The Effect of Neoliberalism on the Fall in the Rate of Profit in Business Cycles

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Abstract

In 1979, Tom Weisskopf found that the crucial late-expansion period of the business cycle, in which the output continues to expand but the profit rate begins to fall, was best explained for his 1949-1975 U.S. data as a result of increasing real wage gains higher than real productivity gains. This led to a profit share decrease that was the primary cause of the cyclical decline in the profit rate. In this work, we extend Weisskopf's analysis through 2001 and find an important change. Although the fall in the profit share continued to be the key to the fall in the profit rate, unfavorable shifts under neoliberalism in price ratios replaced his earlier (real) wage squeeze. This result is consistent with and supports the generally accepted economic stylized fact of decreased power of workers under neoliberalism.

1. Introduction

In 1978,[1] Tom Weisskopf presented a theoretical discussion of a frame suitable for carrying out an empirical investigation of competing Marxist explanations of the behavior of the profit rate in capitalist business cycles. In particular, he built a frame for comparing what he referred to as the rising organic composition variant (ROC), the rising strength of labor variant (RSL), and the realization failure variant (RF), with subvariants of some of these. The following year, he presented a paper based on that frame that carried out an

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1. The literature generally refers to a wage squeeze in terms of the thing that is squeezed, a profit squeeze. In this article, we will refer to it in terms of the thing squeezing to enable us to easily express the main point of the article: that the squeeze on profits no longer comes from an ongoing growth of real wages above real productivity, a "real wage squeeze."

empirical investigation on U.S. data.[2] His data covered the years 1949 to 1975 and included five business cycles. Among other results, Weisskopf concluded the following on issues in the late expansionary phase that we will address. First, simply concerning the behavior of the cycles, he found,{1}[3] "Within each cycle the rate of profit rose during the early stage of the expansion, then fell during the late stage of the expansion as well as in the contractions" (1979: 372). In regard to the theoretical issue of the competing Marxist explanations for the fall in the rate of profit, Weisskopf found,

> {2} the RSL variant received far more empirical support than either the ROC or the RF variants as an explanation of profit rate declines in all of these key periods of time. A rise in the strength of labor vis-à-vis capital—as reflected in a suitably adjusted wage share of income—accounted . . . largely for the cyclical late-expansion declines in the rate of profit. . . . {3} Changes in the organic composition of capital—insofar as these were independent of changes in the strength of labor or in realization conditions—had relatively little effect on the rate of profit. {4} Realization failure—as reflected in a falling average rate of capacity utilization—contributed modestly to profit rate declines that occurred . . . during the late-expansion phase of several individual cycles. (Weisskopf 1979: 372)[4]

Finally, to further consider the mechanisms by which a fall in the rate of profit could result from a rise in the strength of labor, Weisskopf "found it useful to distinguish between two RLS subvariants based on 'offensive' and 'defensive' labor strength, respectively" (Weisskopf 1979: 372). The offensive variant involved workers achieving real wage gains higher than real labor productivity gains, whereas the defensive variant referred to workers being able to pass on to the capitalists large amounts of real income losses that would result from relative price changes. Weisskopf found,

> {5} The increase in labour strength that contributed to profit rate declines in the late-expansion phase of each post war cycle involved both offensive and defensive labour strength: workers' real wages grew more rapidly than productivity, and capitalists were obliged to absorb a disproportionate share of the effects of price changes. (Weisskopf 1979: 372)

The economic question addressed by this article is suggested by the above results, combined with the economic regime change beginning in the early 1970s. It has become an accepted "stylized fact" that labor dramatically lost power in its conflicts with capital under neoliberalism. Many of the specifics of the business cycles that Weisskopf reported (above) concerning the explanation of the initial profit downturn in the late expansionary phase rested on the power of labor. The question then immediately poses itself: did business cycles come to look and behave significantly differently under neoliberalism, when labor relatively lost power, than they did in the period investigated by Weisskopf?

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2. Weisskopf (1979) also used the same frame to investigate the secular behavior of the profit rate during the period considered, but that is not a subject of this short article.

3. Numbers are added to the quote in {} for subsequent reference.

4. Weisskopf also concluded that changes in realization conditions were important for sharp variations in the profit rate in the early-expansion and contraction phases, but our concern in this article is only with the cause of the initial profit rate downturn.

It is necessary to be aware of a small technical point. The Bureau of Economic Analysis periodically retrospectively revises its published data. As a small secondary consideration of this article, we will check to see if these revisions, since Weisskopf did his work, significantly change the performance he reported for the period he investigated.

A final introductory comment is that there has been only a small body of work since then that has updated Weisskopf's approach (some following it quite closely, and others following the general approach but with significant modifications). Among them are Michl (1988), Shaikh (1992), Wolff (2003), and most extensively recent papers by Dumenil and Levy (2002a, 2002b).[5] All of these, however, have focused either exclusively, or at least very largely, on one of the two strands of Weisskopf's original work: the secular trend of the rate of profit. Only Henley (1987) centrally extended the business cycle strand.[6] Although his work added two more cycles to Weisskopf's five (although one of them had no late expansionary period, our topic of concern), his last trough was in 1982, the very beginning of the consolidation of neoliberalism in the United States. In retrospect, the change that this article will discuss was visible in Henley's cycle that started in 1975, but it became a clear sustained change only after one could also consider the two subsequent cycles we investigate that ran up to the trough in 2001.

2. Results

What we will see in this section is that at a first level of analysis, the cycles in the 1970s and after appeared very much the same as the previous cycles under the "Keynesian compromise" in a number of different ways. This would seem inconsistent with the neoliberal stylized fact of weakened labor strength. A deeper examination of those cycles, however, will reveal they differ from the previous cycles in precisely the way this stylized fact of neoliberalism would suggest, thus giving further support from a different approach to the stylized fact.

Using quarterly data for the nonfinancial corporate business (NFCB) sector[7] and the official NBER business cycle reference dates yields nine trough-to-trough cycles from 1949 to 2001 (see figure 1).

In each cycle, three phases are indicated. The early expansion phase (A) has rising output and a rising profit rate, and it appears on the graph with a plain background field. In the late expansion phase (B), the output continues to expand but the profit rate begins to fall, and it is indicated on the graph with ticks for a background field. Note that cycle VII has no B phase; it goes directly from A to C. In the contraction phase (C), output falls as the profit rate continues to fall, and this also appears on the graph with a plain background field.

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5. In the late 1980s and early 1990s, there were a number of papers that argued empirically against Weisskopf's conclusion of the central importance of a profit squeeze to both cycles and the secular trend since World War II. For comments on those papers and a response rejecting their positions, see Goldstein (1996).

6. Goldstein addressed the business cycles in a series of papers from the mid-1980s forward. Although he came to the same conclusion as Weisskopf's original work concerning the importance of the profit squeeze, he worked in a markedly different formal frame. For a list of these works and an example of his frame, see Goldstein (1999).

7. There is no room here for technical appendices, so here we will only make the following comment. Net profits are calculated essentially the same way as by Weisskopf, Henley, and Dumenil and Levy. For the details of the calculation procedure for net profits and other calculated variables, see the technical appendices of Bakir (2006).
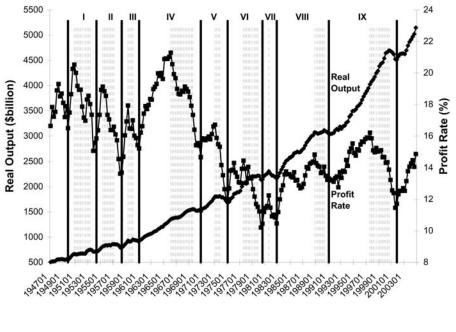
Figure 1.
Profit Rate and Real Output

Without any further analysis, we can see that Weisskopf's result {1} (above) on the general relation of profits to growth, including in particular in phase B, continued to hold both in periods VI and VII that came immediately after his data ended, and in the subsequent fully neoliberal cycles VIII and IX.

Here, for reasons of space, we will give just enough of the frame presented by Weisskopf to explain the meaning of the results we will present. For a much fuller presentation and discussion of this frame, see Weisskopf (1978, 1979) and Bakir (2006).

The profit rate can be decomposed as follows:

$$r = \frac{\Pi}{K} = \frac{\Pi}{Y} \times \frac{Y}{Y^*} \times \frac{Y^*}{K} \tag{1}$$

where Π is the net profits, K is the net capital stock, and Y and Y^* are the net output and potential net output, respectively. The elements of this decomposition are then referred to as follows: Π/Y is the profit share, Y/Y^* is the capacity utilization rate, and Y^*/K is the capacity-capital ratio. This already gives the basis for the three variants of the profit rate behavior referred to above.[8] The RSL variant suggests changes in the profit share Π/Y will be dominant, the RF variant suggests changes in the capacity utilization factor Y/Y^* will be dominant, and the ROC variant suggests changes in the capacity-capital ratio Y^*/K will be dominant.

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8. The names suggest a concern with a falling rate of profit or a "crisis." The frame clearly is, however, equally suitable for considering the dominant causes of profit rate increases, as we will do in some of our following work.

Table 1
Rates of Growth of Basic Variables: Phase B in Each Cycle (%)

	Cycles							
	I	II	III	IV	V	VI	VIII	IX
r	−5.2	−8.1	−7.2	−5.9	−11.7	−10.1	−3.5	−5.2
Π/Y	−5.1	−3.8	−5.8	−4.1	−6.7	−6.9	−2.7	−5.4
Y/Y^*	0.8	−2.9	−1.5	−2.0	−5.7	−1.7	−1.5	0.4
Y^*/K	−0.9	−1.4	0.1	0.2	0.7	−1.4	0.7	−0.2

In line with Weisskopf's concern in the causes of the decline in the rate of profit in phase B (while output is still expanding), as reflected in his results (stated above), we examine the performance of all three contributing factors in phase B in each cycle in table 1. We look at the percent rates of growth of the variables in equation (1); their multiplicative structure there requires that these rates of growth sum to the percent rate of growth of the profit rate.

Table 1 confirms that Weisskopf's results {2} through {4} (above) for phase B continued to hold for cycles VI (again, VII had no phase B) and the two fully neoliberal cycles VIII and IX.

Up to this point, the evidence, to the depth it has been investigated, appears to support the claim that the cycles subsequent to the Keynesian compromise during the transition to neoliberalism and under neoliberalism were fundamentally like all the preceding cycles. Because the dominance of the RSL in causing the phase B profit rate downturn is theoretically considered to rest on the strength of labor, and because a stylized fact of the neoliberal period is that labor was largely defenseless in the "one-sided class war," this seems to argue against this stylized fact of neoliberalism. A deeper investigation of the same data paints a more complex and fundamentally different picture.

We next will look deeper at the rate of decline of the profit share term that dominates the downturn in phase B. It will be easier to consider the economic issues involved in the usual terms in which they are discussed if we change from the profit share Π/Y to the wage share W/Y, where W is the total wage and benefit bill. Since by definition the sum of the profit share and the wage share is one, the rate of growth of the wage share is simply the negative of the rate of growth of the profit share times Π/W. A rapidly rising wage share means a rapidly falling profit share, which causes the profit rate to fall from equation (1).

There are three ways one can decompose the wage share, and we include them all because different people carry out their discussions in terms of different variants, as we will indicate.

$$\frac{W}{Y} = \frac{W}{y} \times \frac{1}{p_y} = \frac{\omega}{Y/L} = \frac{p_y}{p_y} \times w \times \frac{1}{y/L} \tag{2}$$

where, in addition to the symbols already defined, we have the following: L is the total labor hours; p_y and p_w are the implicit price deflators for the output and wage goods, respectively; y is the net real output Y/p_y; ω is the hourly money wage W/L; and w is the hourly real wage ω/p_w. The first decomposition compares the unit cost to the output price.

Table 2
Rates of Growth of Component Variables in Wage Share: Phase B in Each Cycle (%)

	Cycles							
	I	II	III	IV	V	VI	VIII	IX
W/Y	2.4	1.7	2.6	1.8	2.5	2.4	1.0	2.0
W/y	4.5	5.2	3.4	5.3	10.7	9.8	4.3	2.7
$-P_y$	−2.1	−3.5	−0.9	−3.5	−8.2	−7.4	−3.3	−0.7
ω	6.1	6.0	4.7	6.5	8.1	8.8	3.7	5.7
−Y/L	−3.7	−4.3	−2.1	−4.8	−5.6	−6.4	−2.7	−3.8
P_w/P_y	1.0	−1.4	0.5	0.6	0.7	2.3	1.4	1.7
w	3.1	3.9	3.3	2.4	−0.8	−0.8	−1.0	3.3
−y/L	−1.6	−0.9	−1.2	−1.2	2.6	0.9	0.7	−3.0

The second decomposition compares the nominal wage to the nominal productivity. And the third decomposition compares the relative price indexes, the real wage, and the real productivity. Again, we can take percent rates of change: the sums of the percent rates of change of the factors in each expression on the right of equation (2) must equal the percent rate of change of the wage share.

Table 2 allows us to consider first the rate of the rise in the wage share itself in phase B, and then its decomposition in all three ways.

First, we see that the rate of growth of the wage share in phase B did come down in the fully neoliberal period. Period VIII was the lowest of all the periods, and although the well-known increase in wages in Clinton's second term (roughly coinciding with phase B) raised the period IX rate above that of period II and IV, it was still low compared to periods I and III and the 1970s. But now let us look further into what those decreases in the growth of the wage share that did occur consisted of.

Unit costs growth in phase B dropped sharply from the 1970s to cycle VIII, and then sharply again to period IX. This in itself (a frequently voiced business objective) should have slowed the rate of growth of the wage share. The effect, however, was largely offset by the fall in the rate of the increase of the output price, which itself is attributed by many to neoliberalism. In any case, although this decomposition is popular with many business-people, it conflates productivity and wages in a way that obfuscates what is causing the observed changes.

The second decomposition separates wages from productivity. In cycle VIII phase B, nominal wage growth was brought to its lowest ever (again, an often cited business goal), and as we saw, that did bring the rate of growth of the wage share to its lowest ever, but the gains for capitalists were limited by the second lowest ever nominal productivity gains. In period IX, when the well-known second Clinton term wage gains pushed the nominal wage rate growth back up (but still lower than any period except III and the first fully neoliberal period VIII), the negative effects of that on the capitalists were mitigated by a significant gain in nominal productivity growth—although again, still lower than every period except III and the first neoliberal period VIII, and essentially tied with period I. But this decomposition still conflates real and price effects.

Finally, looking at the third decomposition, we can separate the price and real effects, and a more complex story emerges. Recall that Weisskopf had concluded as his result {5} that

> [t]he increase in labour strength that contributed to profit rate declines in the late-expansion phase of each post war cycle involved both offensive and defensive labour strength: workers' real wages grew more rapidly than productivity, and capitalists were obliged to absorb a disproportionate share of the effects of price changes. (1979: 372)

We see in the data, however, that there was already a fundamental change in Weisskopf's last period, cycle V, the first cycle after the end of the post–World War II Keynesian compromise. Real wage growth dropped sharply and became negative. Weisskopf's claim remains true in a particular sense, because at –0.8 the wage growth was still considerably higher than the productivity growth, which dropped sharply to –2.6. The growth of the price of wage goods continued to be higher than that of the price of output, which, although it was a contribution to the growth of the wage share, remained minimal, as it had been for the previous cycles. Then, in cycle VI, the capitalists dramatically improved real productivity: it now was falling almost at the same rate as the real wage, whose rate of decline did not change. At the same time, however, the price ratio growth shifted sharply against them. As of this cycle, a fundamental change occurred in the cause of the growth of the wage share that caused the phase B initial fall in the profit rate. The wage squeeze gap between the real wage growth and real productivity growth that had been the central cause during the period investigated by Weisskopf was nearly eliminated, and the unfavorable growth in the price ratios came to be the dominant cause. In the first fully neoliberal period VIII, the capitalists accomplished all the things one would expect from neoliberalism: wages fell slightly faster, productivity fell slightly slower, and they even lowered sharply the unfavorable price ratio growth. Together, these yielded their lowest phase B wage share growth ever. They were so successful on wages and productivity that they achieved a wage un-squeeze, with wages falling faster than productivity. And although they did sharply reduce the unfavorable growth of the price ratio, that remained large compared to its growth during the Keynesian compromise, and in particular it remained the dominant contribution to the growth in the wage share that did occur. In the final cycle IX, the capitalists turned real productivity growth around to its highest ever, but they were unable to keep real wages under control, which jumped from negative to one of their highest levels ever, more than offsetting the productivity gains. Hence, although cycle IX returned to having real wages growing faster than productivity in phase B, it continued the pattern we have seen in the period subsequent to the Keynesian compromise of the real wages-productivity gap being small and secondary. The growth of the price ratio, which became even somewhat worse for the capitalists, continued to be the primary factor in the growth of the wage share.

3. Conclusions

When we decompose the wage share, we see a fundamental change in business cycles that occurred during the post–World War II period, notwithstanding the many constants in their behavior. And that change did not begin with what we generally think of as the beginning

of full neoliberalism in the early 1980s, but rather in the transition to neoliberalism in the mid-1970s.

The picture of the first four business cycles is certainly what Weisskopf described: the primary cause of the increase in the wage share that brought down the rate of profit in phase B was a healthy growth of the real wage, and in particular its higher growth than real productivity (hence, a wage squeeze), with only a much smaller secondary contribution from a shift in prices unfavorable to the capitalists. With the first phase B after the Keynesian compromise, Weisskopf's last cycle, real wage growth could no longer be said to be the cause of anything, because there was no real wage growth but rather a decline for the next three B phases. But because real productivity growth turned even more negative, the wage share continued to rise primarily from a wage squeeze as Weisskopf asserted, despite the fall in real wages.

The fundamental change came during the transition to neoliberalism in cycle VI in the late 1970s. The capitalists reduced their productivity decline until eventually it fell less rapidly than wages, thus reducing and eventually even eliminating the phase B wage squeeze. At the same time, a fundamental change occurred in the evolution of the changes in the price ratio between the output index and the wage goods index. Although this had mildly shifted against the capitalists throughout the first five cycles, it suddenly jumped to rapidly shifting against them. The wage share squeeze continued, but now no longer based on the real wage-productivity squeeze described by Weisskopf but on the completely different basis of a continual major shift in price indexes unfavorable to the capitalists. Note that even in cycle IX, when real wages achieved a healthy increase in phase B for the first time in twenty years, the real wage-productivity gap remained small and the shifting price ratios continued to be the main cause of the phase B wage share increase that caused the cyclical profit rate fall.

The new cause of the phase B initial fall in the profit rate that emerged in the late 1970s and has persisted until today puts three questions on the table for the future. (1) Although phase IX did restore healthy wage gains in phase B, the other periods in the new regime had negative real wage growth. Will we return to what anecdotal evidence so far suggests: at least very weak real wage growth in phase B for the cycle we are presently experiencing? (2) Regardless of if we return to weak or negative real wage growth or again achieve a healthy real wage growth in the next phase B, will unfavorable price shifts as opposed to a real wage squeeze be the key contribution to the wage share growth in phase B that drives the fall in the profit rate? (3) And finally, if in fact price shifts do continue to be the key to the initial cyclical downturn in the profit rates, what is it about the new economic regime that is causing these significant persistently unfavorable shifts in price ratios for the capitalists that were not there during the Keynesian compromise?

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