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# ‘Cognitive closure’ in the Netherlands: mortgage securitization in a hybrid European political economy

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**Abstract.** There is a strong case that mortgage-backed securities were at the root of the 2007–09 financial crisis. Even though geographers have convincingly demonstrated that loan origination is strongly locally rooted and that the fallout from the subprime mortgage crisis clearly had spatially circumscribed effects, securitization is still generally perceived as a universal, private, and purely market-based financial technique. In this paper we use a description of the securitization chain in the Netherlands to contest these perceptions. Building on and adding to Thomas Wainwright’s analysis of securitization in the UK, we first argue that securitization in the Netherlands has taken a form which reflects Dutch corporatist institutional arrangements, implying that both geography and states do matter for the supposedly aspatial process of securitization. Second, we argue that the Dutch state has been very much implicated in the construction of the securitization market in the Netherlands. Third, we suggest that this can best be seen as an effect of ‘cognitive closure’ rather than of ‘regulatory capture’: that is, Dutch pro-banking regulation is not so much an effect of bankers hijacking regulators but, rather, more the result of bankers seducing regulators with their stories. This paper is a detailed case study of the workings of financialization and adds to the growing body of work which seeks to analyze the different ‘varieties of financialization’ and the variegated geographies of the financial crisis.

## 1 Introduction

Despite ongoing controversy over the causes and consequences of the global financial crisis, there is near unanimous agreement on the root cause of the crisis. In his extensively quoted speech, delivered before the global explosion of the financial crisis, Federal Reserve chief Ben Bernanke (2007) pointed out that:

“the financial turbulence we have seen had its immediate origins in the problems in the subprime mortgage market [even though] the effects have been felt in the broader mortgage market and in financial markets more generally, with potential consequences for the performance of the overall economy. [At the root was the view] that the new mortgage market came to look more like a textbook financial market, with fewer institutional “frictions” to impede trading and pricing of event-contingent securities. [Securitization] eased the spreading and trading of risk, ... turned mortgages [into] more liquid instruments, for both lenders and borrowers... and led to a ‘commoditization’ of mortgages. Access to mortgage credit also widened; notably, loans to subprime borrowers accounted for about 13 percent of outstanding mortgages in 2006.”

As the 2007–09 crisis clearly demonstrated, innovative securitizations had very negative consequences. Contrary to the promises of financial innovation—transparency, adequate risk assessments, dispersion of risk, higher yields, and perfect markets—the increased securitization of assets created highly opaque products that were traded on the back of credit ratings that failed to take the volatility of asset markets into account adequately. It created financial products that lost most of their

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value under circumstances that theoretically should never have happened (according to the models, once every 30 000 years). Their triple-A ratings suggested that they should have been as stable as US Treasury bills. The risk dispersal that the financial innovations promised also proved a chimera. The investment banks that reaped handsome fees from securitization professed to be in the business of ‘moving’, that is, securitizing assets in order to sell them as fast as possible to yield-hungry investors. Yet, they also appeared to be in the business of ‘storing’, that is, stocking their banking books with ever-larger amounts of securitized assets, either because of the handsome returns they generated (in the beginning) or because (later) they could not find sufficient ‘dumb money’ (end investors) to absorb the assets. Hence, when the crisis broke and securitized assets lost their value, the trading books of the largest banks proved to be infected with huge amounts of asset-backed securities.

There are interesting geographies to the mortgage and financial crises. As has been pointed out in a number of geography papers, the decline in house prices, which began the subprime mortgage crisis, had its origin in a small number of urban areas in the Rustbelt (the traditionally strong but often declining manufacturing regions in the Northeast and Midwest of the United States), but only received global attention after it had shifted to mostly suburban areas located in Sunbelt states, such as Florida, California, Arizona, and Nevada (Aalbers, 2009a; Darden and Wyly, 2010; Sidaway, 2008; Wainwright, 2010; Wyly et al, 2009). These authors also stressed the spatially concentrated nature of the fallout from the crisis (Aalbers, 2009b; Dymksi, 2010; Engelen and Faulconbridge, 2009; Wójcik, 2009). In short, the crisis appears to have had very specific geographical origins and effects, which suggests that the beginning and the end of the securitization chain are easy to locate: mortgage loans (borrowers) and end investors. However, what happens in between these end points is not so apparent.

In Bernanke’s speech the emphasis is very much on how financial innovation—in the form of securitization of assets—produced a liquid, highly standardized market that was devoid of ‘institutional frictions’ and increasingly mimicked a ‘textbook financial market’. Geography, difference, and context do not figure prominently in the authoritative speeches and lectures of masters of global financial markets such as Bernanke. The complacent assumption underlying Bernanke’s speech is that markets—in particular, highly sophisticated financial markets—are asocial, acultural, devoid of institutional patterning, and universal in nature. This view is at the core of the curriculum of mainstream economics and is blatantly visible in any of the plethora of finance handbooks (eg, Fabozzi et al, 2002).

Although this image of markets is increasingly being challenged empirically and theoretically by economic sociologists (eg, Abolafia, 1997; Morgan, 2008; 2010; Zaloom, 2006), studies of the socially, culturally, and institutionally patterned nature of securitized asset markets are still few and far between. This paper builds on a seminal paper by Thomas Wainwright (2009), who demonstrated that the transfer of US securitization techniques to the UK required multidimensional organizational, institutional, and legal adaptations, which were actively negotiated by market insiders and regulators. Wainwright’s paper counters head on the mainstream economists’ view of financial markets by pointing out that securitization did not develop in an institutional void but required institutional, organizational, and cultural pre-conditions for which state intervention was crucial. Wainwright’s counterargument adds another crucial geography to the growing body of literature on the geographies of the crisis.

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In this paper we engage in a similar exercise by drawing out the ways in which the securitization chain in the Netherlands was shaped and moulded by existing institutional arrangements and highlighting how market insiders and financial market regulators collaborated to accommodate the growth of asset securitization. This paper is part of a growing body of literature that tries to trace different trajectories of financialization. Specifically, we seek to analyze the case of constructing a market for securitized mortgages in the Dutch political economy that has been described elsewhere as a ‘hybrid’ between ‘coordinated’ and ‘liberal market’ economies (eg, Engelen and Konings 2010; Engelen et al, 2010a; Hall and Soskice 2001). Where Wainwright added variety to the Anglo-American concept of financialization by pointing out differences between securitization in the US and the UK, this paper adds even more variety by tracing the development of securitization in a hybrid political economy. How does securitization evolve when global capital flows, which are mediated by a supra-national banking network, link up with a corporatist housing market? And how does the state become involved in facilitating a potentially dangerous financial technique?

The paper is structured as follows. We begin, in section 2, with a brief discussion of the technique of securitization to illustrate its functionalities and its design. We then give a brief history of the application of securitization to mortgages and other assets, starting with the US and ending with the Netherlands. The third section gives a short quantitative overview of the securitization market in the Netherlands. In the fourth section we present and discuss the typical model of securitization in the Netherlands, mapping the different linkages and actors in the overall securitization chain; this serves to demonstrate the way in which the linkages and the actions of actors connected to the securitization chain are shaped and moulded by different modes of regulation. In the fifth section we discuss the nature of the relationship between financial market actors and regulators, arguing that it is more a matter of ‘cognitive closure’ than of ‘regulatory capture’. In the concluding section we wrap up our key arguments and suggest avenues for new research.

## **2 Extending and dispersing securitization**

While strongly linked to the surge of financial innovation characteristic of post-Bretton-Woods financial markets (see Engelen et al, 2010b), securitization is in fact an old financial technique. According to Rouwenhorst (2005) and others, it can be traced back to the creation of proto-mutual funds in 18th-century Holland, which issued tradable shares on the back of aggregated life insurance premiums. These so-called ‘tontines’ allowed investors to buy rights to pooled annuities, which were actually nothing more than stable cash flows that could be easily sold to other investors on the Amsterdam stock exchange. The hallmark of these products was that they transformed opaque financial contracts (life insurances), which required local knowledge to assess their quality and hence lacked a liquid market, into highly standardized, transparent financial products that could be traded in the open market based on a limited set of quantitative indicators. The crucial trick was the pooling of assets. One did not buy a single insurance contract but, rather, the right to parts of the cash flow generated by a large number of pooled contracts. While individual contracts could default, a pooled series of contracts distributed the risk over a much larger number of contracts, generating a new product with other, much more calculable, and hence malleable, risk properties.

In essence, today’s structured financial products are based on the same insights. Opaque contracts are pooled and sold to a separate legal entity or special purpose vehicle (SPV) which, in turn, issues bonds to end investors to pay for the underlying assets. The investors receive parts of the cash flow generated by these contracts.

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As a result, the amount of information needed to assess the bonds on offer is radically reduced. For example, in mortgage contracts, investors do not have to assess the quality of the mortgaged real estate, the socioeconomic expectations of the neighbourhood, or the creditworthiness of the mortgagee. They have only to assess the reliability of the originator (is the mortgage granted by a prudential lender?); the sophistication of the structurer (does the investment bank do a good enough job?); and the trustworthiness of the servicer (is the servicer a reliable collector of the principal of the loan and interest?) As a result, it has become extremely uncommon for investors to look at the underlying portfolio of their securities other than through aggregate data. Instead, all risk assessments have increasingly been delegated to rating agencies. These private organizations have a legal mandate to rate the creditworthiness of emitters of bonds and are remunerated for their work by the emitters on a fee basis. The largest and best known agencies are Standard and Poor's, Moody's, and Fitch (Sinclair, 2005).

Despite its presumed universal nature and deep history, the recent rediscovery of asset securitization is rooted in specific spatial–temporal coordinates. Mortgage securitization in the US dates back to the late 1960s and early 1970s, when new legislation allowed Fannie Mae and Freddie Mac to securitize the mortgages and loans they were legally obliged to buy from local banks and thrifts, and to sell the bonds issued on the back of these assets to private investors. This became known as ‘public label securitization’ (Ashton, 2009; Gotham, 2006; 2009; Immergluck, 2009). During the 1970s, these so-called ‘government-sponsored enterprises’ (GSEs) were involved in a large-scale experiment of constructing a smoothly running securitization ‘machine’ which ground to a halt in the late 1970s because of disadvantageous macroeconomic conditions. The political response was to introduce additional deregulation to roll out securitization nationwide. In the mid-1980s a package of legislative measures was initiated to increase the accessibility of the primary mortgage market for an ever-larger slice of US households (Gotham, 2009).<sup>(1)</sup> What has happened since is a gradual transformation of local legislative frameworks, techniques, expertise, and relationships into a ‘private label’ securitization machine (Lewis, 1989; 2010); that is, securitization by investment banks rather than by the GSEs. This resulted in step-by-step extensions of the securitization technique to other assets, markets, and jurisdictions.

The first extension was the securitization of so-called ‘nonconforming loans’, including subprime loans but also smaller categories, such as ALT-A and jumbo loans. Conforming loans are mortgage loans that meet GSE requirements for public label securitization. Subprime loans are high-cost loans; originally intended for borrowers with credit imperfections, they were increasingly sold to borrowers with a good credit history during the runup to the crisis. Their high risk profiles and high interest rates excluded these mortgages from public label securitization, but investment banks still considered them attractive because of their high return rates. The second extension concerned the application of the securitization technique to other types of assets that generate regular cash flows—for example, credit-card and debit-card debts, lease contracts, car loans, and student loans. The third extension was the design of ever-more complex financial products on top of the securitized assets, resulting in derivatives of derivatives—the multibillion dollar collateralized debt obligation-market (CDO). The fourth extension concerned the use of swap-like instruments to trade away volatility and default risks to counterparties willing to take over these risks for a small fee (Morgan, 2010). These are the infamous credit

<sup>(1)</sup> The primary mortgage market is usually referred to as the ‘mortgage market’: the market where a loan is closed between a lender and a borrower. The secondary mortgage market is where securitized assets are sold to investors.

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default swaps (CDSs),<sup>(2)</sup> which spelled the demise of the US insurance giant AIG in the week following the fall of Lehman Brothers.

The final extension concerned the gradual geographical dispersal of the securitization technique outside the US. Given the strong linkages between the US and the UK, and in particular between Wall Street and the City, it comes as no surprise that the UK was the first major securitization growth market outside North America. Wainwright describes how Salomon Brothers<sup>(3)</sup> established a specialized structuring firm in London in 1986, called the Mortgage Corporation, which issued mortgage-backed securities (MBSs) and sold them to UK-based investors (Hamnett, 1994; Lewis, 1989; Wainwright, 2009). Wainwright stressed that the technique of securitization did not travel well across borders. Its wide-scale application in the UK required fiscal, legal, and accounting adaptations, which in turn required extensive negotiations between market insiders and regulators. Once these issues were resolved, London could become the main European financial supermarket for securitized assets.

The contemporary version of assets securitization first reached the Netherlands in 1996, when a subsidiary of Fortis Bank sold parts of its mortgage portfolio to a separate legal entity that issued bonds on the back of these mortgages. The aim was to access new funding sources. The next securitization was done by ABN Amro and aimed instead at 'regulatory arbitrage'—selling assets in order to decrease the capital requirements under Basel I regulation to enhance capital profitability (Alink et al, 1998). Capital enhancement in the form of CDS contracts was delivered by UBS, the bank that was involved in the first US private label asset-backed securitization. Market insiders have indicated that London-based investment banks and the Dutch staff from their securitization teams have played a crucial role in setting up the first Dutch securitizations.

Since these first securitizations, developments in the Netherlands have been following developments in the UK closely. The Dutch market for securitized assets has become the second largest in Europe (after the UK), and, similar to the US and the UK, the securitization technique is being applied to an increasing range of assets (see <http://www.afme.eu>). More importantly, regulators and market insiders in the Netherlands negotiated incremental adaptation of legal and regulatory infrastructure, in order to accommodate the growth and expansion of asset securitization by Dutch banks. In 1997, for instance, the Dutch Central Bank published a *Memorandum Concerning Securitization and Supervision* (DNB, 1997) in which it commented on market practices and stipulated how securitizations fitted into the existing regulatory framework, in particular the 1992 Banking Supervision Act<sup>(4)</sup> and Investor Supervision Act.<sup>(5)</sup> In light of the increasing complexity of securitizations, the Dutch Central Bank felt the need to update its stance on securitization again in 2005, through the so-called *Solvency Regime for Securitization* (DNB, 2005). Below, we first give a brief overview of the size of the Dutch securitization market (section 3) before focusing on how the precrisis regulation of capital markets and banks in the Netherlands shaped and was shaped by agents playing the securitization market (section 4).

<sup>(2)</sup> Credit default swaps are a type of insurance against defaults and other 'credit events', which are taken over by another financial firm against a fee. CDS contracts are traded 'over-the-counter' and are largely unregulated. Since 2000, when it became legally possible to buy insurance on credit instruments one did not own, the CDS market has turned into a veritable casino (see Morgan, 2010).

<sup>(3)</sup> In the early 1980s Salomon Brothers, together with First Boston, experimented with securitizations of mortgages in the US (Rosenthal and Ocampo, 1988).

<sup>(4)</sup> [http://www.st-ab.nl/wetten/0830\\_Wet\\_toezicht\\_beleggingsinstellingen\\_Wtb.htm](http://www.st-ab.nl/wetten/0830_Wet_toezicht_beleggingsinstellingen_Wtb.htm)

<sup>(5)</sup> [http://www.st-ab.nl/wetten/1064\\_Wet\\_op\\_het\\_financieel\\_toezicht\\_Wft.htm](http://www.st-ab.nl/wetten/1064_Wet_op_het_financieel_toezicht_Wft.htm)

### 3 A quick scan of the Dutch securitization market

Since the establishment of the market in 1996, securitization has truly taken off in the Netherlands. Today, total liabilities of Dutch SPVs have reached €270 billion, with well over two thirds (€210 billion) in residential mortgages. The remainder relates to commercial real estate, corporate loans, lease contracts, and other nonmortgage assets. Total mortgage debt stood at €625 billion in 2008 (approximately equal to Dutch GDP), which implies that almost one third of all mortgages are securitized in the Netherlands (CBS, 2009).

Dutch securitizations account for almost one fifth of the Euro market and one tenth of the overall European market (IFSL, 2010). Given the Netherlands's small size, it is a huge overrepresentation, which can be attributed to the high level of financialization in the Netherlands (see Engelen and Konings, 2010; Engelen et al, 2010a) as well as to the largest level of deductibility of mortgage payments in the world and, partly as a result thereof, the high levels of indebtedness of Dutch citizens. The particularities of the Dutch housing market have resulted in housing prices almost tripling since the mid-1990s. Some of these particularities include the Netherlands's large social housing sector (approximately one third of all units), with capped rent prices and an unwieldy distribution system; a very small private rental market (less than 10%); a very limited number of houses available for owner-occupation, in particular in the densely populated western part of the country; and generous tax benefits for mortgage payments. These are the main explanations for the high level of indebtedness per capita, which has worried international agencies like the IMF (IMF, 2010).

The housing boom has substantially changed lending practices: loan-to-value (LTV), loan-to-income (LTI), and qualitative lending standards have markedly 'loosened' over the past two decades. Whereas it used to be common practice only to grant mortgages of up to 75% of the assessed value of the house, today LTVs of up to 125%, covering not only the purchase price for the property but also transaction fees, are the norm. Subsequently, loan-to-foreclosure values—while still among the lowest in the world—have risen substantially and could increase further if the housing market collapses. As a result, Dutch households on average are among the most indebted worldwide, on a par with Danish and Irish households and far surpassing US households (see table 1). These trends suggest that there are currently many borrowers in the Netherlands who are exceptionally vulnerable to adverse financial shocks (SCP, 2010).

The large rise in Dutch housing loans increased pressure on originating banks to offload their assets to the capital market in order to free up capital and initiate new rounds of lending. Alternatively, one could argue that securitization fuelled the loosening of underwriting standards in the primary mortgage market [Aalbers (2008); for the US see Immergluck, (2009)] as it enabled lenders to underwrite more mortgages, in turn also increasing competition for borrowers. Indeed, the rise of securitization from 1996 onwards is strongly correlated to the housing bubble. Another factor behind the

**Table 1.** Mortgage debt in selected countries, 2009 (source: EMF, 2009).

Country	Homeownership rate (%)	Mortgage debt (€ million)	Mortgage debt:GDP ratio	Per capita mortgage debt (€)
Netherlands	53	602 192	105.6	36 350
Denmark	53	231 263	103.8	41 960
UK	70	1 372 659	87.6	22 210
Ireland	77	147 654	90.3	33.180
US	69	7 994 457	81.4	26 040

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strong growth of securitization is the increased penetration of the primary mortgage market by foreign lenders, such as Argenta, GMAC, Bank of Scotland, and Lehman Brothers' subsidiary ELQ. Except for Argenta, all these companies were fully dependent on the originate-to-distribute business model—selling mortgages through mortgage intermediaries or the Internet, where the mortgages are securitized to free up capital for another round of originations and securitizations. This allowed them to avoid having to establish an expensive branch network or deposit base. In the Netherlands the small lender NIBC was the first to copy this strategy; others quickly followed suit. Since 2002, GMAC has put fourteen separate securitization issuances on the market, while Bank of Scotland has issued three securitizations since 2005 (DNB, 2008, page 15).

The final factor behind the strong growth of Dutch securitizations since 2003, according to the Dutch Central Bank, was growing demand among institutional investors for securities which provide higher yields than T-bills and other triple-A-rated sovereign bonds. The low-interest environment as well as the increased volatility of stock markets, which had hit institutional investors hard in 2001, forced them to look for alternative investments. MBSs, and in particular senior tranches, seemed like 'the right thing at the right time' (DNB, 2008, page 15). European 'real money' investors (an industry term for pension funds, insurance companies, and asset managers which seek to diversify multibillion-euro funds) as well as banks are the best part of the demand for Dutch residential MBSs, both before and since the US crisis. Several smaller investors (mostly highly leveraged funds) disappeared during the crisis, leaving a few international heavyweights to buy up Dutch securitizations in large chunks. Together with British MBSs, Dutch MBSs are still popular among end investors, due to their favourable historical risk–return profile.

#### **4 The coevolution of regulation and securitization**

Since the aim of this paper is to contest the view of securitization markets as textbook financial markets, in this section we look at the way in which the Dutch securitization chain coevolved with its regulatory environment. The emphasis in our analysis is on the political negotiations surrounding the securitization process and thus also on the agents involved in the secondary mortgage market. Our approach thus fits the actor-centred institutionalism that is currently coming of age within comparative political economy (Jackson, 2010). We do not provide an analysis of the primary mortgage market; what happens downstream in the securitization chain is important but cannot be covered here due to space limitations (but see Aalbers, 2008; 2009c; 2011).

##### **4.1 Basel 1 and 2**

The rationale behind securitization is twofold: first, to use capital markets as a new funding source, in addition to funding from bank deposits and savings accounts (originate-to-distribute model); and second, to skirt, dodge, or circumvent legal requirements that are perceived as increasing capital costs, regardless of rationale or the functionality of these requirements ('regulatory arbitrage'). The requirements concern the obligation set down by Basel 1 (and, since 2004, also Basel 2) to keep equity capital in reserve, so that it can serve as buffer in case of defaults or other credit risks linked to particular kinds of assets (Blundell-Wignall and Atkinson, 2010). These capital reserve requirements were the outcome of lengthy and highly complex negotiations among central banks, as well as between central banks collectively and representatives of the industry in the Basel Committee on Banking Supervision—an international regulatory body linked to the Bank for International Settlements based in Basel (Underhill et al, 2010; Wood, 2005).

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Over time, the Basel Committee specified reserve requirements for an increasing number of asset classes in ever-more detail. Mortgages were considered riskier than sovereign bonds and carried a solvency weight of 50%. Given that the Basel Committee required banks to maintain a benchmark capital reserve ratio of 8%, a weighting of 50% meant that mortgages required a risk-weighted reserve ratio of 4% (Alink et al, 1998). Because reserve capital is capital on which no returns can be generated (as it cannot be invested), banks have strong incentives to use SPVs to lower their capital requirement costs and default risks. Since the 1990s banks have increasingly used securitization to do this, and thus securitization became a popular technique for managing reserve requirements across the banking world.

Basel 1 and 2 were transnational responses by national regulators, who sought to address the reduction of their regulatory capabilities due to the banks' increasing ability to play off jurisdictions against one another. However Basel 1 and Basel 2 also reflected a striking and growing information asymmetry between regulators and the regulated. Central banks were increasingly kept in the dark about the solvency of the banks under their regulatory jurisdiction. This was caused by quantitative and qualitative changes in financial markets and fast-paced financial innovation, as well as the multi-jurisdiction nature of an ever-increasing number of banking activities (some explicitly conducted in or from offshore financial centres in order to circumvent regulatory oversight). To accommodate these changes and maintain a modicum of oversight, Basel 2 granted internationally active banks the right to use certified internal risk management systems to determine their capital reserve ratios (Blundall-Wignall and Atkinson, 2010). The regime of transnational banking regulation under Basel 1 and 2 was thus very much a coproduction between regulators and the industry, simultaneously serving commercial and prudential aims. Over time, one internal management system came to dominate the market—JP Morgan's Value-at-Risk model which was made available on the Internet free of charge. In light of its commercial origin, it is not surprising that this risk-management system—despite its formal recognition in Bank of International Settlements documents—primarily aimed to bring down capital requirements, rather than ensure sufficient solvency from a macro prudential standpoint (Holton, 2003).

In general, there was no public microcontrol over the actual structuring process, and to this day there is still no improvement in control. This creates possibilities for misselling, misrating and mismanagement (intentional or unintentional). In contrast to the US, where the International Swaps and Derivatives Association and the American Securitization Forum have created standardized securitization contracts, no such initiatives have yet occurred in the Netherlands. At the European level, the European Securitization Forum is pushing for more cross-European standardization. It is particularly important to introduce 'same label for same content' requirements: that is, a uniform mode of presenting information.

#### **4.2 Dutch Central Bank**

As in the US and the UK (Immergluck, 2009; Wainwright, 2009), securitization in the Netherlands was strongly influenced by a set of preexisting institutional arrangements and idiosyncrasies. In particular, the large-scale establishment of SPVs, which served as buyers of pooled mortgages and as issuers of residential mortgage-backed securities, were strongly dependant on the well-developed trust industry and the large community of trust lawyers, who become the official administrators of the financial assets as soon as the assets were placed outside the banks. Stemming from its colonial history, the Netherlands has always been home to a relatively large number of multinational corporations. Over time, this resulted in a cluster of legal agencies and trust offices

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which, in turn, attracted many foreign firms. They opted for fiscal consolidation in the Netherlands, both to circumvent taxation by other jurisdictions and to take advantage of the generous fiscal facilities that the Netherlands had to offer. Thus, most trusts used for Dutch securitization transactions are located in Amsterdam, but some are in other tax havens, such as Ireland.

The SPVs established for securitization purposes were carbon copies of the trusts set up for fiscal purposes by multinational corporations, and served similar goals of arbitrage: they were designed to ensure that they remained outside the regulatory scope of the Dutch Central Bank. In essence, these SPVs were credit-generating entities and, as such, formally subject to regulation under the Banking Supervision Act. In a 1997 Memorandum, the Dutch Central Bank stipulated that SPVs would not be subject to regulation under this act as long as (i) the bonds were sold only to professional investors; (ii) they were based on a homogenous pool of assets; and (iii) they were rated by at least two recognized rating agencies (DNB, 1997). The first requirement meant that most issuers opted for large coupon sizes of at least €1 million. The second requirement was meant to enhance transparency and decrease risk: it essentially prohibited the issuing of bonds on the back of mixed pools of mortgages from different originators or on the back of different categories of assets. The third requirement delegated the public responsibility of ensuring good-quality assets to private, for-profit, rating agencies—perceived as neutral guardians of risk and creditworthiness which had built up reliable market reputations over time (DNB, 1997).

The second act that shaped the SPVs was the Investor Supervision Act. This act stipulated certification and registration of legal entities active in the Dutch market for investment products. In response to industry requests, in early 1997 the Dutch Central Bank defined the grounds for exemption: (a) SPV management should consist of at least two independent directors, whose knowledge and integrity were to be assessed by functionaries of the Central Bank; (b) the SPV must be registered at the local Chamber of Commerce; (c) it should be able to hand over certain financial guarantees, in the form of legal documents spelling out its assets and liabilities; and (d) the structurer has to disclose details about the assets and liabilities of the SPV to the Dutch Central Bank. Whereas the 1997 Memorandum stipulated it as mandatory, in the 2004 update structurers were no longer required but now merely advised to inform the Central Bank (DNB, 2005).

### **4.3 Dutch Parliament**

In an ideal—typical securitization chain the originator asks a structurer to set up an SPV to serve as a receptacle for the mortgages and related payments and as the formal initiator of the emission of bonds on the formal bond market to pay the originator for delivery of the mortgage bundle. Before October 2004 the exchange of bundles of mortgage contracts to an SPV took the form of a legal transaction between originator and structurer, which entailed the duty of the originator to notify each and every individual mortgagee of the fact that the mortgage was now owned by a different owner, namely the SPV. This was referred to as the legal ‘notification requirement’, which most originators were reluctant to follow for commercial reasons. The alternative was the so-called ‘subparticipation’ of the originator in the SPV, in exchange for a monthly sum of parts of the interest and principal paid by the debtors. Because this was not a true ‘sale’, and hence did not free up capital for new lending, this strategy was not very popular. Hence, in most securitizations between 1996 and 2004 debtors were only notified if certain predefined ‘events’ occurred, for example, downgrading of the originator by rating agencies (Alink et al, 1998). The Dutch Central Bank saw this practice as following the spirit of the notification requirement.

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In the context of the housing boom described above, the legal obligation to notify one's mortgagees was increasingly perceived by market insiders as a stumbling block to the further development of the securitization market. Hence a powerful lobby emerged, initiated by the Dutch Banking Association, to repeal the notification requirement. In June 2003 a legal proposal by the Ministry of Finance was supported by Parliament and it became possible for banks to sell their mortgages to third parties by 'silent assignment'—effectively ending the notification requirement and giving a big boost to the Dutch securitization market.

What is striking about this episode is the extent to which the legislator bought into the banks' perspective which saw securitization as something functional. The official document containing the legal rationale behind the new act contained sections that were literally copied and pasted from the consultation document drafted by the Dutch Banking Association in close collaboration with its members (Wester, 2009). Moreover, as the 2009 hearings of the parliamentary committee on the financial crisis have demonstrated, hardly any MPs showed any interest in the act, allowing it to be signed into law with no discussion and without considerations of its functionality, rationale, or consequences (Commissie de Wit, 2010, pages 16–19). Although in accordance with the aim of ensuring that asset securitization results in the 'actual' sale of assets, and hence does not contain residual risk for structurer and/or originator, the severing of all links between originator, SPV, and end investor could have resulted in a loss of information on (and hence lack of responsibility for) the quality of the underlying mortgage contract. Some commentators consider this lack of insight to be the main cause of the US subprime mortgage crisis and the ensuing global credit crunch (see Gorton, 2010).

#### 4.4 Delegated risk assessment

Like any other bond issued on the Dutch bond market, securitized assets must be rated by at least two recognized rating agencies. The 1997 *Memorandum on Securitization* stipulates that, in order to determine the quality of the different tranches of bonds, rating agencies should focus in particular on the origination and structuring process (DNB, 1997). This should be done by so-called 'registered rating agencies'. The current register contains the 'big three'—Moody's, Standard and Poor's, and Fitch—as well as the less well-known Canadian rating agency DBRS. It is important to know that these rating agencies have not felt a need to establish offices in the Netherlands but conduct their assessment of Dutch securitizations from their offices in London (combined with brief visits to the structuring bank). This is in line with the observation that the Amsterdam financial centre in the 21st century is largely a satellite of the City of London (Engelen and Grote, 2009).

The type of assessments required to rate bonds emitted on the back of a pool of several thousand mortgage contracts (a so-called 'granular portfolio'—many small loans, low correlation) is radically different from the rating of portfolios based on loans to a few big corporations (so called 'nongranular portfolios'—few large loans, high correlation) (see MacKenzie, 2009). Given their decade-long presence in the corporate bond market, rating agencies have built up large datasets and theoretical expertise on the probabilities of credit moments (eg, default, renegotiation of terms, rolling over of debt), which can affect the quality of corporate bonds. This allowed them to calculate relatively robust assessments of default risks. However, they lacked similar longitudinal data on developments in mortgage markets and did not possess the same level of professional expertise here as they did in corporate bond markets. The crisis highlighted this shortcoming as a big problem for delegated asset quality assessment and has initiated some discussion about possible alternatives.

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An even more pressing problem highlighted by the crisis is the conflict of interest nested in the business models of large rating agencies. Since rating agencies are paid by the issuer, there are strong incentives on the part of rating agencies to accommodate the issuer's wishes. From the mid-1990s onward, the largest rating agencies transformed themselves into (or were taken over by) publicly traded corporations under increasing pressures to maximize shareholder value. The result was a gradual shift in the business model of rating agencies. From quasi-public market regulators they became for-profit service providers which aimed to maximize revenue and profitability. To do so, rating agencies increasingly became involved in the lucrative market for securitizations. In 2007, for instance, Moody's earned more than 40% of its annual revenues from rating MBSs, compared with 30% a decade earlier. According to some commentators, these changes have had a negative impact on the quality of the internal rating process.

## 5 Discussion

According to mainstream finance, as expounded by Bernanke (2007), securitization markets increasingly mimic 'textbook financial markets', due to the effects of financial innovation, the use of ICT, and the 'quant revolution'. In other words, they are placeless, timeless, institution-less coordination mechanisms with low to zero transaction and information costs that clear instantly. Instead, the picture of securitization markets that arises from our reconstruction of Dutch securitization suggests a completely different conceptualization of these markets. Although formally a 'private law' domain which, due to its opaqueness and technicality, was largely depoliticized (even after the crisis), securitization is in fact shaped by a complex array of direct, indirect, autonomous, and delegated regulations, undertaken by various public, private, and semipublic organizations. Private agencies—such as the Basel Committee, the Dutch Banking Association, and commercial rating agencies—ensure a modicum of compliance with public values on behalf of the state, which increasingly lacks the knowledge, will, and means to set the rules. This is most apparent in the case of rating agencies.

Also interesting, but not extensively addressed here, is the multiscalar and multilevel nature of regulation in this field. Financial market regulation, solvency requirements, and the taxation of financial conglomerates are in many instances established at supranational level, on the basis of prolonged consultation rounds with industry insiders. However, they still have to be adapted regionally and nationally as they are implemented by nation-states and national regulators. The picture that arises is one of public goals being reworked by private agencies in sets of rules that accommodate industry interests and that are subsequently formalized by EU directives which, in turn, push national regulators to implement those rules. While the push towards regulation comes from state and state-like agents, the reworking in terms of rules of the game is very much left to private agencies.

Although usually depicted as part of the so-called 'shadow banking system'—suggesting a free-for-all system, devoid of regulation—the hand of the state is actually everywhere, at each link of the securitization chain and in the behaviour of every party involved with securitization. This is not to suggest, however, that the way in which the chain, its links, and its agents are shaped by regulation reflects intentional design. Whereas broad public concerns (competitiveness, stability, accessibility of capital) stood at the core of Dutch regulatory changes over the last fifteen years, the content, style, and impact of the regulations were very much determined by private initiatives and subsequently formalized by state agencies. Moreover, in many instances one can observe unintended effects—as is the case with the securitization chain, which was

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designed by private agents (banks) to undertake regulatory arbitrage in response to new supranational regulation (the Basel 1 and Basel 2 agreements) and was subsequently facilitated by the regulator (the Dutch Central Bank) and backed by Parliament.

The Dutch state, as we have demonstrated, is almost never the initiator of changes and developments. Rather, the state responds to calls by industry insiders for regulatory change, even using the arguments of these insiders calling for regulatory change to convince political adversaries. As Posner and Véron (2010) argued in the case of EU financial regulation, the role of the state in allowing and facilitating securitization very much fits the image of ‘power without purpose’. Despite possessing strong regulatory instruments, at both regional and national levels, the state failed to formulate a coherent vision on how to manage financial globalization. The default practice was ‘ad hoc globalization’, which was strongly informed by perceptions of financial markets that were hegemonic among US-based and UK-based market insiders and were derived from mainstream finance theories (MacKenzie, 2006; Moran, 1991). The most vocal supporters of self-regulation, securitization, and financial market integration on the European continent were those banks that saw themselves as taking part in activities similar to those of the UK-based investment banks, for example, Deutsche Bank in Germany, Société Générale in France, and ABN Amro in the Netherlands (Tsingou, 2009).

In our view this is not ‘regulatory capture’ as set out in Stigler’s public choice model (Laffont and Tirole, 1991; Stigler, 1971). Although ‘revolving doors’ between politics, regulation, and financial markets, as well as direct lobbying, do play a role in explaining why the Dutch state facilitated, allowed, liberated, and delegated, it is too strong to claim that the outcomes are the intended effects of well-organized, selfish, and rent-seeking special interest groups (as proposed by the public choice perspective). Instead, as is demonstrated by the episode of the ‘silent assignment’, in this situation politics does not have a strong opinion on the issue, has no alternative narrative, and is seduced into accepting the picture of the world presented by market insiders. Add the paraphernalia of ‘expertise’ and the professionalism of banking—traders and analysts widely perceived as ‘quants’ and ‘eggheads’, a high-tech working environment, impressive market reports and PowerPoint presentations, head offices posing as ‘cathedrals of capital’, huge bonuses, impressive PhDs, stylish suits, expensive watches (see Ho, 2009)—and there was not much that regulators and politicians could provide as counterargument. Thus, following the work done by the Manchester-based Centre for Research in Socio-Cultural Change (CRESC), we feel that the phenomena described in this paper are better captured as ‘cognitive closure’; that is, the simultaneous seduction of politics by the promises of lucrative financial gains and the inability of politics to formulate an alternative perspective on financial globalization to the ‘ad hoc globalization’ pursued by bankers. Our notion of ‘cognitive closure’ is very similar to the notion of ‘cognitive locking’ used by Blyth (2002, pages 170, 229) to explain the transformation of Swedish economic policy making in the 1970s. It stresses the importance of dominant ‘problem definitions’ and the crowding out of alternative solutions through ‘cognitive locking’. We opted for the term ‘closure’ over that of ‘locking’ because of the observation that problematic definitions become dominant only after political strife and that their dominance is contingent and always precarious—an essence that we feel is better captured with ‘closure’ than ‘locking’. In the words of Engelen et al (2011):

“business and politics [has] become an endless pursuit of closure through mobilizing narratives which seldom obtain closure for long....With narrative ‘closure’, we envisage a more complex and cultural world with uncertain outcomes.... In story driven capitalism, the normal activity of capitalist politics is interfering with

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another's narrative so as to secure action or inaction. Organizations, institutions and positions provide location and partition which set limits on the authority, endorsement or circulation of stories in a world where sectional agendas usually compete. For example, in turf wars between central bankers and non-bank regulators, where you stand usually depends on where you sit."

This is nicely illustrated by the two legal documents produced by the Dutch Central Bank to accommodate securitization: the 1997 *Memorandum on Securitization* and its 2004 update. What is striking about both pieces of legislation is the extent to which the Central Bank bought into the functionality of securitization as means for overcoming the capital reserve requirements of Basel 1 and 2. The main concerns voiced by the Central Bank relate to the possible dangers to bank solvency as a result of the remaining material links between the originator/structurer and the SPV. Both documents aim predominantly at ensuring that the sale of assets in a securitization is an 'actual' sale, meaning that the transfer of assets plus the liabilities linked to them is complete and does not leave any remaining obligations—legal or moral. This suggests that the Dutch Central Bank knowingly and willingly accommodated the 'regulatory arbitrage' of banks and fully accepted the arguments for credit expansion used by industry insiders: that is, enhancing the amounts of investable capital and thus lowering the costs of capital, which results in wider accessibility of capital. In the light of the crisis, which has demonstrated that banks were overleveraged and had far too thin capital reserves, the willing collaboration of the Dutch Central Bank to help the banks under its supervision minimize their capital reserves seems to call for the introduction of more cognitive/intellectual distance between regulator and regulated. As Adair Turner (2010), chairman of the Financial Services Authority (the British financial market regulator) stated:

"in the pre-crisis years, 'using bank capital more efficiently' (ie, being able to support more lending on any given level of bank capital) was perceived as not only a rational objective for individual banks, but as a valuable social objective. Thus the Basel II capital adequacy regime was designed around the overt principle that if banks could develop more sophisticated risk management systems, they should be allowed to operate with higher leverage."

It is difficult to find a more poignant description of 'cognitive closure'.

## 6 Conclusions

In this paper we set out to contest the view that secondary mortgage markets mimic the universal, frictionless, and efficient markets of mainstream finance. Based on our empirical assessment of the Dutch securitization chain, we have demonstrated how regulation and securitization coevolved in a political economy which combines liberal and corporatist characteristics. This paper thus makes contributions to three bodies of literature: (1) to the growing economic sociological literature on financial markets; (2) to the 'varieties of financialization' debate, which combines comparative political economy, financialization studies, and financial geography; and (3) to the budding literature which aims to map the complex geographies of the financial crisis.

Taking our cue from earlier work done in geography by Thomas Wainwright on the specificities of the British securitization chain, in this paper we have attempted to trace the legal, social, and cultural transformations that were required to adapt the Dutch institutional framework to the requirements of asset securitization. Finally, we have discussed two theoretical perspectives on the strong role of Dutch regulatory agencies in coproducing the Dutch securitization market. By stressing that the Dutch Central Bank facilitated securitization while delegating regulatory oversight to private agencies, the Dutch case can easily be seen as a confirmation of the 'regulatory capture'

concept found in public choice theory. Based on several illustrations from the Dutch experience, we suggested that this overly rational and deliberate perspective should be replaced by the notion of ‘cognitive closure’ developed by the Manchester-based CRESC team (Engelen et al, 2011), for it places much stronger emphasis on narratives and storytelling as well as shifting political coalitions and unintended consequences. We feel that this perspective is much more helpful in making sense of the Dutch case.

Our findings lead to three suggestions for future research. First, additional studies should be conducted on the construction of secondary mortgage markets in different parts of Europe and the world from a comparative political–economic perspective, specifically along the lines of ‘varieties of financialization’. Such work should focus on the interaction between market insiders and regulators, the effects of prestructured institutional arrangements on the size and form of these markets, as well as on tracing the robustness of securitized assets in different political economies throughout the business cycle. Why was US mortgage securitization much more fragile than Dutch securitizations? Is it due to the peculiarities of the Dutch securitization market and, if so, which ones? Or is it due to the corporatist housing market which provides the underlying assets on which Dutch MBS have been built, resulting in much more robust credit assessment by banks and preventing the emergence of subprime mortgage markets? Or is it simply the unintended side effect of scarcities and mismatches in Dutch housing markets that have sustained the current housing ‘bubble’?

The second theme which needs to be examined is the way in which securitization—as a set of discrete devices, artefacts, ideas, and arrangements—travelled across borders. Who were the carriers of these devices and ideas? To which networks did they belong? It is obvious that reconstructing the path of securitization techniques requires reconstruction of the professional biographies of traders over time and space. Constructing a database of professional biographies of those working in financial markets is very labour intensive and can only be undertaken in a systematic way by closer collaboration between all those scholars interested in these issues. More coordination and better exchanges of ideas are thus crucial. This kind of research would make an interesting contribution to the growing literature on the sociology of knowledge diffusion (Djelic, 2004).

Third, we need to know more about the narratives that are used by market insiders on the one hand and regulators and politicians on the other. This will help ascertain how ‘cognitive closure’ ‘actually’ works in different jurisdictions and at different scales. What are the origins of the narratives? Who are the carriers? How do they gain legitimacy? What are the counternarratives? Why do they lose out? What role does the media play in this battle between narratives? And how can one work towards ensuring that the battle of narratives in the political sphere becomes more equal, more open, and more pluralistic?

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