turn implies a significant possibility, if not a likelihood, that the profit rate recovery in the next business cycle will be anemic.
- 3) As we empirically presented in Bakir and Campbell (2006), in the "Keynesian compromise" business cycles I IV the prime contribution to the onset of the profit decline in each cycle was the growth of the wage share, which in turn was caused by the faster growth of real wages than real productivity. With the undoing of that economic regime, that problem seemed solved for capital. Real wage growth was negative in the transitional cycles V and VI, and the first neoliberal cycle VIII. And while real wage growth returned to being positive in cycle IX, it was almost completely offset by the real productivity growth. But the problem for capital was in fact not resolved. The cyclical fall in the profit rate continued, and it was still initiated by the rise in the wage share. This, however, now had a different principle cause: unfavorable price shifts.

Knowing that the capitalists significantly reduced the rate of growth of real wages in the Bush downturn from the previous Clinton downturn, one might guess that they were in a better position. This guess would be incorrect. Even though the rate of growth of real wages was reduced from 3.6 to 2.2, productivity growth collapsed from 3.3 to 0.6 (a gap greater than the smallest of the "Keynesian compromise" gaps, despite lower real wage growth). With the shift in prices staying about the same as during the post-Keynesian compromise period, the rate of growth of the wage share that drives the phase B profit downturn rose from 2.0 under Clinton to 3.2 under Bush. Going forward, we see i) it is unlikely that capitalists can drive down real wage growth more in the next cycle than under Bush, since labor is showing signs of reacting to the one-sided class war for the first time in over thirty years; ii) there is no indication that productivity will rebound, since capitalists neither have the ability to drive labor harder for the same reason just listed concerning wages, nor can they get significantly improved productivity out of technological improvements since productive investment is low and the general consensus (including from the polls of businesses regarding their investment intentions) is that it will stay low for quite

<sup>16.</sup> The recovery of output was unimpressive and the recovery of jobs was abysmal, but here the issue is only the rate of profit.

<sup>17.</sup> A candidate for a bubble needs be more than something investors want to pour money into, driving up prices in that branch. It needs to also be something that creates a "wealth effect" for some layer of consumers. This is why the sometimes mentioned "green technology" candidate, while it could become an important investment target that could have some important stimulative effects on the economy, could not serve as the basis for a bubble with effects similar to the last two.

a while; and iii) the degree of the unfavorable price shifts has stayed high in phase B since cycle VI and there is no indication of why that should change. Together these imply that the rate of growth of the wage share in the phase B profit rate downturn will be as high as, or higher than, the record rate under the Bush business cycle, implying a rapid and severe profit rate downturn when it occurs.

In summary, these basic economic considerations suggest the following picture as a reasoned guess for the near-term dynamics of the profit rate: it will start its recovery at a low level, the recovery will be anemic, and the downturn will be stronger than average.

#### IV. Conclusions

This paper looks at the most recent aggregate profit rate data for the United States, which correspond to the now almost concluded Bush business cycle. It then makes four theoretical arguments concerning the profit rate, and one prognostication. Theoretically it argues that i) the data belie the argument of a successful (for capital) restructuring of capitalism under neoliberalism, in which one could expect it to maintain the recovered rate of profit (of the mid-1990s) and perhaps increase it further; ii) the profit rate fall is best understood as two relatively flat periods separated by a one-step fall; iii) this result argues against understanding the fall in the rate of profit as directly driven by the process of the accumulation of capital; and iv) the data are consistent with understanding the profit rate fall as resulting from the change of economic regimes from the "Keynesian compromise" to neoliberalism. Prognostically, when these new profit rate data are considered together with several now widely held general beliefs about the near-term performance of the U.S. economy, we argue that the next business cycle is likely to record a low average aggregate rate of profit because i) it is likely to start its recovery period from a very low level at the end of the current business cycle; ii) the rate of recovery is likely to be less than in the last two cycles because those were driven by bubbles and it seems unlikely a major bubble will unfold in the next business cycle; and iii) the rate of growth of the wage share in the period of the business cycle where the profit rate starts to fall can be expected to be as high or higher than the record rate in the present cycle, which will make the fall in the rate of profit during the period of the beginning of the decline particularly strong in the next business cycle.

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