CEPN Centre d'économie de l'Université Paris Nord CNRS UMR n° 7234

Document de travail du CEPN

N° 2017-02

The financialisation-offshoring nexus and the capital accumulation of U.S. nonfinancial firms

Cambridge Journal of Economics, 04 February 2019

Tristan Auvray, Joel Rabinovich

January 2017

The financialisation of the nonfinancial corporation has drawn the attention of many scholars who have identified two channels by which financialisation happens: a higher proportion of financial assets compared to nonfinancial ones and a higher amount of resources distributed to financial markets. One of the consequences of this is the decrease in investment. Parallel to financialisation, many nonfinancial corporations have also engaged in an internationalization of their productive activities, organizing them under global value chains. Surprisingly, the intersections between the literature on financialisation and the literature on global value chain are still underdeveloped, although, for example, offshoring may also explain the decrease in investment of nonfinancial firms. This paper fills this gap using panel regressions for U.S. nonfinancial corporations between 1995 and 2011. We find evidence that both offshoring and financialisation are determinants to the decrease in investment and that financialisation occurs mainly for firms belonging to high offshoring sectors.

La financiarisation des sociétés non financières a attiré l'attention de nombreux chercheurs qui ont identifié deux canaux par lesquels elle se produit : les bilans des sociétés sont composés d'une plus grande proportion d'actifs financiers relativement aux actifs non financiers, et une plus grande part des ressources est redistribuée vers les marchés financiers. L'une des conséquences qui en résulte est la baisse de l'investissement. Parallèlement à ce mouvement de financiarisation, beaucoup de sociétés non financières ont développé l'internationalisation de leur production en l'organisant selon des chaînes globales de valeur. Il est surprenant de constater que les liens entre la littérature sur la financiarisation et celle sur les chaînes globales de valeur soit peu développée, bien que, par exemple, le transfert de la production à l'étranger puisse aussi expliquer la baisse de l'investissement des firmes non financières. Cet article vise à combler cette lacune en menant des régressions sur un panel de firmes américaines entre 1995 et 2011. Nous montrons que tant le transfert de production à l'étranger que la financiarisation sont des déterminants de la baisse de l'investissement. Nous montrons également que la financiarisation touche surtout les firmes appartenant à des secteurs fortement insérées dans les chaînes globales de valeur.

Keywords: financialisation of the non-financial corporation, global value chain, offshoring, investment.

JEL Codes: F61, G32

Note: We would like to thank Cédric Durand, Jason Hecht, Ewa Karwowski, Engelbert Stockhammer, and Daniele Tori for their help and insightful comments. All errors and omissions remain the sole responsibility of the authors.

1. Introduction

In the seminal book on financialisation, Gerald Epstein (2005) highlighted that the main changes that global economy underwent in the previous 30 years could be synthesized in three phenomena: neoliberalism, globalisation, and financialisation. He stated that, even though much research had been done on neoliberalism and globalisation, research on financialisation was relatively newer and, therefore, underdeveloped. However, it took only two years until John Bellamy Foster (2007), restating that trio of terms as the most important changes in contemporary economy, stated that financialisation had become the dominant term.

If we look at the research on the relations among the three concepts, we will find different outcomes. Financialisation and neoliberalism are usually considered to be closely related phenomena, the former sometimes regarded as the direct outcome of the neoliberal set of policy arrangements (Stockhammer, 2008) or, on the other hand, that neoliberalism appeared as a consequence of financialisation (Duménil and Lévy, 2004). Surprisingly, as Milberg (2008) and Baud and Durand (2012) point out, the link between globalisation of production and financialisation has been overlooked.

Regarding globalisation, the OECD (2001) defines it as "an increasing internationalisation of markets for goods and services, the means of production, financial systems, competition, corporations, technology and industries." As a result, different countries are gradually more interconnected through major dimensions such as higher growth of trade and higher growth of foreign direct investment (Dicken, 2011, p. 18), with a key role played by multinational corporations (MNCs). Both increases have been carried mainly through the so-called global value chains[2] (GVCs, Gereffi and Korzeniewicz, 1994), which concentrate 80% of world trade (UNCTAD, 2013, p. 16). The transfer of production is part of this restructuring and can be defined as a process that implies both spatial relocation –home nation/offshoring– and organizational restructuring –in-house/outsourcing– (Contractor, Kumar, Kundu, and Pedersen, 2011, p. 7; Kinkel, Lay, and Maloca, 2008, p. 247). As we explain below, this article focuses on offshoring, keeping in mind its differential effects in case it is carried in-house or outsourced.

Concerning financialisation, no such clear definition exists. To establish criteria among the different uses of the concept, van der Zwan (2014) finds three different approaches: financialisation as a change in everyday life, as a change in corporate behaviour, and as a regime of accumulation. From these different meanings, we will concentrate on the financialisation of

[2] GVCs are defined as "the full range of activities that firms and workers perform to bring a specific product from its conception to its end use and beyond" (Gereffi and Fernandez-Stark, 2011, p. 4).

nonfinancial corporations (NFCs), which can be defined as the "engagement of non-financial businesses in financial markets" (Stockhammer, 2004, p. 721). As a result of this engagement, a greater portion of both their income and payouts are related to the financial sphere (Orhangazi, 2008).

Even if these two processes are generally analysed separately, some arguments exist in support of the co-dependency between financialisation of NFCs and offshoring of their production (Milberg and Winkler, 2009, 2013; Soener, 2015). First, large MNCs have been active players in the relocation of production and financialisation at the same time (Fiebiger, 2016; Milberg and Winkler, 2013; Serfati, 2008). Second, both phenomena have exploded in similar periods: 1980s, 1990s, and 2000s (Fiebiger, 2016; Ivanova, 2015). Finally, both phenomena are frequently indicated as arising from similar reasons, mainly the search for higher yields (Brenner, 2006; Ivanova, 2015; Milberg and Winkler, 2009, 2013).

Despite this potential interaction, empirical studies usually do not consider the joint consequences of offshoring and financialisation on outcome variables like employment and investment. The interest of scholars who study the effects of the transfer of production has been mainly on how it affects wages, employment, and productivity, disregarding the potential effects of financialisation (Feenstra and Hanson, 1996, 1999; Foster-McGregor, Stehrer, and de Vries, 2013; Hijzen, Görg, and Hine, 2005; Schwörer, 2013). To our knowledge, only Durand and Miroudot (2015) introduce financialisation, in addition to offshoring, as a possible explanation of the level of employment. Their results suggest that these two variables are significantly correlated with employment, though their effects are unrelated in their macro dataset. Within the financialisation literature, a prominent group of scholars has shown the detrimental effects of financialisation on investment in developed countries, both at macro and micro basis (Clévenot, Guy, & Mazier, 2010; Cordonnier & Van de Velde, 2014; Dallery, 2009; Hecht, 2014; Orhangazi, 2008; Stockhammer, 2004; Tori & Onaran, 2015). However, none of these papers considered the effects of offshoring, which is surprising given the interaction the literature indicates.

This article's aim is to fill this gap by empirically testing the effect of both financialisation and offshoring on the real investment of U.S.-listed NFCs. To do so, we will estimate investment functions using firm-level data from U.S.-listed companies merged with industry-level information on offshoring from the World Input-Output Database (WIOD). The main issue when dealing with the transfer of production is that comprehensive information is not available for individual firms[3].

[3] Conversely, the WIOD doesn't include information about the financial structure of industries which is relevant to explain financialisation as we explain in section 4.

Rather than studying the offshoring of corporations, we propose to consider the offshoring of their industry for which we have reliable information over the 1995-2011 period. The scope of this study focuses, therefore, on individual capital accumulation behaviour, conditional on the fact that firms belong to industries with various degrees of offshoring.

Thanks to this empirical strategy, the main contribution of this paper is to show that the negative correlation between payouts and investment in capital expenditures underlined by the literature is valid for firms belonging to industries with high offshoring in non-core activities. Moreover, investment of firms in low offshoring sectors is not significantly correlated to their financial payouts. These results suggest that financialisation and offshoring are related phenomenon. By providing the empirical evidence of this interaction, we contribute to the critical debate dealing with the context of the shareholder value creation and its consequences on fixed capital formation. Financialisation is not a uniform process and, in particular, it occurs differently depending on the variety of business models (Lazonick, 2009; Montalban and Sakinç, 2013). In this respect, our results imply that the so-called downsize and distribute strategy, in its capital accumulation component at least, has been significantly followed by firms belonging to industries well-integrated in GVCs mainly.

Our econometric estimations are robust to various specifications, and results cohere with previous works. First, we know that financialisation is more pronounced for the largest firms (Orhangazi, 2008), which are mostly of the old economy business model (Lazonick, 2009). In our sample, both financialisation and its interaction with offshoring manifest for large firms mainly while controlling for the age of the corporation. Second, as we explain below, offshoring may have opposite effects on investment of corporations depending on its organizational setup (in-house or outsourcing, offshoring in core, or non-core activities). Basically, we can expect a positive (negative) relationship between investment and offshoring in core (non-core) activities since outsourcing may probably occur for the latter while in-house transfer of production may probably occur for the former (Gereffi et al., 2005). Though we do not find such clear-cut effects, our results are in line with these expectations.

The reminder of the paper is organized as follows. Section 2 will deal with literature about financialisation of NFCs (but sometimes also about financialisation as a new regime of accumulation, since they are obviously related) and its effects on investment. Section 3 will discuss the various methods to estimate offshoring as well as its impacts on investment. Section 4 presents the regression specification and our main hypothesis, while section 5 presents the data

and the estimation methodology. Section 6 shows the results and section 7 includes some concluding remarks.

2. The financialisation of nonfinancial corporations and its consequences for investment

The financialisation of nonfinancial corporations is usually associated with the change in corporate governance, a topic treated by Lazonick and O'Sullivan (2000). During the 1980s and especially in the 1990s, the principle of *retain* (profits) *and reinvest* (in physical capital and human resources) shifted toward *downsize and distribute*. Various mechanisms were used to do that: drastic reductions of the labour force, increases in the distribution of corporate revenues, and stock repurchases.

All the changes in how nonfinancial corporations were run, as well as their relation with the financial market, affected real investment. As Keynes (1936) mentions, investment implies an irreversible, long-term decision. However, nowadays, financial agents do not see corporations as an integrated combination of illiquid assets but as a portfolio of liquid subunits, focusing on short-term stock price movements (Crotty, 2003).

The negative effect of this process on investment is usually identified as arising by two main channels. The first is related to the increased *transfer* of earnings from nonfinancial corporations to financial markets in various forms such as interest payments, dividend payments, and stock buybacks (Orhangazi, 2008, p. 877). The above-mentioned paper by Lazonick and O'Sullivan (2000) is a good example of this channel. Crotty (2003, p.6) supports this argument by showing that since the mid-1980s, in most of the years, over half the cash flow that corporations need to sustain investment and innovation is used as payment to financial markets.

The second channel is related to the flow of *income* that nonfinancial corporations earn due to their investment in financial assets and financial subsidiaries such as interest and dividend income, which discourages investment in real assets (Orhangazi, 2008, p. 877). The pioneering work of Krippner (2005) about the effects of financialisation on the U.S. economy provides evidence to support this. Between 1950 and 2001, the ratio of portfolio income (total earnings accruing to nonfinancial firms from interest, dividends, and realized capital gains of investments) to cash flow for U.S. nonfinancial corporations has increased from 8% to 40%.

Stockhammer (2004) empirically estimates this channel in a macro level through the "rentiers´ share of non-financial business," the interest and dividend income received by the nonfinancial

business, and shows that for the 1960s-1990s period, financialisation has caused a slowdown in accumulation in the United States and France, some for the UK, but none for Germany. Orhangazi (2008) also develops an econometric model to estimate the effects of both channels we have been discussing on investment[4]. Using a panel data of U.S.-listed, nonfinancial firms for the period 1973-2003 and differentiating among large and small, manufacturing and nonmanufacturing, and durable and nondurable, Orhangazi finds relevant negative results, especially for large firms.

In the case of France, with macro data, Clévenot et al. (2010) find a negative impact of the *income* channel. For the UK-listed firms, Tori and Onaran (2015) find a negative impact of both financialisation channels. Another firm-level study was conducted by Hecht (2014), who uses a panel of enterprises from big countries (China, France, Germany, Great Britain, India, Japan, and the United States), with heterogeneous results. While net stock issue significantly affects only the UK and India, financial income has a negative effect for France and a positive one for Japan; interest paid is negative for the United States, and cash dividends negatively affect France, the UK, Japan, and the United States[5].

It is interesting that in many of the papers that discuss financialisation channels also considered the possibility that the decrease in investment could be explained by the transfer of production. For example, Stockhammer (2004, p. 729) references it in a footnote but argues that he wants to focus specifically on financialisation. Krippner (2005) addresses it in Section 5 of her paper, but she dismisses it based on the fact that, in the comparison between U.S. domestic portfolio income and foreign-source portfolio income or U.S. profits earned abroad, results from domestic economy dominate the trend for the global measure. However, as we will show later, offshoring has also played a role in the decrease in investment. Before doing that, in the next section we will discuss the different ways in which offshoring can be put into practice and measured.

3. Offshoring and its effect on investment

As we mentioned in the introduction, global production is organized mainly through GVCs today (OECD, 2010), resulting in a fundamental restructuring through offshoring and outsourcing (Lee and Gereffi, 2015). MNCs play a key role here as the leaders of the whole network, and the dominant consideration is still to reduce wages and costs (Contractor et al., 2011). In fact, while stagnation of wages in advanced countries and gains of productivity related to the introduction of

[4] The sum of interest expense, cash dividends, and purchase of firm's own common and preferred stock on the one hand, and the sum of interest income and equity in net earnings on the other.

[5] The negative correlation between investment and dividend for U.S. NFCs, stressed by Hecht (2014) and Orhangazi (2008), is not sustained by the estimations of Schoder (2014).

new information technology were, traditionally, the most studied ways to maintain mark-up despite price competition, Milberg (2008, p.428) puts forward a third source: "the effective management of global value chains."

Moreover, the relocation of the value chain has not been the same for all the different stages of the chain: MNCs kept some activities considered core or strategic (development and design, trans-divisional research, technology and business intelligence) while dropping the non-core ones, usually with low value creation (Gereffi et al., 2005; Ivanova, 2015; Lee and Gereffi, 2015; Schwörer, 2013; Serfati, 2008).

The process by which the reorganization was put into practice has been described with different terms such as outsourcing, offshoring, or vertical disintegration that, as Geishecker (2007) notes, were sometimes used interchangeably. In our case, we will be following OECD's widely accepted definition (2010, p. 220):

> Offshoring is generally defined as companies' purchases of intermediate goods and services from foreign providers at arm's length or the transfer of particular tasks within the firm to a foreign location, i.e. to foreign affiliates. Outsourcing refers to the purchasing of intermediate goods and services from outside specialist providers at arm's length either nationally or internationally.

So, we need to keep in mind the four possibilities described in the following table when measuring offshoring and considering its effect on investment.

[INSERT TABLE 1]

Despite the consensus on the definition, quantification is still in debate. Feenstra and Hanson (1996) provide a methodology to measure industry offshoring that will be much used in following studies:

$$\sum_j [\text{input purchases of good j by industry } i] * [\frac{\text{imports of good } j}{\text{consumption of good } j}] \qquad \text{(I)}$$

Where the consumption of good *j* is measured as shipments + imports – exports and the intermediate imports computed are restricted to nonenergy ones. In a later work, the same authors (Feenstra and Hanson, 1999) will call this estimate a *broad* measure of offshoring, contrasting it to a *narrow* one by which the inputs considered are only those from the same two-digit Standard Industrial Classification (SIC) industry as the good produced:

$$\sum_{j \in i} [\text{input purchases of good j by industry } i] * [\frac{\text{imports of good } j}{\text{consumption of good } j}]$$

Two main discussions have been raised about the second term of equation (I). First, we mention the one about its denominator. It can be calculated, apart from the consumption of good *j*, using industry's total inputs[6] (Amiti and Wei, 2005), industry value added (Hijzen et al., 2005), or industry output (Geishecker, 2007). As the last author correctly points out, the first two measures are less accurate than the last one since they are both affected by domestic outsourcing. We will focus on this last measure in the next sections.

The second discussion about the second term of equation (I) concerns its numerator: good *j*'s share of imports is computed for the entire economy. Using it for different industries basically assumes that all the economy has the same import share of good *j*, which is obviously not the case. This has been called the "proportionality assumption" by the OECD (OECD, Structural Analysis Database) and "import comparability" assumption by Houseman (2011). Different authors have found that this assumption can be misleading (Feenstra and Jensen, 2012; Milberg and Winkler, 2010).

Considering all the criticism received by the proxy measure of offshoring, the publication of the WIOD in 2012 represents important progress. The scholars who developed this database did not apply the import proportionality assumption but determined for each product the share of imports that goes to intermediate consumption, final consumption, and gross fixed capital formation. However, within each of these categories, the allocation was based on the proportionality assumption (for more details, see Dietzenbacher, Los, Stehrer, Timmer, and De Vries, 2013 and Timmer, Dietzenbacher, Los, Stehrer, and Vries, 2015).

It is important to highlight that, although they provide useful insights to understand and estimate offshoring, most of the papers we have discussed in this section focus on wages, employment, skill bias shift in labour demand, and productivity, but little on investment[7]. However, some useful insights for investment can be drawn. Moser et al. (2015) identifies the different channels by which offshoring affects employment with different outcomes. While the substitution of the firm's own production implies a direct loss through downsizing, firms also experience a growth in productivity, which allows them to increase their domestic and foreign market share, both of which result in employment gains. Moreover, while empirical studies have traditionally indicated

[6] In some cases, such as Foster et al. (2013), energy inputs are dropped.

[7] Milberg and Winkler (2013) who showed that higher offshoring reduced capital accumulation in the United States between 1998 and 2006 is an exception.

an enhancement of skilled labour, some recent studies have shown that offshoring might no longer have that effect (Milberg and Winkler, 2013, p. 170).

In the case of investment, the related empirical research is generally associated with the impact that outward foreign direct investment (FDI) has on it. Without distinguishing the purpose of the FDI, the evidence is inconclusive. Feldstein (1995) and Desai et al (2005) found a negative relation between outward FDI and domestic investment for OECD countries (the former for 17 countries in the 1970s and 18 for the 1980s, while the latter covers 20 countries in the 1980s and 27 in the 1990s). On the other hand, Markusen and Venables (1999) and Herzer and Schrooten (2007) found a positive effect for the South East Asian and U.S. economies, respectively.

Once we consider the FDI's purpose, basically whether it is market- or cost-seeking, results are more conclusive. Market-seeking FDI generally has a positive effect on domestic investment while cost-seeking FDI, which is closed to in-house offshoring, tends to be negative. These results are supported by Lian and Chuang (2007) for Taiwanese firms between 1993 and 1995 and 1997 and 1999, Hering et al. (2010) for Japanese firms between 1994 and 2004, Hejazi and Pauly (2003) for 15 Canadian sectors between 1994 and 2004, and Onaran et al. (2013) for 29 German sectors between 1998 and 2005. Although we will not be using information of FDI, these results are useful for our study. Since we defined offshoring as related to intermediate inputs, its purpose is more related to cost-seeking than market-seeking.

4. The regression specification

4.1. The baseline model: financialisation of NFCs

Our investment function is primarily based on Fazzari et al. (1988), in which the authors criticize the Modigliani-Miller principle of capital structure irrelevance. For this principle, investment decisions are independent of financial factors, being just relative factor prices that drive investment. On the contrary, Fazzari et al. (1988) show the importance of financing constrains and, particularly, the internal cash flow for investment decisions. The significance of internal funds is also supported later by Hubbard (1997) and Brown et al (2009).

Acknowledging the changes in contemporary economies brought about by financialisation, a group of scholars has tried to re-estimate those investment functions, explicitly considering different financial determinants, both at the macro (Clévenot et al., 2010; Stockhammer, 2004) and micro level (Hecht, 2014; Orhangazi, 2008; Tori and Onaran, 2015). Our baseline model basically follows this last group, and it is defined in the following way:

$$\frac{I}{K} = f(\frac{I_{t-1}}{K}, \frac{\pi}{K}, \frac{S}{K}, Q, \frac{LONGDEBT}{K}, \frac{INTEXP}{K}, \frac{INTINC}{K}, \frac{DIV}{K}, \frac{STKISSUE}{K}, \frac{STKREP}{K}, \frac{NETDEBTISSUE}{K}, \frac{INTERNF}{K})$$

I is capital expenditure; *K* is net property, plant and equipment; π is operating income; *S* is sales; *Q* is Tobin's *q*; *LONGDEBT* is long debt; *INTEXP* is interest expense; *INTINC* is interest and investment income; *DIV* are the common and preferred stock dividends paid; *STKISSUE* and *STKREP* are the issuance and repurchase of common and preferred stock, respectively; *NETDEBTISSUE* is the difference between the sale and purchase of short-term and long-term debt; *INTERNF* is firm's balance sheet value of cash and short-term securities, and it is used as a proxy of internal cash flow, following Hecht (2014).

Expected signs are:

$$\left(\frac{I}{K}\right)_{\frac{I_{t-1}}{K}} > 0, \left(\frac{I}{K}\right)_{\frac{\pi}{K}} > 0, \left(\frac{I}{K}\right)_{\frac{S}{K}} > 0, \left(\frac{I}{K}\right)_{Q} > 0, \left(\frac{I}{K}\right)_{\frac{LONGDEBT}{K}} < 0, \left(\frac{I}{K}\right)_{\frac{INTEXP}{K}} < 0, \left(\frac{I}{K}\right)_{\frac{INTINC}{K}} < 0,$$

$$\left(\frac{I}{K}\right)_{\frac{DIV}{K}} < 0, \left(\frac{I}{K}\right)_{\frac{STKISSUE}{K}} > 0, \left(\frac{I}{K}\right)_{\frac{STKREP}{K}} < 0, \left(\frac{I}{K}\right)_{\frac{NETDEBTISSUE}{K}} > 0, \left(\frac{I}{K}\right)_{\frac{INTERNF}{K}} > 0$$

Positive signs for past investment, profits, sales, Tobin's *q*, and internal finance are a standard result. Profits and internal funds are a source for capital spending. Profits are also a proxy of profit expectations, as is the case for Tobin's *q*, while sales represent the demand the firm is facing. In the case of past investment, it basically shows the intrinsic dynamic process implied in investment decisions.

Interest income measures the extent by which real investment is displaced by financial investment. Interest expenditures, dividends, and stock repurchase align with the story of real investment being displaced by financial payouts, and we expect negative sign for all of them. We expect a negative sign for long-term debt, based on Schoder's (2014) results[8]. For net debt issue, we expect a positive sign based on its role in financing real investment, highlighted by Kliman and Williams (2014). The same applies for stock issue.

The statistical specification will be the following:

[8] We use the contemporaneous value as it is done by Hetch (2014) and Schoder (2014).

$$\ln\left(\frac{I}{K}\right)_{it} = \alpha_0 + \alpha_1 \ln\left(\frac{I}{K}\right)_{i,t-1} + \alpha_2 \ln\left(\frac{\pi}{K}\right)_{i,t-1} + \alpha_3 \ln\left(\frac{S}{K}\right)_{i,t-1} + \alpha_4 \ln(Q)_{i,t-1} + \alpha_5 \ln\left(\frac{LONGDEBT}{K}\right)_{i,t}$$
$$+ \alpha_6 \ln\left(\frac{INTEXP}{K}\right)_{i,t-1} + \alpha_7 \ln\left(\frac{INTINC}{K}\right)_{i,t-1} + \alpha_8 \ln\left(\frac{DIV}{K}\right)_{i,t-1} + \alpha_9 \ln\left(\frac{STKISSUE}{K}\right)_{i,t-1}$$
$$+ \alpha_{10} \ln\left(\frac{STKREP}{K}\right)_{i,t-1} + \alpha_{11} \ln\left(\frac{NETDEBTISSUE}{K}\right)_{i,t-1} + \alpha_{12} \ln\left(\frac{INTERNF}{K}\right)_{i,t-1} + \gamma_{it}$$
$$+ \sum_{t=1996}^{t=2011} \beta_t + \varepsilon_{it} \qquad (1)$$

where *ln* is a logarithmic function used to account for potential non-linearities between explained and explanatory variables, α_0... α_{12} are parameters, the *i* subscript denotes the firm and the *t* subscript denotes the time period. γ_{it} is the coefficient of the age of the corporation. β_t are coefficients of a set of time dummies, while ε_{it} represents nonobservable shocks. The regression variables are divided by capital stock to correct for heteroscedasticity and control for firm size. We will estimate equation (1) for the complete sample and for the subsamples of large and small firms.

4.2. The main hypothesis: the financialisation-offshoring nexus

Once we estimate this baseline model, we will concentrate on the specific novelty we are dealing with: an analysis of the simultaneous effects of financialisation and offshoring in investment functions using industry-level information from WIOD. Following Feenstra and Hanson (1999), we will include two measures for offshoring, one for the narrow or core activities of the enterprise (*COREOFF*) and another for the non-core and non-energy activities (*NONCORENONENERGYOFF*). To limit the effects of domestic outsourcing as much as possible, we will take the total output of each sector as the denominator. The measures will be the following:

$$COREOFF_i = \frac{II_i^F}{Y_i},$$

$$NONCORENONENERGYOFF_i = \frac{\sum_{j \neq i} II_j^F}{Y_i},$$

where II^F are foreign intermediary inputs, *Y* total output, and subscripts *i* and *j* denote two-digit ISIC (International Standard Industrial Classification) industry. The following figure presents the evolution of these core offshoring and non-core non-energy offshoring measures for our sample.

[INSERT FIGURE 1]

Including offshoring gives the following equation:

$$\ln\left(\frac{I}{K}\right)_{ijt} = \alpha_0 + \cdots + \alpha_{13}\ln(COREOFF)_{j,t-1} + \alpha_{14}\ln(NONCORENONENERGYOFF)_{j,t-1} + \gamma_{it} + \sum_{t=1996}^{t=2011}\beta_t + \varepsilon_{it} \quad (2)$$

Here, two points are worth mentioning on the significance and the sign of coefficients α_{13} and α_{14}. First, our indicators of offshoring should be interpreted only as measures of the share of foreign intermediary inputs in each industry, and not as individual measures. Nevertheless, we can expect the existence of a relationship between these meso-indicators and individual behaviour in capital accumulation if some conditions are fulfilled. The first condition is that firms belonging to industries with similar level of offshoring should tend to adopt a similar, or an average, behaviour in investment. The second condition is that this average behaviour in investment should be linear to offshoring in industries (e.g., low-investment firms are also firms in high offshoring industries while high-investment firms belong to low offshoring sectors, or the reverse). If these two conditions are met, then the coefficients α_{13} and α_{14} should be significantly different from zero. Conversely, if a same level of offshoring in specific industries is not relevant to understand similarity of firm capital accumulation, or if this similarity is not linear with offshoring of industries (e.g., firms belonging to high or low offshoring industries have the same level of investment), then α_{13} and α_{14} should be not statistically different from zero.

Second, it is important to highlight that our measures are not able to distinguish between the production offshored to affiliates and the one to other enterprises. Nevertheless, the channels by which offshoring affects investment are similar to ones described by Moser et al. (2015) for employment. A negative sign would be related to the substitution of the firm's own production through downsizing, while a positive sign would be linked to the potential increase in their domestic and foreign market share due to the increase in productivity. However, considering that a large proportion of the downsize movement has been concentrated in non-core activities and the effects of cost-seeking FDI in investment, we should expect that *NONCORENONENERGYOFF* is negatively correlated with investment ($\alpha_{14}<0$). Conversely, in the case of offshoring core activities, we acknowledge that firms may prefer to keep and refocus on their core competences (Lee and Gereffi, 2015). Therefore, if they offshore them, it would be to a subsidiary. Hence, *COREOFF* should be positively correlated with investment ($\alpha_{13}>0$). In case of a positive sign, however, we would not be able to determine whether it is related to the transfer of production to a subsidiary or to increased productivity.

We now turn to our main proposition regarding the co-dependence of financialisation and offshoring. We know that the distribution of cash to the financial sector, and especially to

shareholders through dividends and share buybacks, is partly at the expense of capital accumulation of the largest US NFCs[9]. This means that they distribute an increasing share of their earnings rather than retaining and investing them. Nevertheless, pursuing an intensive payout policy requires one not only to reduce the share of investment but also to maintain profits. As we say in the introduction, one way to do so has been the involvement in GVCs.

Consequently, we hypothesize that the downsize and distribute strategy has been possible for firms belonging to industry highly involved in GVCs. This hypothesis will be true if and only if financial payouts are negatively correlated with investment in capital expenditures for the sole subsample of firms belonging to industry consuming the highest level of foreign intermediary inputs. Conversely, this hypothesis will not be valid if the negative correlation between financial payouts and investment is significant for firms belonging to any industry (i.e., with high or low offshoring). To implement the test related to this hypothesis, we split the sample according to the upper and lower year-median in *NONCORENONENERGYOFF* since offshoring in non-core activities is assumed to be the main source of decreasing investment and therefore the background of the downsize and distribute strategy. Table 2 in appendix presents the distribution of offshoring according to the various industries in our sample.

[INSERT TABLE 2]

5. Data and estimation methodology

We took our data from the Standard and Poors' Compustat Annual Industrial Database and the updated WIOD for the United States. The latter is organized following the ISIC 3rd revision while the classification in Standard and Poors is the SIC one. Given that WIOD presents the information in an aggregate level, the correspondence between the two classifications was done considering the sectors included in each WIOD classification.

We use information from all active and inactive, publicly listed nonfinancial U.S. corporations[10], excluding financial firms identified by the primary SIC codes from 6000 to 6799, firms without sectoral information, and firms whose exchange ticker is over the counter. We use annual data from 1995-2011, the period during which WIOD information is available.

[9] Increasing debt in order to buyback stocks is also a way to distribute wealth to shareholders. That is why it is important to control for indebtedness of the corporation (long-term debt and net debt issue) and interest expenses when estimating the correlation between investment and dividends and stock buybacks.

[10] These companies are incorporated and have their headquarters in the United States and their primary listing in a U.S. stock market.

Although Standard and Poors provides standardized information, we found that many firms had no information on several variables we are using. Thus, apart from removing the enterprises we mentioned in the last paragraph, we removed firms with no information for all years of capital expenditure, sales, net property plant and equipment, long-term debt, interest expenses, of cash and short-term securities, total assets, total liabilities, and equities. We also removed observations with no information on market capitalization at the end of the year, with duplicate observations, negative values for interest income, and positive values for interest expenses and dividends. Finally, we winsorized observations at the upper and lower 0.5%. The final sample includes on average 2,049 companies by year, representing 68% of the total U.S. market capitalization[11]. Tables 3 and 4 display the descriptive statistics and the correlation matrix for all the variables we are using.

[INSERT TABLES 3-4]

For our analysis, we use the generalized method of moments in its difference, two-step version[12]. Roodman (2009) points out that this estimator is especially useful for situations with "small T, large N" panels, linear functional relationships, one left-hand variable that is dynamic, independent variables that are not strictly exogenous, fixed individual effects, and, finally, heteroscedasticity and autocorrelation within individuals but not across them.

6. Estimation results

Table 5 presents the results of the estimation of equations (1) and (2) for all, as well as large and small firms defined as the upper and lower year-median in total assets, respectively. It also shows results of equation (2) for enterprises with high and low levels of offshoring (defined by the year-median of the sample).

Results from Equation (1) about financial income align with Orhangazi's (2008), Hecht's (2014), and Schoder's (2014): for all non-financial enterprises this variable is not significant. In the case of financial payouts, only dividends are significant with the expected sign. Nevertheless, once we divide between large and small companies, stock repurchases become significant for large corporations. Regarding control variables, all other variables but *LONGDEBT* are significant with the expected sign.

[11] This ratio compares the market capitalization of the U.S. non-financial corporations of our sample to the total market capitalization disclosed in the World Bank statistics, which also include financial corporations and foreign corporations with primary listing in the United States.

[12] The other version, system GMM, is useful for situations in which the coefficient on the lagged dependent variable is close to unity, which is not the case.

Table 5 also shows results when *COREOFF* and *NONCORENONENERGYOFF* are introduced. In the case of the new variables, *NONCORENONENERGYOFF* has a negative and significant coefficient for all non-financial firms, which supports the fact that offshoring in non-core activities tends to be outsourced and therefore has a negative impact on investment decisions. For all non-financial and large firms, *COREOFF* has a positive sign, as expected. In all the cases, control variables from equation (1) maintain sign, significance, and similar values. Nevertheless dividends are no longer significant. Stock repurchases only maintain their significance for the subsample of largest firms, which confirms the fact that the largest firms tend to be more financialized, as shown by Orhangazi (2008).

Finally, if we turn to the comparison between high and low offshoring sectors, we will find supporting evidence for our main hypothesis. We find that dividends are significant for firms in high offshoring sectors, both for the full sample and the subsample of largest firms in high offshoring industries. These results do not hold true for small firms. Finally, it is worth noting that interest income becomes significant and positive for large firms in low offshoring sectors. Contrary to the thesis of the crowding-out of real investment by financial investment, it seems that financial income is a source of funding for this subsample. These results are robust to different checks (tables 6-9) such as reducing the number of instruments, dropping nonsignificant variables, and computing alternative size for firms or for offshoring (upper and lower 25%). In these cases, either dividends, stock repurchases, or both, are significant for firms belonging to high offshoring industries[13]. Nevertheless, when we split the sample into two sub-periods,[14] results hold for the more recent one only (tables 10-11). Overall, our results give evidence that financialisation on average does not occur for firms belonging to industries with low offshoring while it compromises capital accumulation of firms belonging to the industries most involved in GVCs.

[INSERT TABLE 5-11]

7. Conclusion

Financialisation and globalisation are two of the major changes experienced by the world economy in the last decades and, therefore, have received a lot of attention by economists. Among the various ways in which the term financialisation is used, we concentrated on the financialisation of NFCs, defined as the "engagement of non-financial businesses in financial markets." The literature

[13] On the other hand, in these regressions, the coefficients of *COREOFF* and *NONCORENONENERGYOFF* are not always significant.

[14] 1995-2002 and 2003-2011, the last period corresponding to the phase with an increase in offshoring as shown by figure 1.

identifies two main channels that affect NFCs and, in particular, their investment decisions: on the one hand, investment would be displaced by different financial payments such as interest expenditures, dividends, and share buybacks. On the other hand, it can be displaced by the engagement of the NFC in buying financial assets that later report financial profit.

In some of the papers that discuss these financialisation channels, the authors contemplated the possibility that the decrease of investment could also be explained by offshoring. However, for different reasons, it was not properly considered. Not considering explicitly the role that offshoring played in the decrease of investment can lead to an exaggeration of the effects of financialisation. For example, one might think that, by cutting the two financialisation channels of NFCs we have already mentioned, NFCs might start to invest again. On the contrary, studying financialisation and offshoring together showed that it is not necessarily the case, especially when we highlighted that both processes are related.

Starting from a baseline model derived from Orhangazi (2008) and Hetch (2014), we conducted an econometric regression to show the consequences of both financialisation and offshoring on U.S. NFCs investment between 1995 and 2011. We built two offshoring variables, one for core and other for non-core non-energy activities, based on industry-level information that show the effect of transferring production outside the United States, both with affiliate companies and non-affiliate companies. We estimated equations for the entire sample and for subsamples of large and small firms belonging to high and low offshoring sectors.

In line with previous literature, financialisation manifests for largest firms mainly. Offshoring in non-core, non-energy activities proved to have a negative and significant effect for all firms. This result supports the idea that enterprises tend to subcontract to other foreign firms' non-core activities. Regarding our main hypothesis (the interaction between the financialisation of NFCs and offshoring), our results confirm it as the financial payouts variables were significant for firms belonging to industries with the highest level of offshoring only, this result remaining valid for the subsample of largest firms. For corporations that distribute financial payouts at the expense of their capital accumulation, the real source of the cash distributed to shareholders should be found in GVCs.

8. References

Amiti, M., & Wei, S.-J. (2005). Fear of service outsourcing: is it justified? *Economic Policy*, *20*(42), 308–347.

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

Brenner, R. (2006). *The economics of global turbulence: the advanced capitalist economies from long boom to long downturn, 1945-2005*. Verso.

Brown, J. R., Fazzari, S. M., & Petersen, B. C. (2009). Financing innovation and growth: Cash flow, external equity, and the 1990s R&D boom. *The Journal of Finance*, *64*(1), 151–185.

Chuan, W.-B., & Lin, H. (2007). FDI and domestic investment in Taiwan: An endogenous switching model. *The Developing Economies*, *45*(4), 465–490.

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.

Contractor, F. J., Kumar, V., Kundu, S., & Pedersen, T. (2011). Global outsourcing and offshoring: In search of the optimal configuration for a company. In *Global outsourcing and offshoring: An integrated approach to theory and corporate strategy* (pp. 3–47).

Crotty, J. (2003). The neoliberal paradox: The impact of destructive product market competition and impatient finance on nonfinancial corporations in the neoliberal era. *Review of Radical Political Economics*, *35*(3), 271–279.

Desai, M. C., Foley, C. F., & Hines Jr, J. R. (2005). *Foreign direct investment and the domestic capital stock*. National Bureau of Economic Research.

Dicken, P. (2011). *Global shift: transforming the world economy* (6th ed.). The Guildford Press.

Dietzenbacher, E., Los, B., Stehrer, R., Timmer, M., & De Vries, G. (2013). The construction of world input–output tables in the WIOD project. *Economic Systems Research*, *25*(1), 71–98.

Durand, C., & Miroudot, S. (2015). Is labour the fall guy of a financial-led globalisation? A cross-country inquiry on globalisation, financialisation and employment at the industry level. *Review of World Economics*, *151*(3), 409–432.

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

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*, *1988*(1), 141–206.

Feenstra, R. C., & Hanson, G. H. (1996). *Globalization, outsourcing, and wage inequality*. National Bureau of Economic Research.

Feenstra, R. C., & Hanson, G. H. (1999). The impact of outsourcing and high-technology capital on wages: estimates for the United States, 1979-1990. *Quarterly Journal of Economics*, 907–940.

Feenstra, R. C., & Jensen, J. B. (2012). Evaluating estimates of materials offshoring from US manufacturing. *Economics Letters*, *117*(1), 170–173.

Feldstein, M. S. (1995). The effects of outbound foreign direct investment on the domestic capital stock. In *The effects of taxation on multinational corporations* (pp. 43–66). University of Chicago Press.

Fiebiger, B. (2016). Rethinking the Financialisation of Non-Financial Corporations: A Reappraisal of US Empirical Data. *Review of Political Economy*, 1–26.

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

Foster-McGregor, N., Stehrer, R., & de Vries, G. J. (2013). Offshoring and the skill structure of labour demand. *Review of World Economics*, *149*(4), 631–662.

Geishecker, I. (2007). Assessing the extent and development of international outsourcing in the euro area. *Document Reprographié, Université de Göttingen*.

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

Gereffi, G., & Korzeniewicz, M. (1994). *Commodity chains and global capitalism*. ABC-CLIO.

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.

Hejazi, W., & Pauly, P. (2003). Motivations for FDI and domestic capital formation. *Journal of International Business Studies*, *34*(3), 282–289.

Hering, L., Inui, T., Poncet, S., & others. (2010). *The Elusive Impact of Investing Abroad for Japanese Parent Firms: Can Disaggregation According to FDI Motives Help?*

Herzer, D., & Schrooten, M. (2007). *Outward FDI and domestic investment*. DIW-Diskussionspapiere.

Hijzen, A., Görg, H., & Hine, R. C. (2005). International Outsourcing and the Skill Structure of Labour Demand in the United Kingdom*. *The Economic Journal*, *115*(506), 860–878.

Houseman, S. N. (2011). Offshoring and import price measurement. *Survey of Current Business*.

Hubbard, R. G. (1997). *Capital-market imperfections and investment*. National Bureau of economic research.

Ivanova, M. (2015). Inequality, Financialization and the US Current Account Deficit. In *27th Annual Meeting*. Sase.

Keynes, J. M. (1936). *General theory of employment, interest and money*. Atlantic Publishers & Dist.

Kinkel, S., Lay, G., & Maloca, S. (2008). Patterns of internationalization of German SMEs: surveying manufacturing offshoring. In *Handbook of Research on European Business and Entrepreneurship: Towards a Theory of Internationalization*.

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

Lazonick, W. (1992). Controlling the market for corporate control: the historical significance of managerial capitalism. *Industrial and Corporate Change*, *1*(3), 445–488.

Lazonick, W. (2009). *Sustainable Prosperity in the New Economy?* WE Upjohn Institute for Employment Research Kalamazoo, Michigan.

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

Lee, J., & Gereffi, G. (2015). Global value chains, rising power firms and economic and social upgrading. *Critical Perspectives on International Business*, *11*(3/4), 319–339.

Markusen, J. R., & Venables, A. J. (1999). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, *43*(2), 335–356.

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. (2009). Financialisation and the dynamics of offshoring in the USA. *Cambridge Journal of Economics*.

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

Milberg, W., & Winkler, D. E. (2010). Errors from the'Proportionality Assumption'in the Measurement of Offshoring: Application to German Labor Demand. *SSRN Working Paper Series*.

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

Moser, C., Urban, D., & Weder Di Mauro, B. (2015). On the heterogeneous employment effects of offshoring: Identifying productivity and downsizing channels. *Economic Inquiry*, *53*(1), 220–239.

OECD. (2010). Measuring Globalisation. OECD Economic Globalisation Indicators.

OECD Glossary of Statistical Terms. (2001). Retrieved December 18, 2016, from https://stats.oecd.org/glossary/detail.asp?ID=1121

Onaran, Ö., Stockhammer, E., & Zwickl, K. (2013). FDI and domestic investment in Germany: crowding in or out? *International Review of Applied Economics*, *27*(4), 429–448.

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.

Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata Journal*, *9*(1), 86–136.

Schwörer, T. (2013). Offshoring, domestic outsourcing and productivity: evidence for a number of European countries. *Review of World Economics*, *149*(1), 131–149.

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

Soener, M. (2015). Why do firms financialize? Meso-level evidence from the US apparel and footwear industry, 1991–2005. *Socio-Economic Review*, mwv006.

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

Timmer, M. P., Dietzenbacher, E., Los, B., Stehrer, R., & Vries, G. J. (2015). An illustrated user guide to the world input–output database: the case of global automotive production. *Review of International Economics*, *23*(3), 575–605.

Tori, D., & Onaran, Ö. (2015). The effects of financialization on investment: evidence from firm-level data for the UK.

UNCTAD. (2013). Global value chains and development: investment and value added trade in the global economy.

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

Appendix: Figures and tables

Figure1: Narrow and non-core non-energy offshoring as a percentage of total output. Source: WIOD, Authors' calculation.

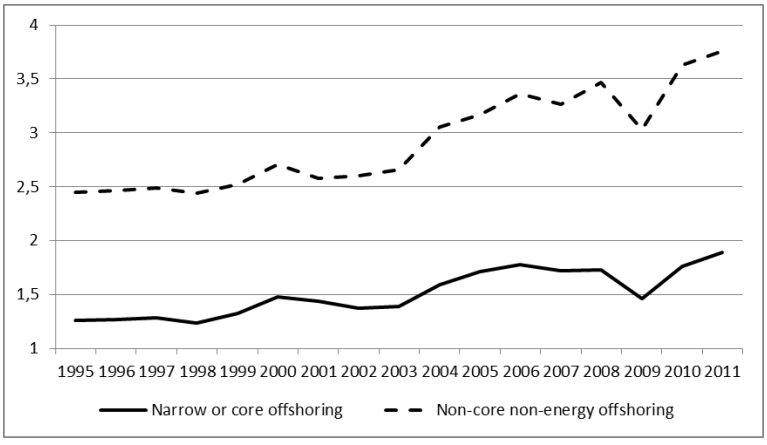

Table 1: Definition of offshoring and outsourcing. Source: Contractor et al (2011)

	Home nation	"Offshore"
In-house Domestic or foreign	Value of entirely in-house activities in home nation	Value of entirely in-house activities within owned foreign affiliates
Outsourcing Domestic or foreign	Value outsourced domestically in home nation	Value outsourced contractually from foreign providers

Table 2: Observations belonging to high and low non-core and non-energy offshoring sectors

isic	Sector	High offshoring	Low offshoring	Total	Mean offshoring
25	Rubber and Plastics	458		458	7,7%
29	Machinery, Nec	1532		1532	7,3%
34t35	Transport Equipment	827		827	6,9%
36t37	Manufacturing, Nec; Recycling	586		586	6,0%
17t18	Textiles and Textile Products	575		575	5,1%
F	Construction	458		458	4,7%
50	Sale, Maintenance and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	192		192	4,6%
15t16	Food, Beverages and Tobacco	1012		1012	4,5%
19	Leather, Leather and Footwear	94		94	3,6%
27t28	Basic Metals and Fabricated Metal	1074		1074	3,5%
21t22	Pulp, Paper, Paper , Printing and Publishing	838		838	3,5%
20	Wood and Products of Wood and Cork	195		195	3,4%
30t33	Electrical and Optical Equipment	4082	459	4541	3,2%
26	Other Non-Metallic Mineral	224		224	3,1%
C	Mining and Quarrying	1348	335	1683	2,8%
61	Water Transport	55	66	121	2,6%
64	Post and Telecommunications	464	1054	1518	2,4%
23	Coke, Refined Petroleum and Nuclear Fuel	111	128	239	2,4%
24	Chemicals and Chemical Products		2674	2674	2,3%
H	Hotels and Restaurants	30	132	162	2,2%
AtB	Agriculture, Hunting, Forestry and Fishing	9	111	120	2,1%
N	Health and Social Work		819	819	2,0%
60	Inland Transport		177	177	1,9%
62	Air Transport		287	287	1,7%
O	Other Community, Social and Personal Services		756	756	1,6%
52	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods		2774	2774	1,4%
51	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles		1334	1334	1,3%
M	Education		132	132	1,3%
E	Electricity, Gas and Water Supply		1965	1965	1,2%
63	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies		49	49	1,1%
71t74	Renting of M&Eq and Other Business Activities		3146	3146	0,9%
	TOTAL	**14164**	**16398**	**30562**	**2,9%**

This table displays the number of observations in high and low offshoring sectors over the 1995-2011 period. It reports also the mean value of offshoring by sectors, i.e. the share of foreign input in total outpout.

Table 3: Descriptive Statistics (variables are scaled by firm's capital stock *K*)

Variable name & variable label		*Mean*	*Std. Dev.*	*Observations*
Capital expenditures	overall	0.242	0.229	N = 30,562
I/K	between		0.223	n = 4,674
	within		0.137	T-bar = 6.539
Profits	overall	-0.052	4.400	N = 30,562
π/K	between		6.460	n = 4,674
	within		2.355	T-bar = 6.539
Sales	overall	9.112	18.502	N = 30,562
S/K	between		19.519	n = 4,674
	within		8.125	T-bar = 6.539
Long Term Debt	overall	2.110	6.002	N = 30,562
LONGDEBT/K	between		7.047	n = 4,674
	within		3.138	T-bar = 6.539
Interest Expenditure	overall	0.253	1.191	N = 30,562
INTEXP/K	between		1.594	n = 4,674
	within		0.690	T-bar = 6.539
Interest and Investment Income	overall	0.041	0.167	N = 30,562
INTINC/K	between		0.190	n = 4,674
	within		0.098	T-bar = 6.539
Dividends	overall	0.036	0.101	N = 30,562
DIV/K	between		0.087	n = 4,674
	within		0.055	T-bar = 6.539
Stock Issue	overall	0.484	2.921	N = 30,562
STKISSUE/K	between		3.499	n = 4,674
	within		2.026	T-bar = 6.539
Stock Repurchase	overall	0.109	0.422	N = 30,562
STKREP/K	between		0.330	n = 4,674
	within		0.311	T-bar = 6.539
Net Debt Issue	overall	0.255	2.399	N = 30,562
NETDEBTISSUE/K	between		2.743	n = 4,674
	within		1.859	T-bar = 6.539
Internal Finance	overall	1.302	4.887	N = 30,562
INTERNF/K	between		5.698	n = 4,674
	within		2.645	T-bar = 6.539
Tobin's *q*	overall	1.927	2.572	N = 30,562
Q	between		3.317	n = 4,674
	within		1.424	T-bar = 6.539
Narrow or core offshoring	overall	0.024	0.028	N = 30,562
COREOFF	between		0.028	n = 4,674
	within		0.005	T-bar = 6.539
Non-core non-energy offshoring	overall	0.028	0.018	N = 30,562
NONCORENONENERGYOFF	between		0.017	n = 4,674
	within		0.005	T-bar = 6.539

Table 4: Correlation matrix

Variable name	*Variable label*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
1. Capital expenditures	$\ln(I/K)_{i,t-1}$	1.000												
2. Profits	$\ln(\pi/K)_{i,t-1}$	0.016	1.000											
3. Sales	$\ln(S/K)_{i,t-1}$	0.313	0.274	1.000										
4. Long Term Debt	$\ln(LONGDEBT/K)_{i,t}$	0.234	0.039	0.457	1.000									
5. Interest Expenditure	$\ln(INTEXP/K)_{i,t-1}$	0.217	-0.215	0.410	0.671	1.000								
6. Interest and Investment Income	$\ln(INTINC/K)_{i,t-1}$	0.238	-0.258	0.166	0.272	0.281	1.000							
7. Dividends	$\ln(DIV/K)_{i,t-1}$	-0.006	0.227	0.135	0.105	0.037	0.023	1.000						
8. Stock Issue	$\ln(STKISSUE/K)_{i,t-1}$	0.252	-0.374	0.167	0.212	0.354	0.379	-0.025	1.000					
9. Stock Repurchase	$\ln(STKREP/K)_{i,t-1}$	0.126	0.261	0.228	0.164	0.052	0.127	0.223	0.062	1.000				
10. Net Debt Issue	$\ln(NETDEBTISSUE/K)_{i,t-1}$	0.162	-0.144	0.011	0.240	0.156	0.071	0.004	0.086	0.093	1.000			
11. Internal Finance	$\ln(INTERNF/K)_{i,t-1}$	0.330	-0.164	0.387	0.376	0.345	0.673	0.060	0.502	0.197	0.081	1.000		
12. Tobin's *q*	$\ln(Q)_{i,t-1}$	0.132	-0.202	0.019	0.073	0.204	0.117	0.031	0.286	0.062	0.102	0.182	1.000	
13. Narrow or core offshoring	$\ln(COREOFF)_{j,t-1}$	0.038	-0.077	-0.005	-0.003	0.021	0.127	0.030	0.107	0.024	0.010	0.198	0.089	1.000
14. Non-core non-energy offshoring	$\ln(NONCORENONENERGYOFF)_{j,t-1}$	-0.085	0.051	-0.004	-0.017	-0.042	-0.049	0.071	-0.064	-0.016	-0.039	-0.024	-0.040	0.483

Table 5. Estimation results based on equations (1) and (2). Period: 1995-2011

Dependent variable:	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
ln(I/K)i,t	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.239***	0.337***	0.178***	0.240***	0.336***	0.173***	0.185***	0.170***	0.124***	0.253***	0.368***	0.170***
	(0.017)	(0.028)	(0.019)	(0.016)	(0.027)	(0.018)	(0.023)	(0.050)	(0.025)	(0.021)	(0.033)	(0.024)
ln(π/K)i,t-1	0.015**	0.035***	0.010	0.015**	0.033***	0.011	0.030***	0.039***	0.021**	0.007	0.032**	0.004
	(0.007)	(0.011)	(0.007)	(0.007)	(0.011)	(0.007)	(0.010)	(0.013)	(0.010)	(0.009)	(0.013)	(0.009)
ln(S/K)i,t-1	0.031***	0.011	0.038***	0.028**	0.017	0.038***	0.045***	0.057**	0.046**	0.022	-0.013	0.043***
	(0.012)	(0.019)	(0.013)	(0.011)	(0.018)	(0.012)	(0.016)	(0.023)	(0.020)	(0.014)	(0.020)	(0.015)
ln(Q)i,t-1	0.070***	0.069***	0.065***	0.070***	0.073***	0.065***	0.071***	0.079***	0.062***	0.060***	0.065***	0.052***
	(0.007)	(0.008)	(0.010)	(0.007)	(0.008)	(0.010)	(0.010)	(0.013)	(0.015)	(0.009)	(0.009)	(0.012)
ln(LONGDEBT/K)i,t	-0.010	-0.008	-0.003	-0.009	-0.007	-0.002	0.001	0.026	-0.003	0.001	-0.011	-0.002
	(0.008)	(0.013)	(0.011)	(0.008)	(0.012)	(0.011)	(0.012)	(0.020)	(0.016)	(0.010)	(0.011)	(0.011)
ln(INTEXP/K)i,t-1	0.003	-0.023	0.010	0.005	-0.024	0.006	-0.024	-0.057	-0.017	0.004	-0.003	-0.009
	(0.017)	(0.032)	(0.019)	(0.016)	(0.030)	(0.018)	(0.023)	(0.049)	(0.025)	(0.019)	(0.033)	(0.020)
ln(INTINC/K)i,t-1	0.006	0.051	0.017	0.008	0.034	0.022	-0.004	-0.082	0.024	0.000	0.086**	-0.000
	(0.025)	(0.038)	(0.029)	(0.025)	(0.036)	(0.028)	(0.049)	(0.054)	(0.059)	(0.028)	(0.036)	(0.034)
ln(DIV/K)i,t-1	-0.050*	-0.045	-0.042	-0.045	-0.046	-0.040	-0.067**	-0.078*	-0.047	-0.024	0.005	-0.025
	(0.029)	(0.036)	(0.034)	(0.029)	(0.038)	(0.034)	(0.031)	(0.041)	(0.045)	(0.037)	(0.057)	(0.039)
ln(STKISSUE/K)i,t-1	0.020***	0.013**	0.023***	0.020***	0.013**	0.022***	0.027***	0.024*	0.024***	0.011**	0.005	0.017***
	(0.004)	(0.006)	(0.005)	(0.004)	(0.006)	(0.005)	(0.006)	(0.014)	(0.007)	(0.004)	(0.006)	(0.006)
ln(STKREP/K)i,t-1	-0.009	-0.017**	-0.014	-0.009	-0.017**	-0.013	-0.014	-0.008	-0.013	-0.001	-0.011	0.006
	(0.007)	(0.007)	(0.011)	(0.007)	(0.007)	(0.012)	(0.009)	(0.012)	(0.014)	(0.009)	(0.010)	(0.014)
ln(NETDEBT	0.007***	0.005**	0.006**	0.007***	0.006**	0.006**	0.005*	0.008*	0.003	0.007***	0.006*	0.006*
ISSUE/K)i,t-1	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.004)	(0.004)	(0.002)	(0.003)	(0.003)
ln(INTERNF/K)i,t-1	0.043***	0.039***	0.049***	0.046***	0.040***	0.050***	0.028***	0.016	0.038***	0.059***	0.049***	0.053***
	(0.007)	(0.009)	(0.010)	(0.007)	(0.009)	(0.010)	(0.010)	(0.016)	(0.013)	(0.009)	(0.012)	(0.012)
ln(COREOFF)j,t-1				0.026**	0.019*	0.001	0.002	0.019	-0.006	0.010	0.003	0.008
				(0.013)	(0.010)	(0.023)	(0.012)	(0.014)	(0.019)	(0.012)	(0.008)	(0.027)
ln(NONCORE				-0.039**	-0.014	-0.013	-0.018	-0.040*	-0.035	0.016	0.005	0.042
NONENERGYOFF)j,t-1				(0.018)	(0.016)	(0.030)	(0.020)	(0.021)	(0.031)	(0.014)	(0.010)	(0.030)

N. obs	30562	16654	13908	30562	16654	13908	14164	7525	6639	16398	9129	7269
N. firms	4674	2323	3025	4674	2323	3025	2241	1129	1445	3039	1515	1881
Instruments	375	375	375	433	433	433	433	433	433	433	433	433
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ar2p	0.060	0.921	0.228	0.058	0.969	0.253	0.245	0.909	0.888	0.442	0.060	0.426
hansenp	0.001	0.000	0.060	0.000	0.000	0.061	0.000	0.019	0.018	0.003	0.001	0.104
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower median of total asset. High and low offshoring sectors are those belonging upper and lower median of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

Table 6. Robustness check: results based on equations (1) and (2) while reducing the number of instruments. Period: 1995-2011

Dependent variable:ln(I/K)i,t	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.274***	0.398***	0.212***	0.270***	0.396***	0.212***	0.227***	0.288***	0.192***	0.302***	0.474***	0.218***
	(0.018)	(0.036)	(0.021)	(0.018)	(0.036)	(0.021)	(0.027)	(0.048)	(0.032)	(0.025)	(0.045)	(0.029)
ln(π/K)i,t-1	0.012	0.052***	0.003	0.014*	0.057***	0.004	0.032**	0.072***	0.022	0.007	0.052***	-0.001
	(0.008)	(0.014)	(0.008)	(0.008)	(0.014)	(0.008)	(0.014)	(0.024)	(0.015)	(0.010)	(0.017)	(0.011)
ln(S/K)i,t-1	0.018	-0.064**	0.036**	0.013	-0.073***	0.034**	0.037	-0.031	0.064**	-0.028	-0.136***	0.002
	(0.014)	(0.029)	(0.016)	(0.014)	(0.028)	(0.017)	(0.029)	(0.043)	(0.031)	(0.020)	(0.036)	(0.026)
ln(Q)i,t-1	0.062***	0.087***	0.052***	0.062***	0.087***	0.053***	0.049***	0.085***	0.034	0.075***	0.086***	0.073***
	(0.010)	(0.011)	(0.014)	(0.010)	(0.010)	(0.014)	(0.017)	(0.022)	(0.023)	(0.013)	(0.013)	(0.018)
ln(LONGDEBT/K)i,t	-0.007	-0.018	-0.012	-0.009	-0.025	-0.009	-0.010	-0.027	0.002	-0.013	-0.046***	-0.009
	(0.012)	(0.022)	(0.016)	(0.012)	(0.021)	(0.015)	(0.022)	(0.038)	(0.023)	(0.015)	(0.018)	(0.020)
ln(INTEXP/K)i,t-1	-0.001	0.029	-0.011	0.001	0.025	-0.007	-0.012	0.018	-0.014	0.041	0.091**	0.016
	(0.020)	(0.036)	(0.023)	(0.021)	(0.037)	(0.023)	(0.033)	(0.059)	(0.036)	(0.031)	(0.044)	(0.037)
ln(INTINC/K)i,t-1	0.008	0.139***	-0.009	0.012	0.153***	-0.013	0.001	-0.060	-0.044	0.021	0.217***	0.005
	(0.040)	(0.048)	(0.051)	(0.040)	(0.049)	(0.051)	(0.069)	(0.121)	(0.082)	(0.048)	(0.059)	(0.061)
ln(DIV/K)i,t-1	-0.076**	-0.105**	-0.065	-0.072**	-0.095*	-0.060	-0.058	-0.068	0.023	-0.067	-0.014	-0.057
	(0.034)	(0.049)	(0.045)	(0.034)	(0.050)	(0.045)	(0.041)	(0.058)	(0.074)	(0.051)	(0.085)	(0.060)
ln(STKISSUE/K)i,t-1	0.021***	0.018***	0.022***	0.022***	0.018***	0.022***	0.031***	0.035***	0.031***	0.016***	0.005	0.016**
	(0.004)	(0.006)	(0.005)	(0.004)	(0.006)	(0.005)	(0.007)	(0.011)	(0.008)	(0.005)	(0.008)	(0.007)
ln(STKREP/K)i,t-1	-0.015**	-0.024**	-0.013	-0.014*	-0.025***	-0.012	-0.018*	-0.026**	-0.021	-0.008	-0.017	-0.001
	(0.008)	(0.010)	(0.012)	(0.008)	(0.010)	(0.012)	(0.010)	(0.012)	(0.018)	(0.010)	(0.011)	(0.017)
ln(NETDEBT	0.006**	0.005*	0.005	0.006***	0.007**	0.005	0.004	0.006	0.001	0.008***	0.008**	0.007*
ISSUE/K)i,t-1	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)	(0.003)	(0.004)	(0.004)
ln(INTERNF/K)i,t-1	0.050***	0.020*	0.060***	0.046***	0.015	0.058***	0.021	-0.020	0.036**	0.057***	0.041***	0.068***
	(0.009)	(0.012)	(0.011)	(0.009)	(0.011)	(0.012)	(0.013)	(0.019)	(0.014)	(0.012)	(0.015)	(0.016)
ln(COREOFF)j,t-1				0.036	-0.020	0.042	0.091	0.130	-0.046	0.019	-0.024	-0.002
				(0.049)	(0.047)	(0.101)	(0.189)	(0.206)	(0.224)	(0.050)	(0.050)	(0.091)
ln(NONCORE				0.061	0.058	0.085	0.234	0.097	0.183	0.104***	0.035	0.203***
NONENERGYOFF)j,t-1				(0.083)	(0.071)	(0.181)	(0.176)	(0.115)	(0.289)	(0.031)	(0.028)	(0.065)

N. obs	30562	16654	13908	30562	16654	13908	14164	7525	6639	16398	9129	7269
N. firms	4674	2323	3025	4674	2323	3025	2241	1129	1445	3039	1515	1881
Instruments	39	39	39	43	43	43	43	43	43	43	43	43
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ar2p	0.021	0.868	0.125	0.020	0.769	0.104	0.104	0.356	0.520	0.254	0.007	0.213
hansenp	0.035	0.277	0.219	0.020	0.146	0.246	0.130	0.218	0.139	0.062	0.202	0.164
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower median of total asset. High and low offshoring sectors are those belonging upper and lower median of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

Table 7. Robustness check: results based on equations (1) and (2) with alternative size for firms (upper and lower 25%). Period: 1995-2011

Dependent variable:ln(I/K)i,t	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.239***	0.357***	0.111***	0.240***	0.347***	0.099***	0.185***	0.137**	0.033	0.253***	0.382***	0.060*
	(0.017)	(0.047)	(0.024)	(0.016)	(0.045)	(0.024)	(0.023)	(0.065)	(0.034)	(0.021)	(0.055)	(0.034)
ln(π/K)i,t-1	0.015**	0.029**	0.002	0.015**	0.026**	0.003	0.030***	0.061***	0.010	0.007	0.012	-0.000
	(0.007)	(0.012)	(0.008)	(0.007)	(0.012)	(0.008)	(0.010)	(0.020)	(0.011)	(0.009)	(0.014)	(0.009)
ln(S/K)i,t-1	0.031***	0.019	0.045**	0.028**	0.019	0.045***	0.045***	-0.008	0.053**	0.022	0.012	0.053***
	(0.012)	(0.020)	(0.018)	(0.011)	(0.020)	(0.016)	(0.016)	(0.025)	(0.021)	(0.014)	(0.023)	(0.020)
ln(Q)i,t-1	0.070***	0.054***	0.067***	0.070***	0.057***	0.068***	0.071***	0.078***	0.057***	0.060***	0.041***	0.056***
	(0.007)	(0.008)	(0.012)	(0.007)	(0.008)	(0.012)	(0.010)	(0.018)	(0.019)	(0.009)	(0.010)	(0.016)
ln(LONGDEBT/K)i,t	-0.010	0.019	0.016	-0.009	0.019	0.011	0.001	0.050*	-0.002	0.001	0.011	0.007
	(0.008)	(0.016)	(0.014)	(0.008)	(0.016)	(0.014)	(0.012)	(0.028)	(0.015)	(0.010)	(0.018)	(0.016)
ln(INTEXP/K)i,t-1	0.003	-0.114***	0.017	0.005	-0.121***	0.016	-0.024	-0.072	-0.009	0.004	-0.072	0.010
	(0.017)	(0.044)	(0.021)	(0.016)	(0.042)	(0.019)	(0.023)	(0.049)	(0.029)	(0.019)	(0.057)	(0.024)
ln(INTINC/K)i,t-1	0.006	-0.094	0.021	0.008	-0.092	0.021	-0.004	0.018	0.020	0.000	-0.089	0.001
	(0.025)	(0.065)	(0.033)	(0.025)	(0.066)	(0.032)	(0.049)	(0.091)	(0.068)	(0.028)	(0.065)	(0.048)
ln(DIV/K)i,t-1	-0.050*	-0.092	-0.026	-0.045	-0.071	-0.025	-0.067**	-0.036	-0.031	-0.024	-0.125	-0.010
	(0.029)	(0.094)	(0.042)	(0.029)	(0.089)	(0.044)	(0.031)	(0.068)	(0.069)	(0.037)	(0.131)	(0.057)
ln(STKISSUE/K)i,t-1	0.020***	0.016	0.021***	0.020***	0.015	0.020***	0.027***	0.033*	0.032***	0.011**	0.009	0.014*
	(0.004)	(0.010)	(0.006)	(0.004)	(0.009)	(0.006)	(0.006)	(0.018)	(0.011)	(0.004)	(0.011)	(0.008)
ln(STKREP/K)i,t-1	-0.009	-0.016*	-0.008	-0.009	-0.016*	-0.011	-0.014	-0.033*	-0.008	-0.001	-0.009	0.005
	(0.007)	(0.009)	(0.019)	(0.007)	(0.009)	(0.019)	(0.009)	(0.019)	(0.035)	(0.009)	(0.012)	(0.023)
ln(NETDEBT	0.007***	0.009**	0.001	0.007***	0.009**	0.002	0.005*	0.017***	0.001	0.007***	0.011*	0.003
ISSUE/K)i,t-1	(0.002)	(0.004)	(0.004)	(0.002)	(0.004)	(0.004)	(0.003)	(0.007)	(0.006)	(0.002)	(0.006)	(0.005)
ln(INTERNF/K)i,t-1	0.043***	0.035***	0.074***	0.046***	0.039***	0.074***	0.028***	0.003	0.051***	0.059***	0.051***	0.076***
	(0.007)	(0.013)	(0.013)	(0.007)	(0.012)	(0.013)	(0.010)	(0.021)	(0.017)	(0.009)	(0.015)	(0.016)
ln(COREOFF)j,t-1				0.026**	0.017	0.045	0.002	0.042	0.040	0.010	0.016*	0.048
				(0.013)	(0.012)	(0.037)	(0.012)	(0.027)	(0.034)	(0.012)	(0.009)	(0.045)
ln(NONCORE				-0.039**	0.007	-0.035	-0.018	-0.030	-0.034	0.016	0.002	0.027
NONENERGYOFF)j,t-1				(0.018)	(0.013)	(0.050)	(0.020)	(0.031)	(0.054)	(0.014)	(0.010)	(0.054)

N. obs	30562	8535	6517	30562	8535	6517	14164	3631	3099	16398	4904	3418
N. firms	4674	1161	1706	4674	1161	1706	2241	556	810	3039	764	1046
Instruments	375	375	375	433	433	433	433	433	433	433	433	433
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000
ar2p	0.060	0.958	0.543	0.058	0.996	0.620	0.245	0.763	0.324	0.442	0.185	0.763
hansenp	0.001	0.030	0.367	0.000	0.034	0.665	0.000	0.208	0.290	0.003	0.113	0.255
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower 25% fractiles of total asset. High and low offshoring sectors are those belonging upper and lower median of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

Table 8. Robustness check: results based on equations (1) and (2) with alternative level of offshoring (upper and lower 25%). Period: 1995-2011

Dependent variable:ln(I/K)i,t	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.239***	0.337***	0.178***	0.240***	0.336***	0.173***	0.164***	0.119**	0.095***	0.212***	0.384***	0.081**
	(0.017)	(0.028)	(0.019)	(0.016)	(0.027)	(0.018)	(0.028)	(0.059)	(0.029)	(0.031)	(0.050)	(0.035)
ln(π/K)i,t-1	0.015**	0.035***	0.010	0.015**	0.033***	0.011	0.026**	0.033**	0.024**	0.013	0.034**	0.007
	(0.007)	(0.011)	(0.007)	(0.007)	(0.011)	(0.007)	(0.011)	(0.013)	(0.011)	(0.009)	(0.014)	(0.009)
ln(S/K)i,t-1	0.031***	0.011	0.038***	0.028**	0.017	0.038***	0.044***	0.085***	0.035*	0.033*	-0.012	0.055**
	(0.012)	(0.019)	(0.013)	(0.011)	(0.018)	(0.012)	(0.017)	(0.023)	(0.019)	(0.019)	(0.025)	(0.022)
ln(Q)i,t-1	0.070***	0.069***	0.065***	0.070***	0.073***	0.065***	0.069***	0.078***	0.055***	0.046***	0.038***	0.034**
	(0.007)	(0.008)	(0.010)	(0.007)	(0.008)	(0.010)	(0.012)	(0.015)	(0.020)	(0.012)	(0.011)	(0.014)
ln(LONGDEBT/K)i,t	-0.010	-0.008	-0.003	-0.009	-0.007	-0.002	0.008	0.036**	0.009	0.003	-0.019	0.013
	(0.008)	(0.013)	(0.011)	(0.008)	(0.012)	(0.011)	(0.012)	(0.018)	(0.015)	(0.011)	(0.015)	(0.012)
ln(INTEXP/K)i,t-1	0.003	-0.023	0.010	0.005	-0.024	0.006	-0.031	-0.070	-0.018	0.027	0.036	0.008
	(0.017)	(0.032)	(0.019)	(0.016)	(0.030)	(0.018)	(0.022)	(0.049)	(0.025)	(0.024)	(0.045)	(0.023)
ln(INTINC/K)i,t-1	0.006	0.051	0.017	0.008	0.034	0.022	0.025	-0.054	0.088	-0.066	0.076	-0.092
	(0.025)	(0.038)	(0.029)	(0.025)	(0.036)	(0.028)	(0.044)	(0.065)	(0.059)	(0.054)	(0.068)	(0.075)
ln(DIV/K)i,t-1	-0.050*	-0.045	-0.042	-0.045	-0.046	-0.040	-0.052	-0.128**	0.020	0.007	0.033	-0.029
	(0.029)	(0.036)	(0.034)	(0.029)	(0.038)	(0.034)	(0.041)	(0.050)	(0.054)	(0.041)	(0.071)	(0.042)
ln(STKISSUE/K)i,t-1	0.020***	0.013**	0.023***	0.020***	0.013**	0.022***	0.029***	0.019	0.023***	0.007	0.008	0.007
	(0.004)	(0.006)	(0.005)	(0.004)	(0.006)	(0.005)	(0.007)	(0.015)	(0.008)	(0.006)	(0.008)	(0.008)
ln(STKREP/K)i,t-1	-0.009	-0.017**	-0.014	-0.009	-0.017**	-0.013	-0.021**	-0.011	-0.023	0.006	-0.014	0.001
	(0.007)	(0.007)	(0.011)	(0.007)	(0.007)	(0.012)	(0.009)	(0.015)	(0.014)	(0.011)	(0.011)	(0.018)
ln(NETDEBT	0.007***	0.005**	0.006**	0.007***	0.006**	0.006**	0.003	0.006	0.000	0.011***	0.010**	0.009**
ISSUE/K)i,t-1	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.005)	(0.004)	(0.003)	(0.005)	(0.004)
ln(INTERNF/K)i,t-1	0.043***	0.039***	0.049***	0.046***	0.040***	0.050***	0.030***	0.026	0.042***	0.058***	0.023	0.072***
	(0.007)	(0.009)	(0.010)	(0.007)	(0.009)	(0.010)	(0.011)	(0.019)	(0.014)	(0.012)	(0.015)	(0.016)
ln(COREOFF)j,t-1				0.026**	0.019*	0.001	-0.010	0.009	-0.013	0.010	0.018**	0.011
				(0.013)	(0.010)	(0.023)	(0.014)	(0.020)	(0.023)	(0.007)	(0.008)	(0.020)
ln(NONCORE				-0.039**	-0.014	-0.013	-0.011	-0.020	-0.037	0.006	-0.005	0.047
NONENERGYOFF)j,t-1				(0.018)	(0.016)	(0.030)	(0.021)	(0.020)	(0.039)	(0.011)	(0.010)	(0.029)

N. obs	30562	16654	13908	30562	16654	13908	10446	5548	4898	8582	4794	3788
N. firms	4674	2323	3025	4674	2323	3025	1781	905	1119	1564	772	977
Instruments	375	375	375	433	433	433	433	433	433	433	433	433
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ar2p	0.060	0.921	0.228	0.058	0.969	0.253	0.654	0.739	0.299	0.349	0.659	0.588
hansenp	0.001	0.000	0.060	0.000	0.000	0.061	0.024	0.032	0.263	0.015	0.050	0.131
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower median of total asset. High and low offshoring sectors are those belonging upper and lower 25% fractiles of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

Table 9. Robustness check: results based on equations (1) and (2) without non-significant variables. Period: 1995-2011

Dependent variable:ln(I/K)i,t	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.241***	0.348***	0.179***	0.242***	0.346***	0.177***	0.191***	0.221***	0.127***	0.248***	0.386***	0.176***
	(0.016)	(0.026)	(0.018)	(0.016)	(0.025)	(0.018)	(0.021)	(0.048)	(0.023)	(0.021)	(0.033)	(0.024)
ln(π/K)i,t-1	0.018**	0.034***	0.013*	0.017**	0.030***	0.013*	0.034***	0.038***	0.027***	0.009	0.027**	0.005
	(0.007)	(0.011)	(0.007)	(0.007)	(0.010)	(0.007)	(0.009)	(0.014)	(0.010)	(0.010)	(0.013)	(0.009)
ln(S/K)i,t-1	0.023*	0.024	0.031**	0.020	0.031*	0.028**	0.040***	0.041	0.045***	0.021	0.019	0.038**
	(0.013)	(0.019)	(0.013)	(0.012)	(0.016)	(0.013)	(0.015)	(0.027)	(0.017)	(0.016)	(0.020)	(0.016)
ln(Q)i,t-1	0.070***	0.066***	0.069***	0.070***	0.069***	0.069***	0.086***	0.077***	0.078***	0.058***	0.064***	0.051***
	(0.007)	(0.008)	(0.009)	(0.007)	(0.008)	(0.009)	(0.010)	(0.014)	(0.014)	(0.009)	(0.010)	(0.011)
ln(LONGDEBT/K)i,t												
ln(INTEXP/K)i,t-1	0.003	-0.055	0.001	0.003	-0.053	0.003	-0.044**	-0.058	-0.039	0.022	-0.028	0.009
	(0.018)	(0.036)	(0.019)	(0.018)	(0.034)	(0.019)	(0.023)	(0.049)	(0.026)	(0.022)	(0.043)	(0.023)
ln(INTINC/K)i,t-1												
ln(DIV/K)i,t-1	-0.021	-0.037	-0.021	-0.015	-0.047	-0.010	-0.063**	-0.098**	-0.038	0.019	-0.028	-0.011
	(0.028)	(0.034)	(0.034)	(0.028)	(0.034)	(0.035)	(0.028)	(0.045)	(0.041)	(0.036)	(0.055)	(0.038)
ln(STKISSUE/K)i,t-1	0.015***	0.012**	0.017***	0.014***	0.012**	0.017***	0.020***	0.030***	0.015**	0.009*	0.005	0.013**
	(0.004)	(0.005)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.010)	(0.006)	(0.005)	(0.007)	(0.006)
ln(STKREP/K)i,t-1	-0.005	-0.016**	-0.009	-0.006	-0.015**	-0.010	-0.020**	-0.021*	-0.017	0.001	-0.006	0.011
	(0.006)	(0.007)	(0.011)	(0.007)	(0.007)	(0.011)	(0.009)	(0.012)	(0.013)	(0.008)	(0.010)	(0.015)
ln(NETDEBT	0.004*	0.004*	0.004	0.004**	0.005*	0.004	0.003	0.007**	0.002	0.006**	0.005	0.004
ISSUE/K)i,t-1	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)
ln(INTERNF/K)i,t-1	0.051***	0.030***	0.057***	0.056***	0.031***	0.061***	0.035***	0.005	0.046***	0.057***	0.036***	0.058***
	(0.008)	(0.009)	(0.010)	(0.007)	(0.009)	(0.010)	(0.010)	(0.014)	(0.013)	(0.009)	(0.012)	(0.012)
ln(COREOFF)j,t-1				0.013	0.017	0.010	0.001	0.020	-0.021	0.008	0.007	0.009
				(0.014)	(0.011)	(0.023)	(0.012)	(0.013)	(0.018)	(0.013)	(0.008)	(0.029)
ln(NONCORE				-0.024	-0.015	0.006	-0.012	-0.041**	-0.031	0.038**	0.006	0.056*
NONENERGYOFF)j,t-1				(0.019)	(0.017)	(0.030)	(0.019)	(0.020)	(0.031)	(0.015)	(0.010)	(0.030)

N. obs	32403	16967	15436	32403	16967	15436	14973	7652	7321	17430	9315	8115
N. firms	4902	2352	3255	4902	2352	3255	2350	1142	1556	3201	1535	2040
Instruments	315	315	315	373	373	373	373	373	373	373	373	373
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ar2p	0.073	0.858	0.272	0.072	0.906	0.276	0.144	0.656	0.733	0.612	0.040	0.514
hansenp	0.001	0.002	0.120	0.000	0.000	0.177	0.002	0.007	0.106	0.001	0.002	0.236
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower median of total asset. High and low offshoring sectors are those belonging upper and lower median of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

Table 10. Robustness check: results based on equations (1) and (2) for a shorter period: 1995-2002

Dependent variable:ln(I/K)i,t	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.260***	0.336***	0.202***	0.255***	0.322***	0.190***	0.236***	0.148**	0.198***	0.233***	0.372***	0.123***
	(0.024)	(0.043)	(0.025)	(0.024)	(0.044)	(0.025)	(0.030)	(0.074)	(0.033)	(0.033)	(0.052)	(0.039)
ln(π/K)i,t-1	0.018	0.049***	0.006	0.016	0.048***	0.008	0.037***	0.022	0.026*	0.002	0.053***	-0.007
	(0.011)	(0.017)	(0.013)	(0.011)	(0.017)	(0.012)	(0.013)	(0.026)	(0.015)	(0.016)	(0.020)	(0.016)
ln(S/K)i,t-1	0.015	-0.015	0.039*	0.033	0.007	0.038*	-0.000	0.076*	0.013	0.046*	-0.026	0.077***
	(0.018)	(0.025)	(0.022)	(0.021)	(0.028)	(0.022)	(0.021)	(0.046)	(0.026)	(0.027)	(0.030)	(0.030)
ln(Q)i,t-1	0.088***	0.089***	0.086***	0.085***	0.080***	0.087***	0.112***	0.096***	0.098***	0.060***	0.068***	0.062***
	(0.011)	(0.012)	(0.015)	(0.011)	(0.012)	(0.014)	(0.016)	(0.020)	(0.024)	(0.011)	(0.015)	(0.016)
ln(LONGDEBT/K)i,t	-0.016	-0.017	-0.011	-0.013	-0.018	-0.014	-0.013	0.034	-0.023	-0.024	-0.029	-0.017
	(0.014)	(0.019)	(0.020)	(0.014)	(0.018)	(0.019)	(0.020)	(0.033)	(0.028)	(0.016)	(0.018)	(0.020)
ln(INTEXP/K)i,t-1	0.003	0.009	0.008	-0.018	-0.009	0.001	-0.010	-0.108	-0.015	-0.021	0.007	-0.005
	(0.029)	(0.059)	(0.035)	(0.031)	(0.058)	(0.035)	(0.036)	(0.107)	(0.040)	(0.041)	(0.058)	(0.044)
ln(INTINC/K)i,t-1	0.003	0.061	-0.014	-0.004	0.063	0.007	-0.005	0.060	-0.037	0.040	0.064	0.090
	(0.062)	(0.089)	(0.075)	(0.062)	(0.083)	(0.073)	(0.078)	(0.140)	(0.101)	(0.069)	(0.074)	(0.086)
ln(DIV/K)i,t-1	-0.090**	-0.012	-0.062	-0.088**	-0.031	-0.062	-0.046	-0.061	-0.074	-0.065	0.090	-0.049
	(0.038)	(0.054)	(0.040)	(0.040)	(0.054)	(0.043)	(0.048)	(0.060)	(0.052)	(0.055)	(0.089)	(0.046)
ln(STKISSUE/K)i,t-1	0.018***	0.004	0.025***	0.019***	0.005	0.023***	0.022**	0.008	0.020*	0.011	-0.001	0.020**
	(0.006)	(0.009)	(0.008)	(0.006)	(0.009)	(0.008)	(0.009)	(0.021)	(0.011)	(0.008)	(0.011)	(0.010)
ln(STKREP/K)i,t-1	-0.025*	-0.020	-0.044**	-0.021	-0.023*	-0.036*	-0.018	-0.017	-0.015	-0.012	-0.019	-0.019
	(0.013)	(0.012)	(0.020)	(0.013)	(0.013)	(0.020)	(0.015)	(0.020)	(0.020)	(0.018)	(0.016)	(0.030)
ln(NETDEBT	0.007**	0.005	0.007	0.008**	0.006	0.008*	0.006	0.003	0.000	0.011**	0.006	0.009
ISSUE/K)i,t-1	(0.003)	(0.005)	(0.005)	(0.003)	(0.005)	(0.005)	(0.004)	(0.006)	(0.006)	(0.004)	(0.006)	(0.006)
ln(INTERNF/K)i,t-1	0.056***	0.063***	0.055***	0.048***	0.044**	0.054***	0.051***	0.083**	0.044**	0.054***	0.052**	0.052***
	(0.012)	(0.018)	(0.015)	(0.012)	(0.018)	(0.014)	(0.016)	(0.033)	(0.020)	(0.014)	(0.021)	(0.017)
ln(COREOFF)j,t-1				0.047*	0.023	0.047	0.024	0.064	-0.050	-0.019	-0.024	0.013
				(0.025)	(0.025)	(0.043)	(0.035)	(0.041)	(0.058)	(0.024)	(0.023)	(0.042)
ln(NONCORE				-0.071	0.014	-0.127	-0.275***	-0.383***	-0.426**	-0.026	0.010	-0.093
NONENERGYOFF)j,t-1				(0.044)	(0.031)	(0.091)	(0.095)	(0.093)	(0.169)	(0.031)	(0.020)	(0.087)

N. obs	13537	7477	6060	13537	7477	6060	6391	3358	3033	7146	4119	3027
N. firms	3540	1856	1958	3540	1856	1958	1636	830	930	2030	1108	1073
Instruments	150	150	150	172	172	172	172	172	172	172	172	172
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ar2p	0.165	0.625	0.405	0.134	0.661	0.402	0.236	0.491	0.649	0.508	0.225	0.566
hansenp	0.000	0.001	0.018	0.000	0.000	0.008	0.004	0.013	0.065	0.008	0.004	0.083
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower median of total asset. High and low offshoring sectors are those belonging upper and lower median of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

Table 11. Robustness check: results based on equations (1) and (2) for a shorter period: 2003-2011

Dependent variable:ln(I/K)i,t	Financialisation model			Financialisation and offshoring model			High offshoring sectors			Low offshoring sectors		
	All	Large	Small	All	Large	Small	All	Large	Small	All	Large	Small
ln(I/K)i,t-1	0.222***	0.321***	0.166***	0.221***	0.316***	0.164***	0.096***	0.142***	0.010	0.268***	0.354***	0.185***
	(0.024)	(0.041)	(0.028)	(0.024)	(0.039)	(0.028)	(0.036)	(0.051)	(0.038)	(0.028)	(0.051)	(0.031)
ln(π/K)i,t-1	0.008	0.014	0.006	0.008	0.019	0.005	0.014	0.033**	0.007	0.004	0.001	0.006
	(0.009)	(0.015)	(0.010)	(0.009)	(0.014)	(0.009)	(0.014)	(0.016)	(0.015)	(0.012)	(0.015)	(0.011)
ln(S/K)i,t-1	0.048**	0.043	0.052***	0.033**	0.031	0.052***	0.103***	0.067***	0.104***	0.028	0.015	0.040**
	(0.019)	(0.027)	(0.020)	(0.017)	(0.023)	(0.019)	(0.024)	(0.026)	(0.030)	(0.019)	(0.027)	(0.019)
ln(Q)i,t-1	0.050***	0.060***	0.041***	0.057***	0.076***	0.042***	0.039***	0.095***	0.038*	0.063***	0.073***	0.042**
	(0.011)	(0.012)	(0.014)	(0.010)	(0.012)	(0.013)	(0.015)	(0.019)	(0.020)	(0.015)	(0.015)	(0.018)
ln(LONGDEBT/K)i,t	-0.005	-0.006	0.003	-0.004	-0.007	0.007	0.018	0.011	0.027	0.013	-0.003	0.004
	(0.011)	(0.013)	(0.014)	(0.010)	(0.013)	(0.014)	(0.014)	(0.017)	(0.018)	(0.012)	(0.015)	(0.014)
ln(INTEXP/K)i,t-1	0.009	-0.010	0.018	0.018	-0.010	0.017	-0.041	0.036	-0.039	0.010	0.033	0.002
	(0.022)	(0.038)	(0.024)	(0.021)	(0.035)	(0.023)	(0.031)	(0.045)	(0.036)	(0.025)	(0.041)	(0.025)
ln(INTINC/K)i,t-1	0.001	0.037	0.016	-0.001	0.022	0.012	0.049	-0.211***	0.155*	-0.028	0.081**	-0.034
	(0.031)	(0.041)	(0.035)	(0.028)	(0.041)	(0.035)	(0.076)	(0.075)	(0.091)	(0.031)	(0.041)	(0.042)
ln(DIV/K)i,t-1	-0.029	-0.042	-0.035	-0.015	-0.034	-0.036	-0.124**	-0.108*	-0.092	0.041	0.011	0.027
	(0.039)	(0.036)	(0.053)	(0.038)	(0.039)	(0.053)	(0.054)	(0.056)	(0.090)	(0.061)	(0.071)	(0.054)
ln(STKISSUE/K)i,t-1	0.019***	0.015***	0.019***	0.017***	0.015***	0.019***	0.027***	0.031**	0.023**	0.010*	0.008	0.010
	(0.005)	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.008)	(0.012)	(0.010)	(0.006)	(0.007)	(0.007)
ln(STKREP/K)i,t-1	-0.003	-0.013	0.006	-0.003	-0.013	0.006	-0.012	-0.010	-0.022	0.004	-0.010	0.017
	(0.008)	(0.008)	(0.014)	(0.008)	(0.008)	(0.014)	(0.012)	(0.012)	(0.022)	(0.010)	(0.012)	(0.016)
ln(NETDEBT	0.004*	0.005**	0.004	0.005**	0.004*	0.004	0.002	0.011***	0.002	0.006*	0.007*	0.006
ISSUE/K)i,t-1	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.005)	(0.003)	(0.003)	(0.004)
ln(INTERNF/K)i,t-1	0.034***	0.018*	0.039***	0.045***	0.030***	0.044***	0.019	-0.026*	0.049***	0.049***	0.033**	0.041**
	(0.010)	(0.011)	(0.013)	(0.009)	(0.010)	(0.013)	(0.014)	(0.014)	(0.017)	(0.012)	(0.015)	(0.017)
ln(COREOFF)j,t-1				0.020	0.023**	-0.045	-0.006	0.019	-0.012	0.021	0.015*	-0.059
				(0.017)	(0.011)	(0.033)	(0.012)	(0.013)	(0.021)	(0.017)	(0.009)	(0.047)
ln(NONCORE				-0.038*	-0.015	0.029	-0.003	-0.040*	-0.028	0.029	0.012	0.107**
NONENERGYOFF)j,t-1				(0.020)	(0.017)	(0.033)	(0.019)	(0.021)	(0.033)	(0.020)	(0.014)	(0.043)

N. obs	17025	9177	7848	17025	9177	7848	7773	4167	3606	9252	5010	4242
N. firms	3354	1655	2101	3354	1655	2101	1643	850	1001	2249	1084	1365
Instruments	225	225	225	261	261	261	261	261	261	261	261	261
ar1p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ar2p	0.034	0.820	0.144	0.035	0.895	0.162	0.558	0.842	0.458	0.394	0.170	0.644
hansenp	0.015	0.001	0.195	0.008	0.000	0.326	0.005	0.019	0.063	0.003	0.000	0.066
Time effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Large and small are those firms in the upper and lower median of total asset. High and low offshoring sectors are those belonging upper and lower median of non-core non-energy offshoring. Estimations are all obtained by the Arellano-Bond two-step difference GMM. All instruments include up to two-years lags. Robust standard errors are in parentheses. The coefficients for the year fixed effects, for the age, and for the constant term are not reported. ar1p and ar2p are Arellano-Bond test of first order and second order autocorrelation in the errors. hansep is the Hansen-Sargan test of overidentifying restrictions. P-values are reported for all tests. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.