# The Investment-Profit nexus in an Era of Financialisation

# and Globalisation. A Profit-centred Perspective

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# The Investment-Profit Nexus in an Era of Financialisation and Globalisation. A Profit-centred Perspective

**Abstract:** During the past decades, the link between profits and domestic investment has weakened in the biggest high-income economies. The present contribution explores this relaxation of the profits-investment nexus through a profit-centred perspective. Focusing on the impact of the origins and uses of profits, we study the investment behaviour of non-financial corporations in relation to their profits at the macro level since 1980, a period marked by financialisation and globalisation. We contrast three competing hypotheses – the Revenge of the Rentiers, the Financial Turn of Accumulation and Globalisation – and test them through a macro panel data analysis for France, Germany, Italy, Japan, the United Kingdom and the United States over the period 1980-2012.

**Keywords**: Profits, investment, financialisation, globalisation, macro panel analysis

**JEL classifications**: E22, F62, G35

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# 1. Introduction

During the past decades, the link between profits and domestic investment has weakened in the biggest high-income economies (Figure 1). The present contribution explores this phenomenon, sometimes referred as a "*profits without accumulation*" puzzle (Cordonnier, 2006; Husson, 2013; Stockhammer, 2006), through a profit-centred perspective. Focusing on the impact of the origins and uses of profits, we study the investment behaviour of non-financial corporations in relation to their profits at the macro level since 1980, a period marked by financialisation and globalisation.

In capitalist economies, profits and investment are supposed to be strongly linked. In a Kaleckian perspective, investments contribute to profits, and in a Marxian or Classical perspective profits are invested. The relaxation of the relation between profits and investment is thus *a priori* paradoxical. In order to clarify this puzzle one must take into account the embeddedness of economic relations in specific institutional settings. The dynamics of profits and accumulation in capitalist economies needs to be historicised. It varies across space and time according to the regularities constitutive of specific accumulation regimes. From the stagflation of the seventies to the Great Recession, financialisation and globalisation along with neoliberal policies have been the more salient characteristics of the period, although various countries have been affected unevenly. Neoliberal policies at the national and international levels have played a central role in fostering financialisation and globalisation through liberalisation, although they are characterised by many other aspects.

*Financialisation* is a broad process with many facets ranging from changing consumer behaviour, the pre-eminence of financial motives, the rise of new financial institutions and technologies and macroeconomic regularities (Epstein, 2001; van der Zwan, 2014; van Treeck et al., 2007). *Financialisation* of non-financial corporations is considered here as a twofold phenomenon (Orhangazi, 2008): on the one hand, firms increase their payments to financial markets and institutions (Aglietta and Berrebi, 2007; Lazonick and O'Sullivan, 2000); on the other hand, firms accrue their profits through financial channels rather than through trade and production (Krippner, 2005; Lapavitsas and Levina, 2010). *Globalisation* is also a multidimensional phenomenon, ranging from the global spread of cultural practices, the interconnectedness associated with information technologies, to the intensification of transnational economic and financial flows (Dicken, 1992). We refer to *globalisation* as the mounting possibilities for firms to import inputs from low-wages countries (Milberg, 2008; Milberg and Winkler, 2010) and, simultaneously, the fact that firms are offered new opportu-

nities of investment abroad (Fiebiger, 2016), in particular in recently opened markets in developing countries.

We have identified three key mechanisms affecting firms' investment behaviour in relation to this context. The first two are linked to the broader process of financialisation. *The Revenge of the Rentiers* narrative suggests that the rise of financial payments has squeezed industrial retained profits, leading to slower investment growth. Second, the *Financial Turn of Accumulation* narrative suggests a substitution of financial investments at the expense of real investments as the strategy of lead firms shifted towards higher short-term profitability through financial incomes at the expense of productive investment. Finally, the *globalisation* narrative focuses on the impact of a deeper integration of the world economy. It points to the fact that lead firms in the Global North managed to raise their margins thanks to lower input prices as they increased sourcing from low-wages countries and seized new opportunities for investment in the Global South at the expense of domestic investments.

The aim of this paper is to contrast and clarify these three main lines of argument. Part of our development is thus devoted to explicating these narratives and to presenting various stylised facts in order to evaluate their empirical plausibility for France, Germany, Italy, Japan, the United Kingdom and the United States over the period 1980-2012[1]. Additionally, we will test these hypotheses through a macro panel data analysis of the determinants of the profits-investment relation for the 6 countries over the stated period. This econometric exercise will provide some insights into the relevance of the three narratives.

This study is one-sided, in the sense that it does not account for the role of animal spirits in the investment decision, which is central for the Post-Keynesian, Kaleckian and Marxian traditions (for a review, see Lavoie, 2014, chap. 6). Although we have reserved this aspect of the problem for future research, the present analysis does include a demand term.

The next three sections discuss each narrative and confront them with stylised facts. The fifth section exposes the specificities of the profits-investment nexus in an era of financialisation and globalisation. The sixth section presents the methodology and the results of the econometric analysis, which are discussed in section 7. The conclusion proposes a synthetic assessment of the respective theoretical and empirical merits of the three narratives.

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[1] Unless stated otherwise, data are drawn from the OECD and specific National Accounts: 1980 for the US and France, 1990 for the UK and Italy, 1994 for Japan and 1995 for Germany.
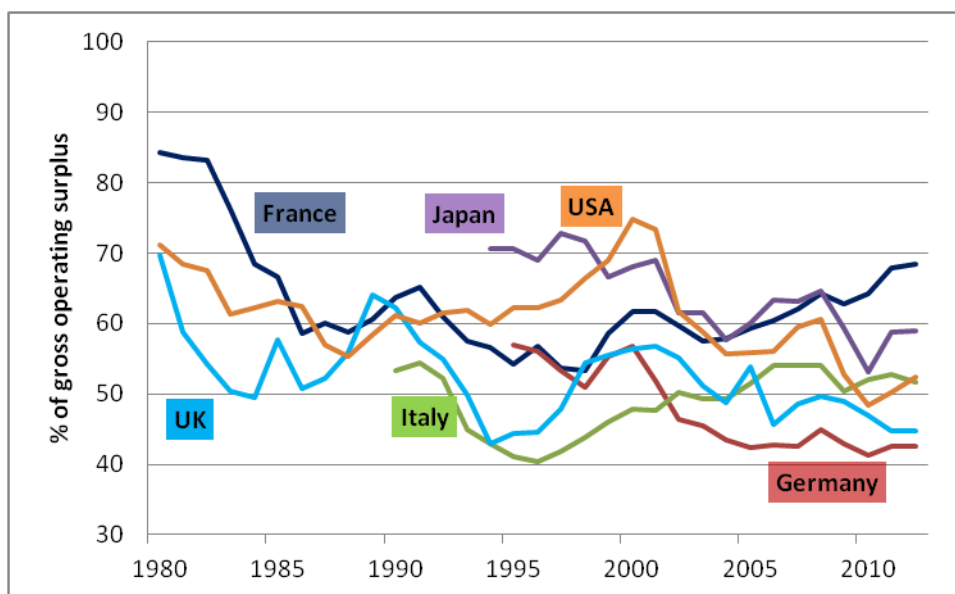
*Figure 1. Profits without accumulation: Gross fixed investment as a share of gross operating surplus (1980-2012).*

Data for non-financial corporations: OECD, National Accounts except: USA, BEA, integrated macroeconomic account; UK, 1980-89, ONS; Italy, Eurostat.

## 2. The Revenge of the Rentiers

The *Revenge of the Rentiers* narrative focuses on the reversal of class struggle dynamics at the end of the seventies. By then, profits were squeezed by wages, which rose more rapidly than productivity as a result of worker activism and the weakening of the disciplinary effects of the labour reserve army. Inflation was a symptom of this class conflict which was tackled through a an abrupt decision of the FED to raise interest rates (Duménil and Lévy, 2011; Smithin, 1996). The effects were colossal, propelling a global recession, a surge of the dollar, but also dramatically altering the balance of power between classes. Indeed, "*the fight against inflation contains the hidden agenda of putting workers back in their place*" (Boddy and Crotty, 1975, p.11); the 1979 coup resulted in a great defeat of labour with surging unemployment, a retreat of unionisation and a rapid increase of income and wealth inequalities (Atkinson et al., 2011). The restoration of the power of finance fostered by mounting real interest rates was also due to a parallel and on-going process of financial liberalisation from the early seventies, under the pressure of petro-dollar accumulation and the collapse of the Bretton-Wood system of fixed exchange rates.

According to this narrative, the 1979 coup and the freedom reacquired by finance propelled a novel process where financial payments tended to squeeze investment. Non-financial firms are thus the

victims of financial capital and the squeeze of retained profits is not a necessary development of the endogenous dynamic of capital accumulation but a contingent outcome that results from policy choices.

Figure 2 describes the mechanisms at stake. The rise of interest rates increases the financial cost for non-financial corporations, diminishing their retained profits. Moreover, the liberalisation of finance increases the profitability of financial operations, raising the general level of return on equity expected by investors - what Boyer (2000) calls a "financial norm"; this hurdle rate translates as higher dividend payments. In a context of increasingly liquid financial markets (Orléan, 1999), stakeholders are more interested in the current profitability than in the long-term expansion and survival of a particular firm (Crotty, 1990). The resulting changes in corporate governance fuelled the shareholder value orientation as management must comply with the requirements of impatient investors in terms of a higher rate of distributed profits (Dallery, 2009; Lazonick and O'Sullivan, 2000; van Treeck, 2009). Overall, considering that retained profits by non-financial corporations are an important channel of funding for investments, a squeeze of retained profits by interest and shareholders' payments slows the accumulation of fixed capital.

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│                     │      │  rising financial profits │
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│                     │      │       hurdle rate        │
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                             │ higher dividend payments │
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          │      decreasing retained profits rate of NFC   │
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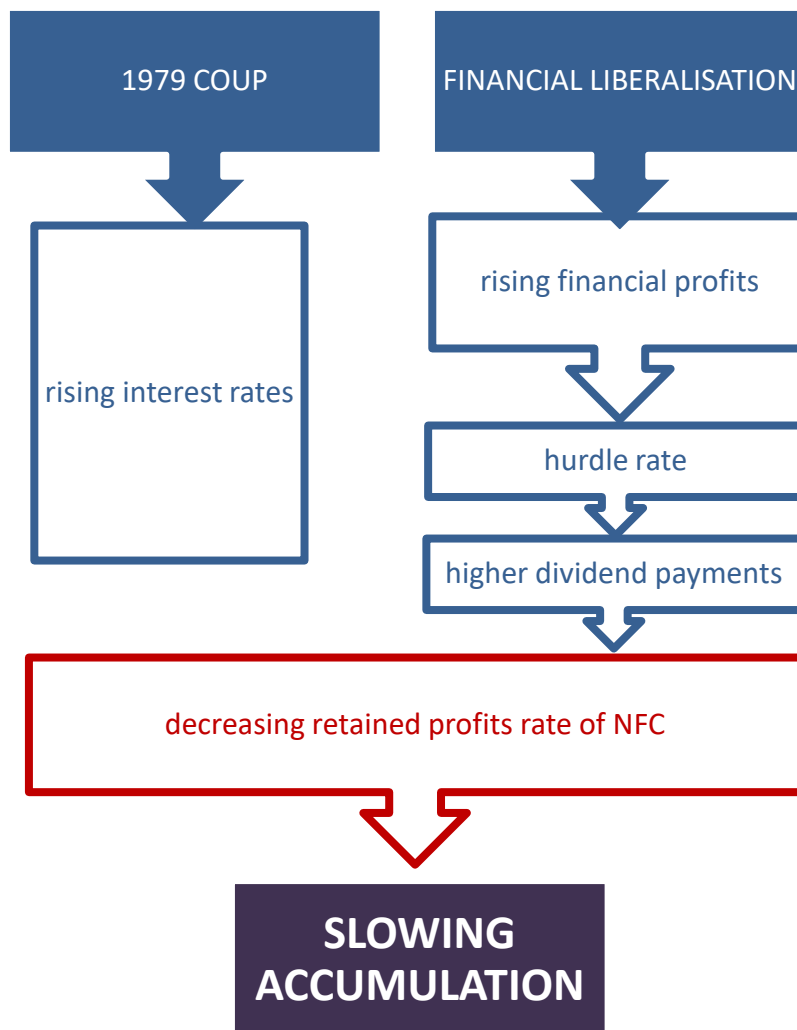
*Figure 2. A class struggle story: the Revenge of the Rentiers*

The share of profits devoted to financial payments in the form of dividends and interests gives an indication of the rentiers' payment by non-financial corporations and the subsequent squeeze of retained profits. As shown in Figure 3, the evolution of this ratio strongly supports *the Revenge of the Rentiers* narrative for the French and German contexts. In France, we observe a dramatic increase in the share of profits devoted to the payment of interests and dividends, from around 15% up to the mid-eighties to 36.6 % in 2008. In Germany, the increase is also continuous and significant, from about 20 % in the mid-nineties to around 28 % in the second half of the 2000s. However, there is no clear trend for Italy, Japan and the UK, and even a reverse trend in the case of Japan and, to a lesser extent, the US. However, historically, this process masks a qualitative change: there has been a shift from interest to dividends, as a result of the decrease of interest rates — interest payment weight relative to profits of non-financial corporations peaked around 1990, which has been counterbalanced by the rising claims of shareholders (Durand, 2013, p. 98-100).
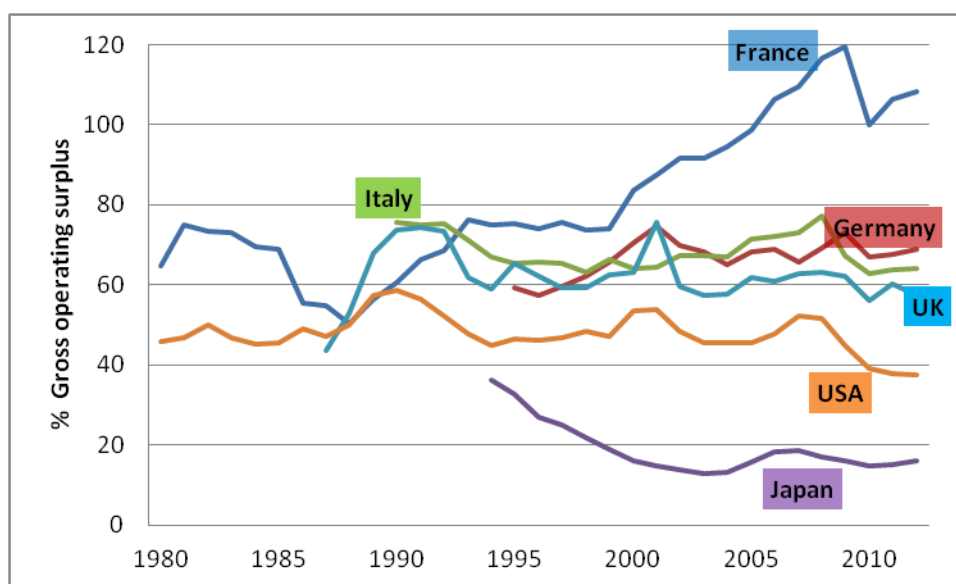
*Figure 3: Rentiers' payment as a share of gross operating surplus (1980-2012).*

Interest paid + distributed income paid as a share of gross operating surplus. Data for non-financial corporations. All OECD countries except the US BEA (integrated macroeconomic accounts) and the UK (ONS Blue Book)

One problem with this indicator is that it fails to capture financial payments made by non-financial firms to their shareholders in the form of cash-financed mergers and share buybacks. This is considerable shortcoming as the literature establishes a positive relation between share issuance and investment (Hecht, 2014). Figure 4 represents the net share issuance, and thus, in negative territory, the shares destroyed by buybacks and cash-financed mergers. It shows that this phenomenon is particularly significant in the US, much less so for the other countries, except Britain in the early 2000s[2]. Indeed, in all the biggest high-income economies save for the US, open market share repurchases are subject to relatively strict regulations in terms of disclosure and execution (Kim et al., 2004). This, and a tax regime that favours capital gains over dividend payments, explain the very specific profile of the US on this matter. Taking into account buybacks, the US trajectory seems more consistent with the *Revenge of the Rentiers* scenario, adding plausibility to this explanation of the relaxation of the profits-investment relation.

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[2] The literature indicates that buybacks have also expanded since the turn of the millennium in Germany (van Treeck et al., 2007, p. 70) and in Japan (Teng and Hachiya, 2011; Tong et al., n.d.). However, this is not evident at the macro-level of share issuance.
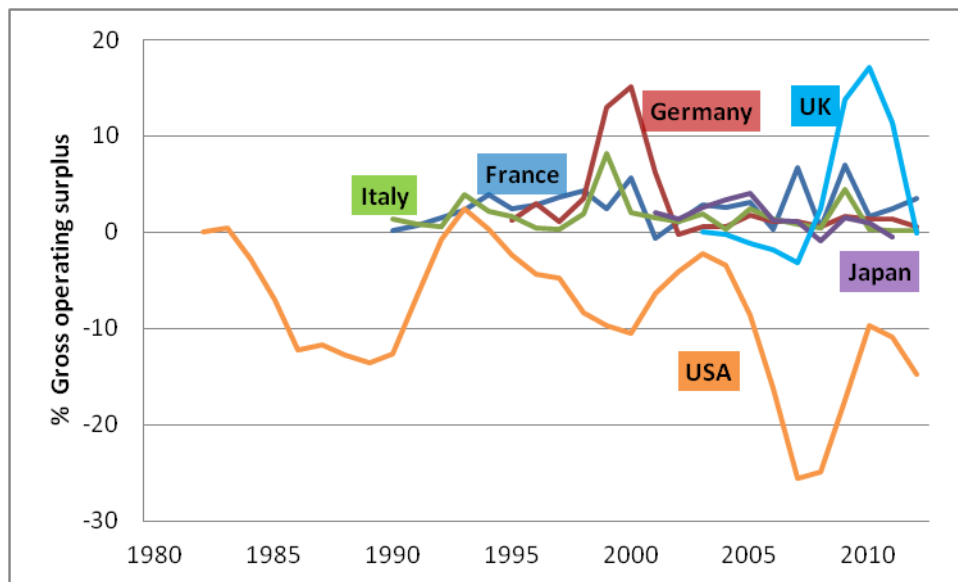
*Figure 4: Net share issuance as a share of gross operating surplus (1980-2012)*

Gross operating surplus all OECD countries except US BEA (Integrated macroeconomic accounts) ; Net share issuance: ECB, BoJ, BoE, FED. UK and US 3 years moving average.

## 3. The Financial Turn of Accumulation

Booming financial markets can be considered a key stimulus for investment. For example, Keynes, in the chapter 12 of the *General Theory* wrote:

> *The daily revaluations of the Stock Exchange, though they are primarily made to facilitate transfers of old investments between one individual and another, inevitably exert a decisive influence on the rate of current investment. For there is no sense in building up a new enterprise at cost greater than that at which a similar existing enterprise can be purchased; whilst there is an inducement to spend on a new project what may seem an extravagant sum, if it can be floated off on the Stock Exchange at an immediate profit.* (2003, p. 97)

Over the past decades, this conception of a positive impact of bullish markets on investment has been challenged. Rather than an inducement to invest, they have been apprehended as opening up new strategic opportunities for firms' management, offering an alternative pattern of accumulation to the accumulation of productive assets. This *financial accumulation turn* narrative is rooted in the Marxist political economy of the *Monthly Review* school (Magdoff and Sweezy, 1987), the world-system perspective (Arrighi, 1994) and has been further elaborated in a non-Marxist socioeconomic perspective (Krippner, 2011, 2005). It points to the "*financialization of the capital accumulation process*" (Sweezy, 1997), which refers to "*a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production*"

(Krippner, 2005, p. 174–175).

Three main strands of explanation have been proposed to interpret this *Financial Turn of Accumulation*. According to the *Monthly Review* and Arrighi approaches, it is a lack of investment opportunities that caused a drive toward financial accumulation. Krippner dismisses the idea that this *Financial Turn* could be correctly understood as an endogenous outcome of the accumulation process. Focusing on the US case, she views it, rather, as an emergent and unintentional phenomenon, resulting from the policies implemented in terms of financial deregulation in reaction to macroeconomic imbalances, global inflows of capital and changing socioeconomic conditions that lead to the emergence of new financial opportunities. This perspective is consistent with a third line of argument rooted in the Post-Keynesian tradition, which points to changes in management preferences (Dallery, 2009; Stockhammer, 2006, 2004) resulting from the shareholder value revolution and stresses the ability of firms' management to take advantage of new financial opportunities in order to satisfy impatient investors. In spite of their diverging underlying theoretical assumptions, these analyses converge in pointing out that a drive toward financial accumulation occurred (Figure 5), both fuelled by and resulting in mark-to-market accounting standards and spiralling financial innovations but also in bubbles. Its main consequences are, on the one hand, a rise in financial profits and, on the other, a slowdown of investment in fixed capital.
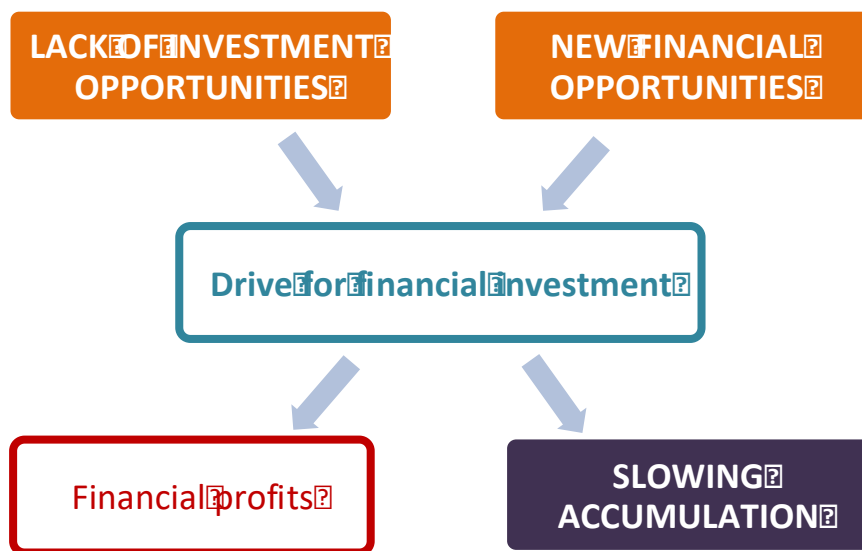


*Figure 5: The Financial Turn of Accumulation*

Contrary to the Rentiers narrative, the non-financial sector is not portrayed, in this persective, as the "victim" of finance but, on the contrary, managers of non-financial corporations are characterised as

taking advantage of the new financial opportunities of profits. More precisely, this narrative suggests that non-financial firms opt deliberately for financial operations instead of fixed investment in order to maximise their short-term returns. Lead firms seize the opportunity of rising household- and public debt, free capital flows and financial exuberance in order to increase their financial operations and limit their exposure to sunk costs associated with fixed investment (Clévenot et al., 2010; Crotty, 2002; Orhangazi, 2008). This change of strategy reflects an endorsement of shareholder value by top management or, to phrase it in Duménil's and Levy's terms, a change of class alliance (Duménil and Levy, 2011).

Empirically, there is some indication of a general turn toward financial accumulation among big high-income economies with an almost perfectly parallel and impressive rising trend in the share of financial activities in value-added, resulting in an increase of 10 to 15 GDP percentage points over the period of study (**Error! Reference source not found.**).
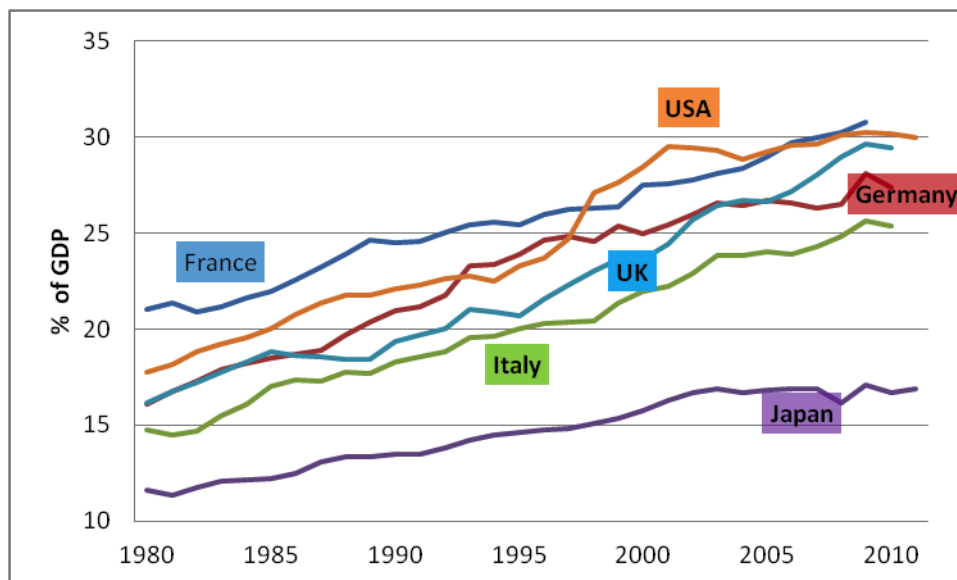


*Figure 6: Value added in the financial, insurance and real-estate sector as a share of GDP (1980-2011)*
OECD

*However, the Financial Turn of Accumulation seems to take different routes in the different countries under study. In the UK and the US, the most impressive evolution is the rise in the share of profit from the financial sector in the total profits (**Error! Reference source not found.**). In the UK, this reflects the role of the City of London as an international financial service hub. In the US, there is a methodological issue at stake as the classification of holding companies differs from that*

*of the OECD[3]. In the other countries, but above all in France, the shift occurred mostly within the non-financial corporate sector*
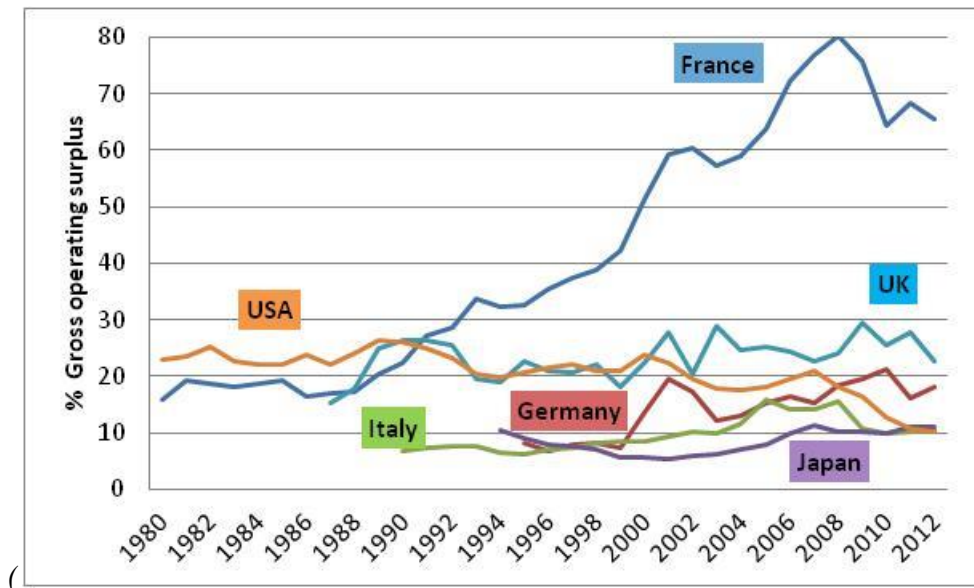


*Figure 8: Rentiers' income in % of gross operating surplus (1980-2012)*

Interest received + distributed income received in % of gross operating surplus of non-financial firms. All OECD countries except US BEA (integrated macroeconomic accounts) and UK (ONS Blue Book).

), with a significant rise of financial income received by non-financial corporations. The spectacular rise of financial income as a share of gross operating surplus for France is related to the declining profit margin of non-financial corporations during the 2000s and, also, to a system of taxation that is applied more than in other countries at the operations level rather than the company profit level.

One limit of the financial income indicator is that it does not account for the capital gains realised by non-financial corporations, a phenomenon which may well be crucial in the US as a counterpart of the buybacks and cash financed mergers discussed above. Another shortcoming is that, because of data limitations, we were not able to determine in this study the weight of financial income that is in fact related to foreign non-financial operations, such as interests and dividends received from foreign affiliates. These kinds of foreign incomes, which are related to productive or financial operations across affiliates of the same companies, could contribute to artificially exaggerating the

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[3] The classification of the OECD states that holding corporations (i.e. corporations which direct a group of companies) are classified as follows: a) in sector S.11, non-financial corporations, if the preponderant type of activity of the group of corporations which are market producers, as a whole is the production of goods and non-financial services; b) in sector S.12, financial corporations, if the preponderant type of activity of the group of corporations as a whole is financial intermediation. This principle does not apply in the US. In an e-mail communication in February 2015, the service of the Integrated Macroeconomic Accounts series indicated that holding companies are classified within the financial business in most of the series, following the 2008 SNA guidelines, which suggests including "holding corporations that hold only the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group without providing any other service to the enterprises in which the equity is held, that is, they do not administer or manage the other units."

weight of financial incomes.
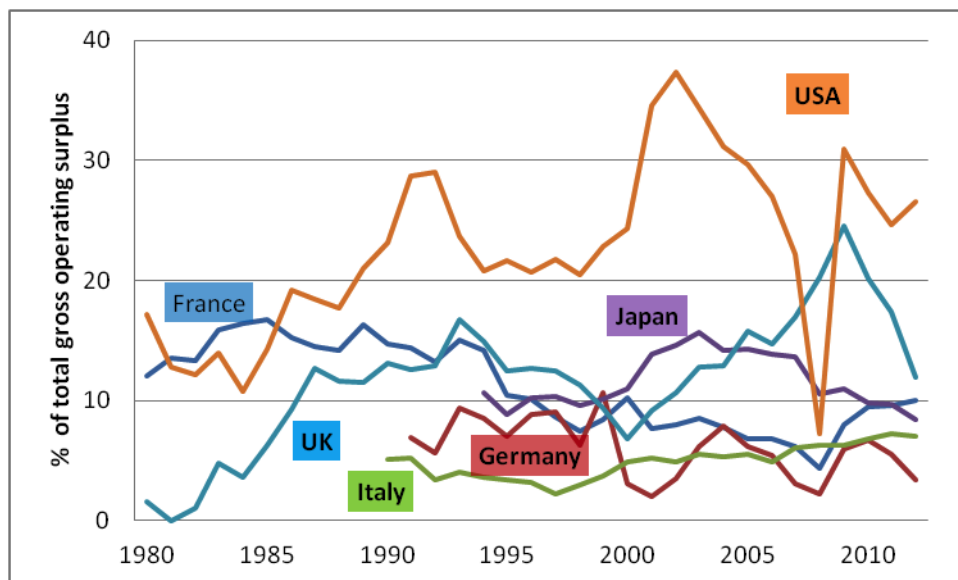


*Figure 7: Gross operating surplus of financial corporations as a share of total gross operating surplus (1980-2012)*

France, Italy and Japan, OECD ; Germany, Statistische Bundesamt ; GB, ONS-EcoWin ; USA, BEA.
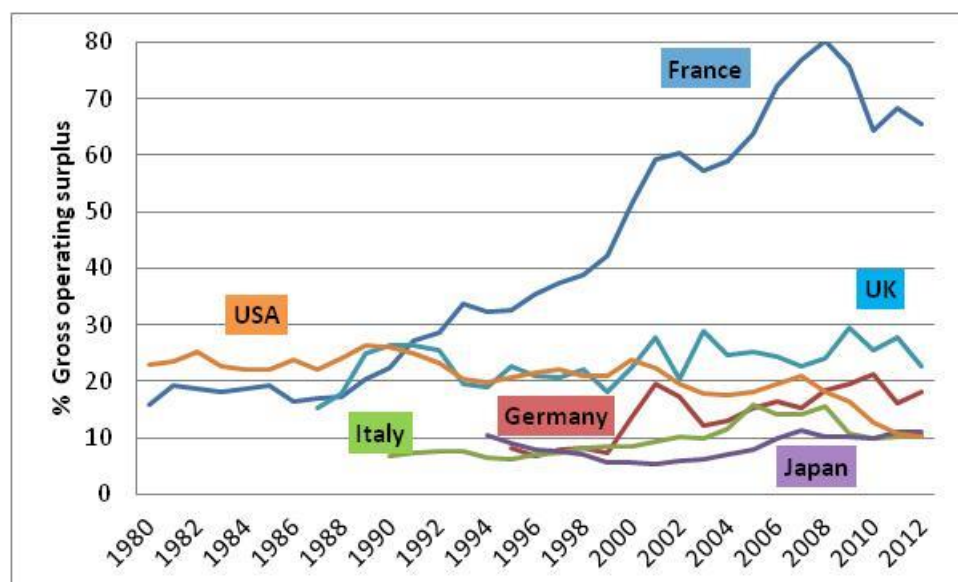


*Figure 8: Rentiers' income in % of gross operating surplus (1980-2012)*

Interest received + distributed income received in % of gross operating surplus of non-financial firms. All OECD countries except US BEA (integrated macroeconomic accounts) and UK (ONS Blue Book).

The stylised facts supporting the *financial turn* narrative call for a more cautious examination of the *Revenge of the Rentiers* scenario. Indeed, if one wants to consider the possibility of a financial squeeze of investment, rentiers' payments by non-financial corporations have to be compared with the evolution of their financial income.

In such a perspective, Figure 9 shows the evolution of the net payment of non-financial corporations as a share of their profits decreases for most of the countries, suggesting that the *Financial Turn of Accumulation* has allowed non-financial firms to increase their available funds. Such an evolution is at odds with the idea of a financial squeeze of investment. However, in the US the level of net financial payment is almost stable which also suggests there has been no squeeze of funds by financial markets at the expense of non-financial firms. Here again, one significant limitation for the US is the fact that buybacks and cash-financed mergers are not taken into account, neither as a payment nor as an income.
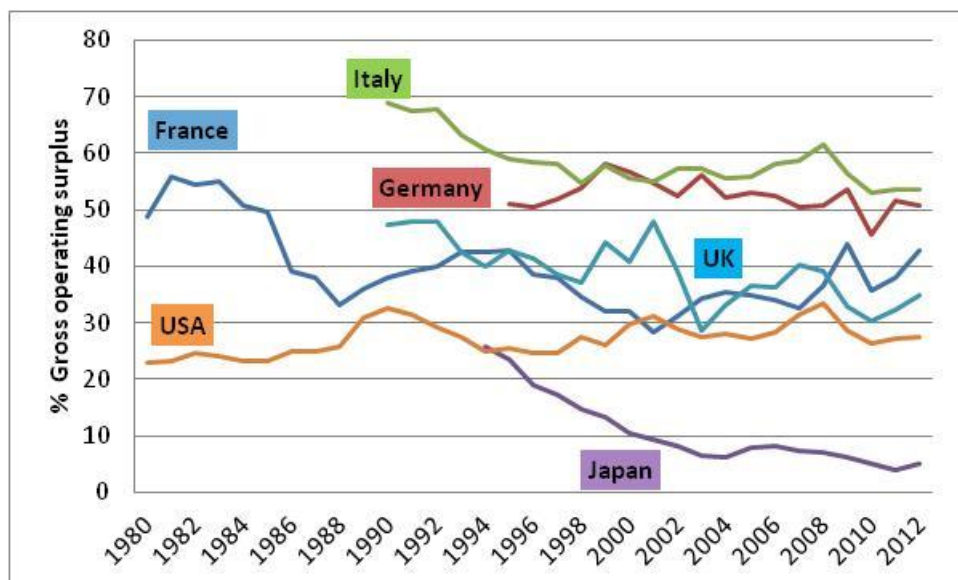


*Figure 9: Net Rentiers' payment share of gross operating surplus (1980-2012)*

(Interest paid + distributed income paid) less (Interest received + distributed received) as a share of gross operating surplus. Data for non-financial operations. All countries OECD except US BEA (integrated macroeconomic accounts) and UK (ONS Blue Book)

One problem with the *Financial Turn of Accumulation narrative* is that it fails to clarify the origin of financial incomes in the non-financial sector at the macroeconomic level. The first possibility is

that it is a domestic transfer from households, the public sector or the financial sector. This can possibly occur in a bubble context where NFCs are able to achieve capital gains. However, one must consider another possibility, the transfer of income from abroad. Indeed, in the data presented concerning interests and dividends received by non-financial corporations one cannot identify the geographical origin of these financial incomes. It is a significant issue, in particular because dividends received by parent companies from foreign affiliates emerge as financial income whereas analytically they simply represent profits from foreign operations, i.e. profits fostered by foreign accumulation, as shown by Fiebiger (2016) in the US case, thus reflecting incomes related to globalisation more than to a financialisation of accumulation.

## 4. Globalisation

For both Ricardo (Maneschi, 1983; Ricardo, 1817) and Marx (Marx, 1894), dynamic gains from international trade in terms of cheaper products are powerful countervailing forces against the declining tendencies of the profit rate, propping-up the possibilities of further accumulation. But this increased availability of internal funding does not mean a subsequently increased inducement to invest.

First, as just stated, in a world opened up to foreign investment flows, non-financial corporations can foster their profitability as they increase their investments abroad — at the expense of domestic investment — in order to expand their more profitable foreign operations (Fiebiger, 2016). Globalisation also interferes with profit-generation through the channel of intensified trade relations. Here, the impact on profits is ambiguous. On the one hand, a standard Ricardian approach focusing on horizontal relations would link increased competition of imports from emerging economies to diminishing profitability of firms' domestic operations across high-income countries. However, this approach fails to take into account the situation whereby firms in developed economies participate in oligopolistic markets and are consequently able to take advantage of cheaper imports sourced abroad in a context of growing international fragmentation of productive processes (Feenstra and Gordon H. Hanson, 1999; Hummels et al., 2001). This vertical dynamic of trade relations can potentially supersede the negative effect of higher competitive pressure. This is the argument Milberg advances (2008, p. 421), noting that "*the enormous expansion of global value chains has brought a lowering of input costs to lead firms, allowing them to maintain and even increase cost mark-ups, and thus profit rates and the economy-wide profit share*". In a context where intensifying competition has prevented large oligopoly firms from raising their prices, these firms have managed to expand their profits as they capture, through cheaper imports (mark-up effect), various gains tied

to labour exploitation, realised along global value chains in developing economies.

The very divergent trajectories of investment in high-income economies versus low and middle-income economies (Figure 10) suggests a rapid geographical shift of accumulation and renders the hypothesis of a spatial disconnection of profits and investment very plausible. Indeed, as trade and capital flows, liberalisation has gained momentum during the past decades, the very possibility of a capture of profits of productive activities in the low-wages countries by Northern lead firms benefiting from their market power position and through the repatriation of profits and interest has increased tremendously. This occurred in parallel with the dislocation of Socialist economies and the dismantlement of developmental state policies, placing a huge number of workers on the world market in a very brief period of time (Freeman, 2005).

The *Globalisation* narrative proposes to capture economic processes beyond national boundaries and to try to overcome the shortcomings of the anaemic geography of financialisation literature (Christophers, 2012; Fiebiger, 2016). Figure 11 describes the mechanisms at stake. The global reshuffling of the political and institutional landscape made a huge pool of labour readily available. As a result, Northern capital was offered new opportunities of investment in the developing world that materialise with foreign direct investment and, indirectly, with loans and financial services exports. These operations contribute to sustaining Northern firms' profitability without fostering any inducement to domestic investment. In the meantime, Northern oligopolistic firms are able to increase their profits thanks to cheaper inputs supplied by global value chains.
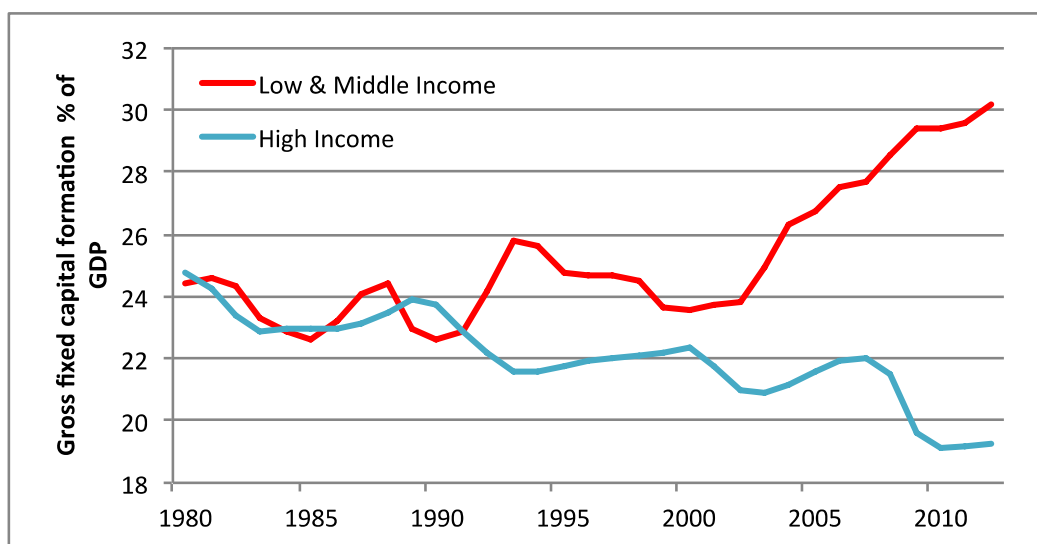


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*Figure 10: Gross fixed capital formation in high-income economies versus low and middle-income economies (World Bank - WDI)*

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│   POST-SOCIALIST     │        │ TRADE AND INVESTMENT │
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│ Decreasing prices of │        │ Investment           │
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              │                 │ FDI loans and export │
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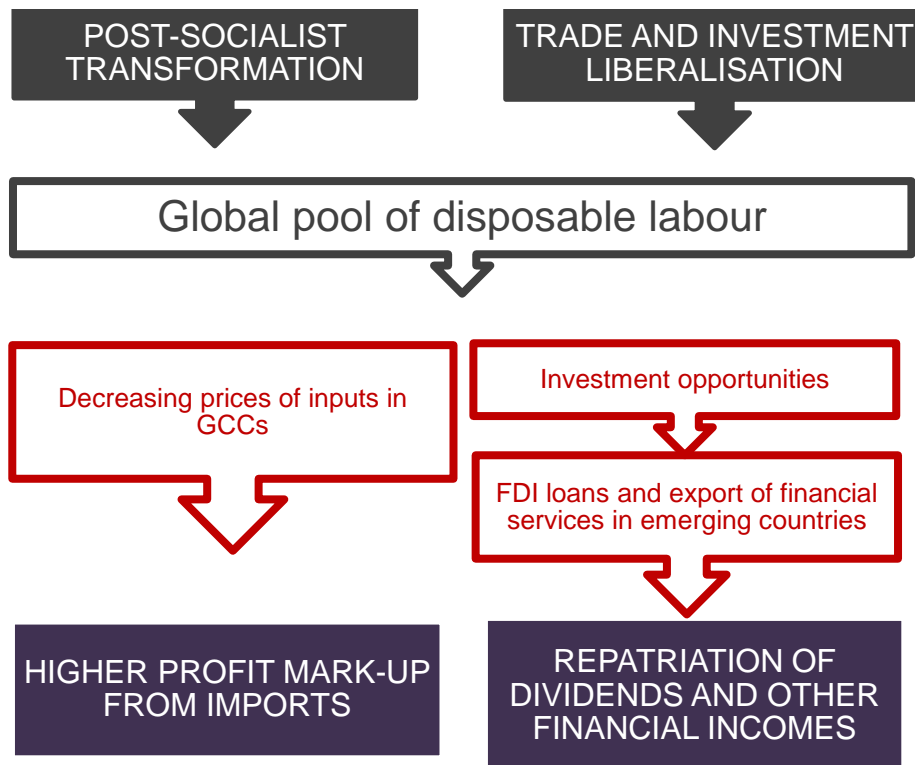
*Figure 11: The globalisation narrative: channelling value to the north*

Several stylised facts support the plausibility of the various dimensions of this narrative. The first one is the rise of the gross and net outward FDI stock, which has increased significantly — although unevenly — since the nineties, following a period of decrease or stability in the eighties (Figure 12 and Figure 13). FDI stock is mainly located in other developed economies. However, because all major economies have a positive and growing net outward FDI stock, it indicates that their stock has expanded in developing countries. This evolution supports the view that firms' profitability could be linked to repatriated earnings and lower supply prices from their foreign affiliates in low-wages economies.
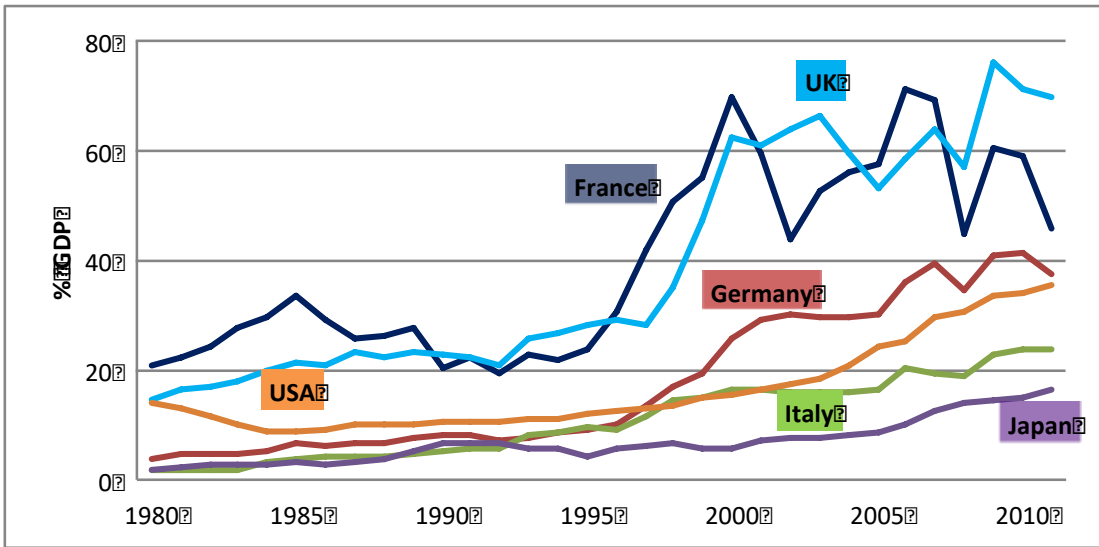
*Figure 12: Outward FDI stock as a share of GDP*

Updated and extended version of dataset constructed by Lane and Milesi-Ferretti (2007)
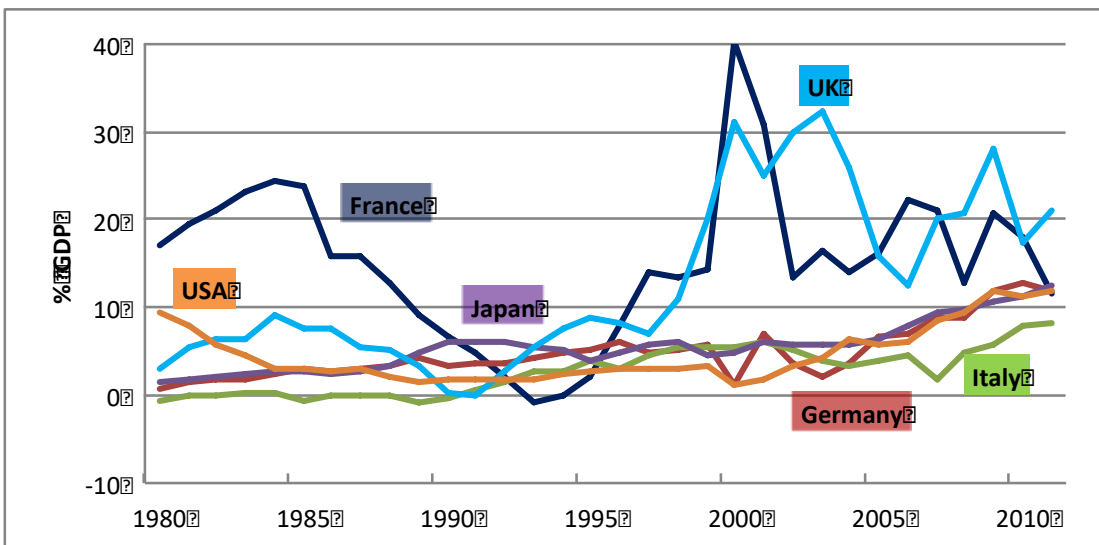


*Figure 13: Net outward FDI stock as a share of GDP*

Updated and extended version of dataset constructed by Lane and Milesi-Ferretti (2007)

The second stylised fact is the steady rise of imports from non-fuel developing countries in the share of imports by the developed economies of our sample since the early nineties (Figure 14). However, in spite of a common trend, the intensity of this evolution varies broadly between countries, Japan and the US being the most affected due to their strong interconnectedness with China's rise, while European countries and especially France lags significantly behind.

*Figure 14: Imports from non-fuel exporting developing countries as a share of imports*

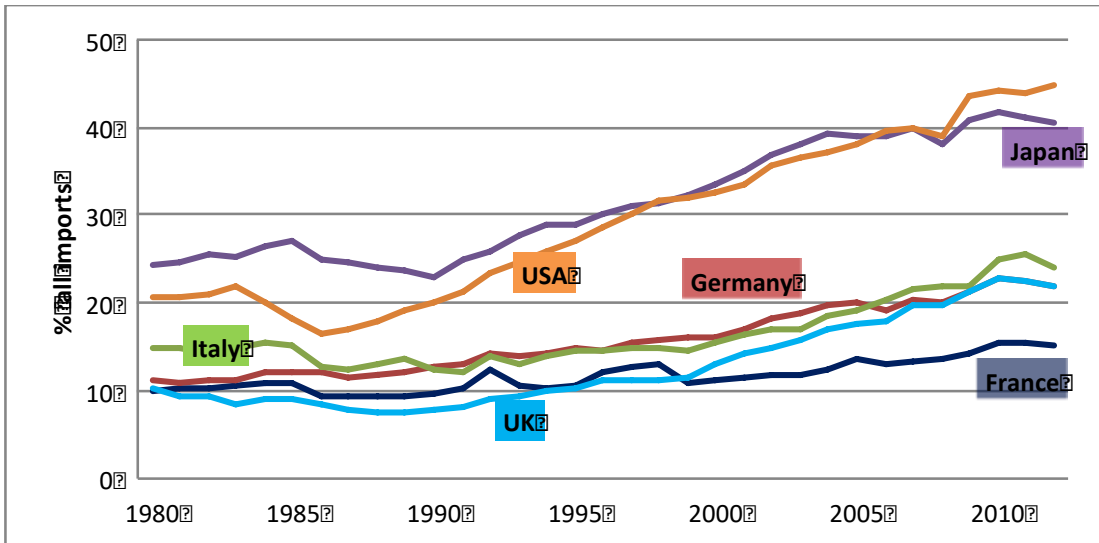IMF, direction of trade statistics

## 5. Profits and accumulation in an era of financialisation and globalisation

The stylised facts articulated in support of our three narratives point to the necessity to reconsider the origins and uses of profits in contemporary capitalism and, subsequently, the relation between profits and investment. These origins and uses of profits and their implications for the relation between profits and investment can be summarised through three simple equations.

The financialisation and globalisation of non-financial corporations have some important implications as profits derived not only from domestic exploitation of labour but also from other sources. In a Marxist perspective, a decomposition of total profits of the non-financial corporate sector of the country is as follows:

$$\Pi = Ed + Ea + nFI \quad (1)$$

Where $\Pi$ is the total profits, Ed domestic exploitation, Ea exploitation abroad and NFI, net financial income, is the sum of financial incomes received by non-financial corporations' net of their financial payments. Classically, Ed refers to the profit extracted from domestic wage-labour by firms. Ea refers to the shift in the sources of profits due to globalisation. NFI refers to net dividends and net interests received by firms, but also the capital gains (net of capital losses) realised in the course of speculative operations.

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As financialisation and globalisation affect the origins of profits, they also impact the uses of profits. Profits are used to finance domestic investments, payments to financial markets in the form of interests, dividends and share buybacks (net of share issuance), acquisition of financial assets and investments abroad. The variation of indebtedness allows firms to match these expenses with their profits[4]. The use of profits could thus be noted[5]:

$$\Pi = (1-x)(Id + f\Pi + FA + Ia) \quad (2)$$

Where x is the fraction of these expenditures financed by debt (when $x < 0$ the firm is reducing its debt; when $x > 1$ the firm is making losses), Id domestic investment, $f\Pi$ the financial payments in the form of dividends, interests and net share issuance, FA the acquisition of financial assets, Ia investment abroad.

These changes in the origins and uses of profits in an age of financialisation and globalisation can account for the relaxation of the relation between domestic investment and profits. The liberalisation of finance was supposed to favour investment as it enlarged the potential sources of funding for the firms. However, as we have seen in sections 2 and 3, the literature on financialisation points to opposite effects. First, the empowerment of finance (*Revenge of the Rentiers*) characterised by an increasing share of distributed profits could result in a squeeze of internal funding available for investment. Second, the appeal of the acquisition of financial assets may divert firms' resources from productive investment as they look for rapid profits, which are more easily realised through financial operations than with less immediately profitable and less reversible fixed investment (*Financial Turn of Accumulation*). Concerning *Globalisation* (section 4), the incorporation of low-wages countries in the global economy make it possible to substitute domestic operations with foreign investments and/or imports and thus reduce the appetite for domestic investment. The propensity of firms to invest in relation to their profits ($I/\Pi$) could thus be noted as follows:

$$I/\Pi = \gamma + i_1.(1-f)\Pi + i_2.(r_d - r_f) + i_3.(r_d - r_a \quad (3)$$

$I/\Pi$ depends on a demand term () and three additional terms reflecting the institutional settings of the period, whose rationale will be detailed below: distributed profits to the financial sector (, *the Revenge of the Rentiers*), a shift toward *Financial Accumulation* with a financial hurdle rate that requires the domestic profit rate to be equal or exceed the rate of return of financial assets (), and a

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[4] The leverage ratios are not necessarily the same for the various spendings, but in order to simplify the argument we consider here an average leverage ratio for all the spendings.
[5] This equation is close to the one proposed by Cordonnier and Van de Velde (2015, p.15) however 1/ they described the hoped-for profits when we consider the use of actual profits and 2/ we add investment abroad to financial accumulation, domestic investment and financial payments.

foreign hurdle rate that requires the domestic profit rate to be equal or exceed the profit rate abroad (, *Globalisation*). On the one hand, the requirements of financial markets and institutions constrain firms' uses of profits at the expense of investment and, on the other hand, new opportunities result in a financial and foreign hurdle rate. Each of these three elements can contribute to the weakening of the profit-domestic investment relation. What is their respective importance? This is the dimension we will attempt to clarify in the remaining sections.

# 6. Empirical analysis

To what extent can the mechanisms detailed through our three narratives explain the weakening of the relation between investment and profits during the past decades? In order to quantitatively assess this issue, we conduct a macro panel data analysis using macroeconomic annual data from 1980 to 2012 for the US and France, from 1990 for the UK and Italy, from 1994 for Japan and from 1995 for Germany. This limited panel focuses on the six biggest OECD economies.

We explain the evolution of the investment over gross operating surplus ratio by three of the variables used in the previous sections to describe each scenario: the rentiers' payment (Figure 3) for the *Revenge of the Rentiers* scenario, the rentiers' income (Figure 8) to quantify the *Financial Turn of Accumulation* narrative, and the share of imports from developing countries (Figure 14) to account for the *Globalisation* hypothesis. We aim to disentangle the correlation between each of these variables using standard linear models.

Following Juessen and Linnemann (2010) who study the behavior of panel data estimators with few individuals and large time spans, we estimate equation 4 using the knowingly biased fixed effects Within estimator with instrumental variables (IV-FE), and the robust and consistent Arellano and Bond (AB) estimator (1991), both with a trend.

Our baseline model can be written as follows:

$$\frac{I_{i,t}}{\Pi_{i,t}} = \rho \frac{I_{i,t-1}}{\Pi_{i,t-1}} + \beta_1 RP_{i,t} + \beta_2 RI_{i,t} + \beta_3 IMPDVP_{i,t} + \beta_4 \frac{\Delta GDP_{i,t}}{GDP_{i,t-1}} + \alpha_i + \beta_5 t + \varepsilon_{i,t} \quad (4)$$

The Investment over Profits ratio ($I/\Pi$) for country i at year t is explained by the following variables: the Rentier's Payment as a share of profits (RP), the Rentier's Income as a share of profits (RI), the share of imports from developing countries in the GDP (IMPDVP). The choice of these variables as proponents of the three scenarios studied is motivated by the fact that these indicators present the

most straightforward links to our narratives and, concerning share issuances, by the limitations of available data, especially for Japan, the UK and Germany. As we focus on large economies, the growth rate of the real GDP per capita can be used as a supplementary control for aggregate demand. To avoid the endogeneity bias due to the simultaneous determination of our variables, we use either the past values of the variable as an instrument (IV-FE estimator) or the lagged difference (AB). We allow the error term ε to follow a first-order autoregressive process, which justifies the use of the AB estimator.

Table 1 shows that both estimators tend to provide similar results: the investment over profits ratio tends to be positively linked to the Rentier's Payment, and negatively correlated to both the Rentier's Income and the Share of Imports from Developing Countries. These results, which are robust across a large number of specifications, as we shall prove, tend to validate our *Globalisation* narrative, although the result in the case of the AB estimator is only significant at a 15% level. Considering the relatively low number of observations and most specifically the low number of countries considered in the analysis, we expect our result to have low significance.

The most surprising outcome of our analysis remains the positive effect of the Rentier's Payment on our variable of interest, which contradicts our *Revenge of the Rentiers* theory. As one could have anticipated, the Investment over Profits ratio is positively linked to our demand term, the real GDP per capital.

*Table 1: Panel estimators, variables in level*

|  | IV-FE | AB |
|---|---|---|
| $Investment/Profits_{t-1}$ | 0.911*** | 0.817*** |
|  | (0.104) | (0.0686) |
| $Rentier's\ Payment_t$ | 0.162 | 0.121* |
|  | (0.162) | (0.0486) |
| $Rentier's\ Income_t$ | -0.319 | -0.128 |
|  | (0.201) | (0.0661) |
| $Imports\ Dvlping\ Countries_t$ | -0.752* | -0.284 |
|  | (0.307) | (0.180) |
| $Growth\ Rate\ RGDP\ per\ Capita_t$ | 1.407* | 0.3420+ |
|  | (0.5446) | (0.1485) |
|  |  |  |
| Observations | 135 | 141 |
| Country Fixed Effects | YES | YES |
| Trend | YES | YES |
| Fisher Test p-value | 0.000*** | 0.000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

This analysis explains the long-term relationship between these variables. However, to avoid the risk of spurious regression, it is necessary to take into account that several independent variables exhibit a unit root (see appendix, Table 3). Consequently, we run an estimation of equation (4) in

first difference:

$$\frac{I_{i,t}}{\Pi_{i,t}} = \rho \frac{I_{i,t-1}}{\Pi_{i,t-1}} + \beta_1 RP_{i,t} + \beta_2 RI_{i,t} + \beta_3 IMPDVP_{i,t} + \beta_4 \frac{\Delta GDP_{i,t}}{GDP_{i,t-1}} + \alpha_i + \beta_5 t + \varepsilon_{i,t} \quad (4)$$

This specification will avoid having our estimations polluted by unit roots, although it reduces the spectrum of our analysis, since we are now studying a short-term relationship.

Table 2 shows the results of this analysis, with noticeable differences between the two estimation techniques, mostly due to the differences in instrumentation. The signs of the coefficients with respect to the previous results in level (Table 1) are preserved, especially in the case of the AB estimator. We find unambiguous positive effects of the demand term on our variable of interest, as well as evidence of a negative effect of the variation in the share of imports from developing countries on the variation of the investment over profits ratio. In the case of the AB estimator, for which we fall short of rejecting the nullity of the coefficient associated with this variable at any level below 10%, the actual p-value is 0.141, which remains small. The coefficient is significant at a 10% level for the IV-FE regression.

We find evidence of a positive effect of the variation of the Rentier's Payment on the variation of the investment over profits ratio, as computed with the AB estimator, which we tend to favour since it takes into account the possibility of an auto-regressive error term[6]. As in the previous analysis, the effect of the Rentier's Income is difficult to untangle, since no result is significant at any acceptable level, and our estimates of the standard error of these estimators remain broad.

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[6] We find no evidence of second-order auto-regressive residuals in the first-differenced analysis (p-value of Arellano-Bond test of 0.71), while the evidence against the presence of second-order auto-regressive residuals are less significant in our analysis in level (p-value of AB test of 0.19).

*Table 2: Panel estimators, variables in first difference*

|  | IV-FE | AB |
|---|---|---|
| $\Delta Investment/Profits_{t-1}$ | 0.0549 | 0.0744 |
|  | (0.170) | (0.0647) |
| $\Delta Rentier's\ Payment_t$ | -0.205 | 0.302** |
|  | (0.445) | (0.0742) |
| $\Delta Rentier's\ Income_t$ | 0.650 | -0.0731 |
|  | (0.856) | (0.0573) |
| $\Delta Imports\ Dvlping\ Countries_t$ | -3.753* | -0.500 |
|  | (1.771) | (0.295) |
| $Growth\ Rate\ RGDP\ per\ Capita_t$ | 0.2439 | 0.2996* |
|  | (0.7759) | (0.1158) |
| Observations | 134 | 135 |
| Country Fixed Effects | YES | YES |
| Fisher Test p-value | 0.0018** | 0.000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

We conduct two sensitivity analyses of these results, available in the Appendices. As the end of our sample is strongly influenced by the Great Recession, we run this analysis on a sample ending in 2007 (Tables 3 and 4): we find similar results as the previous estimations, although less significance for our estimators, which was expected since the subsequent number of observations is reduced by almost twenty percent. We also measure the sensitivity of our specification in relation to a marginal change in the variables which represent our different scenarios by running several estimations of the previous models changing one variable at a time (Tables 7 to 12). The results are in line with the estimates we obtained in Tables 1 and 2.

Evidence from a panel made up of the six largest economies of the OECD supports our *Globalisation* theory in explaining the decrease of the investment over profits ratio between 1980 and 2014. It is still unclear whether the *Financial Turn of Accumulation* scenario is backed by the data, while we find consistent evidence of a positive relationship between the Rentiers' Payment and our ratio of interest, thus contradicting the *Revenge of the Rentiers* narrative.

# 7. Discussion

Overall, our results and robustness tests empirically confirm the particular relevance of the *Globalisation* narrative to the *Revenge of the Rentiers* and the *Financial Turn of Accumulation* scenarios in order to explain the weakening of the relation between profits and investment.

The *Revenge of the Rentiers* narrative and the idea of a squeeze of profits by financial payments is vulnerable to the fact that net financial inflows paid by non-financial firms — i.e. financial

payments less financial income — diminished or stay stable for the countries in our sample. Although more detailed analysis would be necessary in the case of the US to assess precisely the net effect of share-buybacks, there is no reason to suppose that the net effect should be different than in the case of other financial payments and incomes. Moreover, none of our econometric estimators indicate a negative effect of the ratio of financial payment to profits on investment. On the contrary, the positive sign indicates that domestic investment as a share of profits and financial payments as a share of profits evolve in the same direction. This *a priori* paradoxical result suggests that investment and financial payments are not necessarily at odds but that their determinants are related to other forces in which a demand-side determinant probably plays a key role. Keynes proposes a complementary interpretation that considers the relative expansiveness of investment in relation to share prices and establishes a positive relation between investment and share prices, which are themselves related to shareholder payments.

The *Financial Turn of Accumulation* narrative appears more convincing, with a negative — but not significant — sign in the empirical analysis. Its plausibility is supported by the growing weight of financial operations in the economies and the increasing weight of the financial income of financial firms related to operating surplus. A first difficulty with this narrative, at the theoretical level, is that it presupposes that financial accumulation can be sustained over a long period without fixed accumulation by non-financial firms. Empirically, the financial income indicator is problematic as it includes incomes received from foreign affiliates. Further investigations are thus needed to examine the decomposition of financial income of non-financial corporations.

The *Globalisation* narrative is the most convincing according to the elements presented in this paper. The growing outward FDI stock of main major economies and their rising reliance on imports from developing countries and, especially, on imports of intermediate inputs, are consistent with the view that domestic profitability of non-financial corporations is fuelled by foreign operations and, thus, that they are more induced to capture the gains of foreign accumulation than to invest domestically. The empirical analysis supports this view with negative and significant estimators concerning the impact of imports from low-wages countries on the investment/profit ratio. The sign is also negative but not significant in the case of the outward FDI stock relative to GDP. However, this narrative is still under-specified at this stage and the respective weight of the evolution of the denominator and the numerator needs to be specified. To what extent foreign investment in developing countries substitutes domestic investment and/or mark-up increase thanks to cheaper inputs from low-wage countries needs to be clarified.

Our results are original and could contribute to reviving the debate about sluggish investment and growth in OECD economies, but they must be interpreted cautiously as further research with more

data is needed to confirm their accuracy. In this analysis we have only n=6 individuals with T=30 time periods, which makes things difficult from a panel data analysis perspective since all the convergence theorems for panel data analysis assume small T and large N. However, with a relatively small panel, it is very difficult to obtain significant and consistent results. It is thus all the more remarkable that our results are robust with different specifications.

Three other limits of our study need to be mentioned. First, we do not explore empirically the role of debt, which probably plays a key role in the firms' policy towards its stakeholders, its investment decisions and its financial operations. Second, as it is a profit-centred study, the role of demand aspects is dramatically under-examined, although we introduce a rudimentary demand term in our econometric analysis. How we are to link our analysis with demand-side determinants remains to be defined. Finally, the paper did not contrast national trajectories. Although this comparative dimension would be very relevant, it goes beyond the scope of the present paper.

# 8. Conclusion

This paper proposed a profits-centred perspective on the weakening of the link between profits and investment since the eighties in the biggest high-income economies. It relates this phenomenon to the impact of financialisation and globalisation on the dynamics of accumulation by non-financial firms by identifying three channels related to the origin and use of profits: a squeeze of available funds for investment due to the increase of financial payment - the *Revenge of the Rentiers* narrative, a financial hurdle rate which favours financial investment at the expense of domestic productive investment - the *Financial Turn of Accumulation* narrative - and a global hurdle rate which favours foreign investment at the expense of domestic productive investment - The *Globalisation* narrative. We have presented stylised facts that support these three narratives. However, a parallel examination of the three narratives, the theoretical discussion and the econometric analysis suggest that their plausibility is uneven. The *Revenge of the Rentiers* narrative is dismissed by our study. This is not the case for the *Financial Turn of Accumulation* narrative but evidence is weak and ambivalent at this stage. Contrastingly, the *Globalisation* narrative appears to be the most convincing on theoretical and empirical grounds. It suggests that non-financial corporations of rich economies have been able to capture gains from the dynamism of developing economies and, at the same time, that investment opportunities in the developing world have discouraged domestic investment. The econometric results are consistent with this thesis. Nonetheless, this preliminary conclusion needs to be considered with caution. It needs to be confirmed by a more ambitious empirical analysis and be more precisely delineated to account for the role of foreign operations and

supplies as a source of profits through cheaper inputs and foreign financial income and, in terms of the uses of profits, through investments directed to the development of foreign operations.

Finally, we must reiterate that our profits-centred analysis purposely under-considered demand-side aspects of investment behaviour. But, thanks to this emphasis on profit origins and uses, we were able to point to economic mechanisms frequently referred to in the financialisation and globalisation literature but dramatically under-explored in macroeconomic studies.

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# APPENDIX

## 1. Unit Root Tests

We use the Im-Pesaran-Shin test for panel non-stationarity, for which the null hypothesis is that all panels contain a unit-root for a given variable. We are unable to reject the null hypothesis for several variables, which leads us to conduct a complementary analysis with covariates in first difference.

*Table 3: Panel unit root tests - Variables in level*

|  | IPS Test Statistic | P-value |
|---|---|---|
| $Investment/Profits$ | -1.4642 | 0.0716 |
| $Rentier's\ Payment$ | -1.7918 | 0.0366 |
| $Rentier's\ Income_t$ | 0.6926 | 0.7557 |
| $Imports\ Dvlping\ Countries_t$ | 5.8868 | 1.0000 |
| $\log(RGDP)$ | -6.0024 | 0.0000 |

*Table 4: Variables in first difference*

|  | IPS Test Statistic | P-value |
|---|---|---|
|  | -5.2646 | 0.0000 |
|  | -4.9652 | 0.0000 |
|  | -5.371 | 0.0000 |
|  | -6.7340 | 0.0000 |
|  | -5.2978 | 0.0000 |

## 2. Sensitivity analysis

We now turn to a brief sensitivity analysis, in which we will adopt two strategies to test the strength of these results. First of all, we re-estimate our previous model (eq. 4 and 5) both in level and in first difference, putting the Great Recession aside, to avoid having our analysis polluted by any long-term shock at the end of our sample. Finally, we will rerun these models on our entire sample changing one variable at a time with another variable supporting the same scenario.

### 2.1 Putting the Great Recession aside

The end of our sample is strongly affected by the Great Recession. Considering our small number of observations and the intensity of the global crisis, we can legitimately ask ourselves how much our results are affected by this event. Table 5 and Table 6 show the results of the estimation of equations (4) and (5) for a subsample considering only the available data between 1980 and 2007.

*Table 5: Panel estimator (1980 – 2007), variables in level*

|  | IV-FE | AB |
|---|---|---|
|  | 0.933*** | 0.791*** |
|  | (0.0975) | (0.0754) |
|  | 0.0750 | 0.129* |
|  | (0.168) | (0.0394) |
|  | -0.213 | -0.120 |
|  | (0.218) | (0.0670) |
|  | -0.621+ | -0.179 |
|  | (0.362) | (0.240) |
|  | 1.653** | 0.3381 |
|  | (0.5673) | (0.1811) |
| Observations | 114 | 117 |
| Country Fixed Effects | YES | YES |
| Trend | YES | YES |
| Fisher test p-value | 0.000*** | 0.000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

The signs of our estimators are consistent with the previous findings of Table 1 and Table 2, although the significance of our results is even more difficult to attain, due to the reduction of our sampling size. The Rentier's Payment still has a positive and significant effect on the Investment over Profits ratio, and the share of imports from developing countries in the GDP keeps having a negative effect on our ratio of interest, specifically in the First Differenced equation. As for the effect of the Rentier's Income on the dependant variable, it remains difficult to conclude, while we fall short of statistical significance.

*Table 6: Panel estimator (1980 – 2007), variables in first difference*

|  | IV-FE | AB |
|---|---|---|
|  | 0.139 | 0.0693 |
|  | (0.158) | (0.0634) |
|  | -0.298 | 0.379*** |
|  | (0.455) | (0.0606) |
|  | 0.160 | -0.0846 |
|  | (0.645) | (0.0966) |
|  | -1.211 | -0.574* |
|  | (1.575) | (0.160) |
|  | 1.568* | 0.2708* |
|  | (0.6504) | (0.1053) |
| Observations | 110 | 111 |
| Country Fixed Effects | YES | YES |
| Fisher test p-value | 0.0208* | 0.000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

This subsample analysis that takes the Great Depression out of our sample corroborates our finding that among the three studied scenarios the *Globalisation* hypothesis is the most important factor in explaining the decrease in the investment over profits ratio in our sample. The Rentier's Payment still appears to be positively correlated with our dependant variable when controlling by the Rentier's Income, the Imports from Developing Countries, and the real growth rate of GDP per capita.

How well do our variables hold for the three scenarios under study? We conduct a sensitivity analysis using two other variables for each of our hypothesis to control whether the variables used in our baseline models are true to the phenomena we want to describe.

## 2.2. Robustness to changes in covariates

In this subsection, we assess how much our previous results are sensitive to a change of variable that would hold for the same scenario. We consider two more variables for each scenario, and we estimate the equations (4) and (5) for each of these possibilities. The results can be found in the Appendix (Table 7 to Table 12).

We use the Net Rentier's Payment and the Net Share Issuance (as a share of the GOS) as substitutes for the Rentier's Payment. The Net Share Issuance variable suffers from several issues which prevents us from using it in the baseline model: as it is computed as a three-year moving average, it

will yield auto-correlation issues and thus biases in the econometrics analysis. The Net Rentier's Payment does not fully translate our idea of a simple increase of financial payments to the Rentiers, as it only identifies the difference between payments and income. These two variables are nonetheless close enough to what we seek to illustrate in our *Revenge of the Rentiers* narrative.

Table 7 and Table 8 show the results obtained when the Rentier's Payment is changed with the Net Rentier's Payment and the Net Share Issuance. The sign of the relationship with the Investment over Profits ratio remains positive, all other things equal, although the significance of the estimators are lower, which is also to be expected considering that we have less data on these two variables.

As a substitute to the Rentier's Income, we use the GOS of Financial Corporations as a share of the total GOS and the value added in the financial, insurance and real estate as a share of the GDP (FIRE). Increases in those two variables convey the idea of an increase of the financial sector and its importance for accumulation, although they only focus on some specific firms, as opposed to our initial Rentier's Income aggregate, which concerns all the non-financial firms. When using these variables in equation 4 and 5 in place of the Rentier's Income, we find a similar result as before, as shown in Table 9 and Table 10: the effect on the investment over profits ratio is slightly negative, although almost never significant.

We use foreign direct investment as a share of the GDP to assess our *Globalisation* hypothesis. This aggregate imperfectly translates our idea of an offshoring of the investment made with the profits of the domestic firms due to increasing opportunities coming from developing countries, as it does not differentiate between the destinations of these investments. We expect a negative sign when using this aggregate in equation 4 and 5, due to an expected negative relationship between the FDI and the domestic investment. The results obtained in Table 11 and Table 12 are consistent with this expected result, although not as strong as we could have assumed.

Our econometrics analysis over the six most important economies of the OECD between 1980 and 2012 tend to acknowledge the role played by *Globalisation* in the weakening of the Investment over Profits ratio. The *Revenge of the Rentiers* scenario and its effect on this ratio, while backed by strong stylised facts, fade out when we try to disentangle the effects of each narrative. Evidence of the importance of the *Financial Turn of Accumulation* in the decreasing of the investment over profits ratio in our countries of interest is weak, and could be strengthened by acquiring more data, which would imply working on more countries. Alternatively, with more countries and more

granular data, the use of panel Vector Error Correction Models would help in exhibiting a long-term relationship between these variables.

## *Revenge of the Rentiers*

*Table 7: Revenge of the Rentiers hypothesis sensitivity analysis – Level equation*

|  | IV-FE | AB | IV-FE | AB |
|---|---|---|---|---|
|  | 0.889*** | 0.809*** | 0.879*** | 0.795*** |
|  | (0.0844) | (0.0642) | (0.110) | (0.0907) |
|  | 0.0912 | 0.165** |  |  |
|  | (0.133) | (0.0285) |  |  |
|  |  |  | -0.0846 | -0.00850 |
|  |  |  | (0.0876) | (0.0743) |
|  | -0.182* | -0.0327 | -0.135 | -0.0273 |
|  | (0.0810) | (0.0615) | (0.0860) | (0.0820) |
|  | -0.738* | -0.319 | -0.621* | -0.249 |
|  | (0.295) | (0.205) | (0.296) | (0.239) |
|  | 130.3** | 30.71 | 56.65 | 10.44 |
|  | (42.24) | (21.40) | (34.67) | (21.01) |
| Country Fixed Effects | YES | YES | YES | YES |
| Trend | YES | YES | YES | YES |
| Fisher test p-value | 0.0000*** | 0.0000*** | 0.0000*** | 0.0000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

*Table 8: Revenge of the Rentiers hypothesis sensitivity analysis – Difference equation*

|  | IV-FE | AB | IV-FE | AB |
|---|---|---|---|---|
|  | 0.171 | 0.0855 | 0.390+ | -0.0356 |
|  | (0.106) | (0.0671) | (0.198) | (0.218) |
|  | 0.446 | 0.360** |  |  |
|  | (0.309) | (0.0823) |  |  |
|  |  |  | -0.341 | 0.0453 |
|  |  |  | (0.259) | (0.0985) |
|  | 0.0221 | 0.264* | -0.194 | 0.394+ |
|  | (0.327) | (0.0764) | (0.419) | (0.183) |
|  | -0.709 | -0.562* | -0.764 | -0.578 |
|  | (1.092) | (0.160) | (1.182) | (0.353) |
|  | 78.74+ | 25.50+ | 9.471 | 11.80 |
|  | (44.63) | (12.41) | (57.53) | (18.51) |
| Observations | 107 | 108 | 77 | 80 |
| Country Fixed Effects | YES | YES | YES | YES |
| Trend | YES | YES | YES | YES |
| Fisher test p-value | 0.0205* | 0.009** | 0.2909 | 0.003 |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

## Financial Turn of Accumulation

### Table 9: Financial Turn of Accumulation hypothesis sensitivity analysis – Level equation

|  | IV-FE | AB | IV-FE | AB |
|---|---|---|---|---|
|  | 0.946*** | 0.829*** | 0.957*** | 0.785*** |
|  | (0.0792) | (0.0716) | (0.0963) | (0.0887) |
|  | -0.0548 | 0.0361 | -0.0561 | 0.0527 |
|  | (0.0655) | (0.0447) | (0.0789) | (0.0536) |
|  | -0.0587 | -0.0479 |  |  |
|  | (0.155) | (0.0566) |  |  |
|  |  |  | -0.122 | 0.328 |
|  |  |  | (0.705) | (0.225) |
|  | -0.346+ | -0.110 | -0.363 | -0.116 |
|  | (0.206) | (0.137) | (0.220) | (0.144) |
|  | 119.0** | 28.62+ | 141.7** | 30.35* |
|  | (44.65) | (12.98) | (45.56) | (12.27) |
| Observations | 138 | 141 | 127 | 130 |
| Country Fixed Effects | YES | YES | YES | YES |
| Trend | YES | YES | YES | YES |
| Fisher test p-value | 0.0000*** | 0.0000*** | 0.0000*** | 0.0000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

### Table 10: Financial Turn of Accumulation hypothesis sensitivity analysis – Difference equation

|  | IV-FE | AB | IV-FE | AB |
|---|---|---|---|---|
|  | 0.0389 | 0.0734 | 0.334 | 0.0433 |
|  | (0.131) | (0.0723) | (0.684) | (0.0507) |
|  | 0.150 | 0.269** | -0.00878 | 0.340*** |
|  | (0.325) | (0.0684) | (0.653) | (0.0366) |
|  | 0.451 | -0.0204 |  |  |
|  | (0.625) | (0.0689) |  |  |
|  |  |  | -6.010 | 0.458 |
|  |  |  | (15.42) | (0.581) |
|  | -2.679 | -0.491 | -5.262 | -0.674+ |
|  | (1.752) | (0.324) | (6.986) | (0.294) |
|  | 60.24 | 28.59* | 12.21 | 26.96* |
|  | (68.78) | (10.04) | (107.8) | (9.028) |
| Observations | 134 | 135 | 123 | 124 |
| Country Fixed Effects | YES | YES | YES | YES |
| Trend | YES | YES | YES | YES |
| Fisher test p-value | 0.000*** | 0.000*** | 0.0921+ | 0.000*** |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

## Globalisation

*Table 11: Globalisation hypothesis sensitivity analysis – Level equation*

|  | IV-FE | AB | IV-FE | AB |
|---|---|---|---|---|
|  | 0.896*** | 0.788*** | 0.864*** | 0.781*** |
|  | (0.0843) | (0.0517) | (0.0783) | (0.0539) |
|  | 0.0568 | 0.0985 | 0.0529 | 0.106 |
|  | (0.169) | (0.0598) | (0.166) | (0.0606) |
|  | -0.00916 | -0.0242 | -0.0167 | -0.0373 |
|  | (0.167) | (0.0409) | (0.166) | (0.0407) |
|  | -0.127+ | -0.0388 |  |  |
|  | (0.0680) | (0.0321) |  |  |
|  |  |  | 0.00522 | -0.00227 |
|  |  |  | (0.00815) | (0.00256) |
|  | 158.7** | 32.32+ | 121.6* | 30.82+ |
|  | (59.38) | (13.42) | (47.26) | (13.25) |
| Observations | 132 | 135 | 132 | 135 |
| Country FE | YES | YES | YES | YES |
| Trend | YES | YES | YES | YES |
| Fisher test p-value | 0.0000*** | 0.0000*** | 0.0000*** | 0.0000*** |

Robust standard errors in parentheses
*** $p<0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.1$

*Table 12: Globalisation hypothesis sensitivity analysis – Difference equation*

|  | IV-FE | AB | IV-FE | AB |
|---|---|---|---|---|
|  | 0.173 | 0.0803 | 0.0756 | 0.0853 |
|  | (0.137) | (0.0559) | (0.120) | (0.0502) |
|  | 0.312 | 0.327** | 0.118 | 0.313* |
|  | (0.296) | (0.0851) | (0.361) | (0.0890) |
|  | -0.482 | -0.0966 | 0.326 | -0.0858 |
|  | (0.468) | (0.0646) | (0.576) | (0.0691) |
|  | -0.00616 | -0.00478 |  |  |
|  | (0.298) | (0.0131) |  |  |
|  |  |  | -0.0339 | -0.0160 |
|  |  |  | (0.0776) | (0.0122) |
|  | 152.9** | 32.37* | 103.5* | 32.42* |
|  | (54.95) | (11.18) | (42.18) | (11.22) |
| Observations | 128 | 129 | 128 | 129 |
| Country Fixed Effects | YES | YES | YES | YES |
| Trend | YES | YES | YES | YES |
| Fisher test p-value | 0.008** | 0.0000*** | 0.0021** | 0.0000*** |

Robust standard errors in parentheses
*** $p<0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.1$