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Abstract

Credit intermediation outside the regular banking system, or shadow banking, has increased immensely over the past decade. This paper situates this increase against the backdrop of the structural problem of overaccumulation, and thus the absence of profitable reinvestment opportunities in the production sphere, in addition to the scarcity of high-quality collaterals. Zooming in on Europe's offshore world and Dutch conduit structures in particular, the paper illustrates how, on the basis of the Amsterdam-based Lehman Brothers subsidiary (and others), shadow banking enables regular banks to increase leverage and take on excessive debt. It will be argued that the continued expansion of debt at the systemic level, *inter alia* facilitated by shadow banking, heralds the prospect of a crisis far more dramatic than the one we are currently witnessing.

Keywords: shadow banking, overaccumulation, debt-led accumulation, offshore financial centres, Lehman Brothers, The Netherlands.

Introduction

Shadow banking has been an integral part of the global financial architecture for quite some time but it has only been brought into the limelight in the wake of the 2007/2008 global economic crisis. Frequently associated with money, repo and derivatives markets, shadow banking refers to borrowing and lending by non-depository financial institutions - so-called non-banks or quasi-banks. Shadow banking expanded dramatically in the first decade of the new millennium, both before and after the eruption of the current crisis. Estimates by the Financial Stability Board (FSB) suggest a rise from US$ 26 trillion in 2002 to US$ 71 trillion in 2012, which is equivalent to almost half of the size of the regular banking system (FSB, 2013b). This expanding parallel financial universe in the shadow of regular banks usually builds on far higher leverage, and thus higher risk taking when issuing debt. The prudential standards for capital requirements, liquidity and trading rules - the backstops that usually ensure the resilience of the traditional banking sector - do not apply, which is why shadow banking has been declared a breeding ground for financial instability at the G20 meetings in 2010 in Seoul and 2011 in Cannes. Ever since, the financial industry has put greater efforts into unshackling the term from its connotation of being a nefarious practice and into the portrayal of shadow banking as a 'modern, sophisticated, and complementary way to share risks efficiently' (see for example, Hakkarainen, 2014). Lobby efforts by the financial industry seem to have been successful. Non-bank credit intermediation is no longer proclaimed a cause of but a solution to the current crisis. The proposed Capital Markets Union (CMU) by the European Commission is testimony to this. The Commission's Green Paper refers to 'high-quality securitization' as a simple, transparent and safe financial technique. According to the Commission, shadow banking 'performs important functions in the financial system' as it creates 'additional sources of funding' and offers 'investors alternatives to bank deposits' (European Commission, 2012a, 2015). Shadow banking is thus considered an efficient way to match supply and demand for financial services outside conventional banking structures (see also FSB, 2011a, 2012a).

A range of scholars has challenged the allegedly efficient brokerage role of non-banks and argued that shadow banking rather needs to be understood as one of the root causes of the current crisis (Bengtsson, 2013; Lysandrou & Nesvetailova, 2014; Nesvetailova, 2015; Palan & Nesvetailova, 2013; Rixen, 2013; Thiemann, 2014). The fact that such bank-like activities have fallen off the radar of state regulation is particularly highlighted. Explanations for their unregulated nature are generally sought in reductionist concepts such as 'regulatory arbitrage' or 'cognitive capture'. For example, Rixen (2013) and Thielmann (2014) ascribe the absence of 'effective' regulation and the presence of regulatory loopholes to competition among jurisdictions, arguing that domestic regulators have been 'cognitively captured' by yield-seeking financial investors. Similarly, Lysandrou and Nesvetailova (2014) refer to 'unregulated financial innovation' and 'external pressures on the banking system'. Even though this literature provides trenchant empirical insights on institutional responses to investor demands, it is also incomplete in what it highlights. The prevalence of debt-led accumulation patterns and the wider dynamics of financialised capitalism are either ignored or mentioned in passing only. Shadow banking tends to be defined merely as financial intermediation, thereby disregarding its fundamental role in the issuance of debt by regular banks. Moreover, there seems to be an implicit assumption that had shadow banking been regulated 'effectively', there would be no crisis today.

This paper seeks to bring 'capitalism' back in by linking the rise of shadow banking to the recurring structural problem of overaccumulation, which refers to the lack of attractive possibilities to reinvest past profits in the production sphere at a particular historical juncture and location (Harvey, 2006). Consequently, shadow banking should not be understood as one of the root causes of the crisis but rather as a temporary solution that provides new opportunities for profitability in the absence of sufficient outlets for surplus capital in the real economy. At the same time, shadow banking not only absorbs surplus capital that cannot be profitably invested elsewhere, it also provides one of the mechanisms for large systemic banks to increase leverage and manufacture new credit/debt as part of their profit base. Shadow banking, it will be argued, constitutes a central node in the spiral of ongoing debt-led accumulation patterns of today's advanced economies.

Contrary to what is often claimed, this paper argues furthermore that the facilitation of credit/debt through shadow banking does not take place in an unregulated environment but in fact prospers due to state regulation. To begin with, the rise of shadow banking is premised on states creating the necessary regulatory infrastructure that enlarges the capacity of the wider economy to take on more debt, including household debt through credit cards, student or car loans, or the expansion of mortgages based on rising real estate prices (Aalbers, 2008; Fernandez & Aalbers, 2016; Turner, 2015). European governments, in various ways, often promote consumer credit/debt as a strategy for economic growth (Marron, 2012). Similarly, the aforementioned EU plan to create the CMU seeks to facilitate the expansion of mortgage debt through the regulation of securitization, which forms part of shadow banking. Moreover, as will be shown in the case of the Amsterdam-based Lehman Brothers subsidiary, state regulation has been integral for the massive intra-company debt of Lehman Brothers. Shadow banking did not randomly spread across space as some authors seem to suggest (see for example, Thielmann, 2014) but is spatio-temporally condensed in state-regulated offshore financial centres (OFCs) and tax havens. While the bankruptcy of Lehman Brothers, as the apex of the 2007/2008 crisis, has been widely discussed, how its excessive credit structures have become possible is often only poorly understood. Through shadow banking, various debt instruments can be reused multiple times as collateral. Lehman Brothers sold debt instruments basically at will through a vast network of shell companies interconnecting various OFCs with financial centres revolving around the New York/London axis, also referred to as NYLON. Importantly, and also in the post-Lehman Brothers era, the very same mechanisms continue to be a daily practice in the offshore world, for example, rendering the Netherlands in 2011 the largest FDI receiver worldwide (if measured in relation to its GDP). The analysis presented here builds on annual reports, prospectuses of debt instruments, interviews with policymakers and investors and Reuters company data. In addition to various primary and secondary sources, macro-level data retrieved from the OECD, IMF, UNCTAD and FSB have been used.

This paper seeks to communicate simultaneously with (rationalist) institutionalist accounts on shadow banking and the wider (critical) political economy literature on debt, tax havens and offshore financial centres. Much has been written about debt-led accumulation structures and facilitating state regulation (Boyer, 2000; Crotty, 2008, 2009; Stockhammer, 2004), or what has been referred to as ‘privatised Keynesianism’ (Crouch, 2009), ‘debtfare states’ (Soederberg, 2014), ‘debt imperialism’ (Graeber, 2011), or ‘financialisation’ more generally (Froud *et al.*, 2007; Krippner, 2011; Langley, 2008; Montgomerie, 2008). This literature provides excellent (macro-level) explanations for the prevalence of debt-led accumulation patterns; yet the specific role of shadow banking in facilitating credit/debt is often not accounted for. Similarly, shadow banking is not prominently discussed in the literature on OFCs (Donaghy & Clarke, 2003; Maurer, 2008; Picciotto, 1999; Roberts, 1995, 1994; Wójcik, 2013; exceptions are Palan, 1999, 2002; Palan & Nesvetailova, 2013; Rixen, 2013). Relatively little has been written about the specialised work division and complementary shadow-banking practices among different offshore financial hubs, while broader trends within capitalism such as overaccumulation and debt-led accumulation structures tend to be ignored (an exception is Bryan *et al.*, 2016). Thus, we seek to fill this gap and offer a broader understanding of shadow banking. In the current context of lingering scarcity of high-quality collaterals as a ground for the issuance of new debt, shadow banking is likely to expand further in the future. This is immensely problematic as the current pace of debt creation cannot be maintained endlessly, and a similar recapitalization of so-called banks of systemic importance ('too big to fail') with taxpayers' money will not only be politically unfeasible but also *de facto* impossible. Thus, the next crisis heralds the prospect of being far more dramatic than what we have seen since 2007/8. Arguably, the destruction of fictitious capital in a bloated financial sector may seem desirable at first glance; however, it is likely to be accompanied by fierce social struggles and massive repercussions for Western welfare systems that have come to rely on debt-led accumulation structures.

The paper is structured as follows: the first section theorizes how shadow banking and by extension, the creation of credit/debt as fictitious capital, provides a temporary solution to overaccumulation. The second section offers a primer on shadow banking, while the third section zooms in on the mechanisms of debt creation and shows how the Amsterdam-based Lehman Brothers' subsidiary interconnected the Dutch tax haven with other European OFCs. The third section shows that the same Lehman Brothers' practices continue on a daily basis. The section preceding the conclusions locates the rise of shadow banking within the context of capitalist development and outlines empirically, how overaccumulation has become manifest.

Theorizing the crisis-ridden nature of capital accumulation

Capital must circulate continuously or die. (Harvey, 2014, p. 73)

Before locating the role of shadow banking in the current crisis, it is important to point out that capital, understood as accumulated wealth that can be used to accumulate more wealth, is not a fixed entity but through its development and global spread 'constantly reconfigures itself from different angles' (Van der Pijl & Yurchenko, 2015, p. 496). Shadow banking is testimony to this continuous reconfiguration of capital as it facilitates the extension of credit far beyond the conventional banking system. Credit (and its flipside debt) as a circulating form of fictitious capital is not rooted in what has already been produced but lays a claim to the appropriation of a portion of the production of future surplus value, thereby linking the present to the future. Claims to future surplus production can be made infinitely in theory, particularly if the issuance of credit/debt is unregulated or if there are hardly any constraints. Finance capital thrives however, not only on extracting (future) surplus created in the sphere of economic production - the primary circuit of capital, but it can also attain ephemeral value through mere circulation and thus appear seemingly unrelated to productive activity (see also Lapavitsas, 2013, p. 264). Trading all sorts of risks and securitization practices, in the form of packaging illiquid assets such as loans and selling them to investors, are cases in point. Speculative contracts that contain expectations about the future 'are the very expression of value-in-flux' created in a financial system that primarily thrives on the basis of interconnected self-referentiality (De Goede, 2015, p. 365). More concretely, in the modern financial system, credit is no longer issued on the basis of existing saving deposits but instead appears as fictitious capital on the borrower's account - at almost no cost for the creditor. Licenced private institutional creditors such as banks not only intermediate already existing money as credit but also create credit *ex nihilo*, *de novo* (Sgambati, 2016). By making use of financial operations, banks capitalize debtors' obligations by turning 'debt into a security that accrues on the asset side of the bank's balance sheet' (ibid., p. 283). Rather than relying on actual (physical) collaterals, various forms of pooled-debt instruments serve as an 'intangible security for the undertaking of the bank's own debt' (ibid.). As will be shown below, shadow banking is crucial for this debt extension. As Nesvetailova (2015, p. 447) poignantly put it, shadow banking provides an 'overcrowded future' by offering an 'infrastructure for mining, enhancing and shifting debt and its related products into the future'.

Whenever the scarcity of finance capital is (temporarily) offset by permissive regulation, the extension of credit and credit products can create an alternative capital circuit in parallel to existing structures of accumulation, such as trade and commodity production (see also Krippner, 2011, p. 27-28). Credit/debt-led accumulation structures can even come to prevail as part of the continued circulation of capital. This can be the case when surplus capital cannot be recapitalized and thus reactivated through profitable reinvestment in the real production economy. The 'capital surplus absorption problem' has also been referred to as the structural problem of overaccumulation (Clarke, 2001; Harvey, 2006, 2010). Investments in the financial circuit can become more profitable than investments in the production sphere. Other possible outlets for overaccumulated surplus capital can be investments in land or nature, real estate or mergers and acquisitions. Analogous to Harvey's (1985) notion of 'spatial fix', referring to the 'urbanization of capital' and the spatial expansion of capitalism, shadow banking therefore can be seen as a 'financial fix': it offers a machinery that facilitates a growing pool of tradable debt alongside the credit provision of the regular banking system. The creation and circulation of fictitious capital, however, can only temporarily solve some of the paradoxes of capital accumulation. The prevalence of the circulation above the production sphere, and thereby debt-led capital accumulation, reaches its limits once it becomes evident – through defaults and bankruptcies – that debt cannot be sustained on an aggregate scale. Or as Harvey (2011) explained, whenever the accumulation of capital and the accumulation of debt get too out of sync, a capitalist crisis emerges. Financial crises are thus never fully detached from the production sphere but rooted in the real economy and its inability to produce actual surplus. Shadow banking as part of the wider debt-led accumulation structure is certainly linked to the current crisis but it is not its root cause. As long as the economy is capable of taking on and honouring increasing levels of debt, shadow banking will continue to prosper. States and state regulation are a constant and constitutive element in the expansion and reproduction of capital, making it possible for financial institutions to provide credit, and for the wider economy to take on ever-more debt. Consequently, credit - whether provided through shadow banking or not - never emerges 'naturally from a harmoniously functioning (efficient and equilibrating) market' (Soederberg, 2014, p. 37). Financial markets, including shadow banking, are constructed by law, while financial assets are contractual commitments that are legally enforceable through the courts. Hence, shadow banking does not exist in a legal vacuum outside the reach of the state (see also Pistor, 2013). As will be shown in the following section, by making use of the legal settings of OFCs, shadow banking is all about financial transactions moving 'in' rather than 'out' of the state regulatory realm.

Shadow banking - a primer

Shadow banking comprises a system of non-banks, such as non-depository or investment banks, asset management firms, hedge and private equity funds, or financial holding corporations that interconnect from across various jurisdictions, making use of a broad range of products and markets. Shadow banking involves maturity or liquidity transformations without having to comply with regulatory requirements such as capital reserves and other (trading) rules. These maturity transformations concern non-deposit based short-term liquid liabilities used for long-term illiquid assets. Short-term liabilities are usually drawn from money-market funds, hedge funds and repo transactions (FSB, 2011; New York Fed, 2010). Long-term assets are often high-grade fixed-income products (bonds) and a variety of structured asset-backed papers (ECB, 2012; Pozsar, 2011). Shadow banking relies on liquid markets of tradable credit/debt products and money-market funds, as well as new sorts of creative schemes such as layered derivatives, off-balance sheet leverages, hedging and re-hedging of investments with credit derivatives, or re-hypothecated securities. Based on different forms of repackaged debt sold as a commodity, almost unrestricted leverage can be built in, which again allows for pumping out credit in the form of fictitious paper claims to future wealth. As these debt instruments are often bought to be sold and resold to investors many times over, the leverage of single assets is also often spawned several times. Shadow banking thereby creates non-productive forms of capital valorisation through the mere circulation of finance capital, spurring ever riskier debt-based investments. Shadow banking is all about what Harvey (2010, p. 30) described as surplus fictitious capital created within the banking system is absorbing the surplus.

Rather than merely involving an aggregate of atomized financial players in the shadow of regular banks, the conventional banking sector is closely enmeshed. Large systemic banks in advanced economies operate as powerful nodes by sponsoring or owning non-banks in order to exploit leverage opportunities beyond domestic deposit or liquidity requirements. At the same time, non-bank credit intermediation often depends on traditional banks for funding (Pozsar & Manmohan, 2011). As Nesvetailova (2014, p. 3) observed, behind the facade of banking conglomerates 'there is a plethora of entities, transactions and quasi-legal cells, many of which are 'orphaned' from the visible part of the bank by complex legal and financial operations [...].' Shadow banking is thus not 'something parallel to and separate from the core banking system, but deeply intertwined with it' (Turner, 2012). As will be outlined below, the largest Wall Street investment banks have been among the main designers of shadow banking. In their capacity as dealers, brokers and underwriters, extracting profits through commissions and rents, they externalised their credit creation to off-balance sheet vehicles. The Lehman Brothers' case is telling for how debt-issuance practices in OFCs are being practiced, and most notably, how the bank could sell its claims and risks and build in leverage in the issuance of new debt without being limited by reserve requirements.

Lehman Brothers in the offshore world

When Lehman Brothers - one of the largest Wall Street investment banks - collapsed on 15 September 2008, it left behind a highly complex web of unwound internal company debt, derivative transactions and financing programmes by subsidiaries from around the world. The ultimate owner of the Lehman Brothers' empire was *Lehman Brothers Holding Inc.*, incorporated in Delaware - a well-documented tax haven. Underneath this holding, a host of entities operated independently of each other. The geography of Lehman Brothers' subsidiaries illustrates clearly how shadow banking consists of a complex network of financial intermediaries that link major financial centres to OFCs according to a particular hierarchy and functional differentiation. OFCs - notorious for tax avoidance by non-financial corporations since the 1950s - can be 'a country or jurisdiction that provides financial services to non-residents on a scale that is incommensurate with the size and the financing of its domestic economy' (Zoromé, 2007). Financial-market players settled in OFCs particularly from the 1990s onwards, seeking higher profit margins than those possible in the traditional banking sector, in addition to avoiding taxes. Estimates suggest that today, about half of the global stock of money passes through OFCs (Palan & Nesvetailova, 2013, p. 1).

OFCs generally host a highly specialized and professional services industry consisting of consultants, marketing experts, lawyers, accountants and tax avoidance experts, offering tailor-made services to all sorts of corporations (Bassens & van Meeteren, 2015). These services include setting up trusts and investment vehicles, so-called special purpose entities (SPEs), which are complex legal constructs that operate as pass-through entities for shifting profits and eroding tax bases (Maurer, 2008; Palan, 2002; Palan *et al.*, 2010; Rixen, 2011; Wójcik, 2013). Often set up within a few days 'by filling in online forms, or instantly, over the phone in some cases' (Sayer, 2015, p. 256), SPEs can be wholly owned subsidiaries or form part of a more complex and opaque ownership structure, serving the purpose of removing activities such as risky debt from the parent company's balance sheet. Frequently, the core business of SPEs is group financing and holding activities of assets and liabilities in other countries, which is why SPEs generally have little or no physical presence in host jurisdictions (OECD, 2013). Nesvetailova (2015, p. 432) distinguishes three types of SPEs in the shadow-banking industry: bank-owned SPEs that transform bank loans into securities; structured investment vehicles sponsored by commercial banks or investments that transform securities into CDOs; and conduits owned or sponsored by regular banks.

Lehman Brothers Holding Inc. had subsidiaries in both prime financial centres and in the offshore world. Subsidiaries in financial centres generally employed a large staff housed in iconic buildings to display Lehman Brothers' status as one of the world's major investment banks, while offering a wide range of services to a broad clientele. For example, *Lehman Brothers Inc.*, one of the largest brokerage companies in the US, acted as a primary broker for the Federal Reserve Bank of New York. Another example was *Neuberger Berman Inc.,* a New York-based investment advisory firm, managing assets worth US$ 140 billion, that catered for a wide range of activities like tax planning, trust services, mutual funds, institutional and private asset management. Similarly, London-based entities provided services ranging from private banking, brokerage and underwriting to investment banking, whereas the Frankfurt-based *Lehman Brothers Bankhaus AG,* a fully-licensed German bank was active in corporate finance and securities dealing, while owning its own London-based affiliate. In addition, *Lehman Brothers Holding Inc.* comprised a wide range of SPEs scattered across many jurisdictions and mostly without employees, rental contracts or ownership of real estate, and hence without major operational costs. These shell structures were highly specialized and interacted almost exclusively with other Lehman Brothers subsidiaries, fulfilling the function of booking or pass-through entities, or issuing vehicles. Most of these type of Lehman Brothers entities (over 70 in total) were based in Delaware, others in the Cayman Islands (with over 30 entities), Hong Kong, Singapore, Switzerland, the Dutch Antilles, Luxembourg and Ireland, as well as the Netherlands. For example, two entities in Luxembourg specialized as repo counterparts and issuance vehicles for securities hedged by other Lehman Brothers' entities; the Swiss subsidiary was the central vehicle in the booking of the equity derivatives, including OTC transactions and a broad range of other derivatives; or the subsidiary incorporated in the Dutch Antilles, a fully owned subsidiary of *Lehman Brothers' Asia Holdings*, was primarily issuing equity and debt certificates.

The Amsterdam-based subsidiary *Lehman Brothers Treasury B.V. (LBTBV),* established in 1995, was a classic shell or mailbox company with no employees or offices. It was fully owned by *Lehman Brothers UK holdings (Delaware) Inc*., which in turn was fully owned by *Lehman Brothers Holding Inc.,* the ultimate parent company. LBTBV operated legally in the Netherlands, and could profit from the Dutch offshore environment that exempts non-resident investors from taxes on capital gains and withholding taxes for dividend payments. LBTBV complied with Dutch substance requirements through *Intertrust,* a Dutch trust company, which supplied two external directors (out of a total of four managing directors); conducted services concerning taxation and other compliance duties; and arranged external audits (LBTBV, 2008a). Other Lehman Brothers subsidiaries did the actual work. The Swiss *Lehman Brothers Bank SA,* for example, provided the treasury function (holding and moving capital across accounts), while the secretarial work was conducted by the London-based *LB Holdings Plc.* (LBTBV, 2007).

The 'special purpose' of LBTBV was to issue the *European Medium Term Note Program (EMTN),* a debt instrument that mobilized funds and issued notes that were 'irrevocably and unconditionally' guaranteed by *Lehman Brothers Holding Inc.*, while the London-based *Lehman Brothers International Europe* operated as the arranger and dealer throughout the entire note programme (EMTN, 2001, 2008). It was through the EMTN that debt was being emitted, repackaged and resold as an asset that promised to yield income from future interest payments. The promised income from future interest payments provided the basis for adding leverage. In other words, EMTN was pivotal to boost the ability of *Lehman Brothers Holding Inc.* to extend its overall leverage and produce tens of billions of dollars of debt. The programme initially had a specified maximum of debt issuance but the debt ceiling was increased several times. The largest and also the last increase was in 2007, extending the maximum from US$ 60 to 100 billion (see Figure 1). Even though these limits were not reached when *Lehman Brothers Holding Inc.* went bankrupt - LBTBV had a total of US$ 34 billion in complex long-term debt on its balance sheet, involving large derivative transactions - the debt facility offered by LBTBV still reveals how *Lehman Brother Holding Inc.* could secure its long-term funding.

[Insert Figure 1]

The role of EMTN in the overarching Lehman structure can best be understood on the basis of the developments that resulted in Lehman Brothers' bankruptcy. As can be seen in Table 1, the bank's balance sheet increased rapidly in the years before 2007: the total assets more than doubled from 2003 to 2007, funded primarily by long-term and short-term borrowing and to a lesser extent by stockholders' equity. Short-term borrowing consisted largely of repo-transactions (securities sold under agreement to repurchase), totalling US$ 149 billion on 30 November of 2007 (SEC, 2008, p. 6). The ever-larger balance sheet is a direct result of the use of higher leverage through LBTBV. As retrieved from the 2008 balance sheet (after bankruptcy had been filed), in August 2007, the note programme was responsible for 85 per cent (or US$ 100 billion) of the planned long-term debt of *Lehman Brothers Holding Inc.* The stock of long-term debt (in Table 1 labelled 'long-term capital') together with equity was a strategic pillar of the Lehman Brothers' balance sheet: it formed the bedrock of increasing leverage on the basis of risky short-term debt such as repo-transactions that had to be refinanced on a day-to-day basis.

When real estate prices started to decline, the book value of Lehman Brothers assets dropped, after which the ratio of shareholders' equity to debt became increasingly skewed. As Zingales (2008, p. 12) explained: 'While commercial banks are regulated and cannot leverage their equity more than 15 to 1, at the beginning of the crisis Lehman had a leverage of more than 30 to 1, i.e. only $3.30 of equity for every $100 of loans [...]. With this leverage, a mere 3.3% drop in the value of assets wipes out the entire value of equity and makes the company insolvent.' On the eve of the subprime crash, on 30 November in 2007, Lehman Brothers had on its balance sheet equity worth US$ 23 billion and US$ 691 billion of assets of which US$ 89 billion worth of 'mortgage and asset-backed securities' and US$ 22 billion of 'real estate for sale' (SEC, 2008, p. 24).

[Insert Table 1]

When the subprime crisis erupted and financial market conditions deteriorated rapidly, the procyclical shadow banking-based funding dried up immediately, and the balance between equity and debt became untenable. In a last-minute attempt to avert bankruptcy, Lehman Brothers manipulated its balance sheet and removed US$ 50 billion through refined repo-transactions. The transaction ('repo 105'), which violated US accounting rules, was operated by the London-based *Lehman Brothers International Europe* - the lead manager of the LBTBV emitted notes (see also Wiggins & Metrick, 2014). Through the complexity of cross-border internal Lehman transactions, the bank made use of a gap in financial reporting (ibid., p. 6).

More generally, although LBTBV was domiciled in the Netherlands, it was not supervised by Dutch authorities (DNB, 2012). Forming part of the consolidated Lehman structure, LBTBV was formally subjected to the regulatory scrutiny of the US Securities and Exchange Commission - the SEC (EMTN, 1995, 2000). However, as Wiggins *et al.* (2014) have pointed out, the complex reality of cross-border interconnections created 'regulatory gaps that ignored the systemic risks posed by large global firms like Lehman'.

The Lehman Brothers' case illustrates how a broader archipelago of shell structures and shadow-banking circuits facilitated the extension of debt. It shows moreover that OFCs are not separate, stand-alone hubs but part of a wider hierarchical network of first-tier financial centres like NYLON. While OFCs may not offer the higher value-added services, they still constitute critical outposts in the circulation of financial capital, often routing large capital flows through different OFCs in the process. The Dutch conduit structure has been and continues to be used regularly by NYLON-based financial institutions and banks. It usually involves the collaboration of two or more global banks operating from London, while relying on exchanges in Ireland or Luxembourg to list the securities. For example, the shell company *Morgan Stanley Investment Management Coniston B.V.* constructed CDOs with *Morgan Stanley* as the manager of the collateral, the London branch of the *Deutsche Bank* as the collateral administrator and *CitiGroup Global Markets Limited* as the arranger (see Morgan Stanley Investment Management Coniston B.V., 2007). Similarly, an Amsterdam-based *Morgan Stanley* entity issued notes backed by a collateral of CDOs, and relied on *Lehman Brothers Europe* as an arranger, the London branch of *Deutsche Bank* as collateral administrator alongside an Irish exchange listing (Morgan Stanley Investment Management Mazzano B.V., 2007). In all cases, the corporate structure of banks consisted of a myriad of SPEs that made it possible to hide behind levels of complexity, and to obscure a clear-cut separation of entities, responsibilities, assets and liabilities and leverage. That Lehman Brothers-type of mechanisms continue to be a current daily practice as can be seen from the vast expansion of shadow banking in the Netherlands. As the next section shows, the number of SPEs, as well as the size of capital flows attracted by SPEs, has increased dramatically in the Netherlands.

The rise of shadow banking in the Dutch OFC

Shadow banking in Europe is disproportionately concentrated in the United Kingdom (29 per cent), Luxembourg (17 per cent), the Netherlands (15 per cent) and Ireland (8 per cent) (European Commission, 2012b, p. 11). The largest Eurozone economies are relatively small players with Germany and France accounting for a mere 7 per cent and Italy for 4 per cent (ibid.). Most of the literature so far has focused on London as Europe's main offshore hub, particularly since the re-emergence of capital mobility in the 1980s (Helleiner, 1994; Palan, 1999; Palan & Nesvetailova, 2013; Strange, 1996, 1998), and the tax avoidance opportunities offered by the historical debris of the British Empire and its offshore interconnections (Maurer, 2008; Roberts, 1994; 1995). Comparatively less attention has been paid to the highly specialized subsidiaries and trusts located in the OFCs of Ireland, the Netherlands and Luxembourg, and the function of these OFCs as pass-through jurisdictions or 'conduit centres' (a notable exception is Palan *et al.*, 2010).

The Dutch legacy as an *entrepôt* economy for trading goods and financial capital dates back to the 16th century (Arrighi, 1994; Braudel, 1984; Wallerstein, 1979). Today, the Netherlands attracts a disproportionate share of capital flows, which is due first to its specific legal framework consisting of tax exemption laws, liberal withholding tax regime for royalties and interest income; second, its extensive network of bilateral double taxation and investment treaties; and third, its highly competitive professional-services industry specialised in tax and regulatory arbitrage (Engelen, 2016; SEO, 2013). Moreover, the municipality of Amsterdam - in close collaboration with pension funds, banks, the Amsterdam Stock Exchange, the Dutch Central Bank, and the Dutch Ministry of Finance - designed a financial centre with lax requirements for incorporation (Fernandez, 2011). A key characteristic of the Dutch financial centre is trust firms, whose emergence dates back to nineteenth century Amsterdam. Back then, trust firms acted as the administrative back office for traders on the Amsterdam Stock Exchange, who already back then conducted securitization practices in the form of repackaging non-liquid future income streams into tradable financial assets (Veenendaal, 1996). In the 1940s and particularly in the 1960s, a number of smaller but highly successful trust firms started to diversify into tax arbitrage services in the Dutch Antilles (Van Geest *et al.*, 2013). These offshore activities were brought back 'onshore' in the 1980s, primarily serving domestic transnational corporations (TNCs) such as Unilever and Royal Dutch Shell. Soon foreign TNCs, initially from the oil, automobile and telecommunications industry, also chose the Netherlands as their new domicile for tax purposes (DNB, 2003, 2008). Trust sector activities centred on setting up holding structures, managing dividend and royalty payments of foreign subsidiaries and intra-firm funding vehicles for non-financial TNCs, as well as arbitrage related business services.

When the significance of the Amsterdam stock market faded due to new digital trading technologies and enhanced competition by global brokerage firms (Engelen, 2007), the Amsterdam financial centre was eager to find alternatives to the traditional financial intermediation practices and increasingly offered the services designed for non-financial TNCs to the financial sector. Financial market players nested in the Netherlands from the 1980s onwards, not only for reasons of tax arbitrage but also because of the high degree of self-regulation of the trust sector with respect to overseeing SPEs (and thus without involving official supervisory institutions like the Dutch Central Bank). When in the late 1990s securitization took off, and cross-border financial flows increased at a previously unseen pace, shadow banking in the Netherlands expanded dramatically with banks and other financial institutions using the 'Holland Route' on a large scale. As a side effect, the once highly diversified Amsterdam financial centre gradually transformed into a satellite of the City of London (Fernandez, 2011).

The increase of registered SPEs confirms the significance of shadow banking in the Netherlands. Alongside the liberalisation of capital movements in 1983, the number of SPEs doubled within a year: from 2,000 in 1983 to 4,000 in 1984 (DNB, 2000). In 1993, there were 6,000, and in 1999, 10,000 SPEs (ibid.). The gross capital flows (inward and outward combined) routed through the Netherlands increased from roughly EUR 800 billion in 1996 to EUR 1.5 trillion in 1999, doubling to EUR 3 trillion by 2000 and reaching EUR 4.5 trillion in 2001, which at the time was equivalent to 1,000 per cent of the Dutch GDP (ibid., 2003). These flows reached a peak in 2008 of EUR 10.5 trillion, representing 1,750 per cent of the Dutch GDP (DNB, 2011). In 2011, the Netherlands was the largest FDI receiver worldwide (if measured in relation to its economy), attracting 14 per cent of the global stock of inward FDI flows (about US$ 3.3 trillion), followed by Luxembourg (US$ 2.7 trillion), the United States (US$ 2.6 trillion) and China (US$ 1.9 trillion) (IMF, 2016). Looking at the outward FDI stock, the Netherlands ranked second with US$ 2.3 trillion after the United States (US$ 2.8 trillion), followed by the United

Kingdom (US$ 2.2 trillion) and Luxembourg (US$ 1.8 trillion) (ibid.). While the United States hosts the world's largest economy, the Netherlands and Luxembourg are clearly only pass-through jurisdictions within a longer chain of financial transactions. The extremely large size of the Dutch OFC can only be understood on the basis of its favourable regulatory and institutional conditions that facilitate both FDI entry and exit (Fernandez *et al.*, 2013; Palan *et al.*, 2010).

FDI, often perceived as the transfer of equity or ownership titles of more than 10 per cent of all shares (OECD, 2008), arguably encompasses a broad category of capital flows. In the context of shadow banking, it is important to understand that ever-larger parts of global FDI stock consist of so-called ‘debt instruments’. Figure 2 shows the composition of the inward and outward FDI flows to and from SPEs domiciled in the Netherlands from 2004 to 2011. As can be seen, these flows are much larger than the stock of FDI discussed earlier. In fact, these flows consist almost exclusively of debt instruments, intra-firm loans and external funding, while traditional FDI, equity transfers (‘participation’) accounts for a small part only. In 2013, 26 per cent of the inward stock of FDI in the Netherlands was composed of such debt instruments (IMF, 2016).

[Insert Figure 2]

The magnitude of the ‘Holland Route’ can also be revealed by looking exclusively at US investments in holdings in the Netherlands, taking investment flows into SPEs as a proxy. Data from the Bureau of Economic Analysis of the US Department of Commerce shows that the Netherlands is by far the largest recipient of US FDI into SPEs. Figure 3 entails FDI flows from the United States to the Netherlands from 1990 onwards. There is no data on FDI in holdings available prior to 2004, but from 2004 to 2010, there has been an increase from 62 to 78 per cent of total direct investments. Neither the bursting of the 2000 dot-com bubble nor the 2007/8 financial crisis could interrupt the ever-increasing FDI flows from the US. These flows sharply contrast with the steep decline of global FDI flows after 2000, and again after the collapse of Lehman Brothers (UNCTAD, WIR database). This vast discrepancy suggests that capital flows into SPEs were out of touch with FDI flows that reflect macroeconomic cycles, and in tune with the expanding universe of financialized capitalism.

[Insert Figure 3]

As the next section demonstrates, the immense growth of shadow banking needs to be understood in the context of the structural problem of overaccumulation and the emerging debt-led accumulation structures since the early 1980s in the Western industrialised world.

Shadow banking in the context of global overaccumulation

Seen from a broader perspective, the rise of shadow banking epitomizes the transformation from the macroeconomic demand-management of regulated capitalism of the Keynesian era to the supply-side oriented debt-led accumulation regime of the neoliberal era in the Western industrialised world. This transformation is rooted in the great stagflation crisis of the 1970s, which brought the long wave of post-war Fordist growth to a halt: markets in the advanced economies were saturated; production grew faster than demand, leading to overcapacity in manufacturing sectors, and eventually a major profit squeeze and sharp decreases in output and exports. Once inflation-based Keynesian interventions proved unsuccessful, neoliberal policies were adopted in the hope of restoring corporate profits. Market barriers of all sorts were dismantled, corporate taxes reduced, labour markets flexibilised, wages repressed, and in addition to a monetarist focus of keeping inflation low, financial markets were deregulated and lending standards relaxed. The clear-cut national architecture of finance centred on banks and capital markets of the Bretton Woods era was replaced by a scattered landscape of a broad range of cross-border intermediation channels. Against the backdrop of declining wages, easily available credit became key to stabilising demand and indebtedness as a mass phenomenon.

The set of neoliberal policies implied that less surplus from the productions sphere had to be redistributed, and that ever-more capital was freed for the circulation sphere. To give but a few examples: the decline of the wage share of GDP from 64 per cent in 1980 to 54 per cent in 2002 translated into an annual transfer of 10 per cent of global GDP from labour to capital (UNCTAD, 2013, p. 14). The reduction of the average OECD corporate income tax rate from 49 per cent in 1981 to 27 per cent in 2007 culminated in a growing corporate 'savings glut' from the 2000s onwards (OECD Tax Database; *The Economist*, 2005). Corporations in advanced economies transformed from net borrowers in the 1970s (with up to 15 per cent per year), into net savers from 2000 onwards, hoarding financial assets at a rate of 3 per cent of GDP in G7 countries per year (IMF, 2006, p. 135). The OECD estimated that in 2011, corporate savings in the range of US$ 1.7 trillion were stashed in OFCs (OECD, 2013, p. 68). The global 'savings glut' expanded further alongside large current account surpluses in emerging markets and oil-producing economies (Bernanke, 2011), while quantitative easing by central banks added another US$ 4 trillion in 2013 (Fender & Lewrick, 2013, p. 68); and one might add to this the growing reserves of the super-rich: private-wealth management topped US$ 42 trillion in 2011 (TheCityUK, 2012, p. 1). At the same time - alongside saturated markets, lingering overcapacity and slowly growing aggregate demand - investments in the real economy stagnated. New profitable outlets were found in the circulation sphere where new financial products and higher risk-taking in the form of leverage ratios of sometimes over 1:30 came to prevail, as illustrated in the case of Lehman Brothers. Sovereign wealth funds provided short-term liquidity to banks and other financial institutions in prime financial centres and OFCs. The assets of institutional investors almost quadrupled in the period from 2001 to 2013, from US$ 26 trillion to 97 trillion (OECD, 2016), or in other words, the 'rentier' or 'money-dealing' fraction of capital associated with speculative investment prospered (Van der Pijl & Yurchenko, 2015).

In more than thirty years of neoliberal predominance, financial markets expanded, over-leveraged and grew out of proportion relative to the real economy. Even the most conservative estimates suggest more than a threefold expansion of the ratio of global financial assets to global GDP (Farrell *et al.*, 2008). When the supply of safe assets to invest in, typically government-backed assets, became increasingly scarce (Moreira & Savov, 2014), and when the growing stock of assets relative to GDP could not be in invested in equity alone, debt instruments, often based on property markets as an ultimate collateral, provided an outlet. This is where the rise of shadow banking needs to be located: banks tapped into a diverse set of funding structures other than deposits, including interbank-borrowing and borrowing from outside the banking sector through money market funds or repo-markets. Shadow banking provided the credit/debt infrastructure: producing financial assets on one hand, and extending credit on the other. Thus, shadow banking generated new assets that allowed for offloading surplus capital profitably, and for recycling existing assets, such as the extensive use of repo-transactions for short-term debt, as illustrated in the case of Lehman Brothers.

The neoliberal era has culminated in one of the biggest lending booms in history (McCulley, 2009). Importantly, the credit crunch and current crisis did not interrupt the growth of credit extension. Overall debt (public, private and corporate) increased from U$ 142 trillion in 2007 (269 per cent of world GDP) to US$ 199 trillion in 2015 (286 per cent of world GDP) (McKinsey & Company, 2015, p. 1). Through overleveraging and borrowing from other financial institutions, banking today is more indebted than any other economic sector (Turner, 2015: 24). The current debt bubble is more than twice the size of that in 1915 and 1935 (based on credit-to-GDP data from 1870 to 2010) (Jordà *et al.*, 2014). In a similar vein to previous credit crazes, real estate constitutes the primary collateral. The average mortgage debt across developed economies increased from 50 in 1980 to 120 per cent of GDP in 2010 (Jordà *et al.*, 2014Table 2 shows the growth of total private credit by deposit banks and shadow bank entities combined in a selected group of countries. From the 1980s onwards, total private debt increased massively, except for Germany and Japan. The stock of debt grew faster than the overall economy, before and after the great financial crisis. Particularly affected were economies that had witnessed a housing boom, such as Spain, Ireland, the United Kingdom and the Netherlands. Due to declining real wages and the privatisation of previously public goods, access to debt has become essential to ensuring the material conditions of existence and the reproduction of labour. The share of citizens who resort to debt out of necessity rather than out of convenience or a hedonistic lifestyle has been on the rise ever since.

[Insert Table 2]

Conclusions

This paper has argued that the rise of shadow banking needs to be understood against the backdrop of overaccumulation and the wider dynamics of financialised capitalism, most notably the debt-led accumulation patterns of advanced economies. The capital absorption problem or overaccumulation has become manifest in the growing cash pools searching for yield. With high-quality collaterals, such as sovereign bonds and mortgage-backed assets being increasingly scarce, shadow banking provides alternative funding conduits for recycling tradable financial assets. Thus, in a world awash with cash looking for yield, shadow banking offers a financial fix to capitalism's capital absorption problem. At the same time, it also offers new opportunities for large systemic banks to increase leverage on the basis of the production of debt instruments and hence, opportunities to issue new debt. As a matter of fact, after the brief interruption of 2008, debt levels have kept rising in tandem with the size of shadow-banking assets. Shadow banking thrives largely on residential real estate as collateral, and is bound by the ability of the wider economy to take on more debt, which in turn is premised on the state regulatory framework facilitating indebtedness and disciplining debt servicing. That shadow banking is not the result of market forces 'moving out' of but rather 'moving in' to the state regulated territory is furthermore revealed by the offshore jurisdictions operating as complementary stepping-stones for the first-tier financial centres. The spatial condensation and the various functional differences of OFCs are being continuously facilitated and thus reproduced by the state regulatory apparatus, also including the conclusion of bilateral tax or investment agreements, tax laws, and the wider legal prerequisites for incorporation. The case of *Lehman Brothers Holding Inc.* illustrated that shadow banking is not a parallel financial universe but is deeply intertwined with traditional financial intermediaries, primarily the banking sector, albeit camouflaged by high levels of complexity and multiple legal shell constructs. More research is needed to unpack the variegated nature of different types of shell structures designed by a network of professional service providers, such as lawyers, accountants, trusts and fiduciary services, as well as the web of dealers, fund managers and customers in the prime financial centres of NYLON. Moreover, it is not sufficient to point to regulatory arbitrage and banks making use of funding channels off the radar of regulatory scrutiny when seeking to understand why shadow banking structures are spatially organized the way they are. In addition to bringing capitalism back to the centre of the analysis, we need to create a deeper understanding of the statecraft that produces the re-scaled financial architecture that allows for debt creation in the hegemonic financial core.

The growing global balance sheet, with growing debt levels on the one hand, and assets accumulated by capital owners on the other hand, cannot be a long-term solution to the problem of chronic overaccumulation. As a result of the expanding credit/debt creation, claims on surplus value are being pushed ever-further into the future. In the history of capitalism, capital owners mastered the spatial disciplining of debtors through outright colonialism, imperialism and gun-boat diplomacy, or as exemplified by the Greek tragedy, through the immense structural power of finance capital today. The future remains uncertain: as claims grow larger and the spatial organization of the debt/credit infrastructure becomes more diffuse alongside OFCs, the institutional complex to safeguard the ownership of future claims becomes ever-harder to imagine. The winners of today, the asset owners, mainly corporations and pension funds from advanced economies, may indeed become the losers of tomorrow; but the bursting of the bubble is likely to be accompanied by fierce social struggles. The future will tell.

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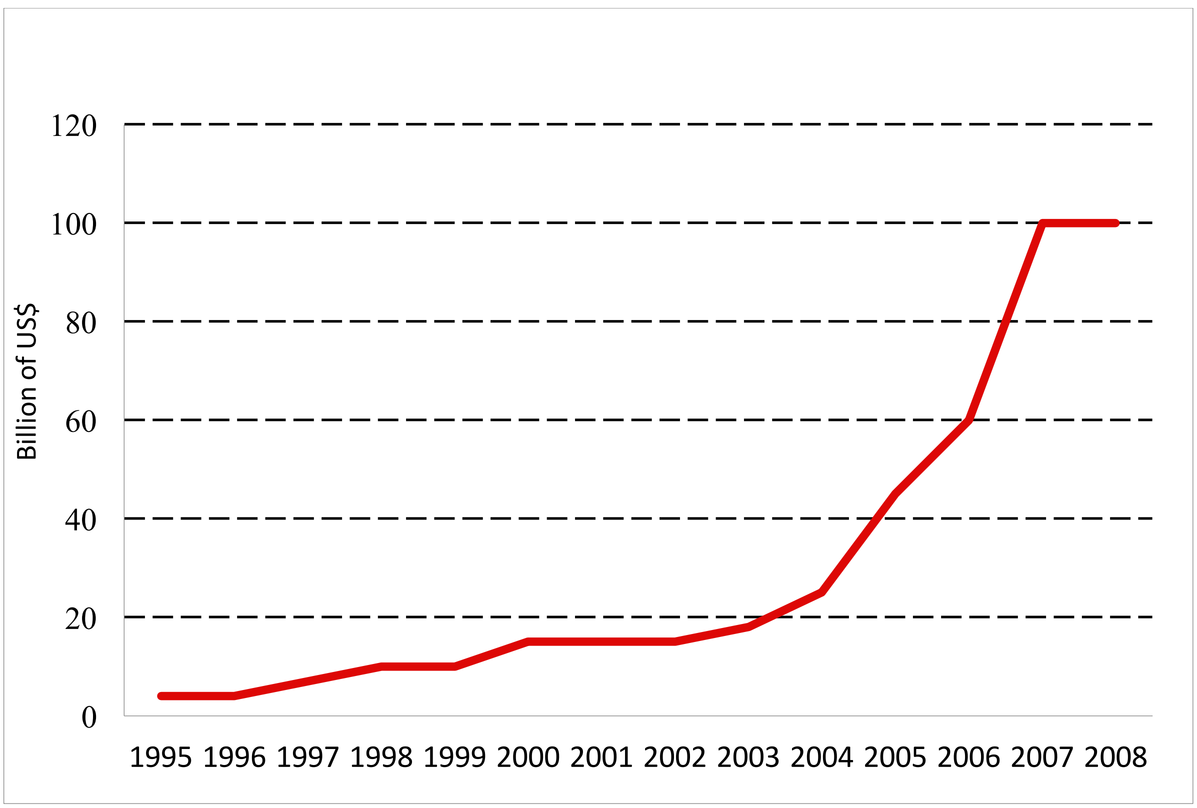

Figure1 EMTN maximum debt issuance
Source: LBTBV, 2008, p 10.

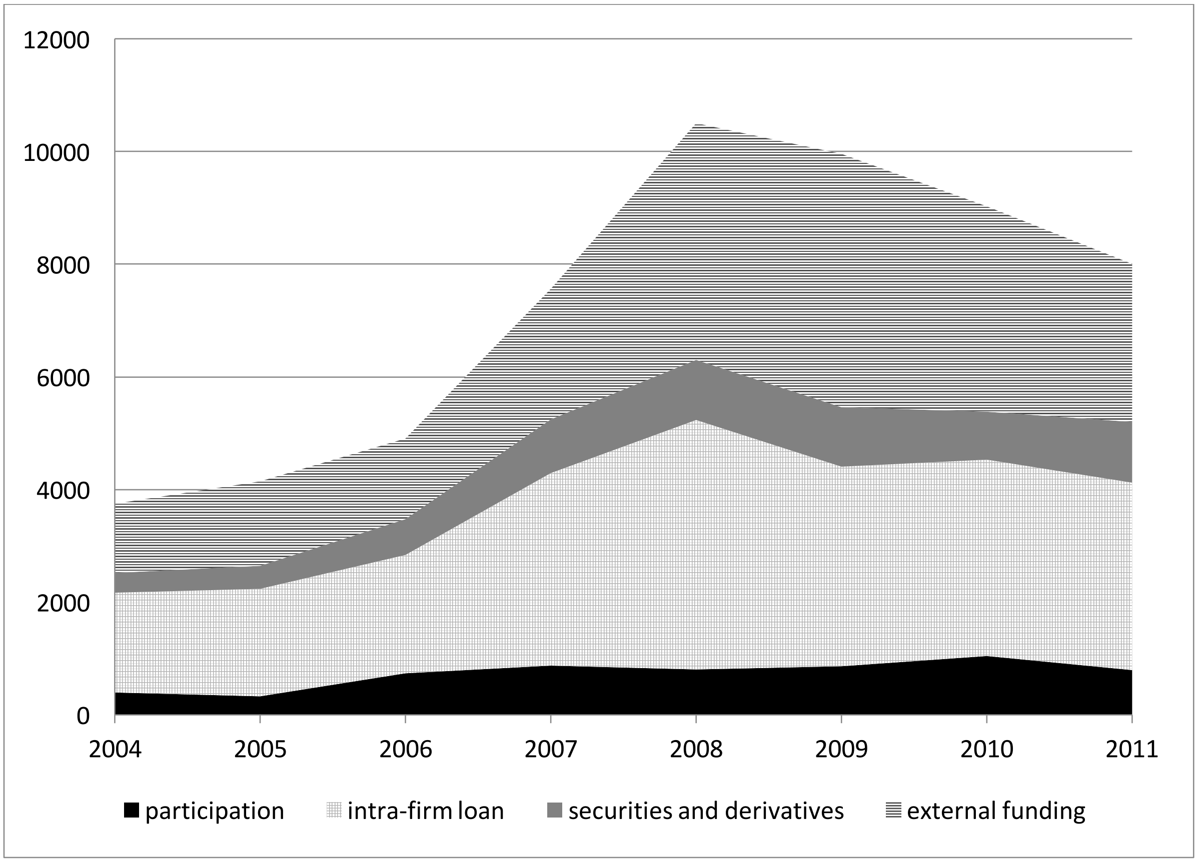

Figure 2 Composition of transactions by SPEs domiciled in the Netherlands (in billions of Euro)
Source: DNB, 2012.

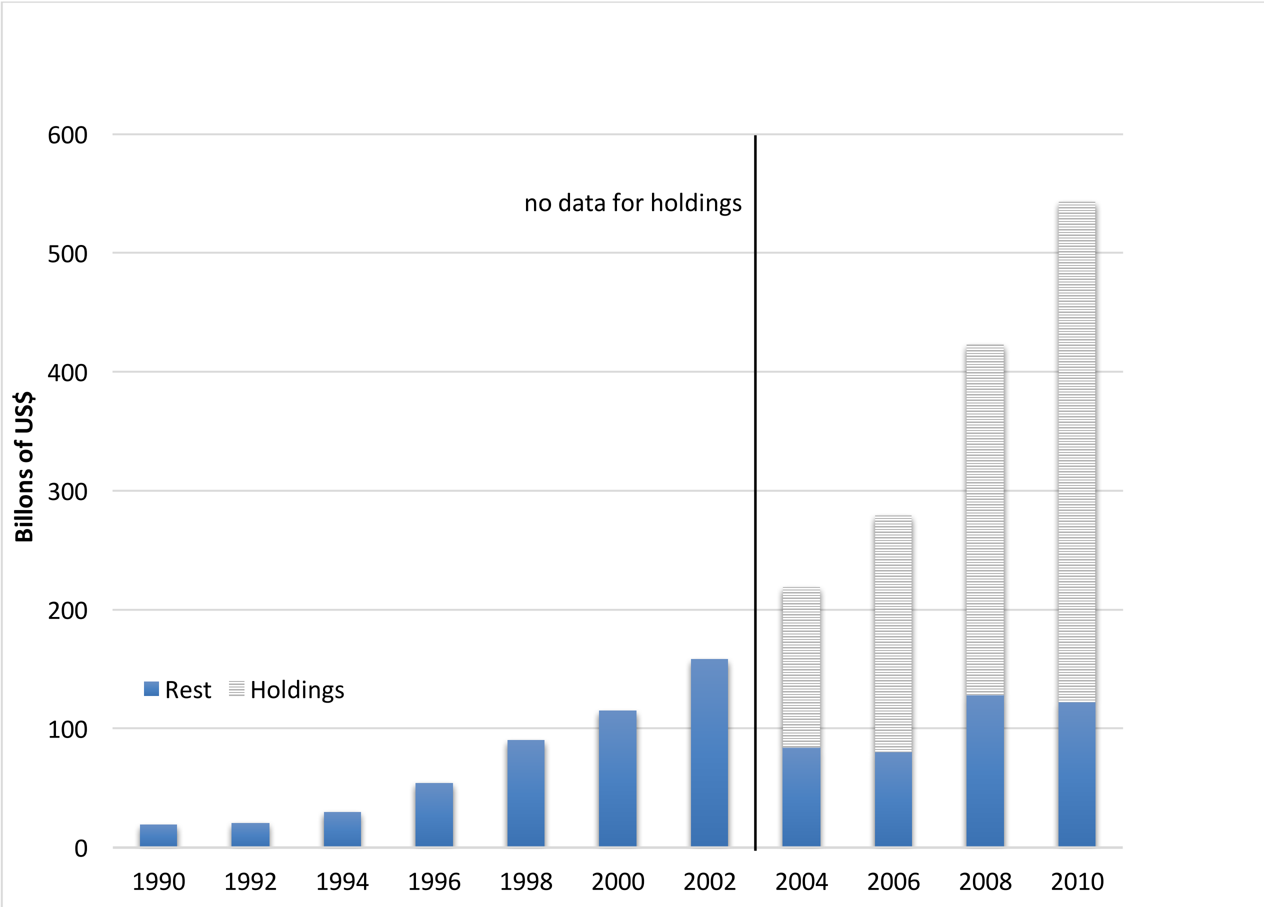

Figure 3 FDI from the US to the Netherlands, 1990-2010
Source: Bureau of Economic Analysis, FDI data, 2012.

Table 1. Selected financial indicators (in billions of US$)

	2003	2004	2005	2006	2007
Net revenues	9	12	15	18	19
Net income	2	2	3	4	4
Total assets	312	357	410	504	691
Long-term borrowing	36	49	54	81	123
Stockholders' equity	13	15	17	19	23
Total long-term capital	49	64	71	100	146

Source: Annual Report *Lehman Brothers Holding Inc.* 2007

Table 2. Total Private Credit as % of GDP in Selected Countries				
	1961	**1980**	**2000**	**2010**
Australia	17,76	25,13	80,78	130,06
Belgium	9,12	27,20	77,20	94,23
France	44,27	96,24	81,30	111,51
Germany	*	*	116,32	107,12
Greece	12,72	39,15	42,19	108,39
Ireland	31,45	43,73	95,67	228,23
Japan	51,47	125,06	222,34	177,18
Netherlands	21,51	61,22	125,34	205,46
Italy	*	52,36	70,33	115,68
Spain	*	69,69	90,13	211,28
US	74,86	93,79	168,75	193,80
UK	*	*	119,59	201,71

Source: World Bank, Global Financial Development Database, 2016.