Neoliberalism, the Rate of Profit and the Rate of Accumulation

*Accumulate, accumulate! That is Moses and the prophets!* (Marx, 1996[1867], p.591)

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ABSTRACT

It is almost universally accepted by economists of all persuasions that capitalism’s current neoliberal economic structure has yielded slower growth than capitalism’s previous post WWII economic structure. Related to this but very seldom discussed is the increase under neoliberalism in the divergence between the rate of profit and the rate of accumulation. Increases involved in the partial recovery of the rate of profit have not been paralleled by increased accumulation, thus contributing to the weak growth. This paper first documents this increased divergence. Next it argues that an important contribution to the slowed accumulation is the increased transfer to finance of profits created in production. It then turns to discuss the behavior of factors contributing to this increased transfer: the interest rate, the non financial corporate debt and the reduced retained earnings. It resolves the riddle of why despite becoming net creditors after 2000, the productive sector continues to lose potential profits to the financial sector. It documents the increased growth of the financial sector in the economy under neoliberalism, but also the little discussed result that this growth has stopped since at least 2000. The paper ends by reviewing the structural change in capitalism represented by this change under neoliberalism in the relation of the rate of profit to capitalism’s central process of capital accumulation.

I. Introduction

It is almost universally accepted by economists of all persuasions that capitalism’s current neoliberal economic structure has yielded slower growth than capitalism’s previous post WWII economic structure. In a Marxist framework, growth is dialectically related to investment, as both a cause and an effect. Investment in turn is similarly dialectically related to the rate of profit. Marxists and many other economists consider the rate of profit to be both a key determinant and an indicator of the health of a capitalist economy.

In a previous work (Bakir and Campbell, 2009) we carefully empirically documented a result that is also widely accepted by many Marxists, that the rate of profit has been lower in the neoliberal period than in the previous period. This is one important structural cause (again, as well as an effect) of the lower rate of growth. The purpose of this brief essay is to consider another structural cause of the slower growth.

Marx’s opus work on Capitalism, Capital, is well known for weaving together two different approaches to the description of capitalism, its historical/descriptive passages, and its logical/theoretical passages. A bare-bones presentation of the part of the logical/theoretical structure that is relevant to this paper is as follows. Workers create more value in production than the part of it that they receive back in wages, the value of labor power. The rest of the value that they create is divided into two parts. One part is used to replace the values consumed in production, constant capital. The other part is expropriated from them by the owners of capital, surplus value. A large part of the surplus value is then thrown back into the circuits of capital as new capital, as value seeking self-expansion in the process of expanded reproduction. The goal of the capitalist system, whether described as the goal of the dominant agents in the system, the capitalists, or as the goal of the system itself, its law of motion, is described by Marx frequently in two different ways. These are closely related but not entirely equivalent – the drive for profits, or the self-expansion of capital (accumulation).

In numerous descriptive passages Marx made clear that he was well aware that not all the surplus value appropriated by the capitalists is thrown back into expanded circuits of capital. His

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1 Three recent Marxist book-length treatments of neoliberalism that discuss the difference of its nature from the previous post WWII capitalist economic structure are Glynn (2006), Harvey (2005) and Duménil and Levy (2004).

2 This is true in both First and Third World countries. The only significant exception to this is China, which has pursued non-neoliberal policies in the neoliberal period.

3 The paper only considered the U.S. economy.
attack on the “Abstinence Theory” in *Capital*, Volume 1, Chapter 24, section 3 (1996[1867], p. 587 ff.) was an extended presentation of this point. For the purpose of his logical/theoretical presentation of the capitalist mode of production, however, it was not necessary to engage in any extended investigation of ‘capitalist personal consumption.’ As long as this remained a minor part of the use of the expropriated surplus value it would not have important effects on the dynamics of the system. In fact, even if it was a sizable part of the total use (which it wasn’t), as long as it remained a relatively constant share of the total surplus value its only effect on the dynamics of capitalism would be to generate a slower rate of accumulation than if it did not exist.

In this paper we will not be concerned with capitalist personal consumption, but rather with something else that has a result that is similar in regards to the issue of the reduction in the rate of accumulation being considered. Profits are also excluded from a return to productive circuits of capital, and hence accumulation, if they are inserted into financial circuits. In a Marxist framework, financial profits are simply a transfer of a part of the total profits created in production to the financial sector. It is theoretically possible that under certain circumstances the transfer of profits from the productive circuits of capital to the financial circuits might not diminish the rate of accumulation of capital because finance has improved the conditions for accumulation more than it has subtracted from the amount for accumulation.4 The evidence presented here, however, will demonstrate that the increased transfer into financial circuits under neoliberalism has occurred simultaneously with a drop in the rate of accumulation. While the problems involved in claiming that this sort of correlation “proves” causation are well known, at a minimum this supports the argument against the neoliberal claim that increased finance has improved the conditions for accumulation.

This paper will investigate the change under neoliberalism in the relation of the rate of profit to the rate of accumulation. Given the need to be concrete and detailed we will here investigate only today’s largest economy, that of the United States.

This issue of the somewhat changed relation between profits and accumulation under neoliberalism, a modification of the core process of capitalism, has received relatively little attention in recent Marxist literature.5 This paper intends to both flag this issue for greater future consideration, and to present a body of basic empirical evidence to support the position we put forward.

This paper will proceed as follows. In section II we will document that under neoliberalism there has been an increased divergence between the rate of profit and the rate of accumulation. Then in section III we will turn to supporting the argument that an increasing fraction of capital is flowing into financial circuits instead of back into circuits of productive capital. We will present six different indications that this is the case. In a Marxist approach, net interest payments to the financial sector from the non financial sector are deductions from the produced profit that is available for productive reinvestment and accumulation. The first three indicators will reflect the increased flow (and the later partial diminution) under neoliberalism of net interest to the financial sector. In sub-section III.A we will present the increased real rate of

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4 As for example basic credit does not create profits, but does improve the conditions for the accumulation of profits as capital, as described by Marx in *Capital*, Vol. 3, Part 5 (1998[1894]).

5 The only Marxist work that we are aware of that actually addresses this issue beyond a mere reference to it, is work by Duménil and Levy. They briefly discuss this in their book (2004) that has already been referred to, and they made the same points in two earlier papers. Two valuable non Marxist works that address this issue both in different economic frames and with different methodologies are Stockhammer (2004) and Arestis and Karakitsos (2004).
interest, which jumped with the birth of neoliberalism. In sub-section III.B we will consider the
other factor in the net interest payments, the net liability position of non financial corporations.
Our results here debunk a popular false analogy to the well-known Third World debt story, that
very low (at times negative) real interest rates in the 1970s were the cause of the debt problem of
the non financial corporations in the 1980s. We will see that to the contrary the debt burden in
fact began to rise sharply already in connection with the boom in the US economy in the 1960s,
and then roughly leveled out over the 1970s. Then in response to the real interest rate jump at the
end of 1979, non financial corporations initiated a process of trying to reduce their liabilities.
Because of the high debt service of the 1980s, however, they were not successful in this effort
until the 1990s when real interest rates dropped from their 1980s levels. By 2000 they had
reversed their situation and become net creditors. This then poses another important issue that we
have not seen not discussed in the Marxist literature on neoliberalism and financialization. If the
non financial sector succeeded by 2000 in solving its debt burden problem that had caused the
jump in its transfers of potential profits to the financial section in the 1908s, and even become a
net creditor, why did it not begin to benefit from its new financial position to the extent of even
draining potential profits back from the financial sector into productive circuits of capital? Why
shouldn’t an analysis of this financial transfer that many Marxist writers have pointed to as a key
aspect of financialization be said to have been over by 2000, and perhaps with it a central aspect
of neoliberalism? In sub-section III.C we consider the combined effects of sub-sections A and B
and directly look at the bleeding-out of profit from the productive sector by looking at the part
that net interest payments constitute of total after-tax profits. Sub-section III.D presents the result
of this directly on the profit rate by looking at the difference between the after-tax profit rate of
the non financial corporate sector and its effective rate of profit available for paying dividends
and retained earnings after it has paid net interest. Another important reason for the increased
role of the financial sector is an additional change in the corporate governance paradigm. Before
neoliberalism a large part of corporate investment came out of retained earnings. Sub-sections A
to D have already referred to one change in that approach, with more borrowing and resulting
interest payments in the first decade of neoliberalism. But there was a second part of the
corporate governance shift less often commented on that also strengthened and enlarged the
financial sector. Corporations were now under more pressure to pay out much of what would
before have been retained earnings to stockholders as dividends. The recipients would then either
through banks or investment funds return that money to the corporations for their operations and
investment. This circuit of investment and operational funds being paid out and then returned to
the productive sector all involved activities by the financial sector for which it was well paid. In
sub-section III.E we will look at this change in the corporate governance paradigm that involved
an increased pay-out of dividends and reduced retained earnings. For robustness we look at this
two ways: dividends as a share of dividends plus retained earnings (that is, as a share of what is
left of after-tax profits for corporations to allocate once net interest is paid out), and dividends as
a share of the entire after-tax profits. Finally in sub-section III.F we look at what we argue is the
result of the contributions just considered, we directly look at the size of the financial corporate
sector against the non financial corporate sector. Given the centrality to our argument of the
claim that the financial sector has grown, for robustness we look at the relative size four ways:
by value added, by before-tax profits, by after-tax profits and by non residential assets. Section
IV concludes.
II. The Divergence between the Rate of Profit and the Rate of Capital Accumulation under Neoliberalism

We begin with an observed change with the onset of neoliberalism in the core process of capitalism, capital accumulation. We will present the data two different ways to clearly illustrate our claim.

Figure 1 compares the after-tax rate of profit and the rate of capital accumulation. A striking impression from the graph is the difference in the relation of the two rates before and after 1979. In the earlier period the two rates appear to roughly move in parallel. Increases in the rate of profit are roughly reflected in increases in the rate of accumulation. After the beginning of the neoliberal regime, however, the rate of accumulation showed a general decline over the first 12 years of the much discussed 17 year neoliberal profit rate recovery from 1980 to 1997. Only the very strong profit rate growth driven by the stock market bubble in the 1990s finally pulled the rate of accumulation up with the profit rate. Its connection to the stock market bubble at that time, as opposed to the profit rate itself, is reflected by its continuing to rise with the stock market for the years 1998 – 2000 even after the rate of profit started to fall. We see the same lack of correlation in the much smaller profit rate revival after 2001. This poses the question: what was being done with the growing profits during these times of increasing rates of profit and declining rates of accumulation? This paper will argue below that an important part of the answer was the markedly increased diversion of profits from the circuits of productive capital into the circuits of finance.

Figure 1: The After-tax Profit Rate and the Rate of Capital Accumulation

By, among others, the above mentioned works by Glyn, Harvey, and Duménil and Levy, and the more mainstream Duca (1997).
Figure 2 presents the data from a different point of view to reinforce the same claim. Here we look at the rate of accumulation as a fraction of the after-tax rate of profit as an indication of how much of that profit is being directed toward accumulation. Again the graph gives a visual impression of a change of regimes between the earlier period which from this graph one could consider to have ended in 1979, 1980 or 1981, and the later period. The fraction of the profits that are redirected toward accumulation appears to be lower in the neoliberal period than in the previous period. A simple average of this ratio in the earlier and later period supports the visual impression. The average for 1948 – 1979 is .61, while the average for 1980 – 2007 is .43. Again our claim is that under neoliberalism a lower percent of profits were directed back into productive investment. Instead they were entering circuits of finance.

III. The Flow of Profits into the Financial Sector.

In this section we will present evidence showing that there was an increased flow of profits into the financial sector, and showing some of the changes which caused this increase.

A. The Real Interest Rate

The first indicator that we will look at to support the claim that there was an increased flow of profits into the financial sector is the real interest rate.

Figure 3 shows clearly the much commented on fall in the real interest rates in the mid 1970s, followed by their sharp increase beginning with the Volker shock to levels above what they had been in the 1950s and 1960s. Both the long-term interest rate that is involved in capitalist investment and the short-term interest rate that is involved in immediate operations gives the weakest support for our claim of a significant change, but there is not much difference. If one considers 1948 – 1981 against 1982 - 2007 the change is from .62 to .40.
followed this pattern. This “revenge of the rentiers” in itself suggests that there would be an increased flow into the financial sector, but we support that conclusion through numerous further considerations in the rest of this section.

![Figure 3: The Short-term and Long-term Real Interest Rates](image)

**Figure 3: The Short-term and Long-term Real Interest Rates**

**B. The Corporate Debt Burden**

The flow from the non financial corporate sector into the financial sector depends on two factors; the interest rate just presented, and the debt burden.

Because the transformation from the post WWII (more) regulated structure\(^8\) to neoliberalism was a process, different authors, while acknowledging that it was a process, date the start of neoliberalism differently – the Volker shock of 1979, the first oil shock of 1973, and so on. But while one can certainly find changes in the 1960s that were important for the rise of neoliberalism, essentially all authors see neoliberalism as beginning sometime in the 1970s.

One important result concerning the structural transformation of capitalism that led to neoliberalism that we can see from Figure 4 is that the rise in the debt of non financial corporations occurred before the onset of neoliberalism. A loose argument often put forward is that the large increase in corporate debt in early neoliberalism resulted from the low interest rates in the 1970s.\(^9\) Here we see to the contrary, however, that after a slow rise in the 1950s, the net liabilities of non financial corporations began to rise rapidly in the 1960s in response to the booming US economy, even while as we saw in Figure 3 that interest rates then remained near 2%. After a slight fall in the early 1970s, net liabilities then returned in 1975 to slightly above their peak level at the end of the 1960s, and then stayed fairly constant until the early 1980s.

\(^8\) Often referred to as “the Keynesian compromise” period, or particularly in the U.S., as “the Golden Age.”

\(^9\) Made as an invalid analogy to the Third World Debt, which indeed did rise sharply in the 1970s as a combined response to the low interest rates, the sharply increased cost of oil for oil importers, and the predatory lending practices of the First World financial institutions that were recycling the petro dollars, in particular the New York banks.
When the post 1979 sharp increase in the interest rates dramatically increased the non financial corporations’ debt service, they responded as expected by working to reduce their net liabilities. But given the high real interest rates and resulting debt services of the 1980s, their situation actually deteriorated somewhat over the decade. Only in the 1990s, when both short and in particular long-term real rates fell sharply from their early 1980s levels, were non financial corporations able to begin a rapid reduction of their net liabilities. By 2000 non financial corporations had eliminated their debt and held net financial assets.

Figure 4: The Ratio of Net Liabilities to Net Capital Stock

It is sometimes implied, in particular by mainstream commentators on the basis of data such as Figure 4, that non financial corporations have responded in accord with market pressures by paying down their debt and thereby resolving this problem of large losses of potential profits to the financial sector. As we will see in the next sub-section, this is not the case. While they indeed reduced the part of after-tax profits paid to the financial sector, they never returned to near the levels of before the mid 1960s, and their situation sharply deteriorated again in 2007 and 2008 (see Figure 5 below). This then poses an important issue that we have not seen not discussed in the Marxist literature on neoliberalism and financialization. If the non financial sector succeeded by 2000 in solving its debt burden problem that had caused the jump in its transfers of potential profits to the financial section in the 1908s, and even become a net creditor, why did it not begin to benefit from its new financial position to the extent of even draining potential profits back from the financial sector into productive circuits of capital? The answer is that due to the structure of finance the non financial sector pays roughly twice the rate of interest on its liabilities as it receives on its assets. Because this point is seldom presented, we have included at the end of this article a very brief appendix demonstrating this current structural aspect of

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10 Here we used table B.102 from the Flow of Funds. We define Net Liabilities as Liabilities minus Financial Assets. Then we get the usual Net Capital Stock of structures, machinery and software and inventories by adding lines 4, 5, 33 and 34.
neoliberalism and the relation of the financial to the non financial sector, which is different from the usually referred to debt mechanism of the 1980s and 1990s. The result of this is that while the financial sector indeed is siphoning off less potential profits than it did in the 1980s, it continues to siphon off more than it did in the “Golden Age,” as we will see directly in the next sub-section.

C. The Proportion of Profits Exported to the Financial Sector

The combination of the factors described in sub-sections A and B gives the net flow of interest payments from the productive to the financial sector. Figure 5 shows this net flow of interest payments as a share of after-tax profits. Its low share until the mid 1960s reflects the combination of the low real interest rate and the low debt burden. Its climb starting in the mid 1960s reflects the increased debt burden that we saw above. The two dips in the 1970s reflect the interest rate dips. We then see a sustained higher level in the 1980s before the combined reduced interest rates and reduced debt burden caused a major reduction in the 1990s.

![Figure 5: Share of the Net Interest Payments in After-tax Profit](image)

D. The Effects of the Net Interest Payments to the Financial Sector on What is Left in the Non Financial Sector for Accumulation

In Figure 6 we compare the after-tax profit rate to what is left to the corporations for use for dividend payments and accumulation after they pay off their net interest obligations (“after-tax rate of profit net of interest payments”).

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11 After-tax profit is the sum of three components: retained earnings, net dividends, and net interest payments.
12 The large 4 year spike after 1997 is a result of the large and sharp 4 year drop in the denominator, the after-tax rate of profit that one sees in Figure 1, and is not immediately connected to our concern with profit transfers.
What we see here is consistent with the last graph which showed the sharp increase under neoliberalism in the share of total after-tax profits devoted to net interest payments. The 1970s saw a structural change concerning capital accumulation, with markedly less of the profit generated in the non financial sector remaining available there for possible accumulation. This gap widened further under full neoliberalism in the 1980s and early 1990s. While it has recently narrowed some from its greatest spread, it is far from returning to its structure in the Golden Age up to the mid 1960s.

E. Further Restructuring: Increased Dividend Payouts

An important aspect of the neoliberal structural changes to capitalism has been its changes in corporate governance. One important part of the financialization of capitalism has been a drive to force corporations to pay out as dividends what before they would have held as retained earnings. They then must borrow these funds back for investment and daily operations, with a significant fee paid to the financial sector for these transactions.

Figure 7 considers the corporations’ allocation between dividends and retained earnings of the residual left from after-tax profits after they have already paid out their net interest obligations. One sees a small and slow fall in the share of dividends from 1950 to 1966, with dividends around 40% and retained earnings around 60%. From then until 1997 one sees a continual rise until today dividends constitute about 80% of this final corporate allocation.

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14 The 2005 data point looks like it may be a data error. The 2001 data point is suspicious as it indicates no retained earnings whatsoever. The overall pattern is the same with or without these two points.
Figure 7: Share of Net Dividend Payments in After-tax Profit (Net of Net Interest Payments) (1946 - 2008)

Figure 8 considers the same issue of dividend payouts, but now considering dividends as part of the three way division of after-tax profits.

Figure 8: The Three Components of After-tax Profit

15 After-tax Profit (Net of Net Interest Payments) = Net Dividend Payments + Retained Earnings
What we see here is that the growth of the net interest payments from the late 1960s that we have discussed above is enough to cause the dividend share to continue to drop until 1988. After that falling interest payments combine with a continued and accelerated decrease in retained earnings\textsuperscript{16} to allow this element of financialization, the continually sharply rising payout of dividends.

F. The Share of the Financial Sector in the Whole Corporate Business Sector

All the considerations above together suggest that under neoliberalism there has been a restructuring of capitalism involving a greatly increased transfer of profits produced in the non financial sector to the financial sector. Such an increased transfer would cause one to expect that the financial sector would grow relative to the non financial sector. Figures 9 to 12 compare the two sectors four different ways: by value added, before-tax profits, after-tax profits and non residential assets. Figures 9, 10 and 11 all show an acceleration of growth of the financial share in the mid 1960s and then a further acceleration in the mid 1990s.\textsuperscript{17} Figure 12 finds the initial acceleration to begin by the beginning of the 1960s and the further acceleration to occur by the mid 1980s. The two common conclusions from all of these comparisons of interest to this study are that the financial sector began to grow in size relative to the non financial sector before neoliberalism, and that it then accelerated under the latter. A final important result from these figures is that all measures find that the relative growth of the financial sector has stopped. While it is not clearly declining, it appears to have stabilized. Three of the measures place this near cessation of relative growth in the early 2000s, though one places it in the early 1990s.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure9.png}
\caption{Share of Financial Corporate Business in Corporate Business Net Value Added (\% (1946 - 2008))}
\end{figure}

\textsuperscript{16} Again the 2001 and 2005 data is suspicious.

\textsuperscript{17} They obviously differ in a number of ways such as the relation of the late 1940s and 1950s to the starting point of the acceleration of the 1960s and the behavior of the period from the mid 1970s to the acceleration of the mid 1990s, but those are not the point we are addressing here.
Figure 10: Share of Financial Corporate Business in Corporate Business Before-tax Profit

Figure 11: Share of Financial Corporate Business in Corporate After-tax Profit
IV. Conclusion and Considerations on Conditions Today and in the Near Future.

This investigation of various data concerning the transformation of the relation between the rate of profit and the rate of accumulation and the transfer of profits from the non financial to the financial sector has yielded the following three central results.

First, the results here, involving those aspects of neoliberalism relevant to the topic of this paper, strongly reinforce the understanding of the birth of neoliberalism as a process extended over time. Non financial corporate indebtedness began to climb rapidly in the early 1960s, and connected to that the share of after-tax profits that flowed out of the sector as interest payments began to climb by the mid 1960s. However, the often discussed jump in the real interest rates which strongly reinforced this out-flow of interest payments did not occur until the end of 1979, and it was only following this that one had the major divergence of the rate of accumulation from the rate of profit under neoliberalism. If one considers the increase in dividend payments only in the frame of the final allocation between that and retained earnings, this increase began in the mid 1960s. But if one considers it in terms of the allocation of after-tax profits, the increase in net interest payments just noted from the mid 1960s onwards was enough to keep the share of dividends from rising until the late 1980s when the combination of net interest payments and retained earnings fell. The result of all this is that looked at by four different measures, the financial sector accelerated its growth relative to the non financial sector when neoliberalism became fully dominant by the late 1980s to mid 1990s.

Second, the relative size of the financial sector to the non financial sector (here considered four different ways) appears to have at least greatly slowed if not entirely stopped

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18 Or largely equivalently, the after-tax rate of profit diverged from the “after-tax rate of profit net of interest payments.”
growing. This poses an important question about how neoliberalism and capitalism more generally will continue to evolve.

Finally and we would argue most importantly, and also minimally discussed in the literature, the divergence between the rate of profit and the rate of accumulation remains above its pre-neoliberal levels. This structural change in capitalism is connected to the transfer of potential profits (net interest) from the non financial to the financial sector at rates that also remains above its “Golden Age” levels. Different factors that one would expect from economic reasoning to contribute to this transfer of profits were investigated, and they all were found to have behaved consistently with the conclusion that there was a greater transfer under neoliberalism. While these rates have dropped somewhat from their higher values in the early neoliberalism of the 1980s, they remain above the pre-neoliberal levels and the data indicates no trend of further decline over the 1990s and 2000s. Of particular interest, we have addressed why the much discussed change of the non financial sector into a net creditor sector has not eliminated (or even reversed) the flow of potential profits out of the sector and hence the divergence between the rate of profit and the rate of accumulation. Hence our data has collectively supported the position that this increased divergence across a thirty year span of the rate of profit and the rate of accumulation is a structural characteristic of the neoliberalism that replaced the earlier post WWII capitalism.

Appendix

Consider the year 2007, which one can see from Figure 4 is a year of maximum relative financial assets for the non financial sector. From the Flow of Funds Table B.102 one gets financial assets of 13.730 trillion and liabilities of 12.8072 trillion (hence, as asserted, the non financial sector is a net creditor). From NIPA Table 1.14 we can see that “money interest” (i.e., interest actually paid or received) is an order of magnitude greater than “imputed interest.” If we look at the actual “money interest,” the non financial sector pays out .7949 trillion for a rate of 6.2% while it receives .4748 trillion for a rate of 3.5%. If one includes also the fictitious imputed interest of -.0665 trillion paid out and .0468 trillion received, the rates change to 5.7% that it pays and 3.7% that it receives. While it is frequently discussed that the U.S. became a debtor nation in 1985 but continued to receive positive net inflows from its negative net investments until the early 2000s because US investments abroad earned roughly twice what foreign investments in the U.S. earned, this exactly analogous domestic process that has such harmful effects on the profits of the non financial corporate sector has not been, to our knowledge, discussed in the same way. It is one more reflection of the power of finance under neoliberalism.

19 With only the partial exception of the net liabilities of the non financial sector, which behaved consistently with this result of increasing profit transfers through the beginning of neoliberalism in the 1970s and 1980s, but then acted to lessen them beginning in the 1990s.
REFERENCES


