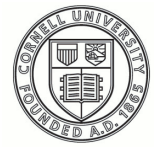

2010

Did the financial sector profit at the expense of the rest of the economy? Evidence from the United States

Sameer Khatiwada
International Institute for Labour Studies

International Labour Organization

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Abstract

The crisis which originated in the US financial sector in 2007 and subsequently spread to the real economy caused severe economic and social damage around the world. Governments have responded by providing fiscal support to the economy, undertaking exceptional monetary policy measures and introducing programmes targeted to vulnerable groups. In addition, considerable efforts have been made to recapitalise banks. Important as they are, these measures do not tackle the deeper influence of financial markets and institutions in the operation of the real economy. The purpose of this paper is to highlight the need for reforms in this neglected area.

The paper confirms the finding of the World of Work Report 2009 that the financial sector has grown beyond reasonable boundaries and its practices have spread to the nonfinancial economy. For example, in the last 20 years, financial sector's share of total corporate profits doubled, reaching as high as 44 per cent in 2002.

The study also demonstrates that in the United States, the growing influence of the financial sector has led to a reduction in the share of business investment as a percent of value added by as much as 2 percentage points in the last three decades.

More research is needed to shed further light on the causal linkages and to identify the reforms that could help ensure that the financial sector encourages investment --thereby growth and employment-- rather than hurting it. However, the finding of this paper is suggestive and important for today's debate on sustainable crisis responses.

Keywords

financial sector, United States, economic crisis

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Discussion paper

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Preface

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A. Introduction[1]

More than 20 million jobs were lost because of the financial and economic crisis of 2008-09, governments spent trillions of dollars in rescuing their financial systems and putting in place economic stimulus programmes, and by most recent estimates the total cost of the crisis is likely to amount to US$ 12 trillion. However, the factors that led to the crisis – deregulation, lack of proper government oversight, low interest rates, global savings imbalance, promotion of home ownership etc. – have not been properly addressed, notably those related to the financial sector. The financial sector has grown considerably in the past three decades, and a closer examination of the trends reveals that this growth had become unsustainable. It is true that finance enables the real economy to function properly by channelling capital resources to its most productive use and financial intermediaries play the role of collecting and disbursing resources. Furthermore, cross-country evidence shows that financial development is associated with economic growth and job creation. But the growth in the financial sector cannot be for its own sake, it would have to be for the sake of enabling growth in the real economy.

One of the ways of looking at the growth of the financial sector and its increasing influence on the rest of the economy is to examine the evolution of profits in the financial sector (Stockhammer, 2004; Krippner, 2005; Johnson, 2009; Torres, 2010). In particular, the financial sector's share of corporate profits has doubled in a span of 20 years (Johnson, 2009; Freeman, 2010; Torres, 2010). While it is true that measurement of profits over time is subject to a high degree of uncertainty, evidence shows that corporate profits have trended upwards since the 1980s in most developed economies (Ellis and Smith, 2007). This result holds by looking at either the *profit share* (gross operating surplus as a percentage of GDP) or the net *rate of return on capital* (gross operating surplus less depreciation of capital as a percentage of total net capital). With the rising corporate profits, evidence shows that the share of corporate profits going to the financial sector has increased tremendously. In other words, the rate of growth of financial sector profit has been much higher than that of the rest of the economy. This trend holds for the U.S. and the developed economies of Europe.

Rising corporate profits and the financial sector taking an increasing share of it is not a problem in itself. Actually, more profits should go to the sector whose value added to the GDP is higher. That is how a capitalist economic system is expected to function and should function. It is true that the value added of the financial sector to GDP exhibits a strong upward trend, but, in the wake of the financial and economic crisis of 2008-09, economists have started asking the question: did the financial sector grow disproportionately (Adrian and Shin, 2009; Krugman, 2009; Stiglitz, 2009; Freeman, 2010; Rajan, 2010; Torres, 2010). In other words, could it be true that the increased importance of financial sector has had negative consequences on the real economy?

In order to examine this question we look at the impact of increased financial sector profit on private business investment in the United States. Variations in business investment expenditures have long-term consequences for the productive capacity of the economy, and it also leads to shifts in the aggregate levels of employment and personal income (Samuel, 1996). The rest of the paper is organized as follows: section B looks at the growth in the financial sector by looking at past trends in profits and wages, and provides an in-depth look at where the increased profits have gone; section C examines the impact of financial sector's rising share of profits on private business investment.

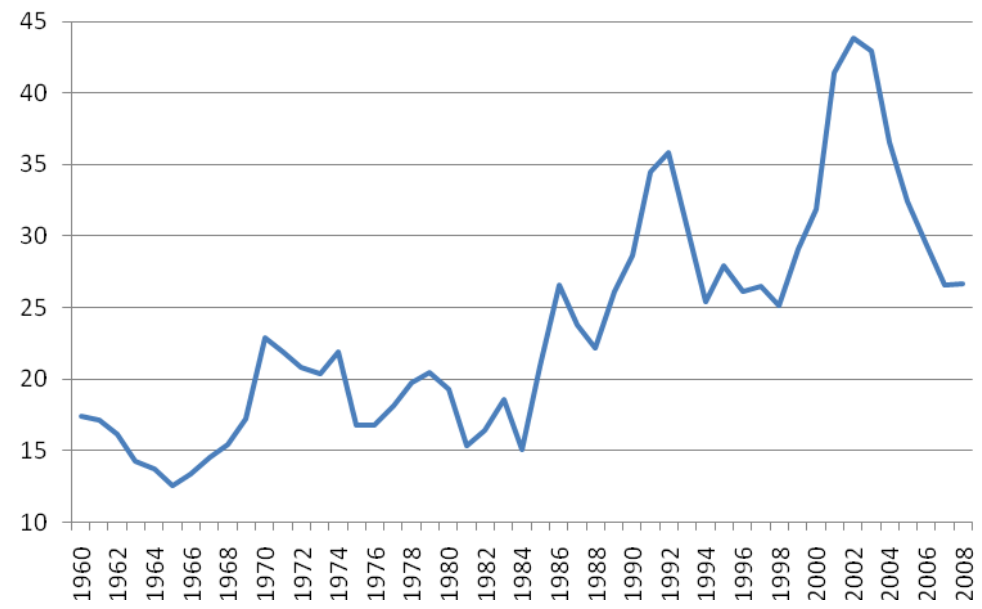
[1] The author would like to thank Ekkehard Ernst and Raymond Torres for valuable comments.

B. Overview of past trends

Rising profits

Financial sector's share of corporate profit in the United States has doubled in the span of two decades (Figure 1). From 1960 to 1984, financial sector's share of total corporate profit averaged 17.4 per cent, but from 1985 to 2008, it averaged roughly 30 per cent. From 2001 to 2003, it was above 40 per cent, reaching as high as 44 per cent in 2002.

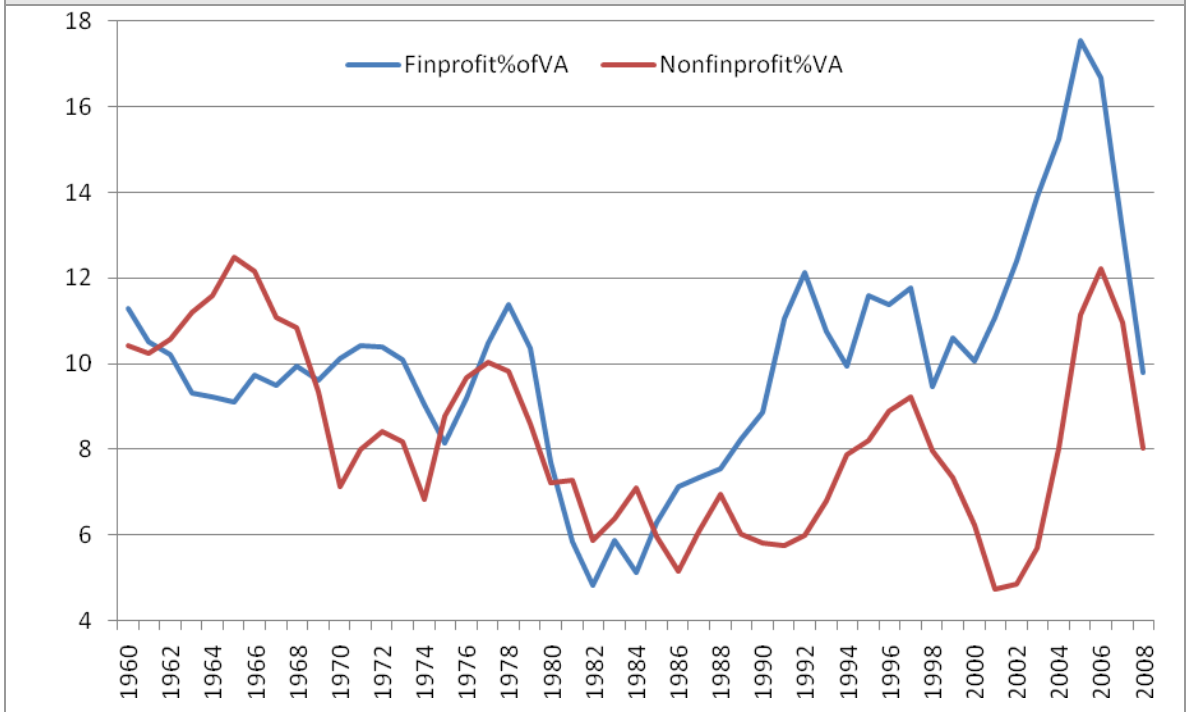
Figure 1: The rising incidence of profits in the US financial sector (as a percent of total corporate profits)



Source: Author's calculations based on US Bureau of Economic Analysis.

Given the rising incidence of corporate profits across all sectors, it is not surprising that the financial sector profits have increased as well. However, the notable difference is that the profit of the financial sector has been increasing at a faster pace than the rest of the economy, namely the non-financial sector. For example, in the United States, when in comparing the financial and non-financial sector profit as a percentage of their valued added to the economy, we see that starting in 1985, profits in the financial sector grew much faster (Figure 2). Furthermore, when corporate profits took declined rapidly in late 1990s and early 2000s, financial sector profit remained remarkably stable.

Figure 2: Financial and non-financial sector profit as a percentage of their valued added to the US economy, 1960-2008



Source: Author's calculations based on US Bureau of Economic Analysis.

Widening wage gap

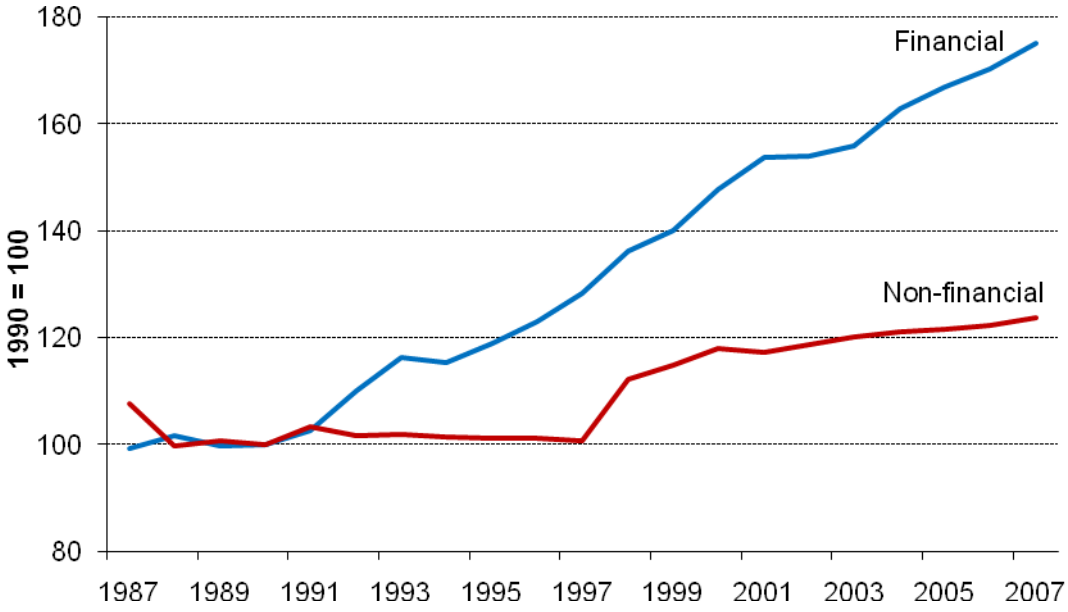
As profits accruing to the financial sector grew, the wage gap between financial and non-financial firms widened. Studies have shown that, compared to the non-financial sector in the United States, wages in the financial sector increased considerably from the 1980s to 2000s and, in the case of executives, was not linked to firm performance (*World of Work Report* 2008). Before the 2008 crisis and the Great Depression, "the compensation of employees in the financial industry appeared too high to be consistent with a sustainable labour market equilibrium" (Philippon and Reshef, 2009).[2] For example, controlling for education level and other observable characteristics, employees in the financial sector during the 1970s earned 3 to 4 per cent more than employees in the rest of the private sector (Philippon and Reshef, 2007). However, in the post-1980s world of deregulation and innovation, the wage premium in the financial sector rose to 20 per cent. Furthermore, a more recent study by Philippon and Reshef (2009) finds a robust and economically positive effect of deregulation on wages in the financial sector. It shows that financiers in the United States have been "overpaid by 30 to 50 percent since the late 1990s".

The analysis reveals that the real wage gap between financial and non-financial firms in the United States widened from US$ 11,000 in 1987 to US$ 40,000 in 2007 (per annum per employee; Figure 3). These past trends in compensation in the financial sector have continued throughout 2008 and 2009. For example, recipients of government bailout money through the Troubled Asset Relief Program (TARP) paid handsome bonuses to their employees in 2008. Citigroup, Merrill Lynch (which does not exist anymore) and Wells Fargo paid bonuses, even while enduring massive losses. In the case of

[2] During the 1970s, when employees in the financial sector earned 3 to 4 per cent more than employees in the rest of the private sector, they also enjoyed substantially lower *unemployment risk*. However, after 1980, *unemployment risk* in the financial sector started to catch with the rest of the private sector and the wage premium also increased to 20 per cent. Half of the increase in wage premium is accounted for by the increase in *unemployment risk*, but the other half is not explainable (Philippon and Reshef, 2007).

Goldman Sachs, JP Morgan Chase and Morgan Stanley, bonus payment per employee exceeded earnings per employee.

Figure 3: Real wage gap between financial and non-financial firms in the US



Notes: The figures give real average compensation per employee, and therefore do not take into account changes in the incidence of part-time employment. This may partly explain the changes in real wages between 1996 and 1997 in the US non-financial sector. However it is unlikely that changes in part time affect the relative trends of financial sector real wages versus non-financial sector real wages.
Source: Author's calculations based on US Bureau of Economic Analysis (BEA).

Disproportionate use of resources

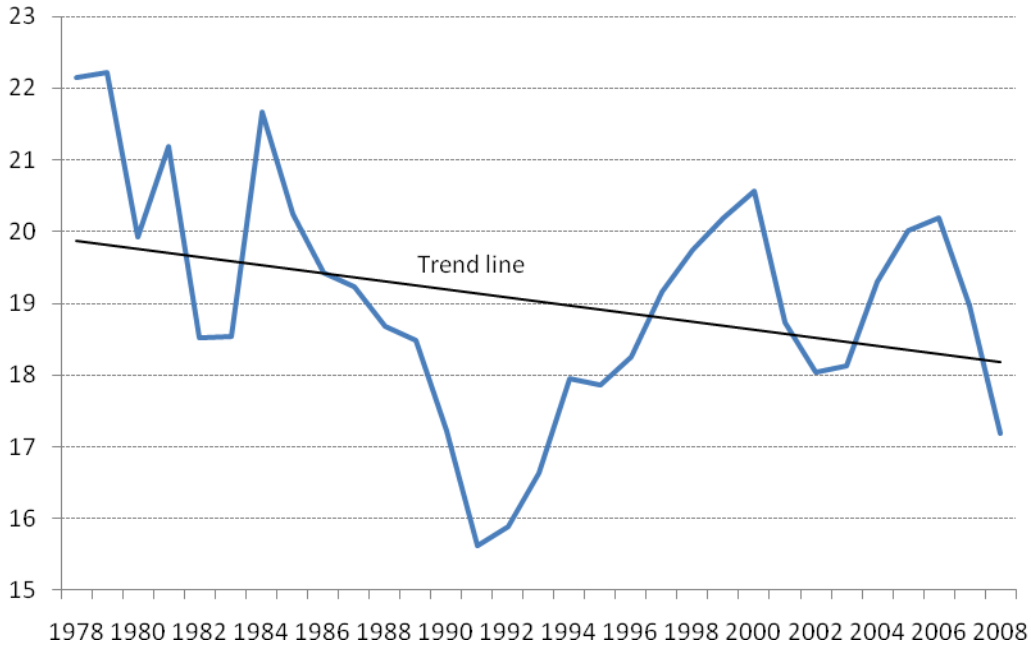
As the financial sector grew in size, it often attracted the best and the brightest. For example, among the Master of Business Administration (MBA) graduates from the top ten business schools in the world (which includes universities in China, France, the United Kingdom and the United States), 40 per cent of the graduates took jobs in the financial sector, while 60 per cent took jobs in the non-financial sector (*World of Work Report*, 2009). For some years, for example 2002/03, the breakdown was 50:50. Even after adjusting for the self-selection bias of students going into business schools, it is evident that the financial sector has been receiving a disproportionate share of the best and the brightest graduates. Longer time series data, available for a few business schools, show that, in the 1990s and 2000s, the share of graduates taking jobs in the financial sector is significantly higher than during the 1970s and 1980s. The general trend mimics the increasing size and influence of the financial sector in the real economy.

Nobel laureate James Tobin warned us more than two decades ago that the financial sector was using a disproportionate share of our resources:

> I confess to an uneasy Physiocratic suspicion, perhaps unbecoming in an academic, that we are throwing more and more of our resources, including the cream of our youth, into financial activities remote from the production of goods and services, into activities that generate high private rewards disproportionate to their social productivity. I suspect that the immense power of the computer is being harnessed to this 'paper economy', not to do the same transactions more economically but to balloon the quantity and variety of financial exchanges - James Tobin, pp.14-15, 1984.

Despite his belief in the power of unfettered markets, Tobin understood that financial sector growth came (or could come) at a cost to the rest of the economy. Indeed, when examining the real private business investment as a percent of its value added, there has been a 2 percentage points decline in investment in the last three decades (Figure 4). Stockhammer (2004) shows that "financialization", which the author defines as "increased activity of non-financial businesses on financial markets", leads to a slowdown in accumulation of physical assets, that is, lower investment activity.

Figure 4 : Real private business investment as a percent of value added



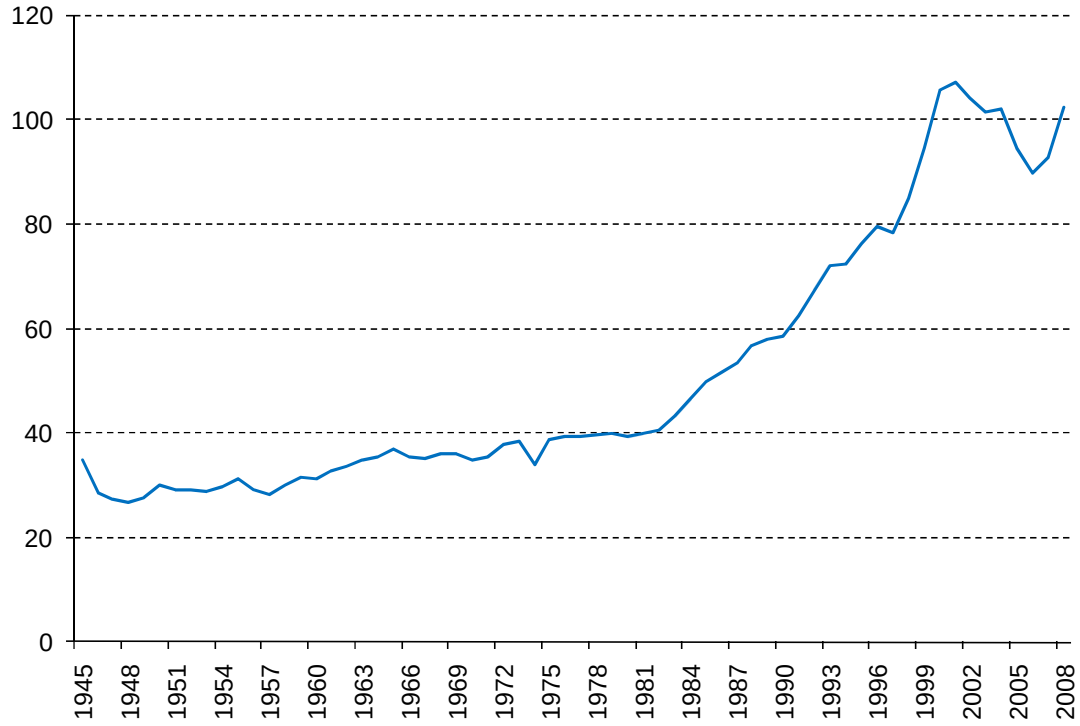
Source: Authors calculations based on US Bureau of Economic Analysis.

Financialization of non-financial firms

Not only has the financial sector absorbed a disproportionate and growing share of valuable resources but, in addition, its practices and values have penetrated the non-financial economy. This is because firms have increasingly been managed according to the reporting rules and short-term goals of capital markets. Corporate managers have adopted the behaviour of the financial markets and, as a result, their interests are more closely aligned with those of financiers than with the real economy (Epstein, 2005; Krippner, 2005; Krugman, 2009; Palley 2009; Stockhammer, 2007; Stiglitz, 2009).

When looking at the influence of financial sector in the operation of nonfinancial corporations (NFCs), three broad patterns emerge: (i) increased investment in financial assets (Figure 5); (ii) increasing share of income from financial sources; and, (iii) and higher amounts of payments (in the form of dividend payments, interest payments, and stock buybacks) to capital markets (Milberg, 2007; Ozgur, 2007). NFCs earn better returns in capital markets, which then crowds out real investment. Moreover, the gap between the rate of return on manufacturing investment and the rate of return on financial investments has widened in the last two decades. Traditionally non-financial firms have become more like financial companies, with a spectrum of financial services and financial investments (Milberg, 2007).

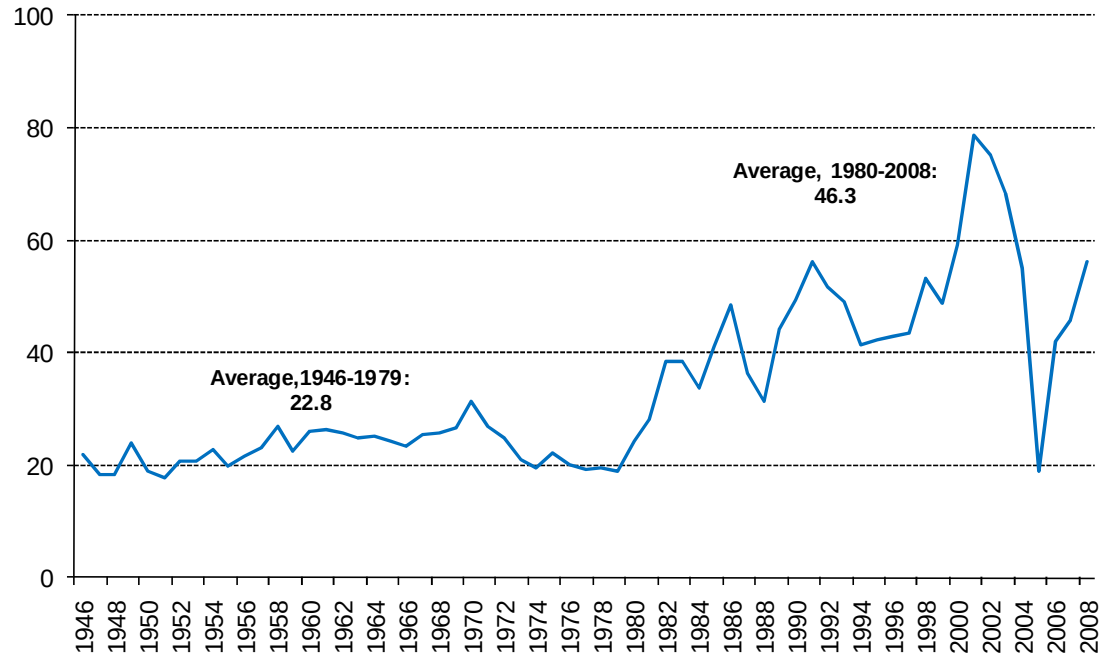
Figure 5: Financial assets as a per cent of tangible assets for the US non-financial corporations, 1945-2008



Source: Author's calculations based on Flow of Funds Data, US Bureau of Economic Analysis.

An important indicator of the capital markets' growing influence in the real economy is the evolution of dividend practices. In the past several decades, the distribution of profits between interest payments, dividends and retained earnings has been drastically modified. The reduction of debt by firms during the 1980s and 1990s has led to a decreasing share of interest payments into profits net of taxes from 70 per cent in 1980 to 50 per cent in 2007. However, the decline in interest payments has not produced an increase in retained earnings, as dividends have increased. Retained earnings stayed constant at around 18 per cent of profits after taxes, while the share of dividends has increased from 20 per cent in 1990 to 40 per cent in 2007. Dividends as a percentage of total profits in the United States doubled from 22.8 per cent in 1946–1979 to 46.3 per cent in 1980–2008 (Figure 6).

Figure 6: Evolution of dividends in the US (as a percent of total profits)



Source: Author's calculations based on Flow of Funds Data, US Bureau of Economic Analysis.

This trend cannot be explained by a changing pattern in financing investment, as new stocks represent scarcely 3.8 per cent of new security issues. On the contrary, a possible explanation might be the deep institutional transformations that have taken place at firm level since the 1970s. These transformations have led to the increasing power of shareholders. The share of profits distributed to shareholders has therefore increased from 30 per cent of corporate profits before tax in 1990 to 48 per cent in 2002. The transformations in the financial sphere have altered the bargaining power within firms. Although shareholders support the risk *ex ante*, they have been able to reduce the risk they support *ex post*. Part of the risk has been transferred to employees and managers through flexible labour contracts and flexible wage income.

Executive pay in line with financial interests

Changes in the composition of pay, especially at the executive level, have further strengthened the influence of capital markets over non-financial firms. As discussed in *World of Work Report 2008*, although annual salaries have been increasing, the proportion of total pay that they represent has decreased in the past 20 years, while compensation through stock options has become the most important component, increasing from 35 per cent to 77 per cent (Jarque, 2008). Leverage in compensation – where incentives pay outweighs salary – has increased tremendously over the years, which in turn has increased risk taking. For example, in 1987, a short-term incentive award was 60 per cent of an average executive's salary and a long-term incentive award was two times the salary but, in 2008, short-term incentive awards comprised 200 per cent of the salary and long-term incentives accounted for eight times the salary.[3] While it is true that tying executive pay to stock options tends to lead to increased sensitivity of pay to performance, it also tends to encourage short-termism – that is, a singular focus on quarterly earnings.

[3] G. Morgenson, "The quick buck just got quicker", in *The New York Times*, 16 Aug. 2009.

Decline in wage share and collective bargaining

Rising corporate profits is associated with decline in wage share and a reduction in the bargaining power of labour (see: Ellis and Smith, 2007; OECD Economic Outlook 82). As the *World of Work Report 2009* showed, for the five most financialized countries (that is, higher the share of corporate profits going to finance, the more financialized a country is), wage share declined by 3.6 per cent over the period 1989 to 2005, while for the five least financialized countries, wage share declined by 2 per cent. More generally, the decline in the wage share can be partly ascribed to the growing pressures from capital markets for quicker and better returns.[4] Meanwhile, for the five least unionized advanced economies, the percentage change in finance's share of corporate profit was the highest, while for the five least unionized, the percentage change in finance's share of corporate profit was the lowest. In other words, countries with the highest union densities saw the lowest increase in financialization while countries with the lowest union densities saw the greatest increase in financialization.

There are several other factors like decline in corporate investment, increased corporate savings, lower interest charges etc. that have led to the rise in corporate profits, but most of these factors are likely to subside over time and follow business cycles. However, the structural factors like wage moderation and labour's decline in bargaining for a larger share of income are likely to persist. The next section examines whether the financial sector taking an increasing share of corporate profits contributed to a downward trend in real investment in the United States.

C. Emprical framework, data, and results

The literature on determinants of investment is vast, and the goal of the paper is *not* to contribute to the debate on investment theory. Instead, it places itself in the literature that tries to better understand financial sector's increased dominance in the real economy and its likely consequences on economic output and employment (Stockhammer, 2004; Epstein, 2005; Krippner, 2005; Stockhammer, 2007; Palley, 2009; Stiglitz, 2009; Freeman, 2010).

First, it is important to draw out some of the primary determinants of private business investment, both at the firm level and at the aggregate level. The most commonly used model is the Q theory of investment (Tobin, 1969; Wildasin, 1984; Galeotti and Schiantarelli, 1991; Schaller, 1990). It states that a firm should invest if the discounted value of future profits from an extra unit of capital exceeds the costs of acquiring it (Mac Gorain and Thompson, 2002). Meanwhile, several authors have shown that the rate of investment of a share-value maximizing firm is a function of *q ratio* (Yoshikawa, 1980; Summers, 1981; Hayashi, 1982). But since these early papers, several caveats have been added, like allowing for heterogeneity in capital goods and refining the definition of *q* (like average vs. marginal *q*). However, Tobin's Q fares poorly in empirical studies for its predictive power for aggregate investment (Mac Gorain and Thompson, 2002). But, without delving too much into the debate regarding the predictability of Tobin's *q* in explaining investment, it is safe to assume that future profitability of a firm has an impact on investment, keeping in mind that there are several other considerations like cash flows and sales.

Besides the Q theory of investment, there are several different theories of investment (accelerator, cash flow, neoclassical etc.) at the firm level. The neo-classical model – Jorgenson's approach – is based on an explicit model of optimisation behaviour, which relates the desired capital stock to interest rates, output, capital prices, and tax policies (Jorgenson, 1963; du Toit and Moolman, 2004). But from the myriad of different models available in the literature, some of the primary determinants of investment are output, cash flows (retained earnings and depreciation), cost of capital, prices, technology shocks etc. (Samuel, 1996). The literature proving or disproving the relative merits of each

[4] See Chapter 1 of *World of Work 2008* for a more detailed discussion of this wage share data.

determinant is extensive.[5] But, the overall conclusion from this literature is that the empirical evidence lends support to an eclectic approach to the study of investment expenditure decisions at the firm level (Samuel, 1996).

On the other hand, the literature on the determinants of investment at the macro level is sparse. However, it is safe to assume that some of the same determinants of investment at the firm level translate into investment decisions at the aggregate level, namely cost of finance, output, corporate profits, stock market etc. Bondt and Diron (2008), one of the few recent papers in this literature, show that costs of external finance (borrowing costs), the availability of internal sources of finance, and profit expectations matter greatly for aggregate investment. This result holds for different investment types – total investment and non construction investment – and regions – the United States and the Euro Area.

Diron, Manzano, and Westermann (2005) look at the role of financial conditions in determining aggregate investment in the Euro Area. They assume (in line with the modern theory of finance) that there is a wedge between internal (cheaper) and external finance (more expensive), and this implies that future investment projects that have positive net present values might not be carried out or delayed because external funds being expensive and there is a lack of adequate internal funds. Meanwhile, Heim (2008) uses government deficits, depreciation, GDP growth, interest rate, a proxy for Tobin's q, capacity utilization, exchange rate, and corporate profitability as determinants of demand for investment goods.

Following from the above discussion of the investment literature, and loosely based on the variables used in Stockhammer (2004), the model used here relates annual private business investment as a percent of its valued added to the economy to its lagged value, growth rate of GDP, lagged long-term real interest rates (cost of finance), debt levels of the country, capacity utilization, and financial sector's profit as a percent of its value added to the economy (Stockhammer, 2004). Variables are lagged to avoid simultaneity problem.

[5] See Samuel (1996) for an extensive discussion on the merits and demerits of different models of investment. The five models discussed in the paper are: i) accelerator theory; ii) cash flow theory; iii) neoclassical theory; iv) modified neoclassical theory; and v) Q theory.

The basic model looks like:

$$(I/VA)_t = \alpha + \beta_1 (I/VA)_{t-1} + \beta_2 \log Y_t + \beta_3 r_{t-1} + \beta_4 \log D_t + \beta_5 CU_t + \beta_6 \Pi_t + \beta_7 \Pi_{t-1} \quad \text{(Eq. 1)}$$

I/VA = real private business investment as a share of its value added;
Y = GDP in constant prices;
r = real interest rate;
D = debt as a proxy for "crowding out" effect on private investment;
CU = capacity utilization rate;
Π = financial sector's share of corporate profit

The expected signs on the estimators are: $\beta_1>0$, $\beta_2>0$, $\beta_3<0$, $\beta_4<0$, $\beta_5>0$, $\beta_6<0$ and $\beta_7<0$

There is no consensus in the literature regarding the time it takes for determinants of investment to actually impact invesmtent. In other words, determining the number of lags for the variables on the right hand side is not straightforward. In order to figure out the appropriate number of lags, we tested our model for different lags (-1 to -4) and chose the one that most explained variance in the model.

The first differenced form looks like,

$$\Delta(I/VA)_t = \beta_1 \Delta(I/VA)_{t-1} + \beta_2 \Delta \log Y_t + \beta_3 \Delta r_{t-1} + \beta_4 \Delta \log D_t + \beta_5 \Delta CU_t + \beta_6 \Delta \Pi_t + \beta_7 \Delta \Pi_{t-1} \text{ (Eq. 2)}$$

where, $\Delta Y_t = Y_t - Y_{t-1}$

First differencing increases stability (robustness) of our estimates because it reduces the intercorrelation between the determinants of investment.

Meanwhile, it is important to understand corporate sector accounts before we start analyzing the profit data. Gross operating surplus is the commonly used measure of operating profit, which is the gross value added by the corporate sector minus compensation on employees and minus tax less subsidies on production. Profit before tax is another measure and it is operating profits (GOS) minus net interest paid, plus net property income received, and plus other current transfers received. Profits after tax takes into account the direct taxes paid by the corporate sector. Then the gross corporate saving is profits after tax minus dividends paid. Gross savings is basically equal to undistributed profits and fixed capital consumption

But absolute measures of profits are not as useful for economic analysis, so the commonly used measure for economic analysis is profit share – the ratio of gross operating surplus to GDP. This is relevant for macroeconomic analysis because movements in profit share are primarily determined by the relative dynamics of GOS and labour costs.[6] In our paper we use financial sector's share of total corporate profits as a share of profit. The period examined in this paper is from 1960 to 2008, and the data is from the Economic Report of the U.S. President, which is an annual report that collects all statistics relevant to the U.S. economy.

First, we use generalized least-squares (GLS) method to estimate the parameters to equation 1. Since we are working with time series data, we believe that errors in our linear regression are serially correlated. Specifically, the errors are assumed to follow a first-order autoregressive process, AR(1). Hence, we correct for this to get our estimates. The statistic that indicates the likelihood that error values for the regression have a AR(1) component is Durbin-Watson, also known as "Durbin Watson test for autocorrelation". When we estimate equation 1, the regression model assumes that the error deviations are uncorrelated, hence it is important to correct for serial correlation before we come up with estimates. DW statistic of less than 0.80 usually indicates autocorrelation, and a value of 2

[6] See ECB monthly bulletin Jan. 2004 for an extensive discussion of different measures of profits.

indicates no autocorrelation.

Table 1: Generalized least squares (GLS), assuming errors are serially correlated, AR (1)

Private business investment as a percent of its total value added

	(1)	(2)	(3)	(4)	(5)
Investment as a percent of its VA (-1)			-0.012 (0.093)	-0.012 (0.097)	
log GDP	15.36*** (2.42)	14.58*** (2.14)	14.76*** (2.54)	14.70*** (2.71)	14.57*** (2.19)
real interest rate (-1)	-0.39*** (0.07)	-0.22*** (0.06)	-0.22*** (0.073)	-0.22*** (0.075)	-0.22*** (0.060)
log debt	-13.85*** (1.85)	-11.70*** (1.49)	-11.78*** (1.58)	-11.78*** (1.58)	-11.69*** (1.52)
Capacity utilization		0.18*** (0.04)	0.18*** (0.044)	0.18*** (0.044)	0.18*** (0.041)
Finance share of total corporate profits	-0.096*** (0.034)	-0.06** (0.027)	-0.056** (0.027)	-0.055* (0.031)	-0.056* (0.031)
Finance share of total corporate profits (-1)				-0.00 (0.029)	0.00 (0.028)
Constant	-6.44 (13.39)	-33.1 (13.44)	-34.1 (15.72)	-34.1 (17.01)	
Durbin Watson (original)	0.84	0.81	0.96	0.96	0.87
Durbin Watson (transformed)	1.66	1.59	1.57	1.57	1.59
R^2	0.73	0.80	0.80	0.80	0.80
Number of years included	42	41	41	41	41

Notes: * Significant at 0.10 level, ** significant at 0.05 level, *** significant at 0.01 level
Standard errors are in parenthesis.

Table 2: First-differenced form

Private business investment as a percent of its total value added

	(1)	(2)	(3)	(4)	(5)
Δ Investment as a percent of its VA (-1)			-0.05 (0.091)		-0.05 (0.099)
Δ log GDP	40.91*** (7.31)	31.87*** (9.24)	32.49*** (9.39)	31.75*** (9.39)	32.49*** (9.60)
Δ real interest rate (-1)	-0.22*** (0.066)	-0.16** (0.07)	-0.14* (0.08)	-0.15** (0.076)	-0.13 (0.09)
Δ log debt	-9.16*** (2.75)	-8.49*** (2.71)	-8.53*** (2.73)	-8.44*** (2.76)	-8.53*** (2.8)
Δ Capacity utilization		0.11* (0.065)	0.13* (0.07)	0.12* (0.067)	0.13* (0.071)
Δ Finance share of total corporate profits	-0.087*** (0.028)	-0.065** (0.030)	-0.061** (0.030)	-0.067** (0.031)	-0.06* (0.03)
Δ Finance share of total corporate profits (-1)				0.006 (0.029)	-0.000 (0.032)
Constant	-0.95 (0.27)	-0.65 (0.321)	-0.67 (0.32)	-0.66 (0.33)	-0.67 (0.33)
R^2	0.80	0.82	0.82	0.82	0.82
F statistic	37.93	31.82	26.05	25.79	21.68
Number of years included	42	41	41	41	41

Notes: * Significant at 0.10 level, ** significant at 0.05 level, *** significant at 0.01 level
Standard errors are in parenthesis.

According to Table 1, a one percentage point increase in financial sector's share of corporate profit increased is associated with a decline of investment rate (private business investment over its value added) by 0.06 to 0.09 percentage points, and the estimates are statistically significant at 1 or 5 percent level. When we use first differencing, we get similar results (Table 2). This means that, had the financial profit rate remained constant for the past 20 years, the investment rate in the real economy would have increased by about 2 percentage points instead of following a mild downward trend. Higher real investment, in turn, would have boosted output and incomes. As we can see from Table 1 and Table 2, the signs of coefficient estimates for GDP, real interest rates, debt, and capacity utilization are as expected, and they are all statistically significant. Meanwhile, lagged investment and financial sector's share of profit have no impact on investment.

Conclusion

In the United States financial sector's share of corporate profits have doubled in a span of 20 years. Given the rising incidence of corporate profits across all sectors, it is not surprising that the financial sector profits have increased as well. However, the notable difference is that the profit of the financial sector has been increasing at a faster rate than the rest of the economy, namely the non-financial sector.

As profits accruing to the financial sector grew, the wage gap between financial and non-financial firms widened. Furthermore, in the last two decades, financial sector has often attracted the best and the brightest. And not only has the financial sector absorbed a disproportionate and growing share of

valuable resources, but its practices and values have penetrated the non-financial economy. It seems that firms have increasingly been managed according to the reporting rules and short-term goals of capital markets. All this has had a negative impact on the real economy, namely business investment: real private business investment as a percent of its value added declined by roughly 2 percentage points in the last 30 years. Did finance play a role in this downward trend? Our results show that it did. This means that, had the financial profit rate remained constant for the past 20 years, the investment rate in the real economy would have increased instead of following a mild downward trend, and higher real investment in turn would have boosted output and incomes.

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