Why “Financialization” Hasn’t Depressed U.S. Productive Investment

Andrew Kliman and Shannon D. Williams

Contact information:

Andrew Kliman, Department of Economics, Pace University, 861 Bedford Rd., Pleasantville, NY 10570 USA. Tel: 1 (914) 773-3968. e-mail: akliman@pace.edu.

Shannon D. Williams, Department of Sociology, University of Tennessee, 1007 Repass Dr., Knoxville, TN 37920 USA. Tel: (865) 573-2762. e-mail: swilli54@utk.edu

For presentation at Association for Heterodox Economics conference, Paris, July 2012.

First draft, May 4, 2012. Please do not quote or cite without *first* obtaining authors’ permission.

**Why “Financialization” Hasn’t Depressed U.S. Productive Investment**

Andrew Kliman and Shannon D. Williams

**Abstract**

The rate of capital accumulation in the U.S. has fallen markedly in recent decades. Works in the financialization literature have tried to explain this phenomenon by arguing that rising financial payments and purchases have come at the expense of productive investment. This paper will show that such arguments are not supported by the data. It will also explain theoretically why rising dividend payments and the growth of corporations’ portfolio investment is compatible with the fact that corporations’ productive investment did not decline during the first two decades of “neoliberalism” in the U.S. There would necessarily be a trade-off between these uses of funds if they were all funded out of current profits, but there is no necessary trade-off because borrowed funds are an additional source. Finally, the paper will show that the fall in U.S. corporations’ rate of profit (rate of return on investment in fixed assets) fully accounts for the fall in their rate of capital accumulation.

**1. Introduction**

The relationship between financialization and capital accumulation is a topic of considerable and growing interest within political economy. As the rate of capital accumulation has fallen in recent decades, many Marxist and heterodox economists have explained this phenomenon in terms of the increasing “financialization” of corporations under neoliberalism. These authors argue that corporations’ increasing involvement in financial markets––under what they characterize as a distinctive neoliberal model of corporate governance––has diverted profits from production, thereby leading to a fall in the rate of capital accumulation (Duménil and Lévy 2004, 2011; Husson, 2008, 2009; Orhangazi 2007, 2008; Stockhammer 2004, 2009).

We argue below that financialization has not suppressed U.S. productive investment. More specifically, we demonstrate that official U.S. government data (from the National Income and Product Accounts and the Flow of Funds Accounts) indicate that there has been no diversion of profit from production to financial markets under neoliberalism. On the contrary, the data indicate that the share of profit that was productively invested was slightly higher during the first two decades of neoliberalism in the U.S. than during the prior three decades. And because profit was not diverted from production, the fall in the rate of accumulation (i.e., the growth rate of accumulated productive investment) over the post-World War II period as a whole was due entirely to the fall in corporations’ rate of profit.

This finding may seem to contradict the fact that corporations have substantially increased their involvement in financial markets, as measured, for instance, by the increase in their financial assets as a share of their total assets, and by the increase in their financial payments relative to profits. However, we argue, there is actually no contradiction between these phenomena and the fact that profit was not diverted from investment in production to financial markets. The reason why no contradiction exists is that *the substantial increase in corporations’ financial acquisitions has been funded by means of borrowing*.[[1]](#footnote-1) Our analysis demonstrates that, in the era of “neoliberalism” and “financialization,” corporate profit has become less important, and borrowing has become more important, as a source of funds for financial expenditures. Additionally, we find that higher dividend payments do not lead to a statistically significant decline in productive investment, and that corporations’ access to and use of borrowed funds accounts for the absence of a tradeoff between paying dividends and investing in production.

In the remainder of this introduction, we briefly survey the prior literature on the issue, discuss the aspects of it that we do and do not contest, and clarify what exactly we mean when we deny that financialization has diverted funds from investment in production. Section 2 of the paper surveys financialization trends. In the third section, we discuss the fact that profit is not the only source of funds for financial payments and we stress the important role played by an additional source, borrowed funds. The fourth section builds on that discussion to show that, notwithstanding the relative growth of financial activity, neoliberalism did not cause U.S. corporations to divert profits from productive investment toward financial uses. Productive investment did fall as a share of profit after the early 1980s, but not because profits were diverted away from production under neoliberalism. Rather, the investment share of profit fell because it was unusually and unsustainably high at the start of the 1980s, and the fall brought it back to *normal* levels through 2001.[[2]](#footnote-2) Section 5 shows that the entire fall in corporations’ rate of accumulation of fixed assets during the post-World War II period is attributable to a decline in their rate of profit (after-tax). In addition, none of the sharp fall in the rate of accumulation that took place between 1979 and 2001 was due to financialization or neoliberalism; more than half of the fall is attributable to the decline in the rate of profit, while the remainder is attributable to the fact that the investment share of profit returned to normal levels. Section 6 summarizes our key findings and offers a brief conclusion. Data sources and computations are described in the Appendix.

Prior Literature

Stockhammer (2004 argued that the decline in the rate of accumulation was caused by a fundamental shift in the priorities of corporate management that has taken place under neoliberalism; corporations have become increasingly renter-like, using their profit to purchase financial assets instead of productive assets.

Over the past decades financial investment of non-financial businesses has been rising and accumulation of capital goods has been declining… [Primarily because] [f]inancialization, the shareholder revolution and the development of a market for corporate control have shifted power to shareholders and thus changed management priorities, leading to a reduction in the desired growth rate.

For France, financialization explains the entire slowdown in accumulation, for the USA about one third of the slowdown. [Stockhammer 2004, p. 2, p. 31]

Other writers focus on the increase in payments that corporations make to financial markets, a phenomenon they likewise attribute to neoliberalism.[[3]](#footnote-3) Duménil and Lévy (2011, p. 153) point out that the rate of accumulation is closely correlated with the rate of retained profits.[[4]](#footnote-4) They argue that changes in corporate governance under neoliberalism have caused corporations to relinquish a greater share of their profits to financial markets––in the form of higher interest and dividend payments––leading to a slowdown in the rate of accumulation. Similarly, Orhangazi (2007, p. 8) claims that “the percent of internal funds paid to financial markets each year has risen dramatically.” And Husson (2008) insists that profitability has increased under neoliberalism, but that the additional profits have not been productively invested. “Rather, … [t]he growing mass of surplus value which has not been accumulated has mainly [been] distributed in the form of financial revenues.”

Lazonick, writing within the “shareholder value” tradition that we will discuss further in the next section, has devoted considerable attention to stock buybacks as a means by which corporate funds are distributed to financial markets (forthcoming, 2010; Lazonick and O’Sullivan 2000). He argues that managers’ commitment to high stock prices has led corporations to devote a larger share of their profits to repurchasing their own stock, which in turn stifles the growth of investment in innovation (Lazonick, forthcoming). Similarly, Orhangazi (2008) hypothesizes that corporate managers’ preoccupation with stock price can lead to the development of investment strategies in which the primary aim is to affect the price of outstanding stocks in the short run. This in turn can compel corporate managers to pursue financial investments with rapid returns in preference to long-term investments in production.

Financialization can have two potential negative impacts on capital accumulation …. First, increased financial investment and financial profit opportunities can crowd out real investment by creating managerial short-termism [i.e., concern for short-term increases in the price of the company’s stock] and directing funds away from real investment. Second, increased financial payments can decrease real investment, shortening planning horizons of firm management and increasing uncertainty. [Orhangazi 2008, p. 99]

Using regression analysis, Orhangazi tested the effects of nonfinancial corporations’ financial payouts and income on their real investment, at both the aggregate and the firm level. At the aggregate level, he found that both financial payments and incomes have a negative effect on real investment. At the firm level, he found that financial payments have had a negative effect on real investment across a range of different industries, within both small and large firms, whereas financial income had a negative effect on real investment particularly for large corporations. However, Orhangazi did not provide estimates of the amounts by which increases in financial payments and income tended to reduce investment, and the negative effects were often not statistically significant at normal levels of testing.[[5]](#footnote-5)

The present paper takes issue with some, but not all, aspects of the financial literature. It does not dispute the claim that a shift toward a “shareholder value” orientation has occurred. Nor do we take issue with the claim that nonfinancial corporations have become increasing “financialized,” according to some definitions of the term. It is certainly the case that their financial payments have increased more rapidly than have their profits, and that their purchases of financial assets have increased more rapidly than have their purchases of fixed assets. Yet authors such as Duménil and Lévy, Husson, Lazonick, Orhangazi, and Stockhammer also claim that financialization has occurred in a rather different sense: a greater share of profits or internal funds has been used to make interest and dividend payments, to purchase financial assets, and/or to repurchase equity, which has led to a decline in the productive investment of profit. Our evidence for the U.S. indicates, to the contrary, that the relative increase in these financial payments did *not* lead to a decline in productive investment, because the increase in financial payments was *not* funded out of profit.

The Meaning of “Diversion”

Before turning to the empirical evidence, we wish to make clear exactly what we mean when we deny that financialization in the U.S. has led to a *diversion* of funds from productive investment. As Tobin (1997, pp. 301–2) pointed out, the purchase of a financial asset is simply an exchange of a certain sum of money for a financial asset. It does not divert funds from productive investment; that is, it does not take money that was slated to be invested in production and use it for a different purpose. If such a shift in the use of the money took place, it did so sometime prior to the purchase of the asset. And even if such a shift did take place, the seller of the asset might take the money received for it and invest it productively, so that no diversion takes place on a macro level.

Yet even after we recognize that financial-market transactions are not themselves diversionary, and that the question of whether diversion has taken place must be answered on the macro level, there is a further issue: a relative increase in financial payments and purchases is not necessarily a diversion of funds from productive investment. Of course, every dollar used to pay interest, pay dividends, buy financial assets, or repurchase stock is a dollar that is not invested in production, but it is also a dollar that is not spent on Gummi Bears, toenail clippers, lottery tickets, etc. Accordingly, we cannot automatically conclude that funds have been diverted from investment whenever financial purchases and payments increase more rapidly than productive investment––unless we are willing to conclude that funds have been diverted from Gummi Bears, toenail clippers, lottery tickets, etc. whenever financial purchases and payments increase more rapidly than spending on these items.

This point holds true whether the funds in question are profits or borrowed funds. Thus, the mere fact that financial purchases have increased as a share of borrowed funds does not imply that credit has been diverted from productive investment. It may be, and often is, the case that increases in financial payments and purchases are funded by means of *newly created* credit, rather than by means of a redistribution of the outstanding volume of credit.[[6]](#footnote-6) In such cases, diversion of credit from productive investment has not occurred.

Thus, in this paper we use the term “diversion” to refer to increases in financial purchases and payments that actually *displace* productive investment, take place at the expense of it. Diversion will be said to occur if and only if the increases in financial purchases and payments depress the share of profit that is invested in production. An equivalent way of stating this condition is that the percentage growth rate of those financial purchases and payments *that are not funded out of additional borrowing* exceeds the percentage growth rate of profit.[[7]](#footnote-7)

One reason why the financialization literature has often arrived at conclusions that seem to be at variance with ours is that it fails to make the distinction we have stressed here, between the diversion of profit from productive investment and the relative increase in financial purchases and payments. For instance, Orhangazi (2007, p. 8) wrote that “the percent of internal funds paid to financial markets each year has risen dramatically. This creates three distinct restraints on real investment.” He was evidently referring to a graph (Orhangazi 2007, p. 44, Figure 2) which showed, correctly, that interest and dividend payments have risen when *expressed* *as a percentage of* internal funds. However, the statement that these financial

payments were *paid out of* internal funds is incorrect. By definition, they cannot be.[[8]](#footnote-8) The statement also misleadingly suggests that, since a greater share of internal funds has been used to make financial payments, a smaller share has been productively invested. In fact, nonfinancial corporations’ gross fixed investment was equal on average to 95% of the book value of their domestic internal funds between 1947 and 1980, but 105% between 1981 and 2007.

**2. Financialization Trends**

The rate of capital accumulation is the percentage rate of growth of the capital invested in production. Figure 1 shows movements in U.S. corporations’ rate of accumulation of fixed assets, i.e., their current net investment in fixed assets as a percentage of their existing accumulated investment (the net stock of their fixed assets at historical cost). The rate of accumulation fell markedly during the last three decades. When net investment (gross investment minus depreciation) is measured in historical-cost terms, the rate of accumulation plummeted from 13.3% in 1979 to an average of 4.3% between 2001 and 2007, a fall of 67%. Some of the fall reflects the fact that the cost of replacing depreciated fixed assets, relative to their original acquisition cost, declined markedly as the rate of inflation declined, beginning in the early 1980s. If we adjust for the effect of inflation by measuring net investment in current-cost terms, we obtain the dashed rate of accumulation shown in Figure 1. It fell from 9.0% in 1979 to an average of 3.0% between 2001 and 2007. In terms of *percentage points*, the decline in this second rate of accumulation was much less than the decline in the first, but the *percentage* decline, 66%, was almost exactly the same. Thus, the rate of accumulation fell to about one-third of its peak level of 1979 however one values depreciation.

**Figure 1. Rate of Accumulation of Fixed Assets, U.S. Corporations**

(net investment as percentage of accumulated investment [net stock of fixed assets])

Yet as the rate of accumulation declined, nonfinancial corporations substantially increased their acquisition of financial assets in relation to their acquisition of productive fixed assets.[[9]](#footnote-9) As Figure 2 shows, their financial assets increased as a share of their total assets (financial assets plus fixed assets as valued at current cost) from 36% to 56%, a rise of more than

50%, between 1982 and 2007. This rise is often cited as evidence by those who argue that financialization has diverted profit from production to financial markets (Krippner 2011; Orhangazi 2007).

**Figure 2.** **Financial Assets, U.S. Nonfinancial Corporations**

**(**as percentage of total fixed & financial assets)

In addition to increasing their financial investments, corporations are also paying out larger sums of cash to financial markets. Figures 3, 4, and 5 show movements in nonfinancial corporations’ interest payments, dividend payments, and stock repurchases, expressed as shares of their net operating surplus (a measure of profit before exclusion of interest payments, transfer payments, and corporate income taxes). The share of net operating surplus used to pay interest tripled between 1965 and 1974, from 7% to 21%, and it remained high thereafter; the average interest share between 1974 and 2007 was 20%. The share of net operating surplus paid out as dividends was relatively stable between 1957 and 1988, but it then rose almost continually (the sharp one-year plunge in 2005 was the main exception), to a level more than double that of 1988. And there have been three periods in which stock buybacks exceeded 10% of net operating surplus––1984–1990, 1998–2000, and 2004–07.[[10]](#footnote-10)

**Figure 3. Net Interest Payments, U.S. Nonfinancial Corporations**

(net interest and miscellaneous payments as percentage of net operating surplus)

**Figure 4. Net Dividend Payments, U.S. Nonfinancial Corporations**

(percentage of net operating surplus)

**Figure 5. Net Stock Repurchases, U.S. Nonfinancial Corporations**

(negative of net new equity issues as percentage of net operating surplus)

The rapid growth of dividend payments and stock repurchases in recent decades has drawn considerable attention among sociologists and economists writing within the shareholder value tradition (Davis 2009; Dobbin and Zorn 2005; Fligstein 2005; Lazonick and O’Sullivan 2000). “Shareholder value” is a term most often used by those who argue that a new corporate governance model emerged under neoliberalism, “wherein the strategic orientation of corporate managers” shifted from a philosophy of “retain and reinvest” toward a philosophy of “downsize and distribute” (Lazonick and O’Sullivan 2000, p. 18). Under the “shareholder value” corporate ethos, they argue, the primary objective is not to accumulate capital per se, but rather to return value to shareholders, especially in terms of an appreciating stock price (Krippner 2011).

According to these authors, a combination of events––a wave of hostile takeovers, a neoliberalized regulatory environment, new financial innovations such as the junk bond, the increasing prevalence of stock options as a form of executive compensation, and the rise of institutional investors as powerful shareholder activists––led to major changes in corporate governance strategies motivated by the goal of raising stock prices. They argue that corporate executives began to focus increasing attention on maintaining a high stock price for several reasons. One was that they sought to defend their firms against the threat of takeover. Another was that institutional investors pressured them to do so. Moreover, institutional investors insisted on the introduction of stock options for newly appointed corporate executives. This was an effort to bring management objectives in line with the interests of shareholders, since executives who have options to buy their company’s stock at a given price have a personal incentive to raise the price and thereby reap a capital gain. The institutional investors’ ability to enforce their wishes was enhanced when Congress permitted insurance companies and pension funds to invest in equities, which led to a dramatic rise in the share of publicly-traded stock held by institutional investors (Lazonick and O’Sullivan 2000).[[11]](#footnote-11)

**3. The Importance of Borrowing to Financialization**

The increases in corporations’ financial acquisitions and payouts are undoubtedly important trends. However, we believe that further analysis is needed to clarify the implications of these trends, in part because a good deal of the financialization literature has drawn unwarranted conclusions about them. In particular, our findings indicate that corporations’ increasing involvement in financial markets does not constitute a diversion of profit from production to finance, because the increases in financial acquisitions and payouts have essentially been funded by means of borrowed funds. As is well known, leverage is another significant aspect of financialization (Gowan 2009); it has become an increasingly large source of the funds that drive the financialization process.

It is noteworthy that financialization is associated with a substantial decline in the importance of profit as a source of the funds used for financial expenditures (financial acquisitions, dividend and interest payments, and stock buybacks). As Figure 6 shows, the share of nonfinancial corporations’ financial expenditures that was funded out of profit was substantially larger between 1947 and 1967, before the rise of financialization, than during the four decades that followed. When we measure financial expenditures funded out of profit as the after-tax profit that remains after net productive investment, and total financial expenditures as the sum of dividend payments and new acquisitions of financial assets, we find that the share of financial expenditures that was funded out of profit fell by 58%, from an average of 60% between 1947 and 1967 to an average of 25% between 1968 and 2007. When a broader measure of total financial expenditures that also includes interest payments and stock repurchases is considered (and, accordingly, the definition of profit is broadened so as to include the portion

**Figure 6. Financial Expenditures Funded out of Profit, U.S. Nonfinancial Corporations**

(percentage of total financial expenditures)

used to pay interest as well as after-tax profit), the share of financial expenditures that was funded out of profit fell by 44%, from an average of 70% to an average of 39%.

If we compare the increase in nonfinancial corporations’ financial assets to their liabilities (see Figure 7), we find that the trends are largely the same. In general, the huge increase in these corporations’ financial investment was paid for by a comparatively huge increase in borrowing. When firms use borrowed funds to purchase financial assets, there is no necessary tradeoff between financial and productive investment, since the profits that can be used to fund productive investment are left unchanged.

**Figure 7. Financial Assets and Liabilities of U.S. Nonfinancial Corporations**

(percentages of Gross Domestic Product)

Figure 7 seems to suggest that the period between 1997 and 2000 was an important exception to the generalization that financial assets were acquired by means of borrowing, but it actually was not an exception. It is true that nonfinancial corporations’ financial assets increased much more than did their liabilities between 1997 and 2000, by $3.9 trillion versus $3.0 trillion. However, *this increase in financial assets relative to liabilities did not come at the expense of a decline in productive investment*. Net investment jumped from 59% of after-tax profit in 1997 to 100% in 2000. Nor was the disproportional growth of financial assets the result of new *acquisitions* of assets in excess of new liabilities. On the contrary, all of the financial assets acquired during this period were funded by means of new liabilities: between 1997 and 2000, net acquisitions of assets totaled $3.0 trillion while additional liabilities totaled $3.1 trillion. What accounts for the disproportional growth of financial assets is therefore the upward *revaluation* of these assets that took place; the revaluation was probably due largely to the skyrocketing of share prices during the dot-com bubble. Hence, the events of the period between 1997 and 2000 are fully consonant with our conclusion that financial assets have been acquired with borrowed funds, not by a diversion of profit from productive investment.

A similar corollary exists with respect to financial payouts. It is true that dividends have increased markedly as a share of profits during the last two decades. It is sometimes wrongly assumed that when a bigger share of profit goes to pay dividends, it must be the case that a smaller share of profit goes to productive investment. This assumption is fallacious because, again, profit is not the only source of corporations’ funds. If they borrow more, and invest the borrowed funds in productive assets, then dividends and productive investment can both be bigger in relation to profit.

As Figure 8 demonstrates, there was in fact no tradeoff between the share of after-tax profit paid out as dividends and the share devoted to net productive investment. The graph splits the data into two subperiods to capture the effect of an obvious structural break that took place from 1989 onward. With the exception of one outlier, 2005, the dividend share of profit during this latter subperiod consistently exceeded its values between 1947 and 1988. For the 1947–1988 subperiod, the nearly horizontal regression line and the miniscule coefficient of determination (*R*2 < 0.001) indicate that there was almost no relationship between the dividend and productive

**Figure 8. Productive Investment and Dividend Payments, U.S.** **Corporations**

(percentages of after-tax profit)

investment shares.[[12]](#footnote-12) During the 1989-2007 subperiod, there was again no statistically significant relationship between the dividend and productive investment shares (at normal levels of testing), and the upward slope of the regression line indicates that increases in investment actually tended to be associated with increases, not decreases, in dividends.

In marked contrast, Figure 9 shows that there was a very strong positive association between net productive investment and “borrowing”––the portion of net investment and dividends not funded out of after-tax profit––as shares of after-tax profit. The slope coefficients, 1.00 for the earlier subperiod and 1.18 for the latter subperiod, indicate that $1 rise in investment was on average associated with additional borrowing of $1.00 and $1.18. When 2005, the outlier

**Figure 9. Productive Investment and Borrowing, U.S. Corporations**

(percentages of after-tax profit)

year, is omitted, the latter slope coefficient falls to 1.08. Since the slope coefficients for the 1989–2007 subperiod are not statistically different from 1 at normal levels of testing, these results strongly suggest that increases in net investment were paid for––dollar-for-dollar––by means of borrowed funds during both subperiods.[[13]](#footnote-13)

Our results imply that when corporations decided to increase their productive investment, they did not obtain the extra money they needed by reducing dividends; instead, they borrowed it. And when they decided to reduce their productive investment, they did not use the freed-up funds to pay additional dividends; instead, they borrowed less. Thus, when the dividend share of profit rose markedly, between 1988 and 2000, the rise did not come about at the expense of a fall in the productive investment share. The latter also rose markedly, as the borrowing share skyrocketed from –9% to 63% (see Table 1). Subsequently, the investment share fell very sharply, after which it partly rebounded; this was associated with a similar decline in and partial rebound in the borrowing share, while the dividend share remained within a narrow range. Moreover, the dividend share again tended to vary together, not inversely, with the investment share.[[14]](#footnote-14)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 1. Shares of After-Tax Profit, U.S. Corporations, 1988–2007 (selected years)** | | | | | |
|  | 1988 | 1992 | 2000 | 2004 | 2007 |
| Investment share | 58% | 47% | 88% | 28% | 54% |
| Dividend share | 34% | 47% | 75% | 60% | 76% |
| Borrowing share | –9% | –6% | 63% | –12% | 30% |

The strong association between productive investment and borrowing demands that we reconsider the typical fashion in which the relationship between financial payouts and investment is depicted. The manner in which this relationship is discussed sometimes seems to give readers the impression that if an additional dollar of profit is distributed as dividends, productive investment must necessarily be reduced by a dollar. For instance, Duménil and Lévy (2011, p. 153) suggest that “corporations basically self-finance their investment. This ability depends on the rate at which they retain profits, that is, do not pay interest or distribute dividends. ... Retained profits condition accumulation.” It is true that, *on average,* and *over sufficiently long spans of time*, the share of investment funded out of borrowing isn’t large, which may be what Duménil and Lévy mean by corporations’ “basically self-financ[ing] their investment.” It is also true that, if corporations did not borrow *at all*, their ability to invest would depend entirely on the degree to which they do not pay interest or distribute dividends. However, it is not true that corporations are unable to invest more than the profit they have retained after paying interest and dividends. Nor do Duménil and Lévy actually state that corporations are unable to invest more than their retained profits. On the contrary, they acknowledge that productive investment greatly exceeded retained earnings in the second half of the 1990s (Duménil and Lévy 2011, p. 153-54).

**4. Trends in Productive Investment as a Share of Profit**

More importantly, as we shall discuss presently, the share of U.S. corporations’ profit that was productively invested was actually greater during the first two decades of neoliberalism than during the period that preceded it. It was also greater during the neoliberal period as a whole once we control for the substantial rise in the rate of depreciation. These findings directly contradict other authors’ (e.g., Husson 2008; Stockhammer 2009) claim that the investment share fell as a result of financialization and/or neoliberalism.

Referring to the United States, the major economies of the European Union, and the European Union as a whole, Stockhammer (2009, p. 11) argued that “financialization has had a dampening effect on business investment, probably due to negative effects of shareholder value orientation and increased uncertainty.” He based this conclusion on declining trends in the countries’ investment/profit ratios since the 1970s. However, there are two main reasons why his inference is invalid. First, although his conclusion pertains to *business* investment, for some reason he computed ratios of investment (gross fixed capital formation) to “profit” (gross operating surplus and mixed income) using data for the *total* economy.[[15]](#footnote-15) We computed the investment/profit ratio for the United States, using the same data source and the same variables that Stockhammer used, but restricting the focus to corporations only.[[16]](#footnote-16) The percentage decline in the ratio was reduced by more than half.

Second, even if we ignore Stockhammer’s disregard for other possible explanations of the decline in the investment/profit ratio, the time period he considered is far too short to enable him to attribute the decline to financialization. He contended that the “regime of accumulation” that preceded the “finance-dominated” regime “c[a]me to an end in the course of the 1970s” (Stockhammer, p. 3). Thus, he tried to assess the effects of financialization by comparing post-financialization figures to a pre-financialization baseline that consists of a few years at most. There is no *a priori* reason to believe that these few years were representative of the pre-financialization period, and thus no reason to believe that the investment/profit ratio was higher on average prior to the emergence of financialization.

Similarly, Husson drew conclusions about the effect of neoliberalism on investment from a data series that provided no prior baseline information at all. In an attempt to defend his contention (in Husson 2008) that a distinctive neoliberal regime of accumulation emerged in the 1980s in which profit was diverted from productive investment to financial markets, Husson (2009, Graphique 7B) employed data for the U.S. only from the early 1980s onward.

Figure 10 shows the net investment share of profit, using four different measures of profit, relative to the average shares of the 1949–1971 period. Because the data suggest that changes in profit generally precede changes in investment, we computed the net investment of each year as a percentage of the profit that was obtained two years earlier. For this reason, the graph begins with 1949 rather than with 1947, the start of the post-World War II period. The graph makes clear that the 1970s were in no way representative of the pre-financialization period; the investment share skyrocketed during this decade. Hence, data series that begin with the 1970s or later do not allow us to draw valid conclusions about how financialization and neoliberalism have affected productive investment.

**Figure 10. Investment Shares of Profit, U.S. Corporations**

(as percentages of 1949–1971 average; net investment as percentage of profit two years earlier)

It is clear from Figure 10 that movements in the investment shares can be broken into four quite distinct periods: 1949–1971, 1972–1985, 1986–2001, and 2002–2007. In order to discuss pre- and post-neoliberal eras, we can also split the second period into two subperiods, one that ends with 1980 and another that starts with 1981, the year in which Ronald Reagan became president.

Table 2 summarizes the data in terms of these periods. Through 2001, all four investment shares of profit during the neoliberal era were greater than or equal to the pre-neoliberal investment shares. Moreover, while the investment share did decline markedly after the early 1980s, as Stockhammer and Husson found, this decline cannot be attributed to financialization or neoliberalism. One reason why it cannot is that the investment share of profit was unsustainably high at the start of the 1980s. Owing to a sharp decline in profitability, the (non-lagged) investment share of after-tax profit between 1979 and 1982 averaged 105%; corporations were investing more profit than the profit they had. Another reason is that neoliberalism and financialization did not cause the investment share to fall to below-normal levels. When it fell, it returned to levels similar to those that were typical prior to 1972; during the 1986–2001 period, all four investment shares were greater than or equal to those of the 1949–1971 period.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 2. Investment Shares of Profit, U.S. Corporations**  (net investment as percentage of profit two years earlier) | | | | | | | | | | |
| profit measure 1 | 1949–  1971 | 1972–  1980 | 1981–  1985 | 1986–  2001 | 2002–  2007 |  |  | 1949–  1980 | 1981–  2001 | 1981–  2007 |
| PI | 24% | 37% | 38% | 24% | 18% |  |  | 28% | 28% | 25% |
| NOS | 34% | 55% | 54% | 36% | 26% |  |  | 40% | 40% | 37% |
| BTP | 36% | 65% | 72% | 46% | 31% |  |  | 44% | 52% | 47% |
| ATP | 61% | 105% | 107% | 67% | 45% |  |  | 74% | 76% | 69% |
| 1 PI = property income; NOS = net operating surplus; BTP = before-tax profit; ATP = after-tax profit | | | | | | | | | | |

The above findings use net investment and profit data based partly on historical-cost depreciation figures. As Table 3 shows, we arrive at very similar conclusions when current-cost depreciation figures are used instead.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 3. Current-Cost Investment Shares of Profit, U.S. Corporations**  (net investment as percentage of profit two years earlier; depreciation measured at current cost) | | | | | | | | | | |
| profit measure 1 | 1949–  1971 | 1972–  1980 | 1981–  1985 | 1986–  2001 | 2002–  2007 |  |  | 1949–  1980 | 1981–  2001 | 1981–  2007 |
| PI | 19% | 27% | 27% | 19% | 13% |  |  | 21% | 21% | 19% |
| NOS | 27% | 42% | 41% | 29% | 19% |  |  | 32% | 32% | 29% |
| BTP | 29% | 51% | 60% | 37% | 23% |  |  | 35% | 43% | 38% |
| ATP | 52% | 92% | 106% | 59% | 34% |  |  | 64% | 70% | 62% |
| 1 PI = property income; NOS = net operating surplus; BTP = before-tax profit; ATP = after-tax profit | | | | | | | | | | |

A sharp decline in investment and a large, though temporary, spike in profitability occurred after 2001. As a result, three of the four average investment-shares for the neoliberal period as a whole, 1981–2007, fall short of the averages for the 1949–1980 period. However, this fact cannot be attributed to neoliberalism, or to an emergent neoliberal mode of corporate governance. Such an explanation cannot account for why the investment share was not inferior to the pre-neoliberal share during the first 21 years of neoliberalism, but then suddenly plummeted.

The post-2001 decline in the investment share seems to have been a temporary response to events of that period––perhaps events such as the bursting of the “dot-com” stock market bubble that began at the end of 2000, the sharp decline in the rate of profit between 1997 and 2001, and the 9/11 terrorist attacks. After 2004, the investment share rebounded sharply. For instance, while after-tax profit was only 6% greater in 2007 than in 2004, net investment was 107% greater. Indeed, net investment increased by $240 billion while after-tax profit increased by only $47 billion, which means that corporations were investing an extra $5 for every extra $1 of profit. Thus, by 2007, the percentage increase in net investment relative to 1997 was slightly greater than the comparable percentage increase in after-tax profit (see Figure 11), which implies that the (non-lagged) investment share was slightly higher in 2007 than in 1997. We do not see how these facts are compatible with a narrative in which neoliberalism and/or a new model of corporate governance are causing companies to divert profit from productive investment to financial uses.

**Figure 11. Net Investment and After-Tax Profit, U.S. Corporations**

(percentage differences from 1997 levels)

In any case, once one adjusts for changes in the rate of depreciation, the average investment share of profit becomes a good deal greater during the neoliberal period, even when the post-2001 years are included, than in the period that preceded it.[[17]](#footnote-17) As Figure 12 shows, the rate of depreciation––depreciation of corporations’ fixed assets as a percentage of the net stock of their fixed assets­­––rose markedly after 1960. Kliman (2011, pp. 140–143) showed that the entire rise is attributable to the information-technology revolution. Investment in information-processing equipment and software became a greater and greater share of corporations’ total

productive investment, and since they depreciate much more rapid than do most other fixed assets, the shift in investment led to a rapid rise in the overall rate of depreciation.

**Figure 12. Rate of Depreciation, U.S. Corporations**

(depreciation as percentage of cost of net stock of fixed assets)

Neoliberalism and financialization are obviously not responsible for this increase in the rate of depreciation. Thus, in order to validly assess whether they have led to a diversion of profit from productive investment toward financial uses, we have to abstract from the increase in the rate of depreciation, control for its effects. We have done so by adding depreciation to both net investment and profit. The resulting investment shares, gross investment as a percentage of what may be called “gross profit” (profit plus depreciation), are the same when net investment and profit are valued at current cost as when they are valued at current cost. One investment share, gross investment as a percentage of gross operating surplus, is very similar to the measure that Stockhammer reported; the main difference is that ours pertains to corporations rather than to the total economy.

The results of this exercise are presented in Figure 13 and Table 4. All four investment shares are higher during the neoliberal period––including the years after 2001––than before it. And three of the four investment shares exceed their 1949–1971 levels even during the 2002–2007 period, while the investment share of gross after-tax profit fell short of its 1949–1971 level by only two percentage points. Thus, the fall in the investment shares over the whole 1981–2007

**Figure 13. Gross Investment Shares of Gross Profit, U.S. Corporations**

(as percentages of 1949–1971 averages; gross investment as percentage of gross profit two years earlier)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 4. Gross Investment Shares of Gross Profit, U.S. Corporations**  (gross investment as percentage of gross profit two years earlier) | | | | | | | | | | |
| profit measure 1 | 1949–  1971 | 1972–  1980 | 1981–  1985 | 1986–  2001 | 2002–  2007 |  |  | 1949–  1980 | 1981–  2001 | 1981–  2007 |
| GPI | 39% | 55% | 57% | 48% | 45% |  |  | 44% | 50% | 49% |
| GOS | 53% | 74% | 75% | 63% | 58% |  |  | 59% | 66% | 64% |
| GBTP | 55% | 83% | 90% | 73% | 65% |  |  | 62% | 77% | 75% |
| GATP | 80% | 113% | 115% | 91% | 78% |  |  | 89% | 96% | 92% |
| 1 GPI = gross property income; GOS = gross operating surplus; GBTP = gross before-tax profit; GATP = gross after-tax profit | | | | | | | | | | |

period, relative to their 1949–1980 averages, are attributable to the rising rate of depreciation, not to neoliberalism and/or financialization.

**5. The Falling Rate of Accumulation**

As we noted above, U.S. corporations’ rate of accumulation of fixed assets fell sharply during the three decades that preceded the Great Recession. Several radical political economists have argued that the decline occurred because, with the emergence of financialization and neoliberalism, profit was diverted from productive investment toward financial payments and acquisitions.

This conclusion is a direct consequence of two of their key claims:

1. the rate of accumulation fell even though the rate of profit rebounded under neoliberalism, which implies that the investment share of profit declined.[[18]](#footnote-18)
2. the investment share declined because profit was diverted from productive investment during the neoliberal period.

For example, Duménil and Lévy (2004, p. 65) wrote,

Why was the restoration of the rate of profit not coupled with a parallel resumption of growth …? The key to this enigma may be found in the monetary and financial mechanisms … the continuing poor performance of the American and European economies [… is] actually the effect of the specific dynamics of neoliberalism. One can, therefore, assert that the structural crisis is over and blame neoliberalism for poor accumulation rates.

Similarly, Husson (2008) argued that

[the] decrease of the wage-share has allowed a spectacular recovery of the average rate of profit from the mid 1980s. But … the rate of accumulation has continued to fluctuate around a level lower than that before the crisis. In other words, the drain on wages has not been used to invest more. … The growing mass of surplus value which has not been accumulated has [to] mainly be distributed in the form of financial revenues, and that is where the source of the process of financialization is to be found. The difference between the rate of profit and the rate of investment is a good indicator of the degree of financialisation.

We have shown above that claim (2) is false, at least in the case of the U.S. Although the investment share did decline after the early 1980s, it did so because the investment share at the start of the 1980s was abnormally high and unsustainable, not because profit was diverted from productive investment toward financial uses. And although financial payments and acquisitions grew rapidly, what made their rapid growth possible was increased use of borrowed funds, not diversion of profit from production. Through 2001, the share of profit that was invested in production was not lower under neoliberalism than prior to it, and once we control for the rise in the rate of depreciation, it was not lower during the neoliberal period as a whole.

As for claim (1), the “rate of profit” that rebounded is not a rate of profit in the normal sense of the term. That is, it is not the rate of return on investment––profit as a percentage of accumulated investment (book value net of depreciation)––but profit as a percentage of what it would currently cost to replace the entire stock of fixed assets. Kliman (2011, chap. 5) has shown that the rate of return *on accumulated investment* declines substantially during the neoliberal period when property income or net operating surplus are employed as measures of profit. When before- or after-tax profit are employed, the rate of return on investment also declines substantially between 1982, a trough year, and 2001 (the last trough prior to the Great Recession), and it is basically trendless during the 1981–2007 period as a whole.[[19]](#footnote-19)

Since claims (1) and (2) are both incorrect––when “rate of profit” is understood in the normal sense––the decline in the rate of accumulation cannot be attributed to a diversion of profit from production that took place because of financialization and neoliberalism. Rather, it declined partly because the rate of profit declined, and partly because the investment share of profit, which was temporarily and unsustainably high at the start of the early 1980s, returned to normal levels.

The change in the rate of accumulation can be decomposed into changes in the investment share and changes in the rate of profit. Since the rate of accumulation is, by definition, the product of the investment share of profit and the rate of profit, the percentage change in the rate of accumulation is approximately equal to the sum of the percentage changes in the investment share and the rate of profit. This relation will help us to assess movements in U.S. corporations’ rate of accumulation of fixed assets.

The rate of accumulation peaked in 1979. Between that year and 2001, it fell by 61%, while the after-tax rate of profit fell by 41% and the investment share of after-tax profit fell by 34%. Thus, about 55% (= 41/[41 + 34]) of the decline in the rate of accumulation is attributable to the decline in the rate of profit, and 45% is attributable to the decline in the investment share. (The rate of accumulation then rose by 18% between 2001 and 2007, as a 47% rise in the rate of profit was only partly offset by a 20% fall in the investment share.)

*Taking a longer view, of the post-World War II period as a whole, the fall in the rate of profit accounts for the entire fall in the rate of accumulation.* Figure 14 shows the percentages by which the variables differed from their values in 1948. The rate of accumulation tracked the rate of profit relatively closely during the first two decades of the postwar period, and again during the last two decades. When the 1968–1986 period is omitted, variations in the rate of profit account for 48% of the variation in the rate of accumulation one year later and 52% of the variation in the rate of accumulation two years later. After 1967, a massive increase in the

**Figure 14. U.S. Corporations’ Rate of Accumulation, After-Tax Rate of Profit, and Investment Share of After-Tax Profit**

(percentage differences from 1948 values)

investment share of profit occurred, which caused the rate of accumulation to rise substantially in relation to the rate of profit; yet because the investment share rose to unsustainable levels, it began to plummet after 1981, and this brought movements in the rate of accumulation back in line with movements in the rate of profit.[[20]](#footnote-20) Thus, when all is said and done––­­i.e., when we

consider the entire postwar period––the investment share had very little to do with the decline in the rate of accumulation. Between 1948 and 2007, the rate of accumulation fell by 41%, while the investment share actually rose slightly, by 3%. The entire fall in the rate of accumulation is thus attributable to the 43% fall in the after-tax rate of profit, which was only offset a bit by the small rise in the investment share.

This finding is not particularly surprising. That the rate of profit is a key determinant of the rate of accumulation is a staple of much economic thought, and indeed the relationship between them is perhaps the main reason why the rate of profit is of economic importance. What would be surprising is a persistent fall in the rate of accumulation despite a persistent rise in the rate of profit. Those who assert that such a divergence occurred under neoliberalism have called attention to the counterintuitive nature of this assertion (see, e.g., Husson 2008).

**6. Summary and Conclusion**

Various claims have been made in the financialization literature that profit has been diverted from investment in production to financial purchases and payments as a result of financialization and/or neoliberalism. This paper has shown that such claims are not correct in the case of U.S. corporations. The share of profit invested in production was greater during the first two decades of neoliberalism than during the preceding decades. Moreover, when we controlled for the rise in the rate of depreciation––a rise that resulted from the information-technology revolution, not financialization or neoliberalism––we found that the share of profit invested in production was as great or greater throughout the neoliberal period as a whole than during the preceding decades. Although the investment share of profit did decline after the early 1980s, the paper has shown that it declined from unsustainably high levels (close to or in excess of 100% of after-tax profit) to levels that were typical during the first quarter-century of the post-World War II period. The decline therefore cannot be attributed to financialization or neoliberalism.

The paper has also shown that the entire fall in U.S. corporations’ rate of accumulation between 1948 and 2007 is attributable to the fall in their rate of profit, rather than to a diversion of profit from investment. Moreover, somewhat more than half of the steep decline in the rate of accumulation that took place between 1979 and 2001 is attributable to the fall in the rate of profit while the remainder is due to the fact that the investment share of profit returned to normal levels after having been unsustainably high.

In order to account for the fact that profit has not been diverted from production even though financial purchases and payments have increased much more rapidly than have profits, the paper has emphasized the fact that corporations make use of borrowed funds as well as profit, and that credit markets have been an increasing important source of funding.

There is no single reason why incorrect claims have been made about how financialization and neoliberalism have affected productive investment. The paper has called attention to a few different incorrect inferences that have been drawn from the data. We wish to conclude by re-emphasizing what seems to be the main problem, in the hope that subsequent contributions to the financial literature will not be burdened by it. We are referring to the inference that––or perhaps a use of language that misleadingly suggests that––an increase in financial payments or purchases relative to some source of funds (profits, internal funds, etc.) implies that funds have been diverted from productive investment. A world in which additional credit is created *ex nihilo* and backed by nothing more than promises to repay––especially a world in which this phenomenon is increasingly significant––is not a constant-sum game. The recent financial crisis has shown once again that this phenomenon is certainly not free of costs. But a diversion of profit from production has not been among these costs.

**Works Cited**

Davis, Gerald F. 2009. *Managed by the Markets: How Finance Reshaped America.* Oxford:

Oxford University Press.

Dobbin, Frank, and Dirk Zorn. 2005. “Corporate Malfeasance and the Myth of Shareholder Value.” *Political Power and Social Theory* 17: 179-198

Duménil, Gerard and Dominique Lévy. 2004. *Capital Resurgent: Roots of the Neoliberal*

*Revolution*. Cambridge, MA: Harvard University Press.

\_\_\_\_\_. 2011. *The Crisis of Neoliberalism*. Cambridge, MA: Harvard University Press.

Fligstein, Neil. 2005. “The End of (Shareholder Value) Ideology?” *Political Power and Social Theory* 17: 223-228.

## Gowan, Peter, “Crisis in the Heartland: Consequences of the New Wall Street System,” *New Left Review* 55: 5-29.

Husson, Michel. 2008. “A Systemic Crisis, Both Global and Long lasting,” Workers Liberty website, July 24. Available at http://www.workersliberty.org/story/2008/07/21/marxists-capitalist-crisis-7-michel-husson-systemic-crisis-both-global-and-long-las .

\_\_\_\_\_. 2009. “Les Coûts Historiques d’Andrew Kliman.” Nouveau Parti Anticapitaliste website, Dec. 27. Available at tinyurl.com/3d5bkqg. Also available at hussonet.free.fr/histokli.pdf.

Kliman, Andrew. 2011. *The Failure of Capitalist Production: Underlying Causes of the Great Recession.* London: Pluto Books.

Krippner, Greta R. 2011. *Capitalizing on Crisis: The Political Origins of the Rise of Finance.* Cambridge, MA: Harvard University Press.

Lazonick, William. Forthcoming. “From Innovation to Financialization: How Shareholder Value Ideology is Destroying the US Economy.” In *The Political Economy of Financial Crises*, eds. Gerald Epstein and Martin H. Wolfson. Oxford: Oxford University Press.

\_\_\_\_\_. 2010. “Innovative Business Models and Varieties of Capitalism: Financialization of the U.S. Corporation.” *Business History Review*, 84: 675-702

Lazonick, William and Mary O’Sullivan. 2000. “Maximizing Shareholder Value: A New

Ideology for Corporate Governance.” *Economy and Society* 29(1): 13-35.

Orhangazi, Özgür. 2007. “Financialization and Capital Accumulation in the Non-financial Corporate Sector: A Theoretical and Empirical Investigation of the U.S. Economy: 1973-2003.” Political Economy Research Institute Working Paper no, 149, Oct.

\_\_\_\_\_. 2008. *Financialization and the US Economy*. Cheltenham, UK: Edward Elgar.

Stockhammer, Engelbert. 2004. “Financialization and the Slowdown of Accumulation.”

*Cambridge Journal of Economics* 28: 719-41.

\_\_\_\_\_. 2009. “The Finance-dominated Accumulation Regime, Income Distribution and the Present Crisis,” Apr. Department of Economics Working Paper No. 127, Vienna University of Economics & Business Administration.

Tobin, James. 1997. “Comment by James Tobin.” In *Macroeconomics of Saving, Finance and Investment*, ed. Robert Pollin, pp. 299–304. Ann Arbor: Univ. of Michigan Press.

**Appendix: Data and Computations**

Unless explicitly indicated otherwise, all profit, net investment, and fixed asset data used in this paper are based on depreciation figures valued at historical cost.

**Abbreviations**

NIPA National Income and Product Accounts, published by the U.S. Bureau of

Economic Analysis

FAA Fixed Asset Accounts, published by the U.S. Bureau of Economic Analysis

FoFA *Flow of Funds Accounts of the United States*, published by the Board of

Governors of the Federal Reserve System

**Definitions**

After-tax profit = before-tax profit – taxes on corporate income

Before-tax profit = net operating surplus – “net interest and miscellaneous payments” – “business current transfer payments (net)”

Depreciation valued at historical cost = gross investment in fixed assets – net investment in fixed assets, valued at historical cost

Net investment in fixed assets, valued at current cost = gross investment in fixed assets – depreciation of fixed assets (capital consumption), at current cost

Net investment in fixed assets, valued at historical cost = change in the net stock of fixed assets, valued at historical cost, between the start and end of the year

Net operating surplus = property income – “taxes on production and imports less subsidies”

Property income = gross value added – depreciation – compensation of employees

Rate of profit = profit divided by net stock of fixed assets as of end of preceding year

Rate of accumulation = net investment divided by net stock of fixed assets as of end of preceding year

Stock repurchases = – (“net new equity issues”)

**Data Sources**

|  |  |  |
| --- | --- | --- |
| **Corporations (all domestic)** | | |
| **Variable** | **Table** | **Line no.** |
| business current transfer payments (net) | NIPA 1.14 | 10 |
| compensation of employees | NIPA 1.14 | 4 |
| depreciation of fixed assets (capital consumption), at current cost | NIPA 1.14 | 2 |
| dividend payments, net | NIPA 1.14 | 14 |
| fixed assets, net stock valued at historical cost | FAA 6.3 | 2 |
| gross investment in fixed assets | FAA 6.7 | 2 |
| gross value added | NIPA 1.14 | 1 |
| interest payments, net (plus miscellaneous payments) | NIPA 1.14 | 9 |
| taxes on corporate income | NIPA 1.14 | 12 |
| taxes on production and imports less subsidies | NIPA 1.14 | 7 |
|  |  |  |
| **Financial corporations** | | |
| **Variable** | **Table** | **Line no.** |
| financial assets, total | FoFA L.108 | 1 |
| gross value added | NIPA 1.14 | 16 |
| fixed assets, net stock valued at historical cost | FAA 6.3 | 3 |
|  |  |  |
| **Nonfinancial corporations** | | |
| **Variable** | **Table** | **Line no.** |
| business current transfer payments (net) | NIPA 1.14 | 26 |
| compensation of employees | NIPA 1.14 | 20 |
| depreciation of fixed assets (capital consumption), at current cost | NIPA 1.14 | 18 |
| dividend payments, net | NIPA 1.14 | 30 |
| equity issues, net new | FoFA F.102 | 39 |
| financial assests, acquisitions of (net) | FoFA F.102 | 16 |
| financial assets, total | FoFA L.102 | 1 |
| fixed assets, net stock valued at current cost | FAA 6.1 | 4 |
| fixed assets, net stock valued at historical cost | FAA 6.3 | 4 |
| gross fixed investment | FoFA F.102 | 12 |
| gross investment in fixed assets | FAA 6.7 | 4 |
| gross value added | NIPA 1.14 | 17 |
| interest payments, net (plus miscellaneous payments) | NIPA 1.14 | 25 |
| internal funds, U.S. (book value) | FoFA F.102 | 5 |
| liabilities, net increase in | FoFA F.102 | 37 |
| liabilities, total | FoFA L.102 | 22 |
| taxes on corporate income | NIPA 1.14 | 28 |
| taxes on production and imports less subsidies | NIPA 1.14 | 23 |
|  |  |  |
| **Other** | | |
| gross domestic product | NIPA 1.1.5 | 1 |
|  |  |  |

1. Here and below, we use the colloquial term “borrowing” to refer to what is technically known as “dissaving.” Dissaving occurs when one uses existing savings (wealth) to fund an expenditure, whether one uses one’s own savings or whether one borrows others’ savings. [↑](#footnote-ref-1)
2. As we also discuss in section 4, the post-2001 decline in the investment share was temporary; productive investment increased much more rapidly than did profit after 2004. [↑](#footnote-ref-2)
3. “Financial payments” or alternatively “financial payouts,” refers to corporations’ payments of dividends and interest, as well as stock repurchases. [↑](#footnote-ref-3)
4. For Duménil and Lévy, “retained profit” is equal to after-tax profit minus interest and dividend payments. [↑](#footnote-ref-4)
5. We attempted to replicate his aggregate-level regression results (Orhangazi 2008, p. 103, model II in Table 6.1), but were unable to do so, In particular, while Orhangazi reported that financial payments had a negative effect on investment that was statistically significant at the 10 percent level, we found that the effect was positive (but significant only at the 15 percent level). The differences between his results and ours seem to be due, at least in part, to substantial discrepancies between the values we obtained for most of the regression variables and the values he reported by means of time-series plots (Orhangazi 2008, pp. 114–6). Incorrect guesses on our part about Orhangazi’s procedures and data sources may explain some of these discrepancies. However, we cannot account for the fact that one of his graphs indicates that the ratio of gross value added to the capital stock rose almost every year between 1961 and 2004, while we found that it trended sharply downward after the mid-1960s. We have written to Orhangazi in an attempt to reconcile the two sets of results and we are awaiting his reply. [↑](#footnote-ref-5)
6. In section 2, we will show that a much smaller share of U.S. nonfinancial corporations’ financial payments and purchases was funded out of profit between 1968 and 2007 than between 1947 and 1967. A much larger share was therefore funded by means of additional borrowing. [↑](#footnote-ref-6)
7. This equivalence follows from the fact that productive investment + financial purchases and payments = profit + borrowing, together with the fact that the sum of the changes in the left-hand side terms equals the sum of changes in the right-hand side terms. [↑](#footnote-ref-7)
8. Roughly speaking, as used in the *Flow of Funds Accounts*, the term “internal funds” are profits retained after paying income tax and dividends but before depreciation charges. [↑](#footnote-ref-8)
9. This comparison is restricted to nonfinancial corporations because financial assets play larger and different roles in the operations of financial corporations. Between 1947 and 2007, financial corporations’ share of the corporate sector’s financial assets rose very modestly, from 80% to 82%––which implies that financial and nonfinancial corporations’ financial assets grew at almost the same rate. In contrast, financial corporations’ shares of output (gross value added) and accumulated investment in fixed assets are much smaller, but they rose much more rapidly, from 4% and 3%, respectively, in 1947, to 13% in 2007. [↑](#footnote-ref-9)
10. On average, stock buybacks were 20%, 19%, and 37% of net operating surplus during these three periods. There were also large buybacks in 2008 and 2010, equal to 28% and 22% of net operating surplus. [↑](#footnote-ref-10)
11. Krippner (2011, p. 9) provides a concise, yet detailed, summary of these developments. “Taken together,” she argues, “these changes had a profound effect on the behavior of firms, with the threat of takeover acting as a stick and stock option as a carrot to fulfill the imperative of financial markets .…”   [↑](#footnote-ref-11)
12. If there had been a perfect (dollar-for-dollar) tradeoff between dividend payments and productive investment, a 1 percentage-point rise in the investment share would have been associated, on average, with a 1 percentage-point fall in the dividend share. The slope coefficient, –0.004, implies that the actual average fall in the dividend share was only four one-thousandths as large. [↑](#footnote-ref-12)
13. When we consider only nonfinancial corporations, all results reported above for the dividend-investment relationship continue to hold true, except that the regression line for the 1947-1988 period rises very slightly; the slope coefficient is +0.002. All results reported for the borrowing-investment relationship also continue to hold true, except that the slope coefficient for the 1989-2007 period is 1.21, or 1.12 when 2005 is excluded. These coefficients are also not statistically different from 1 at normal levels of testing. [↑](#footnote-ref-13)
14. These comparisons disregard the behavior of the variables in the outlier year of 2005. [↑](#footnote-ref-14)
15. Although Stockhammer (2009, p. 23) indicates that his investment data pertain to the private sector only, that is not the case. [↑](#footnote-ref-15)
16. The variables are “Operating surplus and mixed income; gross” and “Gross fixed capital formation,” published in *OECD.Stat Extracts*, stats.oecd.org . [↑](#footnote-ref-16)
17. Since net investment equals gross investment minus depreciation, net investment falls, all else being equal, when depreciation rises as a share of gross investment, i.e., when a larger share of total investment simply replaces the depreciation (loss in value) of existing fixed assets. [↑](#footnote-ref-17)
18. Since the rate of accumulation is the ratio of net investment to advanced capital, and the rate of profit is the ratio of profit to advanced capital, the former can fall while the latter rises only if the investment share falls. [↑](#footnote-ref-18)
19. The before- and after-tax rates of return trend downward between 1981 and 2005, trend upward slightly when 2006 and 2007 are included, but again trend downward when 2008 is also included. The slope coefficients are as follows: property-income rate, –0.217% (*p* = 0.001); net-operating-surplus rate, –0.148% (*p* = 0.009); before-tax-profit rate, 0.018% (*p* = 0.74); and after-tax-profit rate, 0.006% (*p* = 0.88). The *p*-values indicate that, if the “true” slope were zero, the probability that the observed slope coefficients would differ from zero by as much as these is less than 1% in the first two cases but 74% or more in the latter two. [↑](#footnote-ref-19)
20. The investment share rose partly because of declines in the rate of profit that were at first not matched by comparable declines in investment, and partly because of accelerating inflation that boosted the prices of investment goods more rapidly than it tended to boost profit. Conversely, the immediate reasons why the investment share fell so sharply after 1981 were that inflation subsided and that investment did respond, after a lag, to the post-1978 fall in the rate of profit. However, the investment share would eventually have fallen even in the absence of these triggers, since corporations were investing more profit than they were receiving. This is why our account stresses the unsustainable level that the investment share had reached rather than the factors that triggered the fall. [↑](#footnote-ref-20)