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The financialisation of the nonfinancial corporation. A critique to the *financial turn of accumulation* hypothesis

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Abstract: One aspect in which nonfinancial corporations are said to be financialised is that they have been increasingly engaging in financial accumulation from which they derive a growing proportion of financial income. This is what we call the *financial turn of accumulation* hypothesis. In this article we show that the evidence used to sustain it, in the US setting, has to be reconsidered. Our findings show that, contrary to the *financial turn of accumulation* hypothesis, financial income averages 2.5% of nonfinancial corporations' total income since the 1980s, oscillating since the beginnings of the 1990s until 2005 and then declining. In terms of assets, some of the alleged financial assets might actually reflect other activities in which nonfinancial corporations have been increasingly engaging such as tax avoidance, internationalization of production, activities refocusing and M&As.

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1. Introduction

Financialisation is nowadays a buzzword. More than that perhaps, the buzzword of the 2010s, as Christophers (2015) claims. Starting originally in a Marxist tradition (Magdoff & Sweezy, 1987), it has later expanded to broader heterodox economic literature, typically post-Keynesian (G. A. Epstein, 2005), economic geography (Christophers, 2012), parts of mainstream sociology (Lin & Tomaskovic-Devey, 2013) and, very recently, it can even be found in mainstream economics (Admati, 2017). Such a wide disciplinary and theoretical usage has come with a lack of precision or, the flip side of this, a multiplicity of approaches.

Van der Zwan (2014) finds three different strands: financialisation as a change in everyday life, as a change in corporate management (the introduction of shareholder value maximization) and as a new regime of accumulation. Lapavitsas (2013, pp. 3–4) puts forward a different (class-based) analysis, distinguishing among changes in nonfinancial corporations (NFCs), banks and households. We find this a clearer distinction as it allows for a better identification of each actor involved. The focus of this paper will be the financialisation of the NFC.

Even when considering a narrower scope, such as the financialisation of the NFC, there is no general agreement on the precise dynamics it involves. Table 1 shows some of the most-cited papers regarding the financialisation of the NFC. On one side it confirms, as in Van der Zwan (2014), that shareholder value orientation and the financialisation of the NFC have been sometimes used as synonyms reflecting the growing relevance of shareholders over the rest of stakeholders of the firm, especially the labour force. On the other hand, it puts a specific dimension for NFCs which is their engagement in financial activities. The literature has identified two different channels for this engagement. The first is related to the increased transfer of earnings from NFCs to financial markets in various forms such as interest payments, dividend payments, and stock buybacks. This channel is closely linked to the primacy of shareholder value orientation since the increase in share buybacks and dividends starting in the 1980s is largely due to the higher pressure exerted by big institutional investors (Lazonick

& O'Sullivan, 2000). It also reflects the results of increased leverage through interest payment. The second channel is related to the increased acquisition of financial assets from which NFCs derive a growing proportion of financial income.

[Table 1]

Regarding the latter, it is claimed that the involvement in financial activities has been dramatic: the ratio of financial assets to nonfinancial assets has gone from 40% in 1950 to 120% in 2001 (Orhangazi, 2008, p. 866) -95% if we update to 2017-, while the ratio of portfolio income has gone from less than 10% in 1950 to 40% in 2001 (Krippner, 2005, p. 185) -20% if we update to 2013, last information available. Hence, according to Krippner (2005, p.181), financialisation implies the fact that both at the macroeconomic level and for NFCs, "profit-making occurs increasingly through financial channels rather than trade and commodity production". In a similar fashion, Davis (2016, p. 138) states that there has been a "shift in NFC activities toward banking activities".

However, in this article we will scrutinize the empirical evidence used to support those types of claims, or what we define as the *financial turn of accumulation* hypothesis. We define this hypothesis following the meaning given in Table 1, that is, as the contention that there has been an aggregate trend in which NFCs are increasingly acquiring financial assets in order to obtain a higher proportion of their income out of them.[1] To underscore, we are concerned here with the general trend, whilst understanding that there could be significant variation in particular firms, as cases studies have shown (Froud, Johal, Leaver, & Williams, 2006) and we will confirm.

We will focus on the main pieces of evidence that have been adduced: the increase in financial assets held by NFCs and the increase in financial income received by NFCs, while also analyzing

[1] Durand and Gueuder (2018, p. 128) propose the term "financial turn of accumulation" to define the narrative that "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." We follow the definition closely although without focusing on the substitution of one type of investment for another but rather studying financial investment and financial income on their own.

their cash flow statements. We will concentrate on the United States of America (USA) between 1950 and 2016 since this is where most of the literature is focused.

In order to perform our analysis, we make use of three different and complementary databases. The Federal Reserve's Financial Accounts of the USA (FAUSA) and the Statistics of Income (SOI) from the Internal Revenue Service (IRS) provide aggregate, domestic information for all corporations. Moreover, the latter present information disaggregated by size of assets. The third database is Compustat firm-level information for listed US corporations that presents consolidated data for the parent company along with its national and international subsidiaries. This provides an approximate notion of the worldwide activity of those firms. Additionally, Compustat allows us to present a novel analysis of NFC's total sources and uses of cash based on their Cash Flow Statement.

The main contribution of this paper is to show that financial accumulation was not a significant strategy verified in aggregate terms for NFCs. Some of the assets taken into account to support the *financial turn of accumulation* hypothesis are, in fact, intangibles and FDI. In terms of income, financial income has increased in the last decades but remained around 2.5% of total income since 1980, even decreasing in the last years. As stated by Fiebiger (2016), if NFCs are specializing in financial activities in order to make profits outs of them, it seems that the result has not been positive overall. These results also hold when we distinguish among different sizes of enterprises.

The rest of the paper is organized as follows. Section 2 revises the literature that suggests a movement to finance, or what we call the *financial turn of accumulation* hypothesis. Section 3 presents the data and section 4, the methodology. Section 5 shows, separately, the results from the empirical analysis of asset, income and cash flow composition. Section 6 focuses on differences by size while Section 7 discusses the results. We finally give some concluding remarks in section 8.

2. Moving to finance

This idea can be traced back to the Monopoly Capital thesis. In an economy trapped in a state of stagnation, as characterized by Baran and Sweezy (1966), regular ways of absorbing surpluses such as capitalist consumption and investment become insufficient. Speculation appears as one of the new channels for mopping up surpluses (Magdoff & Sweezy, 1987). Although not necessarily sharing the idea of a stagnant economy, Crotty (2005) and Orhangazi (2008) also state that NFCs started using, in the beginnings of the 1980s, an increased percentage of their internal funds to buy financial assets and financial subsidiaries, or to start new financial arms themselves. For Krippner (2011) the degree of high labor militancy at home and increased international competition abroad induced nonfinancial firms to withdraw capital from production and divert it to financial markets. Similarly, Davis (2016) states that due to declining profitability, slower global aggregate demand growth and increased exchange rate volatility, NFCs shifted away from fixed capital toward financial assets. In Stockhammer (2004) and Tomaskovic-Devey et al (2015), the emphasis is put on a shift in management preferences caused by the hostile take-over movement and changes in pay structure which aligned their interests with shareholders´. Due to these transformations, NFCs became more rentier-like abandoning growth-oriented priorities and started investing in financial markets.

Both macro (Crotty, 2005; Krippner, 2011; Orhangazi, 2008) and micro (Davis, 2016; Froud et al., 2006) level data have been used in favor of the *financial turn of accumulation* hypothesis. Among the former, the increase in the ratio of financial assets to non-financial assets based on the FAUSA, which went from 40% in 1950 to 120% in 2001, is usually used to show the movement from productive to financial activities (Orhangazi, 2008, p. 866). This is complemented with a ratio that intends to show an increasing share of income coming from financial sources (Krippner, 2005, p. 185). In the case of the micro evidence, we find scholars focusing either in some case studies as in Froud et al (2006) or analysis based on the aggregations of micro data as Davis (2016) who uses firm-level data to demonstrate a shift in

the asset structure of NFCs towards financial assets and a declining gap between the cost of borrowing and the financial income for large NFCs.

In terms of econometric analysis, in most of the cases, the objective is to estimate the impact of the financialisation of NFC on capital expenditures distinguishing the two different channels we made reference in the previous section: the increased transfer of earnings from NFCs to financial markets in various forms such as interest payments, dividend payments, and stock buybacks (Orhangazi, 2008, p. 877) and the flow of income that nonfinancial corporations earn due to their investment in financial assets and financial subsidiaries such as interest and dividend income (Orhangazi, 2008, p. 877). The latter is, evidently, the closest to the *financial turn of accumulation* hypothesis. Results on this channel are mixed: while Hecht (2014, p. 32) and Auvray & Rabinovich (2019) find no statistically significant effect of financial income on US NFCs' real investment decisions, Stockhammer (2004, p. 735) and Orhangazi (2008, p. 880) do find negative statistically significant effect in some specifications. Conversely, Davis (2017) finds a positive and significant effect of financial assets, for all firms, and financial profitability, for big firms.

3. Data

One of the novelties of this paper is to deal, simultaneously, with three different and complementary databases. Table 2 provides a summary of the information used in this paper contained by each of them. In all cases we are dealing with corporations, i.e. we do not take into account the noncorporate sector. The FAUSA and SOI provide aggregate and separate information for financial and nonfinancial corporations. In both cases the distinction is based on the main activity reported by the firm following the Standard Industrial Classification (SIC) used in years prior to 1998 and the North American Industry Classification System (NAICS) after 1998. Compustat provides firm level information for listed companies which we aggregate and also organize according to the SIC code of each corporation excluding financial

firms identified by the primary codes from 6000 to 6799 as well as those cases in which the industry format belongs to 'financial services.'

[Table 2]

All the information we use from these databases is standardized and consolidated. The latter represents an advantage since we are including information from financial subsidiaries. In the case of the SOI and FAUSA, the consolidation is done at the domestic level while in Compustat it is domestic and international. The latter also allows to identify firms individually while the SOI cover up to 15 different asset sizes (updated over the years). By means of this we are able to study the different dynamics involved in small and medium corporations compared to that of listed ones which are usually the biggest of the economy. For example, in 2013, only 4,955 listed NFCs held 69% of the assets of 4,943,231 NFCs reported in the SOI.

For the asset analysis, we will use the three databases although focusing on the FAUSA and Compustat since the former presents the most disaggregated list of Assets while the latter is the only one that allows to identify a particularly important asset for our argument, Goodwill. The SOI will be used to analyze the differences in terms of asset size. Finally, the FAUSA allow to distinguish those assets held outside the USA in the form of Foreign Direct Investment (FDI).

For the sources of income we will base our study on the SOI and Compustat. While the former has the largest number of items and many of them are different types of financial income, the latter allows to identify another type of financial income: that belonging to the financial divisions of some NFCs.

For the Cash Flow Statement we will only focus on Compustat. The FAUSA also have this kind of data but the information is presented in more detail in Compustat. For instance, while Compustat presents issuance and share buybacks or issuance and reduction of long-term debt

separately, the FAUSA only show net information. The complete list of items used in Figures and Tables is available in Table A1.[2]

4. Methodology

The methodological discussion, both for asset and income composition, is related to two broad topics: what is considered as a financial asset/income and how its evolution is measured. For the asset analysis, the first question is relevant since, as Crotty (2005) and Orhangazi (2008) recognize, practically the entire increase in financial assets over total assets is due to a residual variable, 'unidentified miscellaneous assets', which is considered as financial by the FAUSA. Identifying individually the assets it contains, with the help of Compustat, will be fundamental to assess whether or not there has been such an increase in financial assets.

The second question relates to measurement. With a very similar aim as ours, Davis (2016) carries out an exhaustive analysis of NFCs' balance sheet considering four categories of financial assets in Compustat –'cash and short-term investments', 'total current receivables', 'other investments and advances', and 'other financial assets'. In her case, those categories are normalized by sales in order "to avoid possible biases stemming from the fact that an increase in financial assets relative to assets requires by definition a decline in nonfinancial assets relative to assets" (Davis, 2016, p. 118). However, if we are telling a story about how NFCs become more *intensive* in financial assets, by definition, this is compared to other types of assets. Normalizing by sales fails to capture this dimension because, a priori, all types of assets could be able to increase. Therefore, we chose to normalize by total assets.[3]

In terms of sources of income, using different datasets Krippner (2005, p. 185) -SOI-, Crotty (2005, p. 107) -SOI-, Orhangazi (2008, p. 866) -FAUSA- and Davis (2016, p. 135) -Compustat- arrive at similar conclusions: basically, that financial income has become a significant source of

[2] In terms of overlapping among categories, the comparisons we carry for assets (FAUSA vs. Compustat) and income (SOI vs. Compustat) in all cases suffer from different geographical scope which makes an exact matching impossible. Nevertheless, as we mentioned before, we see this as an advantage rather than a flaw considering the different types of dynamics they show and that the results are consistent for all the performed analyses.

[3] Results do not change nevertheless if we normalize by sales. See Section 5a and Figure A1.

income for NFCs. The measurement discussion is relevant because, although Orhangazi (2008, p. 865) intends to show that NFCs are "deriving an increasing share of their income from financial sources", and Krippner (2005, p. 182), the "growing importance of 'portfolio income' … relative to revenue generated by productive activities", in practice they do not measure NFCs' financial income relative to total income. Instead, they measure financial income relative to some measure close to profits. For Krippner, it is profits plus depreciation allowances, while for Orhaganzi it is operating surplus.

As shown in the mathematical Appendix, this type of ratio can give meaningless results in which the cost of financial activities is increasing (so profit is decreasing) and, *ceteris paribus,* the ratio of portfolio income is increasing. As Crotty himself (2005, p. 105) notes: "caution is required in interpreting the meaning of this time series because the numerator does not deduct the cost of acquiring and holding financial assets, while the denominator includes profit, which is a net revenue concept. This gives an upward bias to this series that could be substantial". Krippner (2005, p. 183) also acknowledges this fact and that is why she takes into account depreciation allowances, although she recognizes that "even augmented by depreciation allowances, corporate cash flow is still a net-of-cost measure". Therefore, the overestimation problem still persists.

The best way to compute the importance of financial activities for NFCs would be to calculate financial profit as a percentage of total profit. Accurate information to do so, however, is not available. Although there are various items related to income from financial activities, the associated costs which are exclusive to financial activities are impossible to gauge with existing information which, in most of the cases, is limited to financial expenses. Computing all financial expenses would overestimate the cost of acquiring and holding financial assets since, for example, financial expenses include interest from debt taken to finance productive activities. Available information can only provide a rough idea of the financial position of NFCs. Therefore, we opt for a second best in terms of measurement which is to compute financial

income as a percentage of total income. By doing so, we eliminate all possible bias arising from comparing a pure revenues stream with a net-of-cost measure.

Regarding the components of financial income, Kripner (2005, p. 182) and Crotty (2005, p. 105) consider income from interest payments, dividends and capital gains from investment while Orhangazi (2008, p. 866), interests and dividend income. The selection of these items can pose two shortcomings: one of overestimation and other of underestimation. The former is related to including dividends from domestic and foreign corporations as part of financial income since they may perfectly be related to non-financial activities held by subsidiaries. Conversely, the possibility of underestimating financial income is due to the way in which corporations fill their annual reports. Those corporations with a strong financial activity usually present income statements from their industrial and financial divisions consolidated.[4] Therefore, an important proportion of financial income appears as part of total revenue in aggregate statistics. It is only with CCM (CRSP-Compustat Merged database) that we are able to identify income from the financial division although starting in 2010.

Finally, for the Cash Flow Statement we compute the evolution of total sources and uses of funds. This analysis will allow to verify that of the asset and income structure.

5. Results

a. Asset structure

Table 3 confirms that the most important change in terms of assets, using the FAUSA, has been the dramatic increase of 'unidentified miscellaneous assets.'

[Table 3]

Until 2010, the total financial assets not including miscellaneous items have, in fact, remained lower as a proportion of total assets than the decade of the 1960s. Figure 1 analyzes the evolution of those assets. While 'money market fund shares' display a small rise, it can be clearly observed that the major increase in 'financial assets less unidentified miscellaneous

[4] See for example Ford Annual Report (2015, p. 106) , Volvo Annual Report (2015, p. 80) or General Electric Annual Report (2014, p. 128).

assets' in fact derives from direct investment abroad which goes from 2% in 1946 to 12% in 2015. The question is, then, about the ultimate goal of that FDI.

Cross-border investment is considered as direct investment in international statistics when the ownership stake is at least of 10 per cent. With that threshold it is assumed a lasting interest with the intention to exercise control over the enterprise. This is how it is distinguished from foreign portfolio investment, much more related to short-term holding or speculation on foreign equity market. Financial studies also consider that threshold as an indication of exercising control over the company (see for example La Porta, Lopez-de-Silanes, & Shleifer, 1999; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002). Moreover, 84.7% of all US foreign affiliates are majority owned (Fiebiger, 2016, p. 5) and scholars who discuss the drivers of FDI usually characterize them either as market-seeking, efficiency-seeking or resource-seeking (Milberg & Winkler, 2013, p. 132); clearly more related to real or regular activities of the firm rather than financial purposes. In a nutshell, this indicates that financial speculation does not seem to be behind the increase in FDI.

On the other hand, not speculating on foreign equity market does not mean that other types of financial income might not be pursued. As it is indicated in Figure 2, once we take into account the destination al FDI, especially in the last couple of years, it is clear that tax havens have been featuring prominently. Although the motives are usually associated to tax avoidance (Desai, Foley, & Hines Jr, 2006) we will later evaluate in Section 5b if some source of financial income is also at stake.

[Figure 1, Figure 2]

We now move to 'unidentified miscellaneous assets'. Crotty (2005, p. 104) stated that, at the time of his research, even Federal Reserve economists didn't know which kind of assets were in that category or even if they were financial at all. The FED (2017) later clarified the definition:

> Unidentified miscellaneous assets, which is calculated residually, may include such items as deferred charges and prepaid expenses, goodwill, other intangible assets, and intercorporate holdings of corporate equity. Intangibles can include such items as copyrights, patents, distribution rights and agreements, easements (gas, water, and mineral rights), franchises and franchise fees, trademarks, and client lists.

It is worth noting that almost all these assets are intangibles rather than financial.[5] Consequently, sometimes they have been excluded from the broader list of financial assets (Doepke & Schneider, 2006). Among unidentified miscellaneous assets, goodwill has a relevant preponderance (Davis, 2016, p. 117). This asset is defined as the amount that an acquiring company pays for a target company over the target's book value (IFRS 3 — Business Combinations). Theoretically, it is explained by the routines, procedures, cultures, etc. which are not individually identifiable but add to company's value. In practice, given the difficulties to measure such items, the amount of goodwill depends on the fluctuations of the stock market, especially on the bull process verified in the weeks preceding M&A (Serfati, 2008). Nevertheless, the fact that goodwill has increased as a proportion of total assets has to be interpreted cautiously. This is due to the fact that goodwill is valued through impairment (IAS 36 — Impairment of Assets). Contrary to amortization, by which assets' value is reduced according to a specific schedule, impairment implies that the value of an asset, in this case goodwill, is decided by a test that compares the total profit expected to be generated by that asset with its book value. Therefore, goodwill does not necessarily disappear from the accounts throughout time.

[5] "Financial assets are entities over which ownership rights are enforced by institutional units, individually or collectively, and from which economic benefits may be derived by their owners by holding them, or using them over a period of time; they differ from other assets in the System of National Accounts in that there is a counterpart liability on the part of another institutional unit (except for monetary gold and Special Drawing Rights (SDRs)" (Organisation for Economic Co-operation and Development, 2001)

We confirm the more relevant role of intangibles using Compustat. Figure 3 shows that the most prominent change in the asset structure of NFCs is the increase in intangibles ('goodwill' + 'other intangibles') which, starting from less than 0.5% in 1961 reaches around 25% in 2015. Since it started to be computed, 'goodwill' has been, in most of the years, around 50% of total intangibles (and closer to 60% since 2002). The remaining intangibles are defined by Compustat as 'other intangibles' which, as in the case of 'goodwill', have also little to do with financial assets. Most of the assets from 'unidentified miscellaneous assets' besides goodwill, such as patents, copyrights and licenses, are included in 'other intangibles'.

[Figure 3]

However, the figure still portrays an increase in some financial assets. 'Cash and short-term investments' display a U-shaped curve starting in 10% of total assets in 1961, then falling to 5% in the beginning of the 1980s before increasing back to 10% in the 1990s where they have since remained. 'Other assets' have also increased, although this is a residual category that includes different types of assets.[6] 'Other investments and advances' have also increased from 2% in 1961 to 5% in the present. 'Receivables' present a discrete jump in 1988, from 11.8% to 17.5% not due to a change in NFCs' strategies but because of a change in regulation. In October 1987, the Financial Accounting Standards Board issued its Statement No. 94 which tried to reduce the off-balance sheet financing by requiring the consolidation of all majority owned subsidiaries in financial statements (Wiedman & Wier, 1999). Parent companies had off-balance subsidiaries in order to transfer corporate receivables and leases, reporting only their net asset position in their own balance sheet improving their debt/equity, return on investment and receivables turnover ratios (Cormier, Andre, & Charles-Cargnello, 2004). Nevertheless, the proportion of 'receivables' has been decreasing since the discrete change.

[6] Although normalizing by sales, Davis (2016) also shows that the financial assets that increase are 'cash and short-term investments' and another asset that she defines as 'other financial assets'. However, as shown in her appendix, 'other financial assets' are 'other current assets' (Compustat item 68) + 'other assets' (Compustat item 69). These are not necessarily financial assets. In Figure A1 in our Appendix we also normalize by sales and the patter displayed by different assets is the same as normalizing by assets.

It is also important to remark that Compustat presents consolidated information and therefore we are not able to distinguish between parent and subsidiary information (i.e. it is not possible to assess the stock of FDI like we did in Figure 1). Being consolidated, on the other hand, implies that all subsidiaries are included, even the financial ones.

On the other hand, if we compare the asset structure of NFCs and financial corporations (FCs) we can see in Figure 4 that for the latter: (1) the amount of 'cash and short-term investments' has decreased, instead of increased, over practically the whole period; (2) the main component is 'receivables' - more than 40%[7]; (3) 'Other investments and advances' comprise a higher proportion of assets.

[Figure 4]

Figure 4 also allows to calculate a rough benchmark in order to identify which NFCs resemble more the structure of FCs. Their two most important assets are 'receivables' and 'other investments and advances', which average 46% and 23% of total assets respectively. The former is a particularly important asset in the *financial turn of accumulation* hypothesis since it represents the monetary obligations owed to a company by its debtors or customers. We take an arbitrary lower percentage for NFCs and identify three cases which resemble the structure of FCs: a) NFCs with more than 40% of 'receivables' over total assets, b) NFCs with more than 15% of 'other investment and advances' over total assets and c) NFCs with more than 35% of 'receivables' over total assets and 10% of 'other investment and advances' over total assets. Figure 5 shows the results: since the 1980s, an average of 7% and 5% of listed NFCs accomplish criteria a) and b) respectively, although with a clear lower trend. Moreover, only an average of 27 NFCs since 1980 meets criteria c) -less than 1%. In the case of FCs, 50%, 58% and 28% respectively accomplish those criteria since the 1980s.

[Figure 5]

[7] And it also presents a discrete jump in 1988, which confirms the fact that, both for FC and NFC, the increase was due to the aforementioned change in regulation.

In a nutshell, we consider that the validity of the *financial turn of accumulation* hypothesis is weakened once we take into account that: a) some of the alleged financial assets which also showed the highest growth are, in fact, FDI, goodwill and other intangibles, b) the most important financial asset for FCs, 'receivables', has been decreasing for NFCs at least since 1988 and c) the number of NFCs with significant proportion of the two most important assets for FCs is less than 1% and has been decreasing since the beginning of the 1990s. Moreover, even though some clear financial assets have increased, as in the case of 'cash and short-term investments',[8] it does not necessarily mean that NFCs are making profits out of them. The same claim can be applied to less clear cases such as FDI. To effectively sustain this kind of argument we would need evidence showing to what extent financial income has displaced more 'traditional' sources of income. This requires, in other words, to examine the income statement of NFCs – the topic we analyze next.

b. Sources of income

Figure 6 illustrates the dramatic differences that arise depending on the denominator chosen to measure the relevance of financial income. On the right side we follow Krippner's methodology and use cash flows (profits + depreciation allowances), on the left side we use revenues. It confirms the overestimation bias due to comparing a pure revenues stream with a net-of-cost measure. In Figure A2, in the Appendix, we compare two net-of-cost measures: financial profitability over total profitability. Although results are telling (the ratios tends to be negative for the whole period and worsens since the 1980s), they have to be interpreted cautiously since we compute all financial costs rather than those related only to financial activities.

We will rather focus on the left side of Figure 6 which still tells a completely different story than the *financial turn of accumulation* hypothesis regarding the importance of that type of revenues on the general income structure of NFCs. Even considering dividends from foreign

[8] The increase in money market funds shares we saw in Figure 1 is included in this broader category.

and domestic corporations (which are not necessarily financial), this type of income is usually below 2.5% and only in 2005 it surpassed the barrier of 3% due to a tax holiday on repatriated profits. If we only take gains on capital and noncapital assets and interests, the aggregate is usually below 2%. Moreover, financial income presents a clear upward trend until the beginnings of the 1990s, oscillates until 2005 and then dramatically declines (this also happens using Krippner's methodology). The last two facts, but especially the decline are contradictory with the fact that the whole period belongs to what has been regarded a finance-led capitalism (Guttmann, 2016).

The main component of financial income is always interest income. Fiebiger (2016, p. 11) shows that both interests received and paid share practically the same trend, which is also similar to the evolution of the interest rate. Therefore, the evolution of the main component of financial income seems to be more a by-product of monetary policy rather than an active speculative activity carried by NFCs.

[Figure 6]

Figure 7 shows the joint evolution of financial income and financial assets using Compustat in order to study whether or not there is any link among them. We measure the evolution of financial income using interest income and this is partly why the percentage is lower than in the SOI. Compustat does not provide consistent information on capital gains and we are not computing dividend income due to the reasons provided in Section 4 (basically, that there is no reason to consider it as financial income). In any case, even if we take into account dividends, the percentage does not surpass the 1% threshold in any year. Regarding capital gains, in Figure 6 we saw they play a minor role being interest income the most important. Taking all of this into account makes it valid to focus on interest income.[9] Figure 7 points out, firstly, the fact that interest income is decreasing simultaneously with 'cash and short-term investments' increase which is a clear indication that the growth in the latter should not be linked to the

[9] In any case, in Figure A3 in the Appendix, we show that the evolution of financial income in SOI and Compustat, with and without dividends, is very much alike.

quest for financial profits. Second, both types of investments and advances have remained fairly constant whereas financial income was decreasing. Just receivables display a clear downward trend as well.

[Figure 7]

Moreover, also using Compustat, we are able to identify the number of firms for which interest income represents a significative source of income (Figure 8). We take three arbitrary thresholds: 10%, 20% and 30%. The fact that, since the 1980s, only an average of 2.1% and 1.6% of firms surpass the last two thresholds supports the fact that, if valid, the *financial turn of accumulation* hypothesis only applies for a small number of firms which is also decreasing in the last two decades.

[Figure 8]

Despite the evidence we have provided in order to reject *financial turn of accumulation* hypothesis, there is a certain probability that an important proportion of financial income might not be specified as such due to the fact that firms with a financial division consolidate its information with regular income. We face this potential issue using CCM database which has a specific item for it ('finance division revenue'). When we compute income from financial divisions we obtain an average of 0.5% of revenues for the whole sample. Although the number is minor, it is nevertheless impressive considering that only 34 corporations report income from financial divisions. It is in many of these cases (but not in all of them) where financial income represents a significant proportion of total income (Table 4). Moreover, all these NFCs are big: in 2010, 90% of them were in the upper quartile, 62% in the upper decile, 38% in the top 5% and 24% in the top 1%.

[Table 4]

Having analyzed the income structure of NFCs we have presented data that, as in the case of the asset structure, tend to deny the *financial turn of accumulation* hypothesis. In particular we showed that: (1) financial income is a small part of the aggregate income structure of NFCs,

even after adding income from finance divisions; (2) financial income has stopped increasing and even declined in a period characterized as financialized; and, finally, (3) financial income represents a significant income for a small and decreasing number of firms since the beginnings of the 2000s. In the next section, we study the remaining financial statement: the cash flow statement of NFCs.

c. Cash Flow Structure

The cash flow statement is a useful tool for assessing the sources (Figure 9) and uses (Figure 10) of funds. In terms of the sources, 'net increase in long term debt' has been maintained as a permanent positive source of income, growing especially in moments of lower income from regular operations. This last item, until 2002, had a negative trend as a source of income, increasing later. The category 'other funds from operations' has also increased during the period.

[Figure 9, Figure 10]

Regarding the uses of funds, one of the most prominent changes is the decrease in capital expenditure across the period from 77% of total funds in 1977 to 34% in 2016. This decline was matched, as a counterpart, by an increase in the purchase of common and preferred stock from 1.5% in the beginnings of the 1970s to 20% in 2016 (and a reduction in the relative importance of dividends as a mean of distributing value to shareholders) along with acquisitions averaging 13.3% of total funds since mid-1980s.

Regarding financial investments, their proportion is low: (1) 'net increases in investments'[10] has an average of 3.7% (and started the sample with 3.5%), (2) 'other investing activities' displays an average of 2.5% and, finally, (3) 'changes in cash and cash equivalents' alternated positive and negative values with an average of 2.6% and a period of systematic higher values

[10] We take the net value (difference between 'increase in investments' and 'sale of investments') because, due to the Statement No. 94 in 1988, the values of each them rise separately but the difference remains constant. 'Increase in investments' goes from 4.7% in 1987 to 25.6% in 1988 while 'sale of investments' jumps from 2.6% to 24.4%. 'Net increase in investments' includes increase in long-term receivables, increase in investments in unconsolidated subsidiaries and long-term investments combined with short-term investments.

(1996-2005) in which it reached 13% in 2003. Therefore, Figure 10 does not show NFCs actively engaging in financial investments.

To conclude, this section confirms the trends we found above. Firstly, increases in acquisitions match increases in goodwill. Decreases in capital expenditure explain the decrease in net property, plant and equipment and positive sustained values for some financial categories might explain the increase in cash and short-term investments. Moreover, the fact that financial investments are not a major use of funds is conformant with the low proportion of financial income relative to total income. Finally, permanent positive values for net long-term debt issuance explains the increase in the liabilities of NFCs as pointed by Davis (2016, p. 128).

So far, we have presented comprehensive evidence pointing towards the rejection of the *financial turn of accumulation* hypothesis as an aggregate trend among NFCs. However, there might still be the case that the aggregate data we presented hides significant variation across firm size and sector. In the next section we perform the same analysis we have done so far, this time for different sizes of NFCs.

6. Size analysis

In order to analyze size differences we use the SOI and Compustat. Figure 11 shows the asset structure of different sizes of firms.[11] A couple of trends can be clearly distinguished. Starting from the lowest percentiles, all firm sizes show a clear increase in 'cash, government obligations and other current assets' met mainly by a decrease in 'notes and accounts receivables less reserves for bad debts' and also 'inventories'. In these segments, 'depreciable assets less accumulated depreciations', 'other capital assets less reserves' (which includes intangibles) and 'other investments and loans' have remained fairly constant.

This picture changes dramatically for the upper percentiles, especially within the top 1%. Firstly, the decrease in 'depreciable assets' as a percentage of total assets is concentrated in

[11] The percentiles are not arbitrary but based on how the SOI provides information (i.e. almost fixed categories for asset size during the whole period). Although it is not possible to distinguish percentiles in the lower 60%, it presents a great versatility for the upper ones.

the upper segment of the distribution, mainly in the upper 0.1% but especially in the upper 0.05%. This group also presents other interesting features. It is the only one in which there is no increase in 'cash, government obligation and other current assets'. Moreover, it is also the only where we verify an increase in 'other investments and loans'. This category is defined by the SOI as generally including:

> Long-term nongovernment investments and certain investments for which no distinction could be made as to their current or long-term nature. Examples of non-government investments included stocks, bonds, loans to subsidiaries, treasury stock reported as assets, and other types of financial securities. (Internal Revenue Service, 2013)

[Figure 11]

The definition is very broad and may include both financial and nonfinancial assets (also related to the international activities of NFCs). As we did in previous sections we are able to verify whether these 'other investments and loans' are related or not to a flow of financial income (Figure 12).[12]

We show, for each percentile, the proportion of financial income over total income as we defined it in Section 4. For the upper 0.1% and especially for the 0.05%, financial income has increased as a percentage of income. Yet, the percentage does not surpass the 3.5% level for biggest firms and 1.4% for the 0.05%-0.1% segment. Figure 12 also allows us to check whether the increase in more clear financial assets -'cash, government obligation and other current assets'- in other firm sizes was associated with an increase in financial income. For the 1%-10% and 10%-20% segments financial income was higher in 1961 and 1962 compared to 2004-2013. Only in the 20%-40% and 40%-100% segments we observe some years in the recent period with higher financial income. However, it is never higher than 0.3% for the former and

[12] The SOI only presents the disaggregation of income by size for 1961, 1962 and 2004-2013. That's why we take those years.

1% for the latter. These general trends are maintained also for the manufacturing sector (Figures A4 and A5 in the Appendix).

[Figure 12]

Finally, Figure 13 shows selected assets of NFCs belonging to the top 1% and lower 50% in asset size from Compustat. Differences are telling: even if in both cases a decrease in 'net property, plant and equipment' is verified, the biggest cut is experienced by the top 1%. The highest increases in 'other intangibles than goodwill' and 'goodwill' are also verified for this category. On the other hand, the most dramatic change in 'cash and short-term investments' happens for the lower 50%. This result is consistent with Figure 11 and confirms that, even for listed firms, the highest increase in liquid assets is verified for the smaller firms.

[Figure 13]

7. Discussion

As we mentioned in Section 2, the alleged movement to finance was in a hostile context for US NFCs. Compared to the "relatively quiet and uncompetitive '60s" (Shleifer & Vishny, 1991, p. 54), US corporations in the beginnings of the 1980s faced a number of major economic challenges: high inflation, high interest rates, low profits and increased foreign competition. Due to inflation, corporations' real assets (i.e. property, plant, equipment) increased in value while high interest rates left corporations undervalued in the stock market (Fligstein & Markowitz, 1993). Moreover, at that time, stock market valuation suggested that in many cases the individual parts of the corporation were worth more than the combined entity (LeBaron & Speidell, 1987)[13].

In this situation, returns for shareholders were relatively low (Zey & Camp, 1996). However, contrary to the dispersal which had prevailed in previous decades, shareholders were increasingly organized in the form of pension and investment funds, some of them being highly active. In this way, they could exert pressure through the board of directors. Management also

[13] This has been termed as the "diversification discount" (Rajan, Servaes, & Zingales, 2000).

felt pressure through leveraged buyouts carried out by corporate raiders (Useem, 1996). This gave rise to two broad changes in corporate governance regimes: firstly a move to financial conceptions of the firm, according to which the company is a moldable set of assets, and secondly an emphasis on shareholder value maximization, which guides management to maximizing short-run returns on those assets (Fligstein, 2002; Lazonick & O'Sullivan, 2000).

In response to this new context, US NFCs underwent several changes. First, many corporations were taken over, broken up and refocused on fewer activities, especially their core competences (Prahalad & Hamel, 1990). Large firms were in the 1990s approximately half as diversified as they were in the 1980s (G. F. Davis, Diekmann, & Tinsley, 1994). For a sample of large acquisitions made between 1971 and 1982, Kaplan and Weisbach (1992) find that by the end of 1989, acquirers had divested almost 44% of the target companies. Contrary to the wave of mergers in the 1960s and 1970s, takeovers in the 1980s tended towards consolidation and specialization. They were characterized in some cases as correctives to the previous wave of mergers (Martynova & Renneboog, 2008; Shleifer & Vishny, 1991). Moreover, this new wave of acquisitions was able to take place because Reagan's antitrust policy allowed practically any type of merger (G. F. Davis et al., 1994).

Increased pressure to maximize shareholder value was also transmitted through the introduction of new technologies, downsizing their workforce and offshoring (Fligstein & Shin, 2007; Milberg & Winkler, 2013). As a consequence, transnational NFCs increasingly redefined their core competences to focus on innovation, product strategy, marketing – in general higher value added activities - while reducing direct ownership of non-core activities (i.e. those associated with lower value added) (Gereffi, Humphrey, & Sturgeon, 2005). Moreover, economic globalization, technological innovation and deregulation triggered another merger wave in the 1990s, this time global in dimension, with the European and Asian takeover market becoming more important and cross-border transactions growing substantially (Martynova & Renneboog, 2008). After the last wave of mergers and acquisitions, the resulting

higher concentration along with the growth in intangible assets were considered to enable technological barriers that limit competition among firms and, therefore, create monopoly rents (Kurz, 2017; Pagano, 2014). Simultaneously, multinational NFCs have been implementing tax avoidance strategies through a variety of ways such as manipulating transfer prices, internal loans from affiliates in low tax countries to those located in high tax countries and assigning common expenses such as R&D to high tax countries (Huizinga & Laeven, 2008).

Our results not only show that, for the aggregate, the *financial turn of accumulation* hypothesis does not hold, but also points towards those other strategies followed by NFCs. In terms of assets, the biggest increase was verified in 'unidentified miscellaneous assets' in which 'goodwill' has a dominant role. 'Other intangibles' such as patents, copyrights and licenses are also part of that category and partly reflect the movement towards higher value added activities. Of the rest of the financial assets that can be identified, it is FDI that demonstrates the highest increase. Strikingly, neither intangibles (goodwill and other intangibles) nor FDI support *financial accumulation* while, in fact, both of them may indicate other changes experienced by NFCs: M&As, reorientation towards core activities, tax avoidance and offshoring respectively.

This does not mean that no financial asset has increased in proportion, as is the case for 'cash and short-term investments' since the 1990s. However, the fact that NFCs are holding a higher proportion of cash and short term investments is not related to an increase in the flow of financial income but to other motives. For example, corporate finance literature identifies different groups of answers for this phenomenon such as growth opportunities (Fazzari, Hubbard, Petersen, Blinder, & Poterba, 1988; Opler, Pinkowitz, Stulz, & Williamson, 1999), riskier cash flows (Acharya, Almeida, & Campello, 2007; Bates, Kahle, & Stulz, 2009), tax costs associated with repatriating foreign income (Foley, Hartzell, Titman, & Twite, 2007), R&D activities (Brown & Petersen, 2011; Pinkowitz, Stulz, & Williamson, 2012) and agency issues (Fama & Jensen, 1983; Jensen & Meckling, 1976). For the latter, in sharp contrast to the

financialisation theory, the accumulation of cash and liquid assets is regarded more as wasted resources rather than profitable investments. In relation to this literature on cash holdings, our results point towards the direction of tax motives but also riskier cash flows and uncertainty since the largest increase in liquid assets is verified for smaller firms.

The analysis in terms of uses of cash does not support either the *financial turn of accumulation* hypothesis. Financial investments represent a relatively minor and constant use of cash over the period. This is a clear indication that financial investments have not displaced capital expenditures in terms of use of funds or, what is the same, that real investment has not been *crowded-out* by financial investment.

This finding is not entirely inconsistent with the financialisation literature. Most econometric studies, rather than evaluating the effect of financial investment as determinants for capital expenditures, have tested the impact of interest income over physical investment. Negative and significant values of the estimated parameters are thus interpreted as a proof of the turn to financial accumulation (Hecht, 2014; Orhangazi, 2008; Stockhammer, 2004) even though liquid financial assets are found to have a positive effect on investment when they are included (Davis, 2017; Hecht, 2014). Davis (2017) interprets these positive results as due to the greater flexibility provided by liquid financial assets in order to support real investment, and the possible complementarities between the financial and nonfinancial components of their business (for example, store-issued credit cards supporting the sales of non-financial products). Without carrying an econometric analysis, our results also go in the direction of an absence of crowding-out.

8. Conclusion

This paper has contributed to the literature on the financialisation of NFCs by providing an in-depth empirical analysis of the dynamics it involves in the USA. We identified that the financialisation of NFCs is usually applied to two different phenomena: the primacy of

shareholder value orientation and the engagement of NFCs in financial activities. The engagement can be, at the same time, of two types: one related to financial payouts and another related to financial income obtained due to the increased acquisition of financial assets. Our primary concern has been to scrutinize the empirical evidence regarding the second type of engagement which we defined as the *financial turn of accumulation* hypothesis. The main contribution of this paper has been to provide empirical evidence for the aggregate of NFCs (but also for different sizes considered on their own), that rejects that hypothesis.

The evidence traditionally used in the literature to sustain the *financial turn of accumulation* hypothesis usually shows an increase in the financial assets held by NFCs along with higher proportion of financial income. However, in terms of assets, one of the main changes has been the growth of goodwill. In the FAUSA, this asset is part of a miscellaneous category classified as financial even though most of their assets are intangibles. Foreign Direct Investment is another asset which has increased and is considered as financial by the FAUSA although it should not be necessarily considered as such. Far from supporting the *financial turn of accumulation* hypothesis, the increase in intangibles in general, goodwill in particular, along with FDI (and its location) may indicate other paths followed by US NFCs. To our knowledge, these are the refocusing in higher value added activities, M&As, tax avoidance and internationalization.

In terms of financial assets, only 'cash and short-term investments' have increased since the beginnings of the 1990s. Nevertheless, the proportion of financial income over total income is fairly low and, more important, has been decreasing in the last years. 'Receivables' and 'other investments and advances' have remained fairly constant (or even decreased) while, at the same time, the proportion of NFCs with a significant amount of those assets has decreased over the past 25 years.

Apart from the *financial turn of accumulation* hypothesis, we emphasized that the introduction of shareholder value orientation as a guiding principle for management and the engagement in

financial activities through an increase in financial payouts were also part of the dynamics involved in the financialisation of nonfinancial corporations. By showing the dramatic increase in share buybacks as a percentage of use of funds we provided evidence that supports these ideas.

Looking forward, we identify some paths that would be interesting to explore. Firstly, if decreasing real investment over the last few decades cannot be explained as being crowded-out by financial-profit-seeking investment, then we are in need of new explanations. Secondly, if financial income is not a relevant source of income, then future investigations should aim to find other ways by which NFCs are able to maintain, at the same time, strategies of downsizing and distribution to shareholders, i.e. the paradox of profits without investment. Examples of these other paths are the financialisation—offshoring nexus (Auvray & Rabinovich, 2019) and market power and technological changes (Durand & Gueuder, 2018; Rikap, 2018).

A corollary of the *financial turn of accumulation* hypothesis is that NFCs are increasingly becoming or behaving as financial *rentiers* (Davis, 2016). Although our results reject the *financial turn of accumulation* hypothesis, they do not imply that no type of *rentierization* is happening regarding NFCs, but only that, if there is any *rentierization*, it does not seem to be financial. On the contrary, the growing importance of intangibles in aggregate terms points toward a type of business model that is more dependent on technological and intellectual rents, such as the case of pharmaceutical sector (Montalban & Sakinç, 2013), electronics (Dedrick, Kraemer, & Linden, 2010) or internet platforms (Haucap & Heimeshoff, 2014). This also seems an interesting path to continue.

Finally, although in this article we have shown that *financial turn of accumulation* is not a strategy followed in general, further studies should focus on the determinants of those cases in which NFCs *do* mimic FCs. In this paper we have indicated two ways in order to do that. First, it would be necessary to focus on those cases with a significant proportion of 'receivables' and 'other investments and advances'. Second, we provided a list of NFCs with

information regarding income from financial division showing that, for them, financial income plays a more relevant role.

Tables

Table 1. Financialisation of NFC literature

Paper	Shareholder value orientation	Engagement in Financial Activities: Increasing Proportion of Financial Payouts	Engagement in Financial Activities: Financial Acquisitions + Increasing Proportion of Financial Income	Other
Lazonick & O'Sullivan (2000)	X	X		
Aglietta (2000)	X	X		
Boyer (2000)	X	X	X	
Stockhammer (2004)	X	X	X	
Crotty (2005)			X	
Krippner (2005)			X	
Froud et al (2006)	X	X		
Bellamy Foster (2007)			X	
Orhangazi (2008)	X	X	X	
Milberg (2008)		X	X	
Van Treeck (2008)	X	X	X	
Dallery (2009)	X	X	X	
Demir (2009)			X	
Clévenot, Guy and Mazier (2010)	X	X	X	
Hein & Van Treeck (2010)	X	X		
Onaran et al (2011)	X	X		
Baud & Durand (2012)	X	X	X	X
Lapavitsas (2013)				X
Lin & Tomaskovic-Devey (2013)			X	
Hecht (2014)	X	X	X	
Kliman & Williams (2015)			X	
Epstein (2015)	X	X	X	
Mason (2015)	X	X		
Tomaskovic-Devey et al. (2015)			X	
Davis (2016)	X	X	X	
Seo et al (2016)	X	X	X	
Barradas (2017)	X	X	X	
Tori & Onaran (2018)	X	X	X	

Table 2. Summary of data

		Financial Accounts of the USA - Tables B.103 and L.103	Statistics of Income - Corporation Income Tax Returns	Compustat
Nonfinancial Corporations		All	All	Listed Corporations
Consolidated		Yes	Yes	Yes
Geographical scope		Domestic	Domestic	Domestic and International
Dissagregation by size		None	Up to 15 categories	Firm level information
Assets[a]	Financial	8 items	2 items	4 items
	Nonfinancial	-	2 items	4 items
	Non-Identifiable	1 item	2 items	1 item
Sources of financial income[a]		-	4/6 items[b]	2 items
Cash Flow[a]		-	-	15 items

[a] Categories used in this paper, [b] Depending on whether dividends are included or not

Table 3. Composition of assets, NFCs, 1950-2015

	50-59	60-69	70-79	80-89	90-99	00-09	10-15
Non-Financial Assets	0.778	0.754	0.740	0.693	0.600	0.536	0.530
Financial assets less unidentified miscellaneous assets	0.221	0.242	0.227	0.210	0.230	0.236	0.263
Unidentified miscellaneous assets	0.001	0.003	0.033	0.097	0.171	0.228	0.207

Note: Financial assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: Table B.103 and L.103, FAUSA.

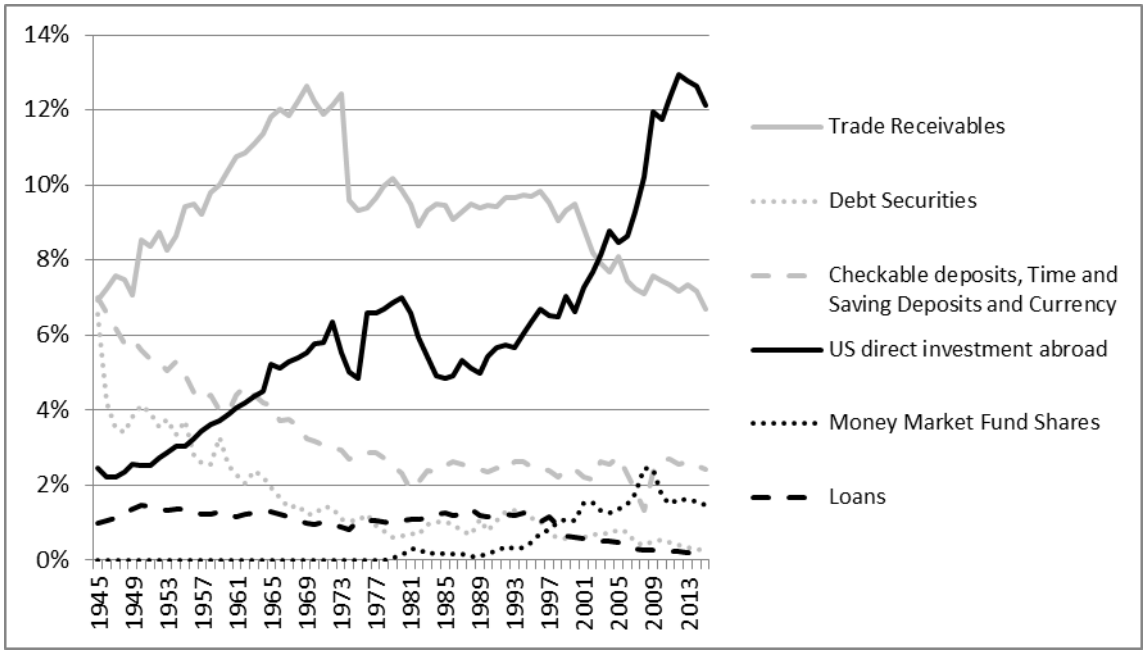
Table 4. Corporations with reported income from financial divisions and its proportion over total income

	2010	2011	2012	2013	2014	2015	2016	Average
Alliance Data Systems Corp	0.497	0.469	0.476	0.471	0.452	0.462	0.498	0.475
Altria Group Inc.	0.047	0.025	0.079					0.050
Boeing Co	0.014	0.013	0.010	0.009	0.009	0.008	0.008	0.010
Cabelas Inc	0.138	0.140	0.132	0.133	0.151	0.161	0.179	0.148
Calatlantic Group Inc	0.095	0.141	0.124	0.090	0.072	0.061	0.050	0.090
Carmax Inc	0.045	0.043	0.043	0.042	0.041	0.043	0.046	0.043
Caterpillar Inc	0.055	0.028	0.035	0.035	0.038	0.035	0.046	0.039
Cavco Industries Inc		0.085	0.101	0.092	0.097	0.083		0.092
D R Horton Inc	0.045	0.051	0.054	0.058	0.062	0.043	0.039	0.050
Eplus Inc	0.044	0.040	0.041	0.042	0.030	0.029		0.038
Ford Motor Co	0.079	0.072	0.073	0.068	0.070	0.082	0.091	0.076
General Electric Co	0.337	0.348	0.327	0.316	0.297	0.090	0.083	0.257
General Motors Co	0.022	0.028	0.032	0.036	0.050	0.061	0.074	0.043
Greenbrier Companies Inc	0.042	0.028	0.031	0.038	0.037	0.035	0.099	0.044
Harley-davidson Inc	0.142	0.124	0.116	0.110	0.107	0.116	0.122	0.119
Hovnanian Entrprs Inc	0.004	0.005	0.026	0.026	0.026	0.035	0.019	0.020
Hp Inc	0.003	0.005	0.004	0.002	0.001	0.000		0.003
Intl Business Machines Corp	0.036	0.031	0.034	0.032	0.034	0.040	0.040	0.035
Kb Home	0.041	0.013	0.049	0.047	0.063	0.059	0.052	0.046
Lennar Corp	0.137	0.130	0.125	0.114	0.130	0.132	0.118	0.126
Lithia Motors Inc	0.025	0.032	0.035	0.035	0.036			0.032
Mdc Holdings Inc			0.096	0.084	0.077	0.055	0.053	0.073
Meritage Homes Corp.							0.033	0.033
Navistar International Corp	0.018	0.014	0.009	0.017	0.014	0.014	0.022	0.015
Nvr Inc	0.022	0.020	0.022	0.020	0.017	0.020	0.021	0.020
Paccar Inc	0.074	0.054	0.057	0.061	0.057	0.056	0.063	0.060
Pitney Bowes Inc	0.118	0.115	0.101	0.120	0.114	0.114	0.107	0.113
Pultegroup Inc	0.087	0.077	0.074	0.054	0.046	0.048	0.046	0.062
Snap-on Inc	0.025	0.043	0.053	0.055	0.061	0.067	0.076	0.054
Sotheby's	0.019	0.015	0.029	0.031	0.040	0.058	0.075	0.038
Textron Inc	0.021	0.009	0.018	0.011	0.007	0.006	0.006	0.011
TRI Pointe Group Inc.						0.027	0.031	0.029
Xerox Corp	0.034	0.033	0.032	0.033	0.029	0.027		0.031
TOTAL	0.078	0.074	0.079	0.076	0.076	0.069	0.078	0.072

Note: Income from financial divisions measured as a proportion of total income. See additional details on variable definitions in Table A1.
Source: Compustat and CCM.

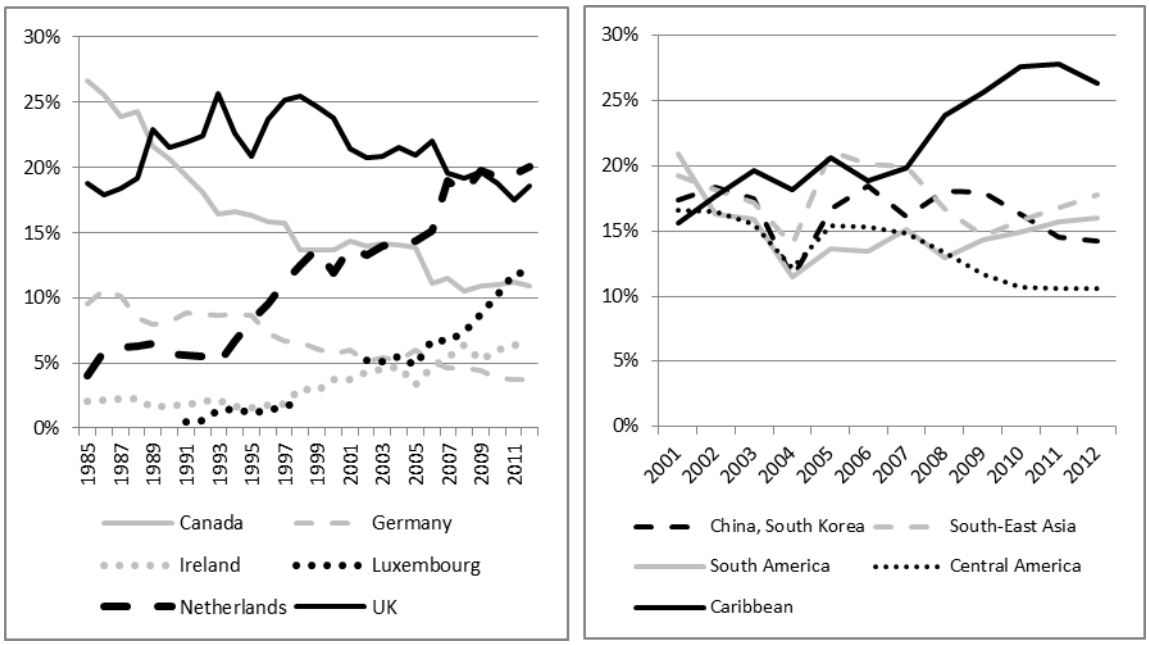
Figures

Figure 1. Selected financial assets, NFCs, 1946-2015



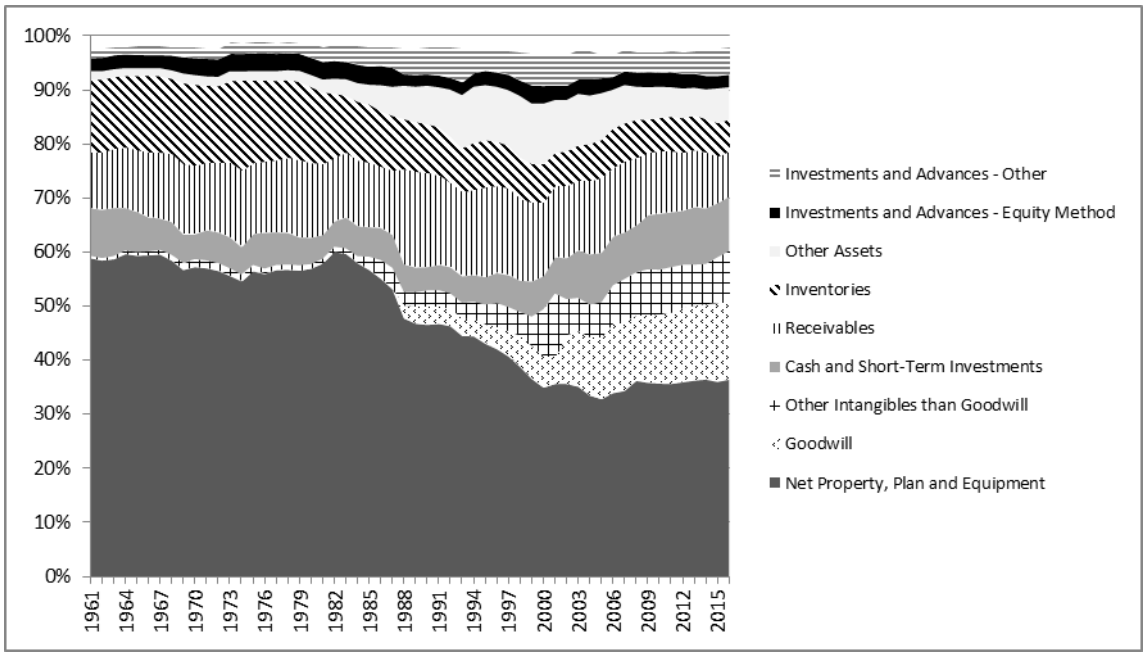
Note: Financial assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: Table B.103 and L.103, FAUSA.

Figure 2. US FDI stock in selected OECD countries, 1985-2011 (left) and selected developing countries, 2001-2012 (right)



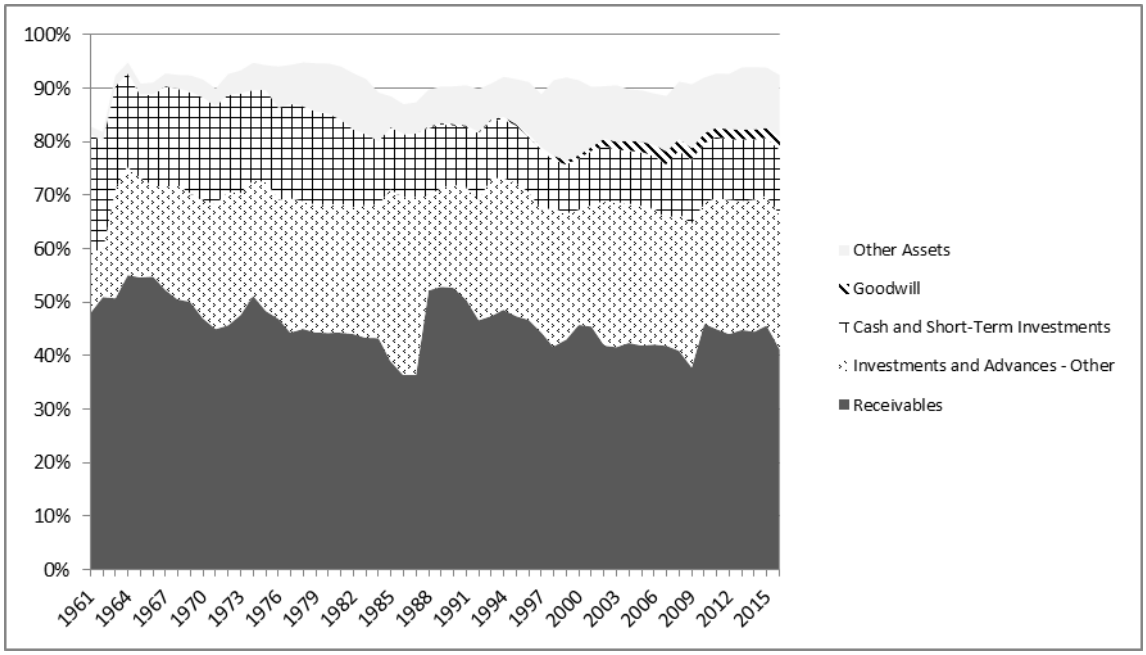
Note: Percentages calculated as a proportion of total stock in OECD countries (left), and total stock in developing countries (right).
Source: OECD and UNCTAD.

Figure 3. Selected assets, NFCs, 1961-2016



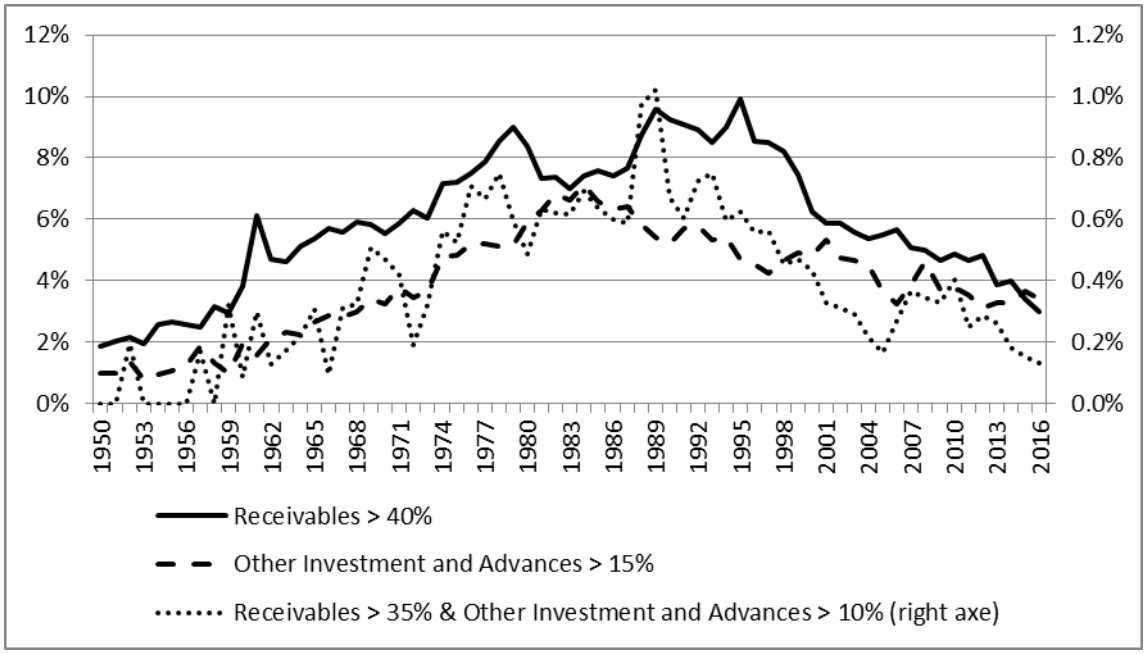
Note: Assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 4. Selected assets, FCs, 1961-2016



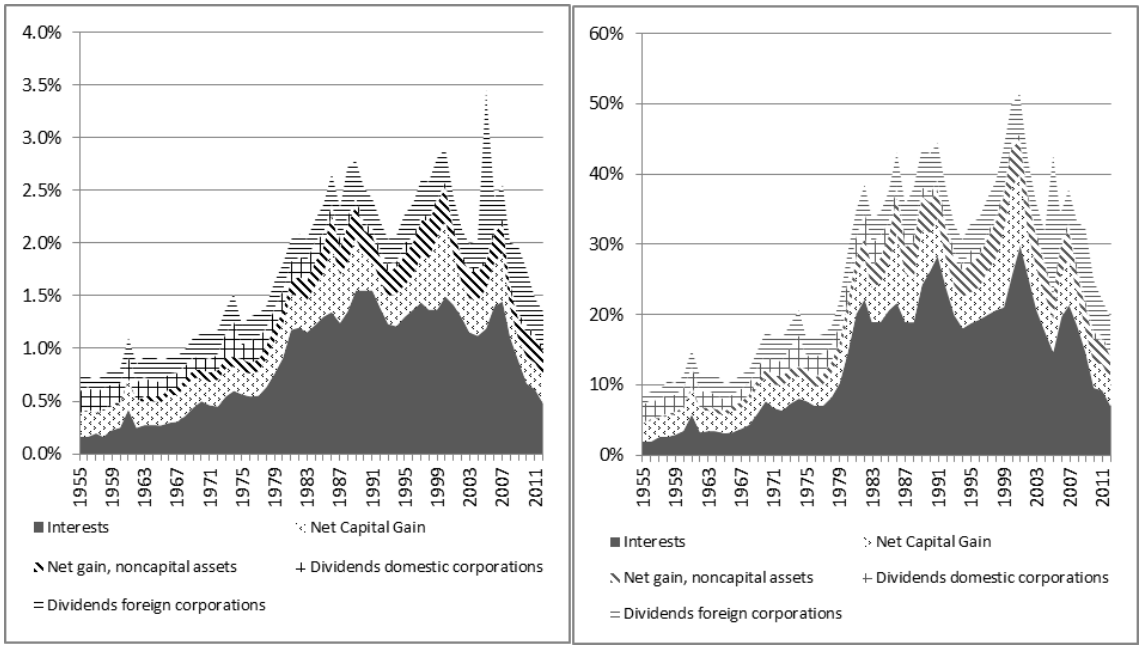
Note: Assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 5. NFCs with significant proportion of Receivables and Other Investment and Advances, 1950-2016



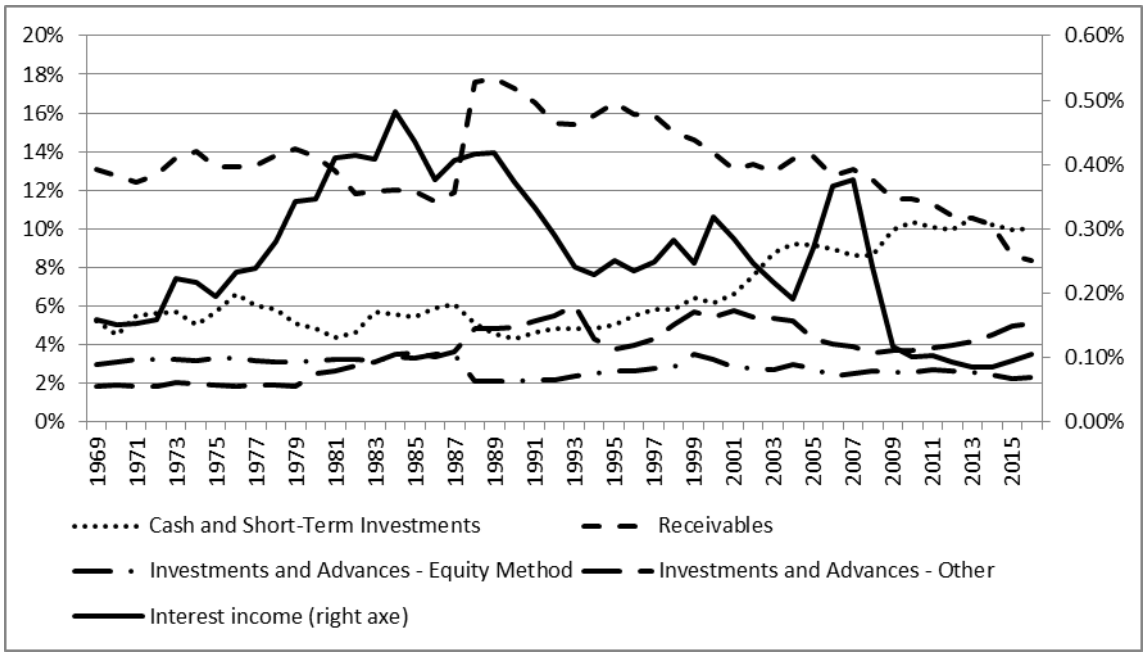
Note: Assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 6. Components of financial income relative to total income (left) and cash flow (right), NFCs, 1955-2012



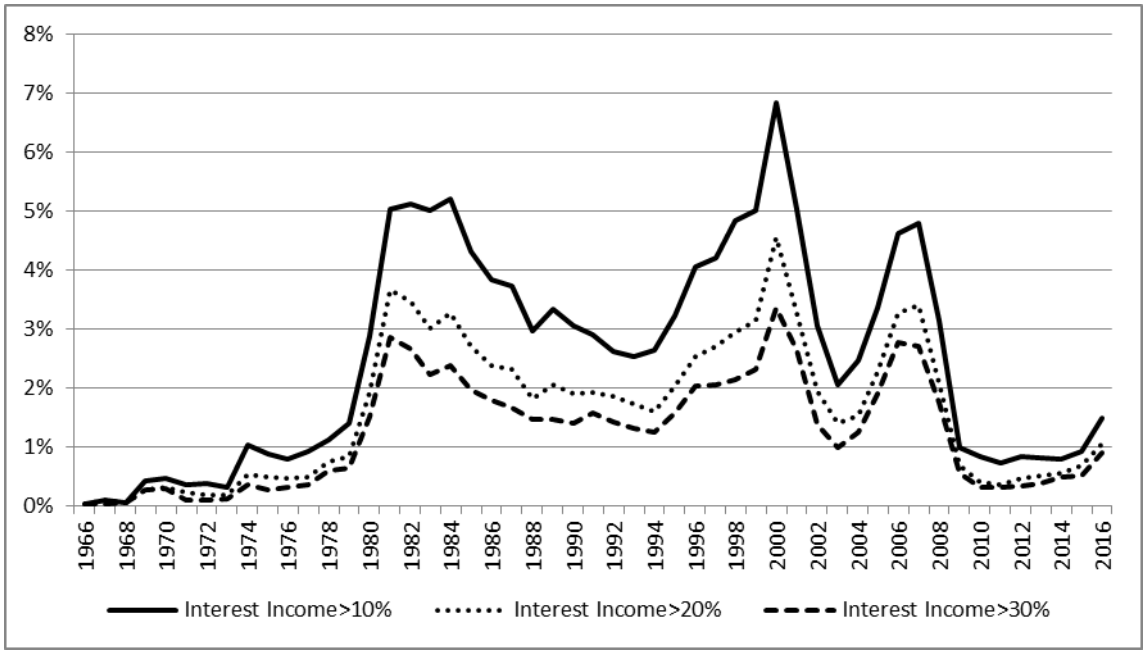
Note: Cash flow calculated as profits + depreciation allowances, following Krippner's (2005) methodology. See additional details on variable definitions in Table A1.
Source: SOI.

Figure 7. Interest income and financial assets, NFCs, 1969-2016



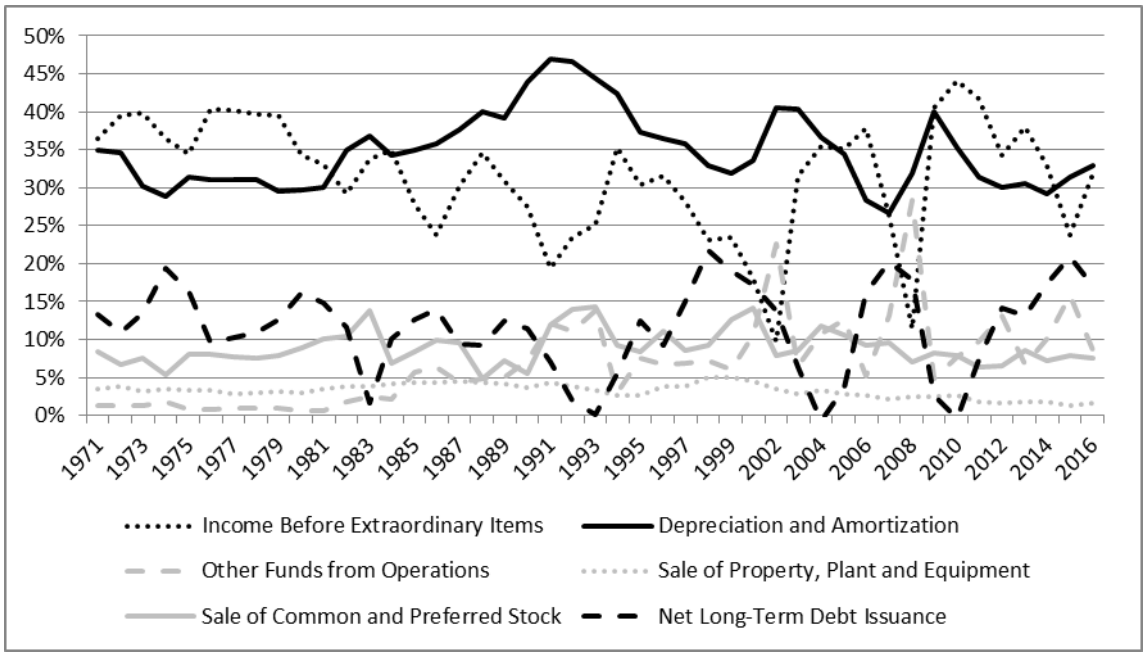
Note: Assets measured as a proportion of total assets and interest income measured as a proportion of total income. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 8. NFCs with significant proportion of Interest Income, 1966-2016



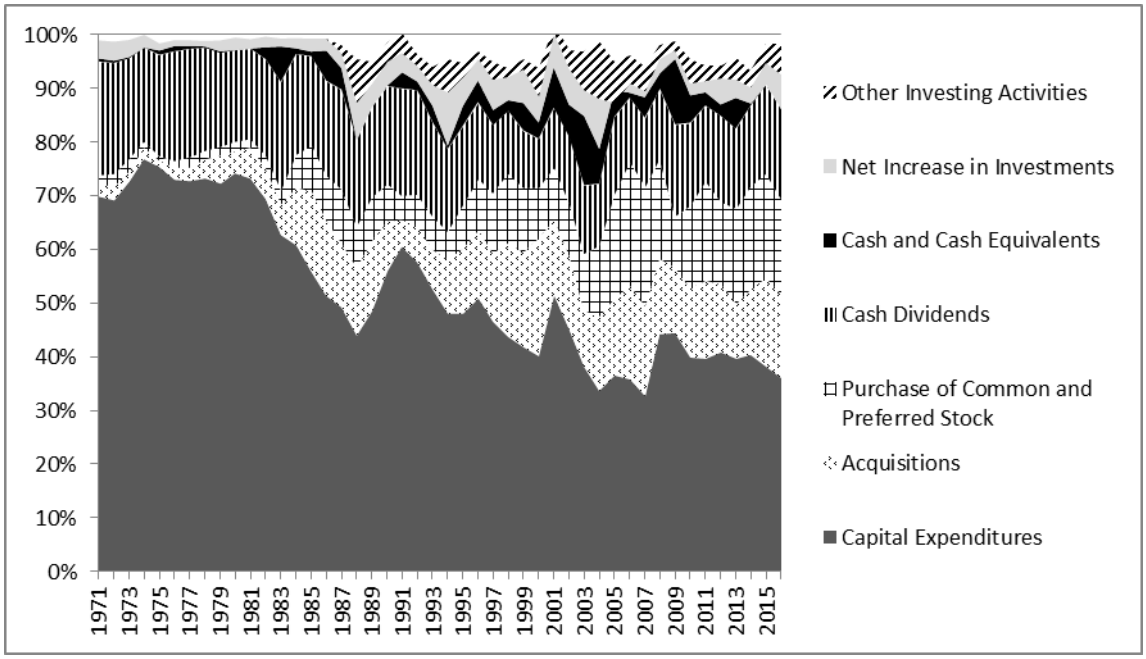
Note: Interest income measured as a proportion of total income. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 9. Selected sources of funds, NFCs, 1971-2016



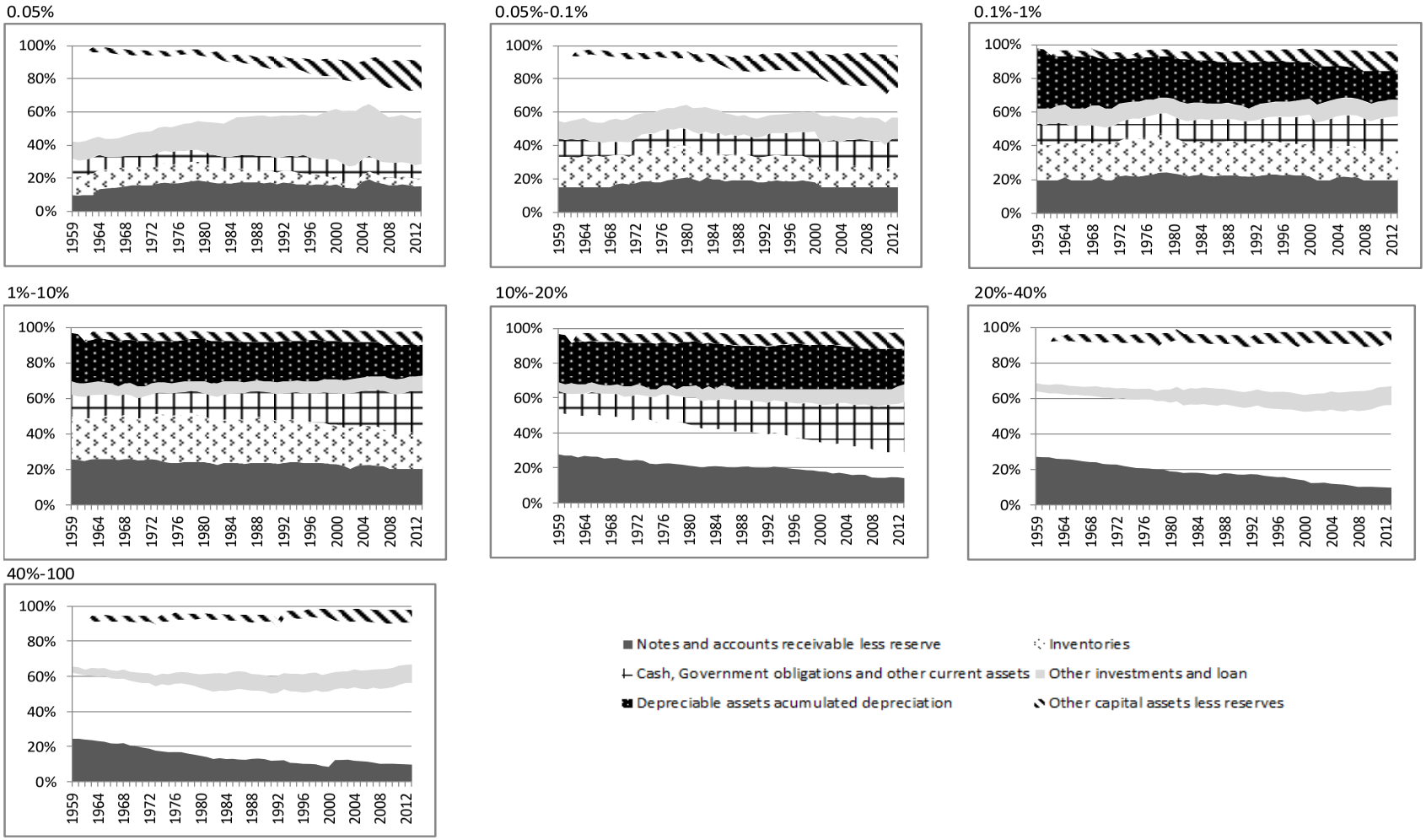
Note: Sources of funds measured as a proportion of an estimated aggregation of sources of funds. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 10. Selected uses of funds, NFCs, 1971-2016



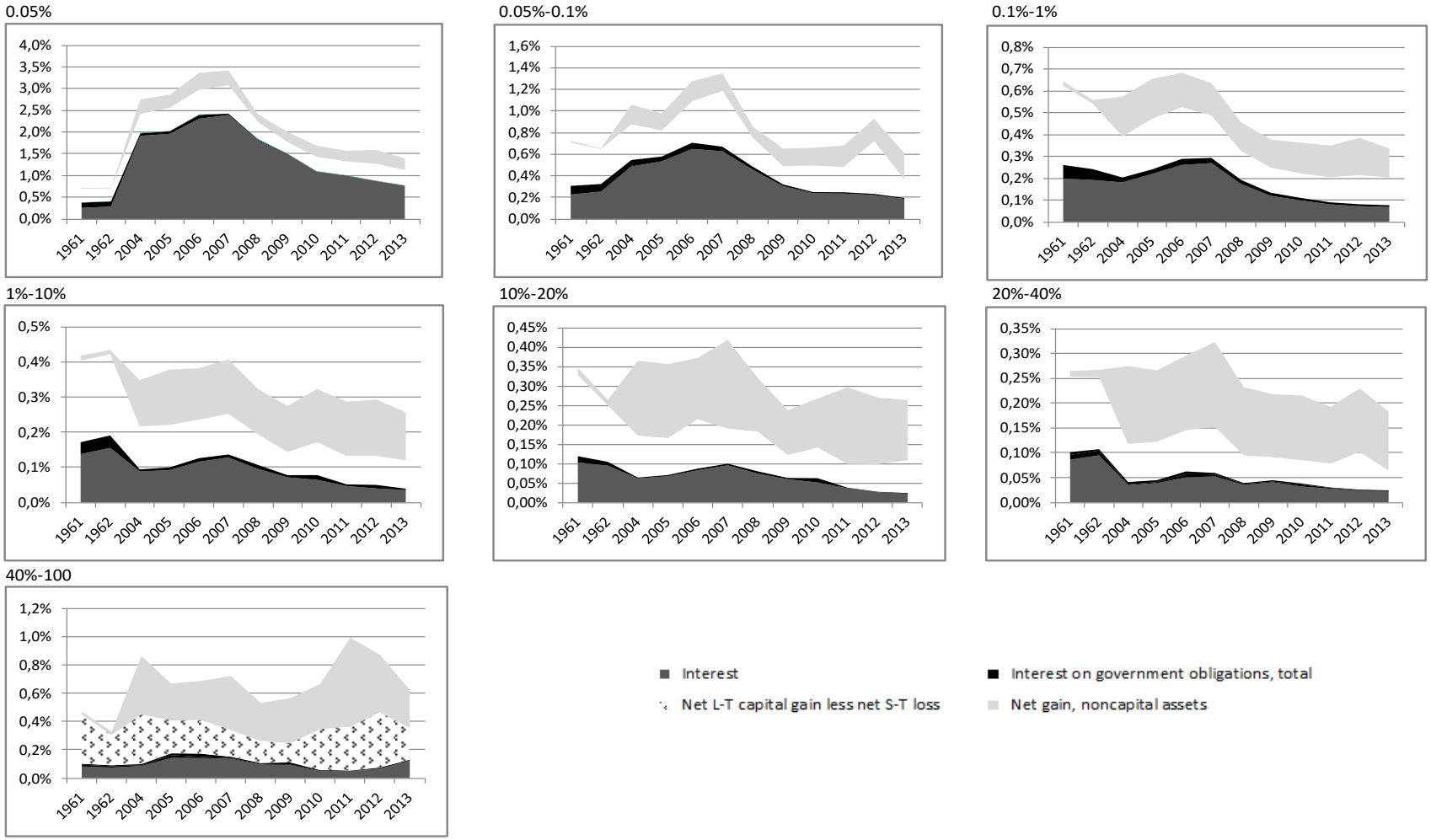
Note: Uses of funds measured as a proportion of an estimated aggregation of uses of funds. See additional details on variable definitions in Table A1.
Source: Compustat.

Figure 11. Selected assets, NFCs, 1959-2013



Note: Assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: SOI.

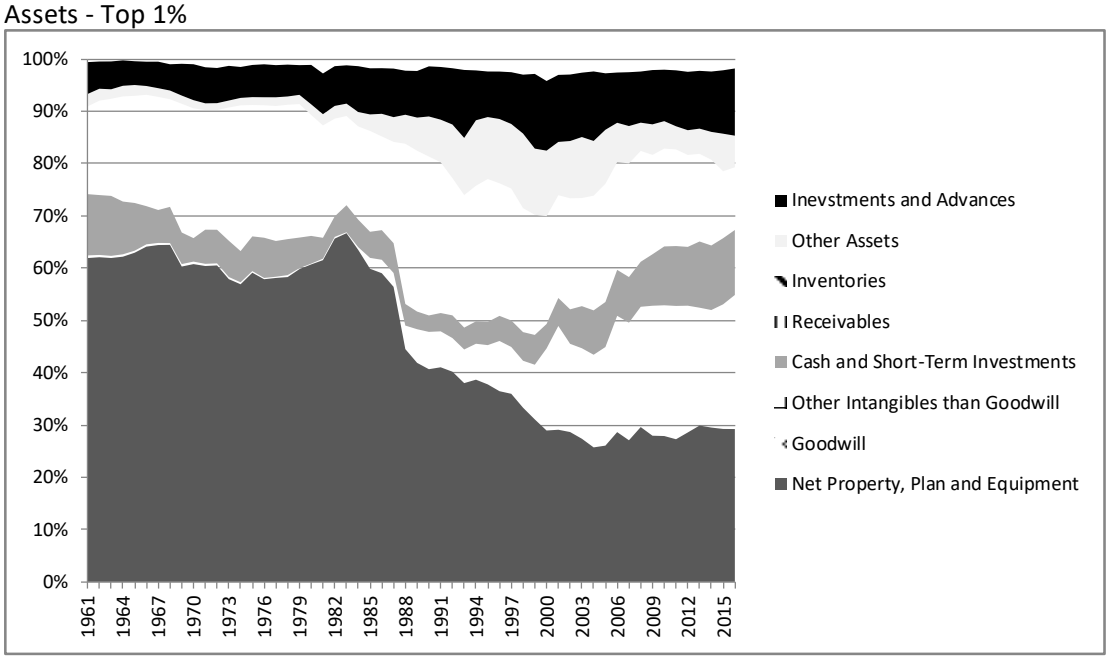
Figure 12. Components of financial Income, NFCs, 1961, 1962, 2004-2013



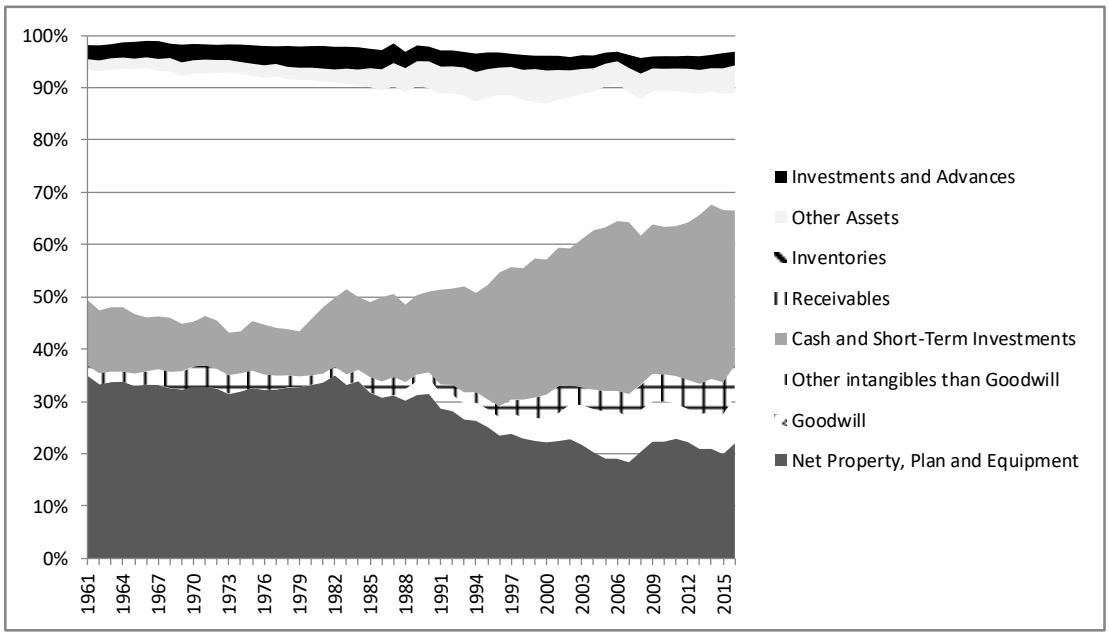
Note: Financial income measured as a proportion of total income. See additional details on variable definitions in Table A1.
Source: SOI.

Figure 13. Selected assets, NFCs, 1961-2016. Top 1% and Lower 50% in asset size

Assets - Top 1%



Assets - Lower 50%



Note: Assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: Compustat.

Bibliography

Acharya, V. V., Almeida, H., & Campello, M. (2007). Is cash negative debt? A hedging perspective on corporate financial policies. *Journal of Financial Intermediation*, *16*(4), 515–554.

Admati, A. R. (2017). A Skeptical View of Financialized Corporate Governance. *Journal of Economic Perspectives*, *31*(3), 131–150.

Aglietta, M. (2000). Shareholder value and corporate governance: some tricky questions. *Economy and Society*, *29*(1), 146–159.

Auvray, T., & Rabinovich, J. (2019). The financialisation-offshoring nexus and the capital accumulation of US nonfinancial firms. *Cambridge Journal of Economics*, *Forthcoming*.

Baran, P. A., & Sweezy, P. M. (1966). *Monopoly capital: An essay on the American economic and social order*. New York: NYU Press.

Barradas, R. (2017). Financialisation and real investment in the European Union: beneficial or prejudicial effects? *Review of Political Economy*, *29*(3), 376–413.

Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do US firms hold so much more cash than they used to? *The Journal of Finance*, *64*(5), 1985–2021.

Baud, C., & Durand, C. (2012). Financialization, globalization and the making of profits by leading retailers. *Socio-Economic Review*, *10*(2), 241–266.

Boyer, R. (2000). Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis. *Economy and Society*, *29*(1), 111–145.

Brown, J. R., & Petersen, B. C. (2011). Cash holdings and R&D smoothing. *Journal of Corporate Finance*, *17*(3), 694–709.

Christophers, B. (2012). Anaemic geographies of financialisation. *New Political Economy*, *17*(3), 271–291.

Christophers, B. (2015). The limits to financialization. *Dialogues in Human Geography*, *5*(2), 183–200.

Clévenot, M., Guy, Y., & Mazier, J. (2010). Investment and the rate of profit in a financial context: the french case. *International Review of Applied Economics*, *24*(6), 693–714.

Crotty, J. (2005). The neoliberal paradox: the impact of destructive product market competition and 'modern' financial markets on nonfinancial corporation performance in the neoliberal era. In G. Epstein (Ed.), *Financialization and the world economy* (pp. 77–110). Northampton, MA: Edward Elgar.

Dallery, T. (2009). Post-Keynesian theories of the firm under financialization. *Review of Radical Political Economics*, *41*(4), 492–515.

Davis, G. F., Diekmann, K. A., & Tinsley, C. H. (1994). The decline and fall of the conglomerate firm in the 1980s: The deinstitutionalization of an organizational form. *American Sociological Review*, *59*, 547–570.

Davis, L. E. (2016). Identifying the "financialization" of the nonfinancial corporation in the US economy: A decomposition of firm-level balance sheets. *Journal of Post Keynesian Economics*, *39*(1), 115–141.

Davis, L. E. (2017). Financialization and the non-financial corporation: An investigation of firm-level investment behavior in the United States. *Metroeconomica*, *69*(1), 270–307.

Dedrick, J., Kraemer, K. L., & Linden, G. (2010). Who profits from innovation in global value chains?: a study of the iPod and notebook PCs. *Industrial and Corporate Change*, *19*(1), 81–116.

Demir, F. (2009). Financial liberalization, private investment and portfolio choice: Financialization of real sectors in emerging markets. *Journal of Development Economics*, *88*(2), 314–324.

Desai, M. A., Foley, C. F., & Hines Jr, J. R. (2006). The demand for tax haven operations. *Journal of Public Economics*, *90*(3), 513–531.

Doepke, M., & Schneider, M. (2006). Inflation and the redistribution of nominal wealth. *Journal of Political Economy*, *114*(6), 1069–1097.

Durand, C., & Gueuder, M. (2018). The Profit–Investment Nexus in an Era of Financialisation, Globalisation and Monopolisation: A Profit-Centred Perspective. *Review of Political Economy*, *30*(2), 126–153.

Epstein, G. (2015). Financialization: there's something happening here. Political Economy Research Institute Working Paper #394.

Epstein, G. A. (2005). *Financialization and the world economy*. Northampton, MA: Edward Elgar Publishing.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law & Economics*, *26*(2), 301–325.

Fazzari, S. M., Hubbard, R. G., Petersen, B. C., Blinder, A. S., & Poterba, J. M. (1988). Financing constraints and corporate investment. *Brookings Papers on Economic Activity*, *1*, 141–206.

Federal Reserve. (2017). Financial Accounts of the United States – All Table Descriptions. Retrieved from https://www.federalreserve.gov/apps/fof/Guide/z1_tables_description.pdf

Fiebiger, B. (2016). Rethinking the Financialisation of Non-Financial Corporations: A Reappraisal of US Empirical Data. *Review of Political Economy*, *28*(3), 354–379.

Fligstein, N. (2002). *The architecture of markets: An economic sociology of twenty-first-century capitalist societies*. Princeton: Princeton University Press.

Fligstein, N., & Markowitz, L. (1993). Financial reorganization of American corporations in the 1980s. In W. J. Wilson, *Sociology and the Public Agenda* (Sage Publications, pp. 185–206). Newbury Park.

Fligstein, N., & Shin, T. (2007). Shareholder value and the transformation of the American economy, 1984–2000. *Sociological Forum*, *22*(4), 399–424.

Foley, C. F., Hartzell, J. C., Titman, S., & Twite, G. (2007). Why do firms hold so much cash? A tax-based explanation. *Journal of Financial Economics*, *86*(3), 579–607.

Ford Motor Company. (2015). Ford Motor Company 2015 Annual Report. Retrieved from https://shareholder.ford.com/investors/financials/annual-reports/default.aspx

Foster, J. B. (2007). The financialization of capitalism. *Monthly Review*, *58*(11), 1.

Froud, J., Johal, S., Leaver, A., & Williams, K. (2006). *Financialization and strategy: narrative and numbers*. London: Routledge.

General Electric. (2014). General Electric 2014 Annual Report. Retrieved from http://www.annualreports.com/Company/general-electric

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, *12*(1), 78–104.

Guttmann, R. (2016). *Finance-Led Capitalism: Shadow Banking, Re-Regulation, and the Future of Global Markets*. New York: Palgrave Macmillan.

Haucap, J., & Heimeshoff, U. (2014). Google, Facebook, Amazon, eBay: Is the Internet driving competition or market monopolization? *International Economics and Economic Policy*, *11*(1–2), 49–61.

Hecht, J. (2014). Is net stock issuance relevant to capital formation? Comparing heterodox models of firm-level capital expenditures across the advanced and largest developing economies. *Cambridge Journal of Economics*, *38*(5), 1171–1206.

Hein, E., & Van Treeck, T. (2010). Financialisation and rising shareholder power in Kaleckian/Post-Kaleckian models of distribution and growth. *Review of Political Economy*, *22*(2), 205–233.

Huizinga, H., & Laeven, L. (2008). International profit shifting within multinationals: A multi-country perspective. *Journal of Public Economics*, *92*(5–6), 1164–1182.

IAS 36 — Impairment of Assets. (n.d.). Retrieved 23 November 2017, from https://www.iasplus.com/en/standards/ias/ias36

IFRS 3 — Business Combinations. (n.d.). Retrieved 23 November 2017, from https://www.iasplus.com/en/standards/ifrs/ifrs3

Internal Revenue Service. (2013). Explanation of Terms. Retrieved from https://www.irs.gov/statistics/soi-tax-stats-corporation-tax-statistics

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360.

Kaplan, S. N., & Weisbach, M. S. (1992). The success of acquisitions: Evidence from divestitures. *The Journal of Finance*, *47*(1), 107–138.

Kliman, A., & Williams, S. D. (2015). Why 'financialisation'hasn't depressed US productive investment. *Cambridge Journal of Economics*, *39*(1), 67–92.

Krippner, G. R. (2005). The financialization of the American economy. *Socio-Economic Review*, *3*(2), 173–208.

Krippner, G. R. (2011). *Capitalizing on crisis*. Cambridge, MA: Harvard University Press.

Kurz, M. (2017). On the Formation of Capital and Wealth. Stanford Institute for Economic Policy Research.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, *54*(2), 471–517.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *The Journal of Finance*, *57*(3), 1147–1170.

Lapavitsas, C. (2013). *Profiting without producing: how finance exploits us all*. London: Verso Books.

Lazonick, W., & O'Sullivan, M. (2000). Maximizing shareholder value: a new ideology for corporate governance. *Economy and Society*, *29*(1), 13–35.

LeBaron, D., & Speidell, L. S. (1987). Why are the parts worth more than the sum?" Chop shop," a corporate valuation model. In L. E. Browne & E. S. Rosengren, *The Merger Boom, Conference Series 31*. Boston, MA: Federal Reserve Bank of Boston.

Lin, K.-H., & Tomaskovic-Devey, D. (2013). Financialization and US income inequality, 1970–2008. *American Journal of Sociology*, *118*(5), 1284–1329.

Magdoff, H., & Sweezy, P. M. (1987). *Stagnation and the financial explosion*. New York: NYU Press.

Martynova, M., & Renneboog, L. (2008). A century of corporate takeovers: What have we learned and where do we stand? *Journal of Banking & Finance*, *32*(10), 2148–2177.

Mason, J. (2015). Understanding short-termism: Questions and consequences. *Roosevelt Institute Report*.

Milberg, W. (2008). Shifting sources and uses of profits: Sustaining US financialization with global value chains. *Economy and Society*, *37*(3), 420–451.

Milberg, W., & Winkler, D. (2013). *Outsourcing economics: Global value chains in capitalist development*. Cambridge, MA: Cambridge University Press.

Montalban, M., & Sakinç, M. E. (2013). Financialization and productive models in the pharmaceutical industry. *Industrial and Corporate Change*, *22*(4), 981–1030.

Onaran, Ö., Stockhammer, E., & Grafl, L. (2011). Financialisation, income distribution and aggregate demand in the USA. *Cambridge Journal of Economics*, *35*(4), 637–661.

Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, *52*(1), 3–46.

Organisation for Economic Co-operation and Development. (2001). Glossary of Statistical Terms. Retrieved from http://stats.oecd.org/glossary/

Orhangazi, Ö. (2008). Financialisation and capital accumulation in the non-financial corporate sector: A theoretical and empirical investigation on the US economy: 1973–2003. *Cambridge Journal of Economics*, *32*(6), 863–886.

Pagano, U. (2014). The crisis of intellectual monopoly capitalism. *Cambridge Journal of Economics*, *38*(6), 1409–1429.

Pinkowitz, L., Stulz, R. M., & Williamson, R. (2012). Multinationals and the high cash holdings puzzle. NBER Working Paper 18120.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, *68*(3), 79–91.

Rajan, R., Servaes, H., & Zingales, L. (2000). The cost of diversity: The diversification discount and inefficient investment. *The Journal of Finance*, *55*(1), 35–80.

Rikap, C. (2018). Innovation as economic power in Global Value Chains. *Revue d'Économie Industrielle*, (163).

Seo, H.-J., Kim, H. S., & Kim, J. (2016). Does Shareholder Value Orientation or Financial Market Liberalization Slow Down Korean Real Investment? *Review of Radical Political Economics*, *48*(4), 633–660.

Serfati, C. (2008). Financial dimensions of transnational corporations, global value chain and technological innovation. *Journal of Innovation Economics & Management*, (2), 35–61.

Shleifer, A., & Vishny, R. W. (1991). Takeovers in the'60s and the'80s: Evidence and Implications. *Strategic Management Journal*, *12*(S2), 51–59.

Stockhammer, E. (2004). Financialisation and the slowdown of accumulation. *Cambridge Journal of Economics*, *28*(5), 719–741.

Tomaskovic-Devey, D., Lin, K.-H., & Meyers, N. (2015). Did financialization reduce economic growth? *Socio-Economic Review*, *13*(3), 525–548.

Tori, D., & Onaran, Ö. (2018). The effects of financialization on investment: Evidence from firm-level data for the UK. *Cambridge Journal of Economics*, *42*(5), 1393–1416.

Useem, M. (1996). *Investor capitalism*. New York: Basic books.

Van der Zwan, N. (2014). Making sense of financialization. *Socio-Economic Review*, *12*(1), 99–129.

Van Treeck, T. (2008). Reconsidering the investment-profit nexus in financed-led economies: an ARDL-based approach. *Metroeconomica*, *59*(3), 371–404.

Volvo Group. (2015). Volvo 2015 Annual Report. Retrieved from https://www.volvogroup.com/en-en/investors/reports-and-presentations/annual-reports.html

Wiedman, C. I., & Wier, H. A. (1999). Management of note disclosures: The case of unconsolidated subsidiaries prior to FAS No. 94. *Journal of Accounting, Auditing & Finance*, *14*(1), 73–94.

Zey, M., & Camp, B. (1996). The Transformation from Multidivisional Form to Corporate Groups of Subsidiaries in the 1980s. *The Sociological Quarterly*, *37*(2), 327–351.

Appendix

Table A1. Definitions of variables in figures and tables

Variable	Source
Figure 1	
Checkable deposits and currency	Financial Accounts of the USA, Table B.103
Time and savings deposits	Financial Accounts of the USA, Table B.103
Money market fund shares	Financial Accounts of the USA, Table B.103
Debt securities	Financial Accounts of the USA, Table B.103
Loans	Financial Accounts of the USA, Table B.103
Trade receivables	Financial Accounts of the USA, Table B.103
US direct investment abroad	Financial Accounts of the USA, Table B.103
Mutual fund shares	Financial Accounts of the USA, Table B.103
Figures 3, 4, 5, 7, 13, A1	
Cash and Short-Term Investments	Compustat Data Item 1
Receivables	Compustat Data Item 2
Inventories	Compustat Data Item 3
Net Property, Plant and Equipment	Compustat Data Item 8
Investments and Advances - Equity Method	Compustat Data Item 31
Investments and Advances - Other	Compustat Data Item 32
Goodwill	Compustat Data Item 204
Other Intangibles than Goodwill = Intagibles - Goodwill	Compustat Data Item 33, 204
Other Assets	Compustat Data Item 69
Sales	Compustat Data Item 12
Figures 6, 12, A2, A3, A5	
Other interest	SOI
Interest on government bonds	SOI
Net Capital Gain	SOI
Net gain, noncapital assets	SOI
Dividends domestic corporations	SOI
Dividends foreign corporations	SOI
Interest Paid	SOI
Financial Profitability = (Other interest + Interest on government bonds + Net Capital and Noncapital Gain + Dividends - Interest Paid)/Net Income	SOI
Figures 7, 8, A3	
Interest Income	Compustat Data Item 62
Dividend Income	Compustat Data Item 55
Figure 9	
Income Before Extraordinary Items	Compustat Data Item 123
Depreciation and Amortization	Compustat Data Item 125
Other Funds from Operations	Compustat Data Item 217
Sale of Property, Plant and Equipment	Compustat Data Item 107
Sale of Common and Preferred Stock	Compustat Data Item 108
Net Long-Term Debt Issuance = Long-Term Debt Issuance - Long-Term Debt Reduction	Compustat Data Items 111, 114
Total estimated sources = Income Before Extraordinary Items + Depreciation and Amortization + Other Funds from Operations + Sale of Property, Plant and Equipment + Sale of Common and Preferred Stock + Net Long-Term Debt Issuance + Deferred Taxes + Extraordinary Items and Discontinued Operations	Compustat Data Item 123, 125, 217, 107, 108, 111, 114, 126, 124
Figures 10	
Net Increase in Investments = Increase in Investments - Sale of Investments	Compustat Data Item 113
Capital Expenditures	Compustat Data Item 128
Acquisitions	Compustat Data Item 129
Other Investing Activities	Compustat Data Item 310
Purchase of Common and Preferred Stock	Compustat Data Item 115
Cash Dividends	Compustat Data Item 127
Cash and Cash Equivalents	Compustat Data Item 274
Total estimated uses = Net Increase in Investments + Capital Expenditures + Acquisitions + Other Investing Activities + Purchase	Compustat Data Item 113, 128, 129, 310, 115, 127, 274, 309, 106, 302, 304

of Common and Preferred Stock + Cash Dividends + Cash and Cash Equivalents + Change in Short-Term Investments + Equity in Net Loss + Net Receivables	
Figures 11, A4	
Notes and accounts receivable less reserve	SOI
Inventories	SOI
Cash, Government obligations and other current assets	SOI
Other investments and loan	SOI
Depreciable assets acumulated depreciation	SOI
Other capital assets less reserves	SOI
Table 3	
Non-Financial Assets	Financial Accounts of the USA, Table B.103
Financial assets less unidentified miscellaneous assets	Financial Accounts of the USA, Table B.103 and L.103
Unidentified miscellaneous assets	Financial Accounts of the USA, Table B.103 and L.103
Table 4	
Income from financial divisions	CRSP-Compustat Merged database

Mathematical Appendix

We define the ratio of portfolio income as calculated by Krippner and Crotty in the following way (we do not take into account depreciation allowances but it does not change the result):

$$Rpi = \frac{I_f}{I_f + I_{nf} - C_f - C_{nf}}$$

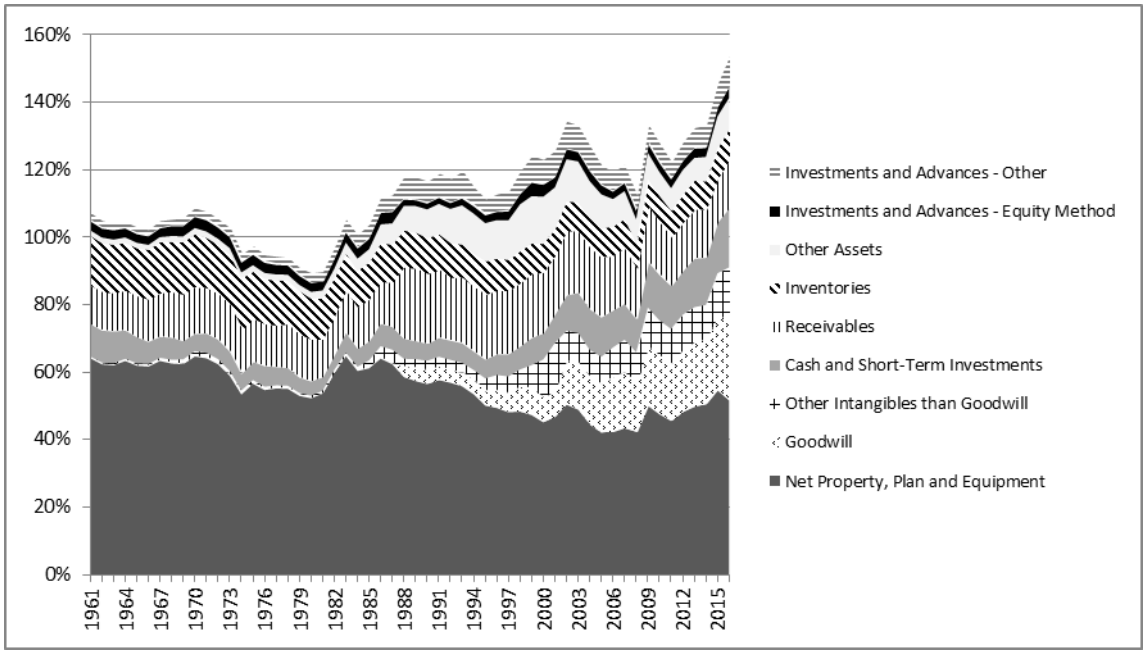
Where Rpi is the ratio of portfolio income, I_f financial income, I_{nf} non-financial income, C_f financial costs and C_{nf} nonfinancial costs.

We are interested to know why this ratio could be moving so we calculate total differential of Rpi.

$$\mathrm{d}Rpi = \frac{\left(I_{nf} - C_f - C_{nf}\right).\mathrm{d}I_f}{(I_f + I_{nf} - C_f - C_{nf})^2} - \frac{I_f.\mathrm{d}I_{nf}}{\left(I_f + I_{nf} - C_f - C_{nf}\right)^2} + \frac{I_f \mathrm{d}C_f}{(I_f + I_{nf} - C_f - C_{nf})^2} + \frac{I_f \mathrm{d}C_{nf}}{(I_f + I_{nf} - C_f - C_{nf})^2}$$

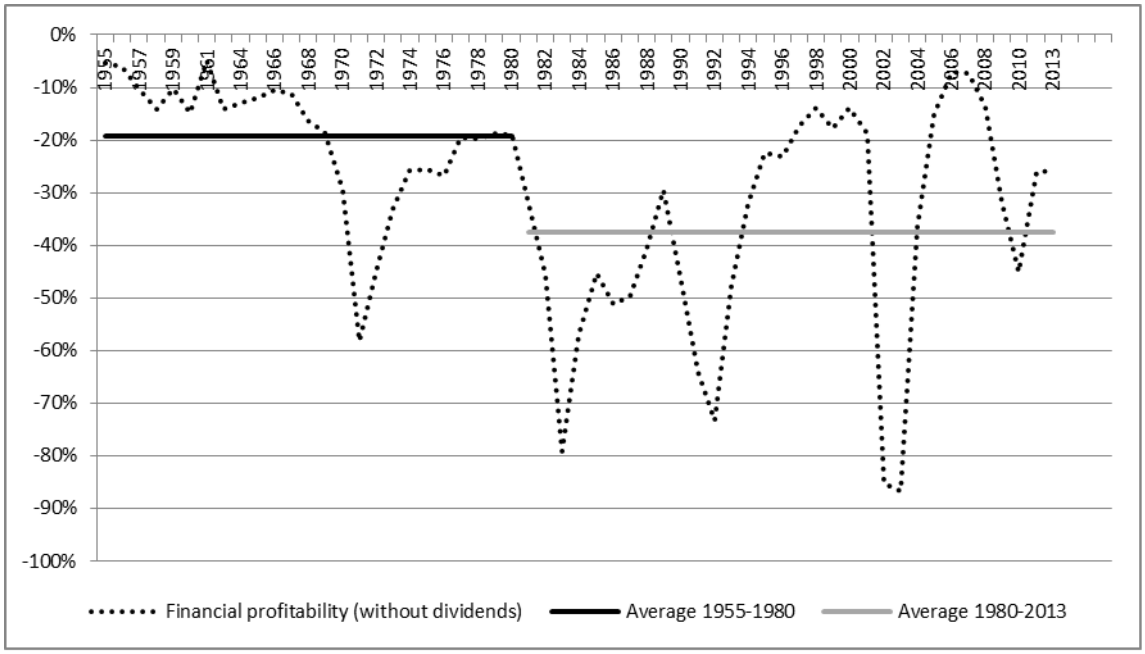
If $\uparrow C_f, ceteris\ paribus \rightarrow \uparrow \mathrm{d}Rpi$

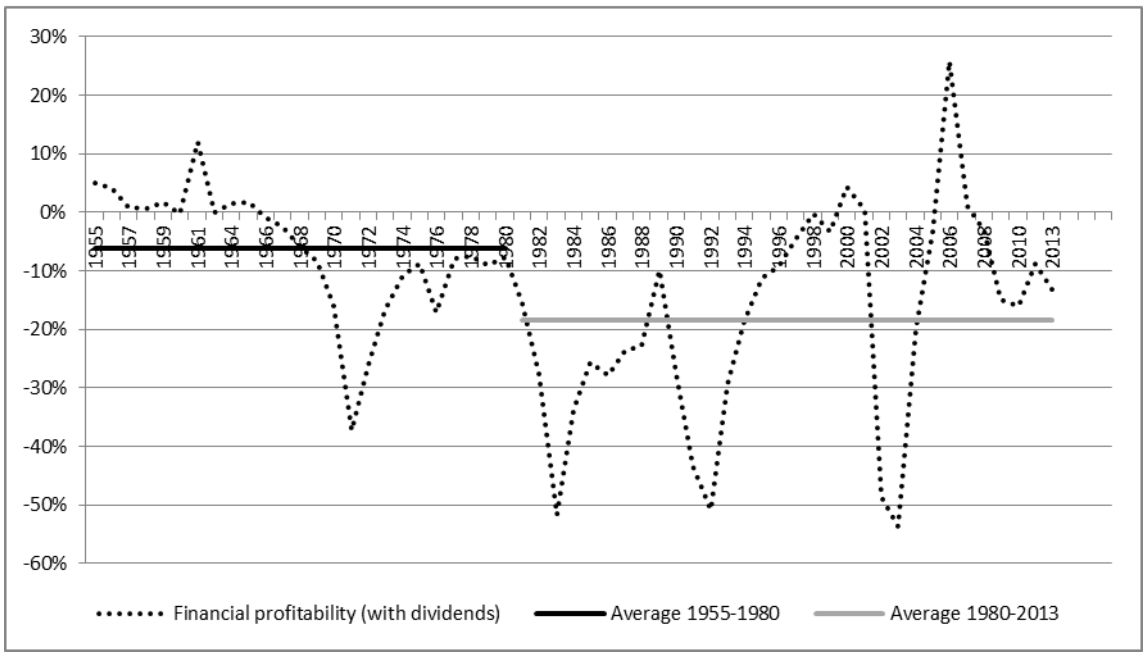
Figure A1. Selected assets, NFCs, 1961-2016



Note: Assets measured as a proportion of sales. See additional details on variable definitions in Table A1.
Source: Compustat.

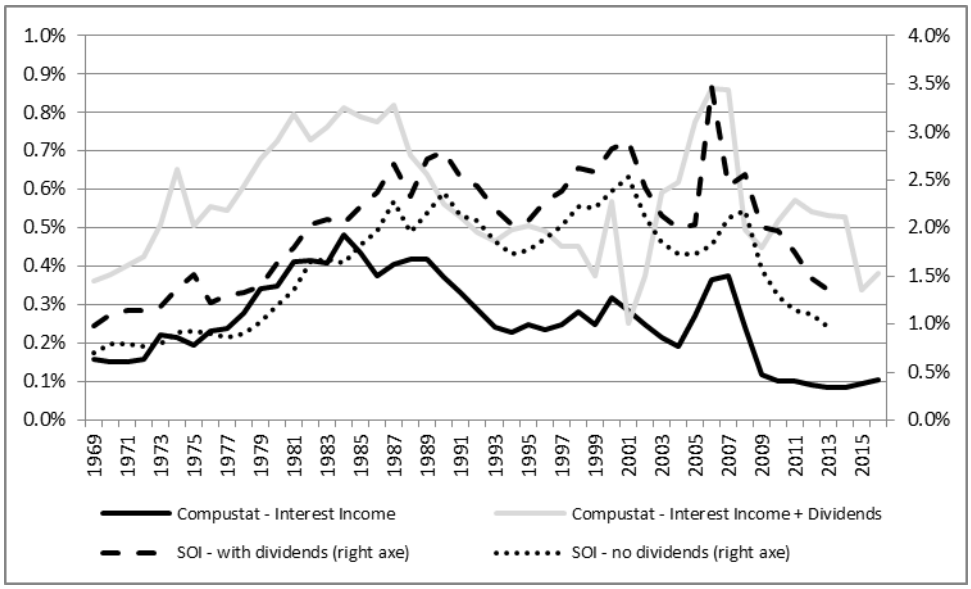
Figure A2. Net financial profitability, NFCs, 1955-2012





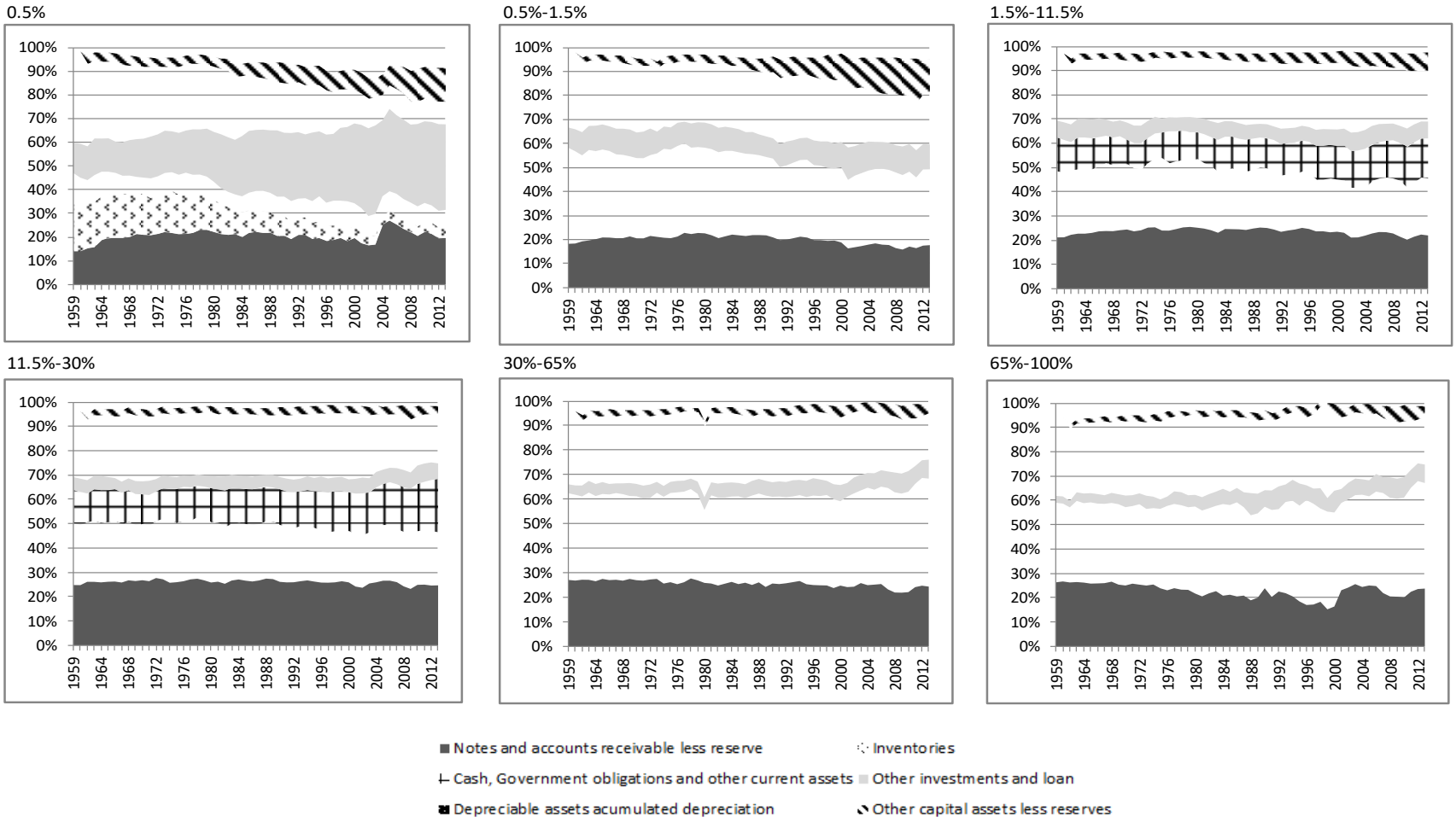
Note: Financial profitability calculated as "financial income – financial expenses" as a proportion of profits. The upper figure does not include dividends from subsidiaries as part of financial income and the lower does. See additional details on variable definitions in Table A1.
Source: SOI.

Figure A3. Financial income, NFCs, 1969-2016



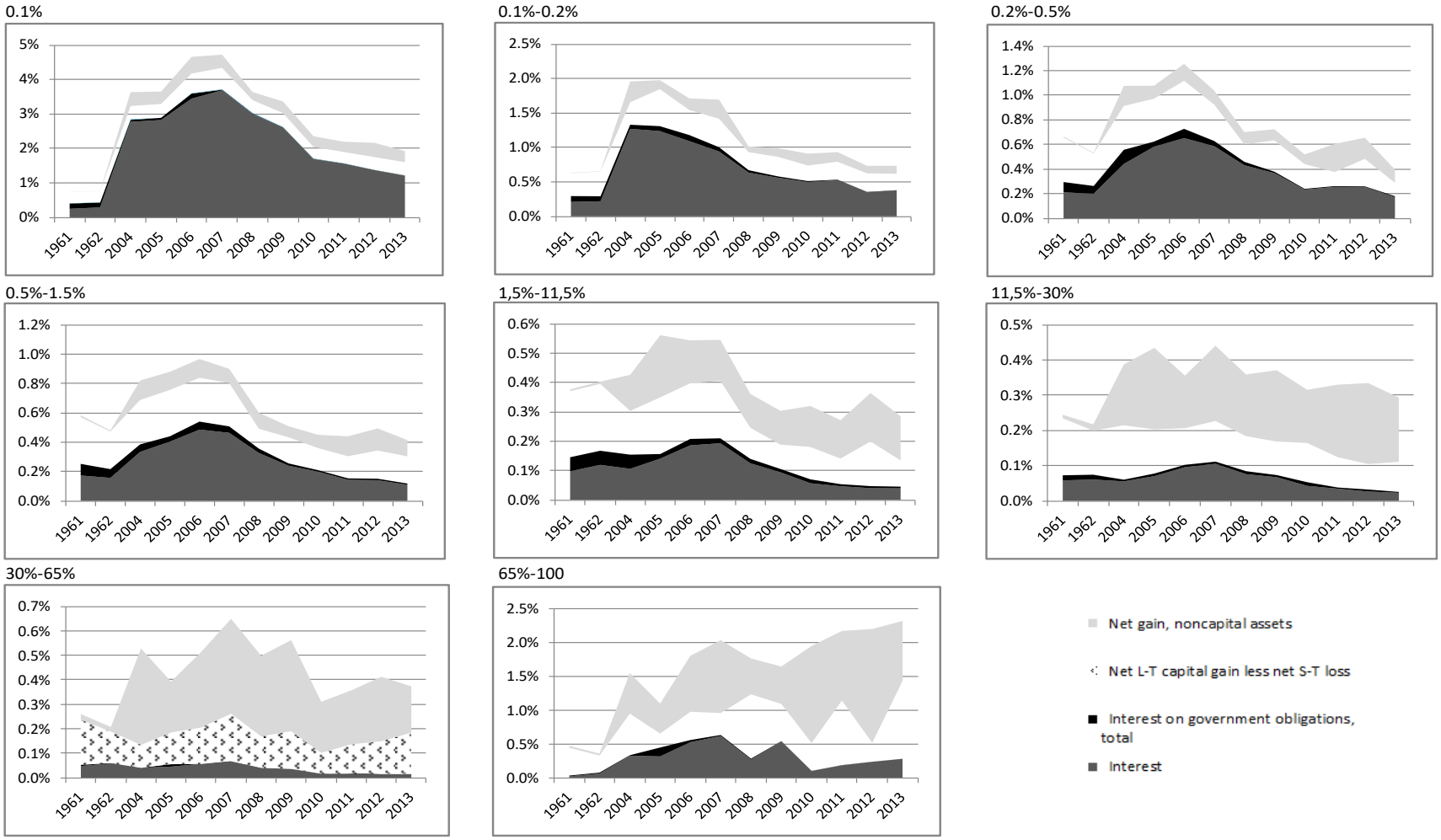
Note: Financial income measured as a proportion of total income. See additional details on variable definitions in Table A1.
Source: Compustat and SOI.

Figure A4. Selected assets, Manufacturing, 1959-2013



Note: Assets measured as a proportion of total assets. See additional details on variable definitions in Table A1.
Source: SOI.

Figure A5. Components of financial Income, Manufacturing, 1961, 1962, 2004-2013



Note: Financial income measured as a proportion of total income. See additional details on variable definitions in Table A1.
Source: SOI.