



UvA-DARE (Digital Academic Repository)

Securitization in the Netherlands: shaped by and shaping regulation

Aalbers, M.; Engelen, E.; Glasmacher, A.

Publication date

2011

Document Version

Final published version

[Link to publication](#)

Citation for published version (APA):

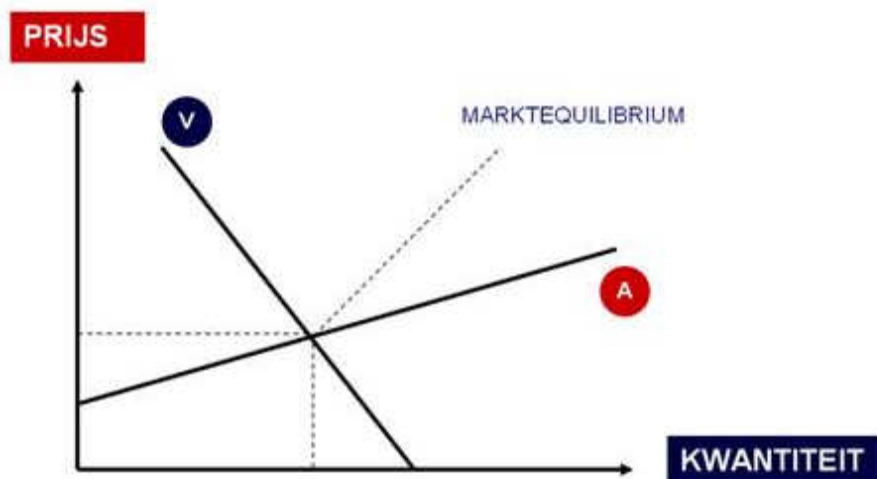
Aalbers, M., Engelen, E., & Glasmacher, A. (2011). *Securitization in the Netherlands: shaped by and shaping regulation*. (Webpublicaties; No. 55). WRR, Wetenschappelijke Raad voor het Regeringsbeleid. http://www.wrr.nl/fileadmin/nl/publicaties/PDF-webpublicaties/Securization_in_the_Netherlands.pdf

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



SECURITIZATION IN THE NETHERLANDS SHAPED BY AND SHAPING REGULATION

Manuel Aalbers, Ewald Engelen & Anna Glasmacher

WEBPUBLICATIE NR. 55

January, 2011

This text was commissioned by the Market, State and Society (*Markt, Staat en Samenleving*) project group at the Netherlands Scientific Council for Government Policy (WRR). The authors are responsible for the content of the text and the reported findings. The Market, State and Society project is concerned with the question of how the government can protect the social and public interest in a free market system. According to the theory, markets function through the mechanism whereby a supplier sells a product to a buyer. The price and quality are determined in the interaction between the buyer and seller. This 'market mechanism' assumes that there is a demand for a product, that there is a supply, that a price is available for the products and that a certain quantity of those products will be traded. For this project, a number of external authors were asked to describe in as much detail as possible how this process of matching supply and demand operates in practice. Contrary to the theory, supply and demand, price and quality do not simply happen automatically; this gives rise to a second question, namely what role the government plays in this process.

The WRR web publication series comprises studies carried out in the context of the activities of the WRR. Responsibility for the content of the studies and the views expressed in them rests with the authors.

CONTENTS

- 1 Introduction..... 7**
- 2 Securitization as a Universal Technique.....11**
- 3 A Brief History of (Mortgage) Securitization 17**
- 4 A Quick Scan of Securitization in the Netherlands 23**
- 5 The Dutch Securitization Model 29**
 - 5.1 Shaping the Housing Market 30
 - 5.2 Shaping the Mortgage Contract.....32
 - 5.3 Shaping the Sale/Seller.....35
 - 5.4 Shaping the Structurer.....36
 - 5.5 Shaping the SPV and its Bonds..... 40
 - 5.6 Shaping the End-Investor.....43
 - 5.7 Shaping the Rating.....45
 - 5.8 Shaping through Lawyers 48
- 6 Conclusions..... 53**

1 INTRODUCTION

Despite fierce controversies over the many causes and consequences of the crisis, there is near unanimity on where the crisis started. According to Fed-chief Ben Bernanke “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 of the crisis was the industry-wide 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.” According to most insiders, this had everything to do with the further development of the technique of securitization and the increasing sophistication and depth of derivative markets. These ‘innovations’, according to Bernanke, “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.”¹

However, as the 2007-2009 crisis has clearly demonstrated, it is possible to have too much of a good thing. While financial innovation promised transparency, adequate risk assessments, dispersion of risk, higher yields and perfect markets, unimpeded innovation in fact created highly opaque products that were traded on the back of credit ratings that failed to take the volatility of asset markets adequately into account, resulting in products that, under circumstances that were less rare than predicted, lost most of their value while their triple-A ratings suggested T-Bill type security. What is more, the dispersal of risk promised by financial innovation proved to be a chimera. The structurers that reaped handsome fees and professed to be in the business of ‘moving,’ i.e. securitizing assets in order to sell them to yield-hungry investors, appeared instead to be in the business of storing, i.e., stocking their books with ever larger numbers of securitized assets, either because of the handsome returns they generated (at the beginning) or because they could not find sufficient ‘dumb money’ (end-investors) to absorb the assets (later).² Hence, when the crisis broke out and securitized assets, especially sub-prime mortgages, rapidly lost value, the trading books of the largest investment banks and wannabe commercial banks proved to be infected with huge amounts of asset-backed securities.

While Dutch banks were hardly immune to the infected assets that originated from US mortgages, there appears as yet to have been no similar fallout from the securitization chains that the largest Dutch banks have set up since the mid-1990s. Past performances are no guarantees for the future, of course. Hence, we cannot dismiss the possibility that in the

(near) future not everything will turn out to be as rosy as it seems at present. In any case, we do feel that a closer look at the way in which the regulatory context has shaped and is shaped by the Dutch securitization chain is a worthwhile exercise in its own right and is especially fruitful in the light of the ambitions of the WRR to take the first steps towards reconceptualizing the highly politicized relations between state, market and society in order to overcome too static, too mechanistic and too dichotomous perspectives that play on a too sharp contrast between state and market and between public and private. Although clearly falling in the 'domain' or 'field' of private market transactions, securitization over time has been strongly shaped, structured and co-produced in the Netherlands by public and private regulators as well as by 'softer' forms of self-regulation that reflect the best practices that have been developed in an industry that thrives on trust, transparency, stability and reliability. The practices reported on in this study are based on field work done at a large Dutch bank and on interviews with various market insiders. For reasons of confidentiality, we have refrained from making any detailed references to firms, institutions and persons.

This report is structured as follows. We will begin with a brief discussion of the technique of securitization to bring to the fore its functionalities and its design. Then we present a brief history of the application of securitization to mortgages and other assets, starting in the US and ending with a history of securitization in the Netherlands. The third section gives a short quantitative overview of the securitization market in the Netherlands. The fourth section presents and discusses an idealized model of securitization in the Netherlands, mapping the different linkages and actors in the overall securitization chain, to sketch the way in which the linkages and the actions of actors connected to the securitization chain are shaped and tuned by different modes of regulation. The fifth and final section draws conclusions that are pertinent to the aims of the WRR project to which this report contributes.

Notes

- 1 Bernanke, Jackson Hole speech, 07/08/31 (our emphasis)
- 2 Lewis 2010

2 SECURITIZATION AS A UNIVERSAL TECHNIQUE

While strongly linked to the surge of financial innovation that characterizes post-Bretton Woods financial markets, securitization is in fact an old financial technique that, according to some, can be traced back to the creation of proto-mutual funds in 18th century Holland, which emitted tradable shares on the back of aggregated life insurances.¹ These so-called ‘tontines’ allowed investors to buy rights to pooled annuities, which are nothing but stable cash flows that could easily be sold on the Amsterdam stock exchange to other investors. The hallmark of these products was that they transformed opaque financial contracts (life insurances), which required local knowledge in order to assess their quality and hence lacked a liquid market, into highly standardized, transparent financial products that could be traded on the open market on the basis of a limited set of quantitative quality indicators in the contract characteristics, such as the level of annuities, the quality of the fund that pooled the insurances and, of course, the price for which these rights to cash flow payments were traded on the stock market. The crucial trick was the pooling of assets. What you bought was not a single insurance contract but a right to parts of the cash flow generated by a large number of pooled contracts. While single contracts might well be defaulted upon, a pooled series of contracts distributed such as credit risk over a much larger number of contracts, generating a new product with other, much more calculable and, hence, manipulable risk properties.

In essence, the structured financial products being traded in contemporary financial markets are based on the same principle: you pool opaque contracts, sell them to a separate legal entity, the entity, in turn, emits bonds to end-investors to pay for the underlying assets, and the investors in return receive the cash flow generated by these contracts. Thus the information needed to assess the quality of the bonds on offer is radically reduced as, in the case of mortgages, investors do not need access to the quality of the mortgaged real estate, the socio-economic future expectations of the neighborhood or the creditworthiness of the mortgagee. All they need to assess is 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?), as well as the trustworthiness of the servicer (is the servicer a reliable collector of the principal of the loan and interest?).

These assessments have increasingly been delegated to rating agencies, private organizations with a legal mandate to rate the creditworthiness of emitters of bonds. While globally there are 72 rating agencies with differing remuneration and incentive systems, the largest and best known agencies are Standard & Poor’s, Moody’s and Fitch, which are all paid for their rating on a fee-basis by the emitters rather than the investors.² Despite obvious conflicts of interest arising from this constellation, which we will discuss below, the ratings of these agents serve as official markers of the credit quality of the emitters and underlying assets and, therefore,

have been awarded legal status; whether products are ‘investment grade’ (BBB- (or Baa3) and higher (see Figure 1. for an overview of ratings)) or not determines whether institutional investors may buy these products as well as the amount of capital banks need to reserve when they buy these assets. The point is that the product’s quality assessment has been legally delegated to credit rating agencies, releasing end-investors from the obligation to do their own assessment.

Figure 1 Credit Ratings of Moody’s, S&P and Fitch

Moody's		S&P		Fitch		
Long term	Short term	Long term	Short term	Long term	Short term	
Aaa	P-1	AAA	A-1+	AAA	A1+	Prime
Aa1		AA+		AA+		High Grade
Aa2		AA		AA		
Aa3		AA-		AA-		
A1	P-2	A+	A-2	A+	A1	Upper Medium Grade
A2		A		A		
A3		A-		A-		
Baa1	P-3	BBB+	A-3	BBB+	A3	Lower Medium Grade
Baa2		BBB		BBB		
Baa3		BBB-		BBB-		
Ba1	Not Prime	BB+	B	BB+	B	Non Investment Grade Speculative
Ba2		BB		BB		
Ba3		BB-		BB-		
B1		B+		B+		Highly speculative
B2		B		B		
B3		B-		B-		
Caa		CCC+		CCC		
Ca	CCC	C	C	Extremely speculative		
C	CCC-			In default, with little prospect for recovery		
/	D	/	/	DDD	/	In default
/		DD				
/		D				

In the finance literature, there is some confusion about the main characteristics of securitization. In a general sense, every firm that chooses to emit bonds on a market instead of taking out a loan from a bank exercises securitization, for it is obvious that this could be seen as the transformation of an opaque loan contract into a liquid, tradable security, namely a bond. In this sense, the rise of securitization in general fits the wider transformation of continental European economies into more Anglo-American economies, described as the replacement of bank-based systems of capital allocation by market-based systems,³ or, in short, as the ‘financialization’ of European economies.⁴ A helpful distinction is offered by Fabozzi et al., who distinguish between ‘securitization of capital markets’ to refer to the more general replacement of loans by bonds and ‘asset securitization’ to refer to “the process of pooling loans and issuing securities backed by these loans.”⁵ In the context of mortgages, securitization produces a ‘secondary mortgage market.’ The primary market consists of individual mortgage contracts closed between the borrower and the lender. In the secondary markets, these mortgages are repackaged in portfolios of securitized instruments that are

sold to end-investors. It is the latter mode of securitization that is object of analysis in this report.

In another context, Fabozzi has defined asset securitization as “a process by which an entity (**originator**) pools together its interests in identifiable cash flows (**mortgages, credit card debts, student loans, car loans, etc.**), transfers the claims on those future cash flows to another entity (**SPV, SPE, SIV**) that has been specifically created for the sole purpose of holding those financial claims, and then utilizes those future cash flows to pay off investors (in **RMBS, CDOs, CDO2’s**) over time, either with or without credit support from a source other than the cash flows (**CDS, over-collateralization, call options**).”⁶

For a good understanding of what follows, we will briefly explain the different elements highlighted by bold printing in this working definition of asset securitization. The **originator** refers to a lender who generates mortgage or loan contracts with a borrower, spelling out the obligations of the contracting parties in terms of the principal of the loan, amortization scheme, as well as the conditions of interest payments. In most instances, the originator will be a bank, but, in theory, it can be any type of financial service provider.

The types of contracts that are pooled have also increased rapidly over time. While only prime **mortgages** were being securitized initially, other types of assets, like the ones listed above, have increasingly been securitized in the US since the 1980s. In the US, a clear terminological distinction is made between **mortgage-backed securities** and other **asset-backed securities**. In principle, every asset that generates a cash flow can and does serve and as feedstock for securities.

The middle part of the definition refers to the legal entities that have been set up with the sole aim of buying the pooled assets from the originator and selling differently rated tranches of bonds to end-investors, who thereby gain the right to the monthly payments generated by the assets. **SPV** stands for ‘special purpose vehicle’, **SPE** for ‘special purpose entity’ and **SIV** for ‘special investment vehicle.’ The first two terms are used interchangeably, while an SIV refers to a legal entity that is used to buy up securitized mortgages to emit so-called Collateralized Debt Obligations, or CDOs, which stand at one remove from securitized assets.⁷ SPVs thus act as investors in RMBS/ABS but have the function of an SPV/SPE for their own bonds, which are sold to end-investors.

During the securitization-fueled boom that collapsed in the 2007-2009 crisis, structurers built veritable financial cathedrals on top of securitized assets, constructing CDOs on top of other CDOs on top of other CDOs. CDOs at one remove from **CDOs** were called **CDO2s**, and

CDOS on top of those were called **CDO3S**. While the building blocks were relatively straightforward, the level of complexity that could be reached by combining these different building blocks knew practically no bounds — nor did the fees that could be generated in this way. It is very hard to find any reliable data on fees and bonuses earned by different trading desks. Annual reports provide only aggregate figures on bonuses, while in some instances individual traders are prohibited from divulging the size of their bonuses. Nevertheless, some anecdotal information is available on the size of securitization-related fees. In the US, standard RMBS transactions generate \$ 5-9 million per deal. In the case of CDO transactions, fees are in the order of 1 percent of the transaction size, which, in the case of \$ 10 billion size deals, could generate up to \$ 100 million in fees.⁸

In the Netherlands too, CDOS, CDO2s and CDO3s have been assembled and sold Over The Counter (OTC). Most major Dutch banks have dipped into this lucrative industry, even though the market has completely dried up since the onset of the crisis. No systematic data are available on the size of the Dutch market for these structured products. This has everything to do with the OTC nature of these products as well as with the fact that the trade in structured products occurs in what is known as ‘the shadow banking system,’ a complex set of networks and trading relations between dedicated legal entities (SPVs, SIVs, SPES) that are kept off-balance and, hence, do not fall under the regulatory and accountancy obligations of regular banks.

Just as opaque is the size of the fees earned by banks assembling these structured products. Interviews as well as central bank reports reveal that compensation in the Netherlands is moderate compared to the UK and the US,⁹ but bonuses paid in the financial service industry in general are high compared to earnings of other professionals in the Netherlands. Overall compensation can potentially be very large relative to overall income, reaching up to 50 percent in some of the US investment banks,¹⁰ and is, as most professionals admit, an important reason for choosing this profession.¹¹

Finally, the securitization market could not have reached the scale it did (see below for some figures) if the structurers had not possessed swap-like instruments that allowed them to swap away interest fluctuations and the risks of delinquencies and defaults from the assets they pooled. Simultaneously with the development of securitization techniques, banks started to develop contracts that swap fixed (mortgage) interest rates paid by retail customers into floating rates paid to the bondholders, and other swaps that transferred default risks linked to assets to specialized insurers who, in exchange for a monthly payment, were willing to take over the payment in case of defaults. While still in its infancy in the mid-1990s, the so-called **Credit Default Swap** or CDS market really took off when the US government modernized

the Commodity Futures Act in 2000 and allowed any investor to take out insurance whether or not he/she possessed the securities that were to be insured, so-called 'naked' CDSS, which allow investors to benefit from downward price movements in the respective market(s).¹² Since then, the CDS market boomed to reach a size of \$ 26 trillion in nominal value in 2006, more than eight times the overall value of the insured securities, clearly indicating the huge extent to which this market had become an arena for speculation on credit moments that would trigger payments. The CDSS helped structurers to convince credit rating agencies that ever larger parcels of emitted bonds were fit to receive a triple-A rating and, hence, extended the number of financial products that could be marketed to yield-hungry institutional investors and, increasingly, European banks. Before the rise of the CDS market, credit enhancement or credit support was undertaken by overcollateralization and reserve accounts. Again, keeping in mind the lack of formal documentation, it does seem that there has never existed any substantial market for CDS in the Netherlands, and that, instead, **overcollateralization** (selling more mortgages to the SPV than the value of the bonds emitted by the very same SPV) and **reserve accounts** (the seller committing extra funds in the form of a reserve account to cover some stipulated losses on the mortgage portfolio) have been the norm. However, some market insiders deem it possible that such a market might develop in the Netherlands in the current period of uncertainty if parties with diametrically opposed interests meet and conduct (OTC) exchanges of such quasi-insurance contracts.

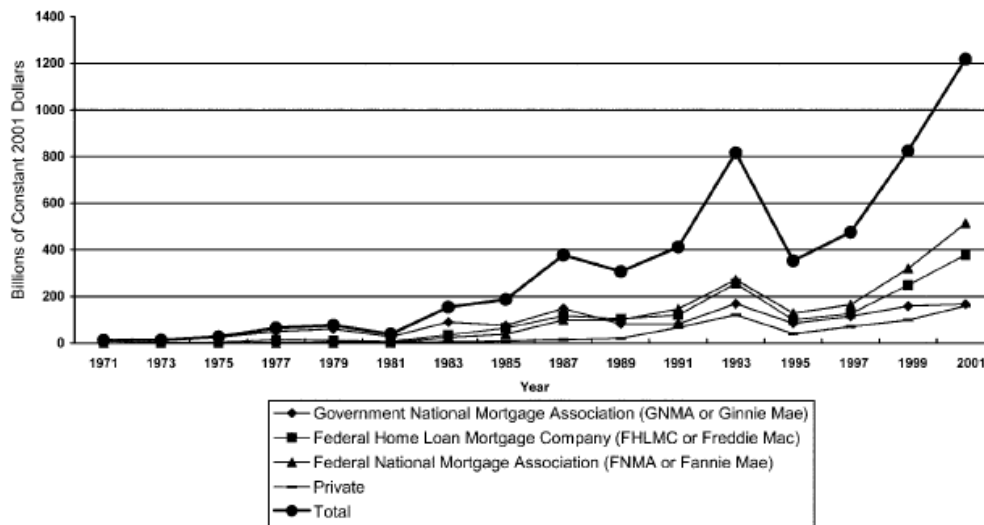
Notes

- 1 Rouwenhorst 2005
- 2 See www.defaultrisk.com/rating_agencies.htm
- 3 Gerschenkron, A. 1962. *Economic Backwardness in Historical Perspective*. Cambridge:Harvard University Press.
- 4 Erturk, I. et al. (Ed.). 2008. *Financialization at Work. Key Texts and Analysis*. London: Routledge.
- 5 Fabozzi et al. (2002) *Foundations of Financial Markets and Institutions*, Pearson Education p. 381.
- 6 Fabozzi & Kothari 2007 (our emphasis)
- 7 Tetts (2009) *Fool's Gold*. London
- 8 Engelen & Williams (2010) 'The story of the crisis or (not) knowing what to do', presentation at the DISS Copenhagen, 21 January 2010
- 9 See DNB (2009) 'Naar een beheerst beloningsbeleid', DNB: September 2009
- 10 See FT (2009) 'Bonuses for performers are set to rise', 5 December 2009
- 11 See Philippon & Reshef (2008) 'Wages and human capital in the US financial industry between 1909 and 2006', NBER
- 12 McDonald & Robinson, 2009, pp. 60-61, 171; Morgan, G. 2009. "Legitimacy in Financial Markets. Credit Default Swaps in the Current Crisis." *Socioeconomic Review* 2009:1-29; Johnson & Kwak 2010. *13 Bankers*, pp. 136-7

3 A BRIEF HISTORY OF (MORTGAGE) SECURITIZATION

Despite the universal nature of the financial technique of securitization and its ancient roots, its recent rediscovery is clearly linked to specific spatio-temporal coordinates. According to recent histories of securitization, mortgage securitization in the US dates from the late 1960s and early 1970s, when new legislation allowed Fanny Mea, Freddie Mac and Ginnie Mea to securitize the mortgages and loans they were legally forced to buy from local banks and thrifts and sell the bonds issued on the back of these assets to private investors.¹ So in the 1970s, state-backed agents (or 'Government Sponsored Enterprises' as they are formally known) were involved in large scale experimentation with the construction of a smoothly running securitization machine, which grinded to a halt in the late 1970s because of disadvantageous macro-economic conditions, i.e., high short term interest rates and low long term ones, a so-called reversed yield curve, causing many thrifts and local mortgage providers to go bankrupt and endangering the US housing sector. The federal government responded by further deregulation to allow thrifts to tap into short term money markets for funding and introduce adjustable rate mortgages to redistribute some of the risk unto the shoulders of households. However, the outcome was the reverse of what had been intended. During the Savings & Loans crisis that ensued, more than 740 thrifts had to file for receivership, resulting in a state bail-out to the tune of \$ 153 billion.²

The political response to the ensuing disruption of the flow of capital moving into mortgages was a further wave of deregulation and investment prescriptions, aiming to roll out the securitization machine nationwide. In the mid-1980s, a package of legislative measures was initiated to solve the S&L-problem that had caused capital flows into the housing sector to dry up. One of them was the Tax Reform Act of 1986, which authorized the establishment of Mortgage Investment Conduits, precursors of the SPVs/ SIVs of the securitization bubble of later years, which separated originators from their securitized assets, allowed them to free up capital for new mortgages, and provided end-investors with securities of a predefined quality generating a pre-determined yield.³ With this and other legal innovations, all the necessary building blocks were present for the ensuing securitization boom.

Figure 2 Value of annual issuance of RMBS in the US

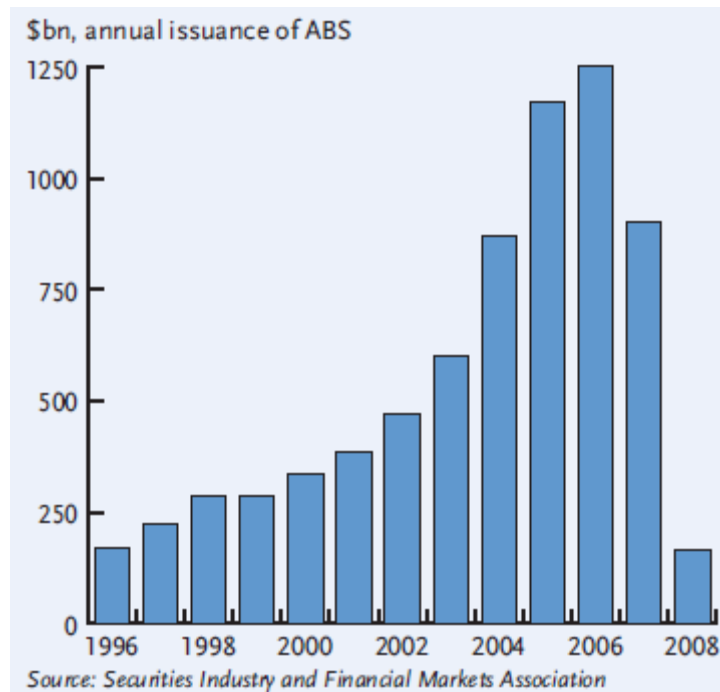
Source: Gotham 2006: 259

What happened after the early 1980s was a gradual extension of the securitization technique as well as a gradual transformation of local legislative frameworks, techniques, expertise and relationships to accommodate a mode of securitization that was developed in the context of the state driven commodification of mortgage contracts in the US.⁴ The first step concerned the securitization of so-called sub-prime mortgages, a broad category of mortgage contracts that shared one property, namely that the profile of the mortgagee and/or of the contract excluded it from state guarantees. As Figure 2 demonstrates, securitizations of these contracts (captured as so-called ‘private securitizations’ or securities based on mortgages originated outside the quasi-public circuits of mortgage capital managed and processed by Freddie Mac and Fannie Mae) were virtually non-existent before the end of the 1990s and only really took off since the start of the 21st century, with the value of annual securitization reaching a level of over \$ 500 billion in 2005.⁵

The second step concerned the application of the securitization technique to other types of assets that shared the property of generating regular cash flows, such as credit card and debit card debts, lease contracts, auto loans and student loans. Apparently, the first tranche of securitizations sold to the public that was not based on mortgages dates from 1985, when Sperry Corp, a computer firm, decided to sell its computer leases to outside investors. The firm hired First Boston as lead manager and UBS as credit enhancer to securitize the leases by means of a separate entity that emitted bonds on the back of the value of the leases it bought with the proceeds of the bonds. First Boston earned a handsome \$ 1 million in fees from the transaction as well as the laurels of having been the first to apply mortgage-related techniques to new asset categories.⁶ Since then, the size of the market for asset-backed securities, as all non-mortgage-backed securities are known in the US, grew to an annual level

of \$ 1,2 trillion in 2006. Figure 3 below gives an impression of the overall size of ABS in the US and of the drop in issuance since the outbreak of the crisis in 2007.⁷

Figure 3 US Issuance of ABS



Source: IFSL, Securitization 2009

The third step concerns a gradual geographical dispersal of the securitization technique and infrastructure to jurisdictions other than US ones. Given the strong linkages between the US and the UK, and in particular between US banks and the cluster of global financial firms concentrated in the London City, it should come as no surprise that the first locality to which the securitization technique traveled is the UK. Wainwright sketches how Salomon Brothers, who, together with First Boston, had experimented with innovative securitizations of sub-prime mortgages in the early 1980s, established a specialized structuring firm in London in 1986 in the wake of the Big Bang that radically deregulated British capital markets, called The Mortgage Corporation, which issued mortgage-backed securities and sold them to UK-based investors.⁸ Wainwright stresses that the idea of securitization initially did not travel well across US borders. Its wide-scale application required a fiscal, legal and accountancy infrastructure that could only be developed over time. Furthermore, more widespread applications demanded a level of standardization that was not available at first and could not be imported lock, stock and barrel from the US, where the ISDA, a private industry-based organization, had helped to develop more or less standardized securitization contracts. This was due to differences in the underlying mortgage contracts and differences in the legal systems. Over time, these issues were incrementally resolved, turning the UK into the second

largest source of securitized assets and London into the main European financial supermarket for securitized assets of the 21st century.

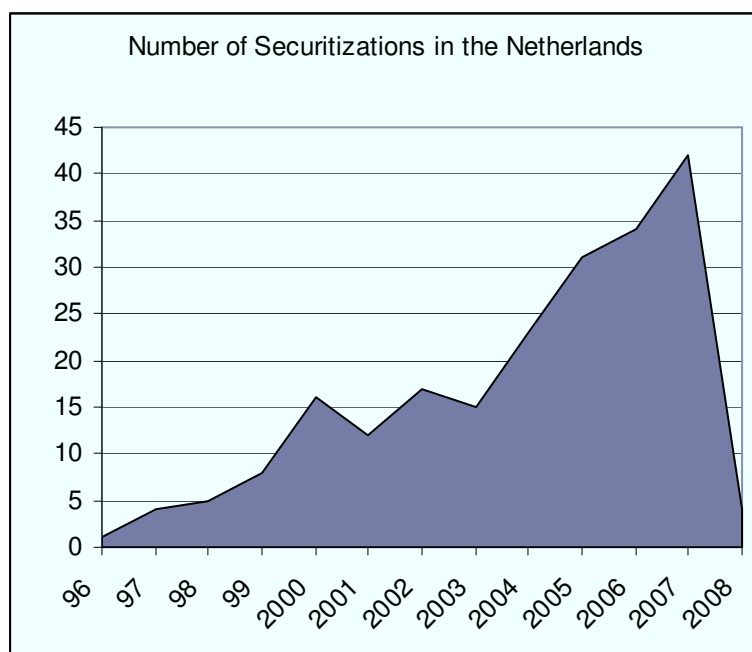
Figure 4 securitizations per country (2004-2008)

Table 1 Securitisation issuance based on originating country or region					
Annual value of gross issuance, \$bn					
	2004	2005	2006	2007	2008
US	2649	3139	3241	2952	1521
Australia	76	77	91	68	16
Japan	51	81	83	76	58
Canada	18	25	29	45	79
UK	130	157	242	237	400
Spain	41	50	55	84	119
Netherlands	23	49	36	56	107
Italy	43	41	38	36	121
Germany	10	19	47	26	74
Ireland	3	1	13	14	60
Belgium	3	1	3	6	51
France	10	9	10	5	21
Portugal	10	10	7	15	22
Pan-Europe	19	63	143	132	41
Other Europe	12	8	11	12	32
Europe total	303	407	604	622	1047
South Korea	24	28	24	21	19
Other Asia	7	4	6	3	19
Latin America	11	14	20	20	18
EEMEA	4	9	13	10	—
Emerg. mkts total	46	55	64	53	63
World total	3142	3782	4112	3817	2777

Sources as listed in subsequent charts and tables relating to countries and regions

Source: IFSL, Securitization 2009

The securitization technique first reached the Netherlands in 1996, when VSB, a subsidiary of Fortis, sold parts of its mortgage portfolio to an SPV called FIMS, which issued bonds on the back of these mortgages. The aim of the securitization was to access new funding sources. The securitizations that followed on the heels of the FIMS structure were done by ABN Amro (called EMS1) and aimed instead at regulatory arbitrage: selling assets in order to decrease the capital requirements under Basle 1 regulation to enhance capital profitability (see below for an elaboration).⁹ While it is as yet unclear through which social network the technique of securitization actually entered the Dutch financial community, it is striking that capital enhancement was delivered by UBS, the same bank that was involved in the first US asset-backed securitization and, at that time, the owner of First Boston, which was one of the first classic Wall Street investment banks to move into the new field of securitization. Market insiders have indicated that London-based investment banks played a crucial advisory role in setting up the first Dutch securitizations. The Netherlands was not the only European country picking up on the securitization trend: the number of securitization deals was also rising fast in Spain and Italy, and, to a lesser degree, in France and Portugal.¹⁰

Figure 5 **Number of Dutch Securitizations**

Source: Dutch Central Bank¹¹

Since that first securitization, Dutch developments closely followed those in the US and the UK, in the sense that both the number and the diversity of securitizations increased incrementally. As Figure 5 below indicates, the number of securitizations increased rapidly from the early 2000s onward. As in the US, an increasing number of different asset categories (car leases, car loans, credit card debts, intellectual property rights) were subjected to securitization.

What was also similar was the step-by-step adaptation of the legal and regulatory infrastructure to accommodate the new practice. In 1997, the Dutch Central Bank, which is the main regulator responsible for prudential banking regulation in the Netherlands, published a so-called Memorandum Concerning Securitization and Control (*Memorandum inzake securitisatie en toezicht*), in which it responded to this innovative financial practice and stipulated how securitizations fitted into the existing regulatory framework, particularly into the 1992 Banking Supervision Act and the Investor Supervision Act. With a view to the increasing complexity of securitizations since that date, the Dutch Central Bank felt the need to update its stance on securitization in 2004 in the so-called *Regeling inzake Solvabiliteit bij Securitatie*. Below, we will focus on the specific way in which the existing regulation of capital markets and financial service providers in the Netherlands shaped the securitization machine right up to the crisis, while also sketching the way in which financial agents acted as co-producers of legislative and regulatory responses to newly evolving financial practices.

Notes

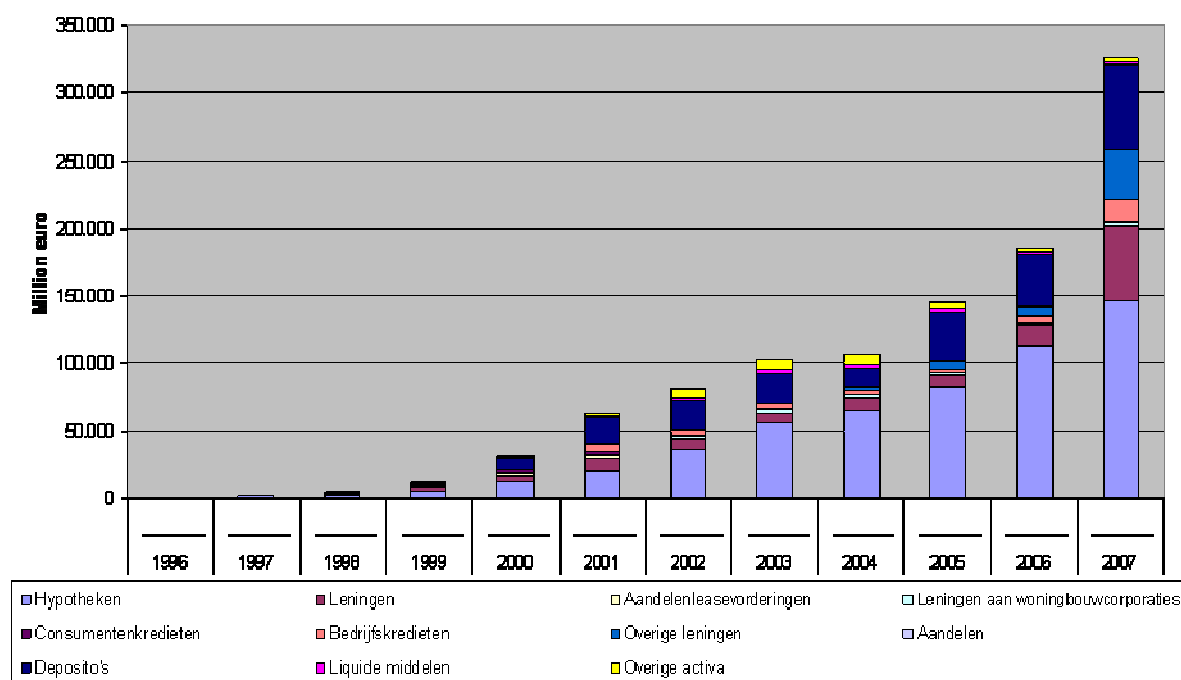
- 1 Fox Gotham 2010; Green & Wachter 2007; MacDonald 1995; 1996
- 2 Davis 2009, p. 141
- 3 Gotham, K.F. (forthcoming) *Creating Liquidity out of Spatial Fixity: The Secondary Circuit of Capital and the Restructuring of the U.S. Housing Finance System*. In: M.B. Aalbers (ed.) *Subprime Cities: The Political Economy of Mortgage Markets*. Oxford: Wiley-Blackwell.
- 4 Lewis 1989; 2010
- 5 Fox Gotham 2010
- 6 James Rosenthal and Juan M. Ocampo (1988) *Securitization of credit: inside the new technology of finance*, 158-171
- 7 IFSL, *Securitization 2009* (London: IFSL)
- 8 Wainwright 2009; see also Lewis 198; 2010
- 9 Alink & Bruggink 1996
- 10 Aalbers, M.B. (2009) *The globalization and Europeanization of mortgage markets*. *International Journal of Urban and Regional Research* 33(2): 389-410.
- 11 Data incomplete for Q4 2003 and data lacking since Q1 2008.

4 A QUICK SCAN OF SECURITIZATION IN THE NETHERLANDS

Securitization is a relatively well-developed technique, and securitized assets are a relatively large asset category in the Netherlands. Since 1996, total liabilities of SPVs registered in the Netherlands have reached a level of €270 billion. Well over two-thirds (€210 billion) consisted of residential mortgages. The rest consisted of commercial real estate, corporate loans, lease contracts and other non-mortgage asset categories (see Figure 6 below). Given a total mortgage debt of €625 billion in the Netherlands in 2008 (appr. 100 percent of Dutch GDP), this implies that approximately one-third of all mortgages in the Netherlands are securitized.¹

Figure 6 Overview of the composition of Dutch SPV assets

Balance sheet (activa) of Dutch special purpose vehicles, 1996-2007



Dutch securitizations amount to approximately one-fifth of the euro market and approximately one-tenth of the overall European market (see Figure 5 above). Given the small size of the Netherlands, this represents a huge overrepresentation. This is due to the relatively large size of the Dutch banking industry, its high level of sophistication as a result of strong linkages between the Dutch banking community and their London-based counterparts, and to the peculiarities of the Dutch housing market, the generous fiscal treatment of mortgages and, hence, the size of overall Dutch citizens indebtedness (see Figure 7 below). As a result of a number of particularities of the Dutch housing market (large public housing sector (approximately a third) with capped rent prices and an unwieldy distribution system, a very small private rental market (of less than ten percent), extreme

scarcity of houses available for owner occupation, especially in the densely populated Western part of the country, combined with generous tax deductibility of mortgage payments), Dutch housing prices have boomed since the mid-1990s.

This has substantially changed lending practices: Loan-to-Value (LTVs), Loan-to-Income (LTIs) and qualitative lending standards have ‘loosened’ markedly over the past two decades. Whereas it used to be common practice to grant mortgages of up to 75 percent of the assessed value of the house – a practice that was thought better to align the home owners’ and the mortgage lenders’ interests – LTVs of up to 125 percent, covering not only the house price but also transaction fees, have now become standard practice. Subsequently, Loan-To-Foreclosure Values (LTFV), although still among the lowest in the world, have risen substantially and could turn out to rise even higher if the housing market collapses further than anticipated by current predictions.

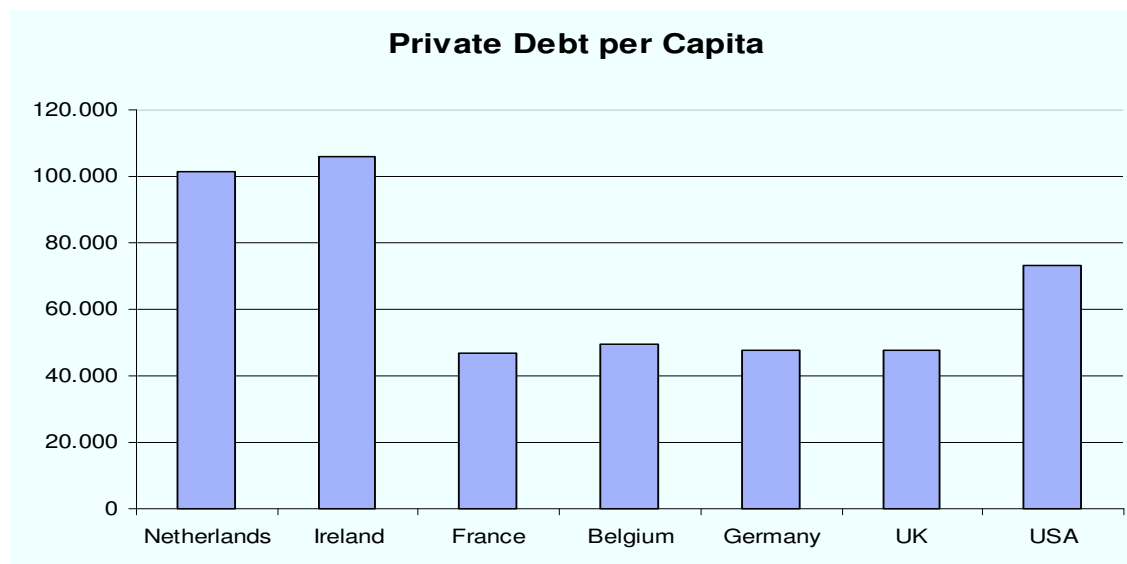
Another indicator for determining the stability of a mortgage contract is the LTI ratio, which measures the size of a mortgage loan relative to monthly income. This ratio is crucial in the sense that sudden interest hikes and unexpected job losses in the case of high LTIs may well result in rapidly rising foreclosures. Here too, market standards have become increasingly lax: while four times annual income used to be the standard of responsible lending, five times became the standard in the early 1990s, and some originators even offered loans up to seven times the mortgage holder’s annual income in the decade running up to the financial crisis. In addition, many originators have offered ‘interest only’ mortgages and calculate the loan offer based on monthly interest payments only (excluding repayment of the principal), a practice not penalized by the major rating agencies in their risk calculations and ratings.

Many highly leveraged households have variable interest rates, which could jump upwards at the respective reset dates, especially if they occur during periods in which financial markets are under stress and investors demand high risk premiums. Maximum LTVs and LTIs are strongly related to the average loan term: bigger loans take longer to repay, and hence there is a higher risk of getting caught up in difficult periods on capital markets. Furthermore, there have been changes in the qualitative assessment criteria of mortgage lending: originators are increasingly basing their determination of mortgagee creditworthiness on two incomes, and some originators, such as Lehman Brothers’ subsidiary ELQ, granted mortgages on the back of self-reported income statements and non-standard employment contracts.

As a result of this gradual loosening of lending standards, Dutch households are among the most indebted worldwide on average, on a par with Danish and Irish households and surpassing US households by far (see Figure 7. below). The market trends described here

suggest that there are currently many borrowers in the Netherlands who are extremely vulnerable to adverse financial shocks.

Figure 7 Private Debt per Capita



In short: stable supply of housing, increasing demand for living space, rising purchasing power and increasing lender permissiveness resulted in rapidly rising house prices and lower thresholds to capital markets, setting in motion a spiral of rising house prices and growing indebtedness. The Netherlands has the highest average and maximum LTV ratios. The Netherlands also has the highest LTI ratios. As a result, average mortgage debt is the highest in the Netherlands. This led to official warnings from the IMF in its April 2008 Global Financial Stability Report, indicating that the Netherlands was experiencing an unsustainable housing bubble which called for greater prudence on the side of Dutch banks and their regulators. The warnings met with disparaging comments from stakeholders in the Netherlands, claiming that the IMF had failed to take into account and understand the institutional specificities of the Dutch housing and mortgage market.² It remains to be seen whether Dutch optimism is justified.

The growing indebtedness of Dutch households and the fierce competition between mortgage originators forced all Dutch mortgage originators to change policies and adapt their business model as well as their sources of funding. Where mortgage banks used to be linked to large Dutch universal banks like ING, ABN Amro and Rabobank and could tap into their strong deposit base for their main source of funding, the Dutch mortgage banks were forced to seek new sources of funding owing to the combination of the increasing fragmentation of the mortgage market, the rapid adoption of Anglo-American business models that aimed to restrict cross-subsidization and forced business units to become stand-alone profit centers, and the rapid rise of capital demand in its own right. Rising securitization was both cause and

effect of these market trends. While the fierce competition in this sector has brought down the costs of homeownership, it also seems to have led to a deterioration of lending standards, especially as there was no legal backstop to the ensuing race to the bottom.

The strong growth in Dutch housing loans increased the pressure on originating banks to offload their assets to the capital market in order to free up capital and initiate a new wave of mortgage lending. The rise of securitizations from 1996 onward and their rapid expansion from 2003 onward can be directly traced to the Dutch housing bubble. Another factor responsible for the strong growth of securitization in the Netherlands is the increasing penetration of Dutch mortgage markets by foreign lenders such as Argenta, GMAC, Bank of Scotland and Lehman Brothers' ELQ. These firms introduced a completely new business model that was first developed in the US. Selling mortgages through the Internet, immediately securitizing them to free up capital for a next wave of fee-generating originations and securitizations, these newcomers could penetrate the Dutch market without worrying about a branch network or a deposit base. In the Netherlands, NIBC was the first to copy this strategy, with others following suit. Moreover, the securitization infrastructure that Dutch banks had incrementally constructed since the late 1990s proved to be sufficiently similar to the US and UK infrastructure to allow rapid penetration of the securitization market by GMAC and the Bank of Scotland. Since 2002, GMAC has put 14 separate securitization issuances in the market, while Bank of Scotland has done three securitizations since 2005.³ Since the outbreak of the crisis, when the securitization market dried up, both lenders and more recent foreign originate-and-distribute firms (such as Lehman Brothers' subsidiary ELQ) have withdrawn from the Dutch market. Attempts to penetrate the primary mortgage markets were rather less successful; foreign mortgage providers have only succeeded in capturing a mere five percent of the market.

The final cause of the strong growth of Dutch securitizations since 2003, according to the Dutch central bank, was the growing demand for higher-yielding securities than T-bills and other triple A-rated sovereign bonds on the side of institutional investors. 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 investment opportunities. Mortgage-backed securities, especially the triple A-rated tranches, proved to be just the right thing at the right time.⁴

Before the crisis, the group of investors for ABS in general, and RMBS in particular, was quite diverse: not only big buyers such as pension funds, banks and insurance companies, but also smaller financial entities subsumed under the category of Special Investment Vehicles (SIVs) bought securities. Most big investors bought to hold, but due to the multitude of smaller,

more mobile investors, there was a reasonable liquidity in the market. The credit crunch led to the complete disappearance of SIVs, which had become unable to roll over their short-term loans with which they financed their long-term positions. This resulted in the current universe of Dutch investors, which is highly concentrated in the hands of a few very big players. This makes the market highly vulnerable to sudden shocks as the retreat of any one actor could lead to serious paralysis of the respective market.

Notes

- 1 CBS, Persbericht: Veel minder vermogen, maar meer inkomen voor huishoudens in 2008, 9 april 2009, www.cbs.nl
- 2 IMF GFSR April 2008. Washington DC.
- 3 DNB Statistisch Bulletin, June 2008, 15
- 4 DNB Statistisch Bulletin, June 2008, 15

5 THE DUTCH SECURITIZATION MODEL

Figure 8 below presents a schematic overview of a typical true sale residential mortgage-backed securitization chain as has it been developed in the Netherlands over time. There are many different schematized representations of securitization chains around because they serve different purposes, highlighting different elements or dimensions of such chains. The one listed below is built around the relations between the different agents connected to, and implicated by, the securitization chain. Other representations focus more on the capital flows within the chain or depict the movement of assets and liabilities between agents.

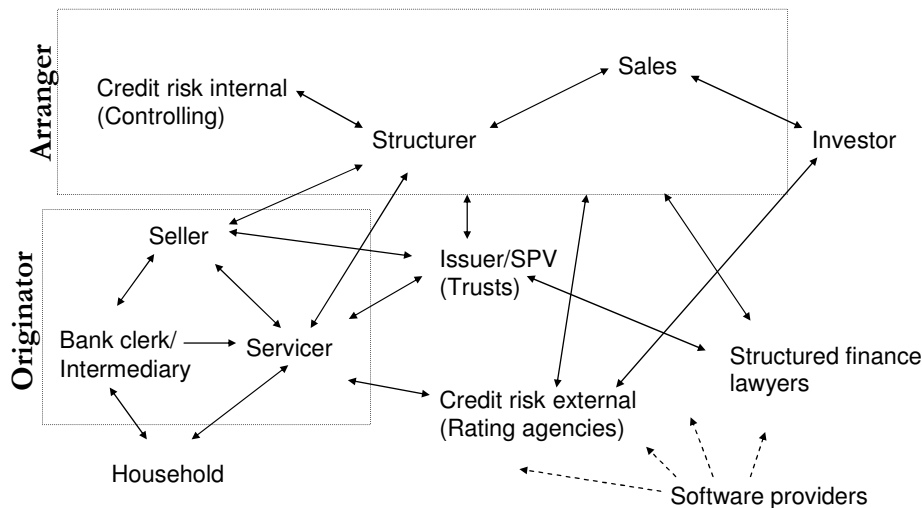
A further set of distinctions relevant here relates to different types of securitization. We already came across the distinction between mortgage-backed and non-mortgage-backed (or asset-backed) securities. As the chain and technology for these two types of securitization are similar, we will use the model presented below as representative of asset-backed securitizations too. As Figure 6 above demonstrated, ABS represent almost half of all Dutch securitizations. Not captured by our model are all those securitizations known as CDOs, CDO2s and CDO3s that repackage already securitized assets. Because we lack data on the size of these markets, we have decided to focus only on standard straightforward securitizations.

A final category not captured by our model is the so-called synthetic securitization. Roughly one-sixth of all Dutch mortgage securitizations is synthetic. This refers to securitizations that do not involve the sale of assets to an SPV but that merely entail the provision of insurances against the credit risks (defaults, prepayments and arrears) connected to a particular pool of assets – mostly mortgages – by the SPV through a so-called Credit Default Swap (CDS). The capital that is required as collateral is provided by investors who buy the bonds emitted by the SPV, while the interest on the bonds consists of the insurance fee paid by the originating bank complemented by the interest on the remaining capital.¹ Whereas a ‘true sale’ securitization removes assets completely from a bank’s books, freeing up capital that the bank would otherwise have been obliged to hold in reserve, precluding it from earning any income on that part of its (expensive) capital, in the case of a synthetic securitization risky assets are upgraded, as it were, by externalizing the credit risks to third parties, resulting in lower capital reserve requirements rather than no capital requirements. Because a synthetic securitization is much easier and much cheaper to set up, this kind of securitization is mainly used for asset categories that, under Basle 1 rules, have low reserve ratios anyway, such as ‘blue chip’ corporate bonds.

As the goal of this report is to get a clearer view of how regulation has shaped and was shaped by securitization in the Netherlands, we feel that a focus on agents and links is the most appropriate to describe the regulatory contexts that influence the actions of agents as well as

the interactions between them. Below, we will move through the chain agent by agent and link by link, tracing the regulatory environment that is pertinent to the actions of the agents as well as the shape of their interactions. We will move from the bottom left to the top right, from retail to wholesale and from origination to the sale of bonds that are emitted on the back of aggregated mortgages to end-investors. We will also address the role of a number of highly influential para-finance agents implicated in securitization, namely rating agencies, securitization lawyers, notaries and accountants. Finally, we will address issues of industry standards and industry practices by focusing on the role of specialized software developers in enhancing transparency.

Figure 8 The Securitization Chain in the Netherlands



5.1 Shaping the Housing Market

Because RMBSS are bonds emitted on the back of individual mortgage contracts, the quality of the overall securitization chain starts with the quality of the underlying retail products, in this case the mortgage. The quality of mortgage contracts, in turn, is strongly dependent on demand and supply conditions in the housing markets and on the future earning capacities of households, which are determined by wider macro-economic conditions such as unemployment level, economic growth, labor productivity, etc.

The Dutch housing market is characterized by a relatively liberal housing finance system in an egalitarian welfare state, a relatively low homeownership rate, very high mortgage indebtedness and rapidly increasing house prices.² Compared to other European countries,

fewer people in the Netherlands own their homes. However, homeownership has increased from 42 percent in 1981 to around 55 percent in 2005 and has fed into a housing bubble that has proven to be sustainable up till now but that may come unstuck in the near future (see below for some concerns).

A number of developments have encouraged this trend.³ First, structurally low interest rates have made mortgage loans not only cheaper but also more secure. Second, housing associations have been encouraged to sell their rental stock. A small state subsidy is available to give tenants an incentive to buy if the opportunity arises. Third, government has actively supported home ownership by offering tax breaks to buyers, the most important one being an income tax break known as the *hypotheekrenteaftrek*, which allows owner-occupants to deduct all interest paid on a mortgage loan from their income. Fourth, the National Mortgage Guarantee (*Nationale Hypotheek Garantie*), an instrument guaranteeing that the lender will be paid if the borrower defaults and managed by the Home Ownership Guarantee Fund Foundation, was set up in the mid-1990s to encourage homeownership. Fifth, since the early 1990s, the acceptance policies of banks have become more lenient, and credit limits (i.e., the maximum amount that can be borrowed through a mortgage) have expanded. Sixth, the percentage of the assessed value that is used to calculate the size of a mortgage has also increased incrementally.

Dutch house prices have steadily increased in value since the recession of the early 1980s, while delinquency rates have remained comparatively low over time. This has ensured that Dutch RMBSS are internationally seen as secure investments, still attracting strong demand from foreign institutional investors. While Dutch house prices have not dropped as much as they have in other jurisdictions where house price bubbles have built up and have even shown signs of post-crisis recovery, some insiders have voiced concerns over the future sustainability of current price levels.

These concerns have two origins. First, it is still unsure what the employment effects of the crisis will be. Dutch employment figures are still relatively good, but it is expected that many more Dutch workers will be facing unemployment from the second half of 2010 onward. Combined with extremely high LTI and LTV ratios (see above), this could set in motion rising delinquencies and decreasing house prices, negatively affecting payouts in Dutch RMBSS. The other cause for concern is related to budget deficits and post-crisis budget cuts, which could result in changes in the fiscal treatment of mortgages and, subsequently, in declining house prices.⁴ Most political parties included mortgage measures in their programs for the 2010 elections. Current mortgages may be exempted from these changes, but it is unclear what the

effects on demand and supply and hence on future house prices will be if future mortgage contracts receive a less generous fiscal treatment.

Of course, the quality of mortgage contracts and the end-investors' trust in the securities backed by these mortgages is not only determined by demand and supply conditions or macro-economic conjunctures and their effects on household incomes and savings, but also by the quality of the underlying real estate and especially the publicly available information on the quality of the collateral. Dutch home buyers and end-investors have access to a well-developed information infrastructure on the housing market (such as prices) by way of publicly available data on neighborhoods such as public registers (the so-called Kadasters) and well-developed spatial planning and zoning regulations. In this perspective, it is even more surprising that investors have neither the means nor the right to know which houses in their portfolios are collaterals and which individuals are their debtors: this information is protected by data-protection and privacy laws, and both originators and arrangers prefer to keep this information to themselves as competitors might possibly deduce their (marketing) strategy from it. On the other hand, households can find all kinds of information about their neighborhood, but they often do not know whom they pay their debts to, and, if their mortgage is securitized, as approximately one-third of all mortgages is, they have no easy way to find out. Once securitized, there is virtually no way for mortgage holders and end-investors to communicate or assess each other's trustworthiness and reliability.

5.2 Shaping the Mortgage Contract

Mortgage contracting in the Netherlands is a highly standardized affair that is conducted by notaries who set up the deeds and file them for future use. The transaction costs are approximately three percent of the value of the overall transaction and have to be paid anew for every change in the legal deed. Notaries have an academic law degree and fall under professional disciplinary rule. The market for notaries has recently been deregulated, resulting in lower transaction costs for services and abandoning the fixed price system for contracts, such as cohabitation contracts and wills. The ensuing downward pressure on fees and incomes has resulted in a rise in fraud and embezzlement. As far as we know, this has not yet affected the quality of mortgage contracts.

A more important player determining the quality of mortgage contracts in the Netherlands is the mortgage provider or lender. This can be either a bank or a specialized mortgage intermediary. It is estimated that there are currently about 7,000 independent intermediaries, who collectively sell more than half of the mortgage loans in the Netherlands. To a much larger extent than their colleagues directly employed by the originator,

intermediaries receive a variable, bonus-based remuneration, consisting of a predetermined percentage of the value of the mortgage of 0.5 – 1.25, reaching levels of up to 4.5 in extreme cases such as ELQ. This has incentivized intermediaries to sell mortgages that are as high as possible given the clients' characteristics and the originators' internal lending standards.

Customers benefit from the intermediary channel by being offered a wider choice of mortgage products in one advisory session, allowing them to compare various originators' costs and risks. Before and during their activities, mortgage intermediaries receive short training programs from the originators whose mortgage products they sell or from private firms. Some originators offer more continuous training than others. Such programs are likely to align the intermediaries' interests with those of the originators: selling as many of their mortgage products as possible.

Intermediaries have the legal obligation to take their costumers' interests seriously, which means that the sale of mortgage products should be determined by the customers' ability to shoulder the debt and not by the size of the fees offered by the producers of these mortgage products. However, it is obvious that there is a conflict of interest in this intermediary-customer-originator relation. In the case of fraud, originators can sue intermediaries, and there have been some cases recently where middlemen have been convicted for failing to serve their clients. In response, the industry has established a foundation, the *Stichting Fraudebestrijding Hypotheken*,⁵ which aims to clean up its act and restore customer confidence after a number of high-profile cases (concerning so-called investment mortgages) shook it. The recent Dutch Code of Conduct on Mortgage Credit, set up by the Dutch Bankers Association (*Nederlandse Vereniging van Bankiers* (NVB)) and linked to a complaint facility, is still largely a paper tiger; most clients do not know of its existence and even less how to use it effectively.

The Dutch market regulator, AFM, has recently demanded stricter certification and more transparency on fees and bonuses. To enhance transparency, it has been made mandatory to clearly list all fees and service costs on the customer's bill. Another initiative currently discussed in the House of Representatives is to change the remuneration system for intermediaries from a largely bonus-based system tied to the size of the mortgage to a fixed pay per hour of client advice or a fixed lump sum per deal. It is expected that this will better align the interests of intermediaries and clients, and subsequently investors, by eliminating incentives to offer higher mortgages than is prudent. A further consideration is to introduce a time lag into the remuneration system for intermediaries, so they receive only part of their pay when the contract is closed and another part after ten years. This is meant to uphold the intermediaries' willingness to provide good services to the customer also after the deal has

been closed. However, both measures would probably entail a financial setback for intermediaries, who have gotten used to fairly high compensations during the past boom years.

The decision-making process of granting a mortgage loan is based on the originators' internal risk assessment and pricing policies. Originators use sophisticated statistical techniques, loosely based on the US Fico credit scoring method, which uses credit history data to assess applicants' creditworthiness. They are also legally required to check a public register, providing information on the indebtedness and debt histories of every resident of the Netherlands who has ever applied for credit, to inform themselves of for the applicant's creditworthiness. The Bureau for Credit Registration (*Bureau Kredietregistratie* (BKR)) registers almost all consumer loans, such as salary credits, personal loans, continuous credits, shopping passes, credit cards, effect leases and payments to digital or paper department stores (excepting student loans and private-issue loans). This registration effectively caps the amount a person can borrow. The BKR keeps track of whether individual consumers pay their installments on time. Those who do not meet their obligations have arrear codes assigned to their profiles (A-encoding). Although it is difficult for individuals whose reports contain such designations to be approved for mortgages, it is not impossible. Individuals who are in arrears and who are unable or unwilling to respond to the repeated collection agencies' request to pay the monthly bonds including the increasing arrears are at great risk of being A-encoded by the BKR. This designation remains valid for five years after the payment of the loan concerned. Most lenders will not provide mortgage loans during this period, but some originators, especially newcomers such as ELQ, paid high fees to intermediaries to sell their mortgage products no matter the creditworthiness of the counterparty (except for those with an A4-encoding). Although the Netherlands was spared some of the worst excesses of US-style subprime lending, some of the spirit of US mortgage securitization also reached Europe by way of US subsidiaries such as ELQ. Its demise was not due to more restrictive and prudent regulators, but to the crisis and, in the case of Lehman Bros, to sheer bankruptcy. It is interesting to note that, during the crisis, one could observe spreads of up to 450 basis points (with GMAC topping the list) on identical securitized assets caused by the reputational quality of the respective originators. It is a sign that, for the first time, procedural quality of origination mattered in investors' risk considerations.

Once a mortgage contract has been closed, all relevant information is entered into the originator's data base, and the mortgage is part of the originator's balance sheet. All subsequent routine interactions between debtors and originators, such as payment reminders, are handled by so-called servicers, which may be either an in-house part of the

originating firm or a specialized company. From then on, bank clerks/intermediaries only get in touch with clients if there are unexpected events or particular questions from clients.

Relevant too for the quality of the interaction between debtor and originator is the degree of financial literacy among Dutch households. As in most developed countries with strong welfare states, the number of unbanked or ‘underbanked’ people is very low in the Netherlands. Almost every member of the adult population has a bank account and/or some direct connection with a financial institution. There are at least four separate institutes that help raise consumers’ financial awareness. The public Dutch Institute for Prudent Budgeting (NIBUD) helps households to maintain or regain financial health. The Central Bank provides financial literacy courses for primary school children next to other financial literacy programs. The AFM enforces transparency on financial products by ensuring that every financial advertisement contains a simple scorecard indicating the risk level of the product. An independent consumer organization, the *Consumentenbond*, regularly tests financial products on postulated returns, riskiness and management costs. Finally, there are a number of consumer programs on Dutch public TV (*Radar* and *Kassa* being the most prominent) which play a role in mobilizing the experiences of buyers of financial products and pressurize banks and other financial firms to accommodate such complaints. All this suggests that financial literacy is relatively high in the Netherlands. However, as the cases of DSB and Icesave indicate, this does not mean that all is well and no extra efforts are required.

5.3 Shaping the Sale/Seller

Before October 2004, the sale of mortgage contracts to SPVs in order to be transformed into transparent, tradable bonds took the form of a legal deed combined with a notification requirement, informing the debtor that the contract was exchanged from the seller to the SPV. For commercial reasons, most originators were hesitant to notify their clients of the sale of their contracts to third parties. The alternative was a so-called sub-participation of the SPV in a pool of mortgages in exchange for a monthly sum of parts of the interest and principal paid by the debtors. Since this was not a ‘true sale’ and, hence, did not free up capital for new lending purposes and fee earning possibilities, this strategy was not very popular. Hence, most securitization undertaken between 1996 and 2004 only notified debtors if certain predefined ‘events’ occurred, such as the originator’s downgrading by one of the rating agencies.⁶ The Dutch central bank accepted this as being in line with the spirit of the notification requirement.

In the context of the developing housing boom described above, the legal obligation to notify their debtors of an ownership change increasingly proved to be a stumbling block for

mortgage banks to embark upon further securitizations. Hence, a powerful lobby developed, channeled by the NVB, to repeal the legal notification requirement. In June 2003, a Ministry of Finance legislative initiative, backed by parliament, allowed banks to sell their mortgages to third parties by 'silent assignment' (*stille cessie*).⁷ As Figure 5 above indicates, this led to a huge growth of the numbers and sizes of securitizations in the Netherlands, with the number of securitizations in the Netherlands skyrocketing since 2003. This was instrumental in turning the Netherlands into a dominant player in the global securitization industry, whose RMBSS are now in virtually every major globally active institutional investor's portfolio.

What is striking about the underlying argumentation for this legal change is the extent to which the legislator depended upon and hence bought into the functionality of securitization as seen from the bank's perspective. As NRC *Handelsblad* pointed out in a useful piece of investigative journalism, the official document containing the legal rationale behind the new act contained large passages that had been copied and pasted verbatim from the consultation document that was drafted by the NVB in close collaboration with its members.⁸ Moreover, as the hearings of the parliamentary committee (the De Wit Committee) on the financial crisis have demonstrated, hardly any MP showed any interest in the Act, allowing it to be turned into law without due consideration of its functionality, rationale or future consequences. The upshot of the new legal practice is that mortgage holders have no insight whatsoever into who owns their contract and receives their interest and principal payments. While it was in accordance with the aim of ensuring that securitization results in a true sale of assets, i.e. of future income streams as well as risks, cutting every link between originator, SPV and end-investor may well have resulted in the same lack of responsibility for the quality of the securitization chain that could be found in the US on the eve of the crisis.

5.4 Shaping the Structurer

The team of professionals that creates the structure of the SPV is another clearly identifiable entity in the securitization chain. They can either be part of the originating firm or of a separate financial firm, arranging the structuring, ancillary service provision such as liquidity facilities, and issuance on the market for the selling firm against a fee. Especially smaller banks and financial non-bank firms, such as insurers, often outsource these services to teams with experience and a good reputation in order to ensure a smooth process and a favorable market launch.

In contrast to the US and some other jurisdictions where banking markets have historically been highly segmented, the Netherlands has never known strong legal barriers between different types of banking activities, such as investment banking (to which the structuring

and issuing of securities belongs), deposit taking and mortgage provision. Given the small size of the Dutch economy and the increasing integration of European banking markets, the Dutch central bank has instead lobbied intensively to repeal the remaining legal obstacles to the formation of Dutch financial conglomerates that would be big enough to withstand pending European competition. In 1990, the legal prohibition on combining banking and insurance activities under the roof of a single legal entity was repealed, allowing mergers such as those of Rabobank with Interpolis and NMB Postbank with Nationale Nederlanden.⁹ The result is one of the most concentrated banking markets in the world, with the top five banks having a market share of 76 percent.¹⁰

‘Structuring’ works as follows: the seller, either an independent company or the mortgage department within the arranging bank, provides data on the assets it intends to sell to the structurers. The structurers use these data to construct an SPV with a maturity and risk profile as desired by the seller. The former can tap into various valuable sources of information, such as previous interactions with rating agencies, direct links to big institutional investors and personal connections with other practitioners in the field. The link between seller and structurer, no matter whether in-house or outsourced, largely escapes scrutiny by regulators and is only supervised by internal risk control departments if the respective balance sheets are in any way affected by the structure. While cooperation across organizational or functional boundaries can generally be subject to misunderstandings or frictions, the interests of both parties involved in the transaction are largely aligned: the goal is to construct a suitable structure with as few costs for the seller as possible, which implicitly entails that those assets that are considered less risky by rating agencies than they really are go first into the portfolio.

While the mathematics as well as legal and risk considerations related to structuring are known to be very complex, the actual tools used for the process can be found in every household: phone and email for communication between the structurers and the seller as well as other relevant actors; Word and PowerPoint to prepare investor presentations and other relevant documentation; and Excel to organize the mortgages or mortgage parts into a portfolio with the desired properties. Everyone who has worked with large amounts of data in Excel knows that it is a task that demands painstaking prudence since things can quickly get messy. Errors may occur especially if more than one person is working on the same data set; if there is great time pressure; if a lot of time has passed since the latest editing of the data; and/or if the person who constructed a particular database has left the company, which happens quite frequently due to high turnover. One can easily lose track of the situation, leading to errors such as the double use of the same mortgage (part) for different transactions. It is not clear to what extent this happened in the Netherlands, but it is certain

that – as in every human activity – errors have occurred, which, in the case of securitization, may quickly become very costly.

The market has already provided solutions for these problems in the form of specialized software, such as the one developed by Prommise (now Hypoport), which flags loans and loan parts once they have been used as collateral and makes sure that they will not be used twice.¹¹ This software is increasingly being applied, but structuring in the Netherlands started and expanded before adequate tools were available, suggesting that older securitizations may well contain the sorts of glitches described above. Even now it is not mandatory to have specialized tools when structuring large asset pools.

The rationale for securitization is twofold: (i) to use capital markets as a new source of funding next to funding from bank deposits and (ii) to skirt, dodge or circumvent legal requirements that are perceived to enhance capital costs, irrespective of the rationale or functionality of the requirements. The requirements include the obligation, set down by Basle 1 (and, since 2008, Basle 2), to keep capital in reserve as a buffer in case of defaults or other credit risks linked to particular kinds of assets. These capital reserve requirements were the outcome of lengthy and highly complex negotiations among central bankers as well as between central bankers collectively and representatives of the industry in the Basle Committee of Banking Supervision, an international regulatory body linked to the Bank for International Settlements based in Basle.¹²

The aim of the Basle Committee was to create a level playing field for internationally operating banks in terms of the amounts of dead capital they had to keep on their books for solvency reasons. As these requirements differed hugely between countries and were an uneven cost burden to banks, there was a strong incentive, with financial markets integrating and banks becoming more internationally active, to harmonize these requirements. In the perspective of highly diverging national banking systems, substantial harmonization proved to be a step too far. Instead, the Basle committee negotiated different capital reserve requirements for different asset categories. No or hardly any reserves were required for secure stable assets and high reserves for risky assets. Triple A-rated sovereign bonds carried hardly any reserve requirements whereas corporate bonds were considered to be much more risky and hence came with a relatively high reserve requirement.

Over time, reserve requirements for more and more asset classes were specified by the Basle Committee. Mortgages were held to be riskier than sovereign bonds and carried a solvency weight of 50 percent. Given that the Basle Committee obliged banks to maintain a capital reserve ratio of 8 percent (i.e., banks had to have dead capital (in jargon: Tier 1 capital) to the

tune of 8 percent of their total assets, i.e., the capital they have invested or lent), a weighing of 50 percent meant that mortgages required a risk-weighted reserve ratio of only 4 percent (50 percent of 8 percent). To complicate things further, this concerned only 75 percent of the amortization value of the mortgage. Above that threshold, the full percentage was required as capital reserve. Mortgages that fall under the National Guarantee Scheme (*Nationale Hypotheek Garantie* / NHG), however, come with no capital reserve requirements because they are officially backed by the state and are therefore considered as safe as government bonds.¹³ Therefore, sellers clearly have an incentive to keep NHG-backed mortgages on their books while selling the rest to the SPV, thus lowering their capital requirement costs and default risks. In other words, there was a strong incentive for banks to get rid of all those assets that required them to keep reserves since they froze substantial sums of capital in the bank's books, which negatively affected their profitability and, in turn, their competitive abilities vis-à-vis banks that did succeed, by whatever means, to lower their capital requirements. Since the 1990s, as we have seen, securitization was exactly such a means, resulting in a rapid dispersal of this capital and risk management technique over jurisdictions.

Once consensus had been reached within the Basle Committee, national regulators committed themselves one by one to ensure that the capital adequacy ratios were effectively used within the banks they regulated to ensure sufficient solvency in an internationalizing financial world. The Dutch central bank, as one of the more prominent members of the Basle Committee, was quick to implement Basle 1 as well as its successor Basle 2. The US, on the other hand, still has to implement Basle 2 and is likely to postpone doing so until negotiations on Basle 3, which are currently taking place and are meant to be a response to the crisis, have finished. The Dutch central bank saw rapid implementation as a means to enhance the international competitiveness of Dutch banks as, in the Dutch context, Basle 1 and 2 represented a relaxation of solvency requirements in comparison with existing rules.¹⁴

Basle 1 and 2 were transnational responses by national regulators (central bank) to experienced losses of regulatory capabilities as a consequence of the increasing ability of banks to play off jurisdictions against one another. However, Basle 1 and Basle 2 also reflected a striking and growing information asymmetry between regulators and regulated. Central banks were increasingly confused about the solvency of the banks under their regulatory responsibility. This was caused by the quantitative and qualitative change of financial markets, fast-paced financial innovation and the multi-jurisdictional nature of an increasing number of banking activities, some of which were explicitly conducted in or from offshore financial centers to stay clear of regulatory oversight.

To accommodate this and maintain a modicum of oversight, Basle 1 and 2 granted internationally active banks the right to use recognized internal risk management systems to determine their capital reserve ratios. So, in a sense, transnational banking regulation was very much a product of close collaboration between regulators and the industry, serving commercial and prudential aims simultaneously. Over time, one internal management system came to dominate the market: JP Morgan's Value at Risk (VaR) model, which was put on the Internet for banks to use for free. With a view to its commercial origin, it is not surprising that this risk management system, despite its formal recognition in BIS documents, primarily aimed to bring down capital requirements rather than ensure sufficient solvency from a macro-prudential standpoint.¹⁵

In general, there was (and still is) no public micro-control over the actual structuring process, creating many possibilities for mis-selling, mis-rating and mismanagement, either intentionally or unintentionally. In contrast to the US, where the International Swaps and Derivatives Association (ISDA) and the American Securitization Forum (ASF) have created standardized securitization contracts, no such initiatives have yet been taken in the Netherlands. At the European level, the European Securitization Forum (ESF) is pushing for more cross-European standardization. Especially a uniform mode of presenting information ('same label for same content') seems to be expedient. However, standardizing the securitization contracts seems to be rather difficult in the Dutch context because – in contrast to the US, where there are only a few different types of mortgages available to retail clients -- the universe of mortgage contracts is much more diverse in the Netherlands. Over time, the Dutch banking industry has developed private solutions to these problems, mainly by increased transparency, improved training and internal supervision, aiming to gain and retain investor confidence.

More informal mechanisms of standardization include the international trade fairs, the presentations given at these fairs and the awards granted them, serving to highlight best practices and corroborate market reputations. Dutch securitization issues fare comparatively well and have a good reputation internationally, certainly in Europe. However, the crisis has siphoned off time, capital and manpower to counter the negative sentiments voiced about securitization, which potentially slows down the further development and improvement of Dutch securitization techniques.

5.5 Shaping the SPV and its Bonds

The shape of securitization in the Netherlands was strongly influenced by a set of in-place institutional arrangements and idiosyncrasies, one of which we have already encountered:

the shape and size of the Dutch mortgage market. Another one is the use of the trust industry and trust lawyers for establishing SPVs that served both as buyers of pooled mortgages and as issuers of mortgage-backed bonds. Going back on its colonial history, the Netherlands has always accommodated a relatively large number of multinationally active corporations. In order to help these firms overcome double taxation issues arising from their presence in multiple fiscal jurisdictions, the Dutch government embarked upon a foreign policy of establishing as many bilateral tax treaties as possible and a domestic climate for multinational corporations that turned the Netherlands into one of the most attractive locations for fiscal consolidation. Over time, this has led to a well developed cluster of legal agencies and trust offices that attracted many foreign firms opting for fiscal consolidation in the Netherlands. According to a recent study, the Dutch trust industry generates €1.8 billion in value added and employs 3,000 workers. Currently, there are 141 trust offices in the Netherlands, predominantly in Amsterdam, managing approximately 20,000 legal entities on behalf of 16,000 clients, one-third of which is of foreign origin.¹⁶

The SPVs needed for securitization were carbon copies of the trusts set up for fiscal ends by multinational corporations and ultimately served similar goals of arbitrage, for the design of the SPVs was intended to ensure that they did not fall within 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 (*Wet Toezicht Kredietwezen*). In a 1997 Memorandum, the Dutch central bank stipulated that SPVs were not subject to regulation under this Act as long as (i) the bonds were only sold to professional investors; (ii) were based on a homogenous pool of assets; and (iii) were rated by at least two recognized rating agencies. 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 and boiled down to a prohibition of issuing bonds on the back of mixed pools of mortgages from different originators (which, however, does not exclude different intermediaries) or on the back of different categories of assets (car loans, lease contracts, intellectual property rights, etc.). The third requirement delegated public responsibilities to ensure good quality assets to private, for-profit rating agencies that were, at that time, perceived as neutral guardians of risk and creditworthiness and had built up a reliable market reputation over time.¹⁷

A second piece of legislation that shaped the SPVs was the Investor Supervision Act. This Act stipulates certification and registration for legal entities that are active on the Dutch market for investment products. Similar to what happened in the context of the Banking Supervision Act, the Dutch central bank, in response to calls from the industry, listed the conditions an SPV had to fulfill in order to circumvent the certification and registration requirements the

Act stipulates. These conditions were the following. First, SPV management would have to include at least two independent directors, whose knowledgeability and integrity were to be assessed by central bank officials. In practice, securitization and trust lawyers held these positions and were often appointed directors of several SPVs simultaneously. The integrity assessments were reputed to be a routine affair. Second, the SPV would have to be registered at the local Chamber of Commerce. Third, it would have to be able to hand over certain financial guarantees in the form of legal documents spelling out their assets and liabilities. Fourth, the structurer had to disclose the SPV's assets and liabilities details to the Dutch central bank. In the 1997 'Memorandum,' this was described as being mandatory, whereas, in the 2004 document, structurers were merely advised to inform the central bank but no longer obliged to do so.

As SPVs and other off-balance vehicles were perceived to have been instrumental in the accountancy frauds conducted by Enron, the US GAAP rules have contained provisions since 2003 requiring publicly quoted firms to mention the SPVs set up by these firms in their annual reports. US banks too were expected to follow this rule, resulting in at least some transparency in the number of legal entities making up the shadow banking system of off-balance trading and other activities. No such legal obligation existed in Europe. Central banks were responsible for solvency supervision, and, therefore, they were primarily interested in making sure that the banks' off-balance activities did not pose substantial risks for their solvency. In its 1997 Memorandum, therefore, the Dutch central bank focused exclusively on stipulating the conditions that made sure that there were no residual obligations between structure and legal entity.

From 2002 onward, publicly listed European firms had to file financial statements under the new International Financial Reporting Standards (IFRS), designed by the IASB, a private sector regulatory body.¹⁸ These standards followed US/UK practices, were the outcome of private negotiations between private interest groups did not contain sector-specific conditions and mainly served the investors' interests in terms of the type of information provided. As solvency supervision had already been covered through Basle 1 and 2 and its decentralized implementation through national supervision practices, IFRS did not contain a provision for the treatment of off-balance vehicles.¹⁹ Hence, accountancy firms dealt with banks' trading books and their off-balance vehicles as if they were single unit entities that had no material relations. As the sub prime mortgage crisis in the US has demonstrated, legal independence is not the same as material independence. Financial market players expected the seller to step in when the assets owned by 'its' off-balance vehicles failed to generate the cash flows that investors had been promised. One can only speculate about whether this

would have been any different in the Netherlands, notwithstanding the Dutch central bank's care to ensure material independence.

Accountancy firms have only come under fire recently for allowing Lehman Bros to use Repo instruments to offload liabilities in exchange for a fee right before the end of the reporting period to mask big liabilities and clean up the leverage ratio.²⁰ So far they have not been charged with facilitating the unchecked growth of a shadow banking system that used virtually the same instruments as Enron had done. Some, such as former World Bank controller Jules Muis, have claimed accountancy firms' co-responsibility for the crisis because of their failure to question their clients more persistently about the nature and size of their off-balance activities.²¹ Current negotiations in bodies such as the AISB indicate a willingness to come up with stricter regulation on off-balance vehicles in order to shed light on the shadow banking system and help investors to improve their assessment of the material dependence of off-balance vehicles on their creators.²²

Finally, at the time of emission, the SPV is obliged to publish a public prospectus, following the format stipulated by the exchange operator (NYSE Euronext), which subsequently had to be filed in the operator's register, in order to allow end-investors to practice due diligence. In the Netherlands, SPVs emitted their bonds on the formal bond market that was operated by NYSE Euronext, allowing for a bit more transparency of what went into these SPVs and what came out of them. In the US, this particular kind of transparency was lacking because the bonds were sold and traded through an Over-The-Counter (OTC) interdealer-broker network. Therefore, there are new attempts by private initiatives in the US like ISDA (see above) to set up a publicly accessible register on the Internet for private label mortgage-backed securitizations. The Dutch convention of processing bonds through a formal exchange has historical roots and is not the result of explicit design. Historically, the Amsterdam exchange has operated a successful liquid formal bond market, which offered itself as the 'natural' venue of trade for securitized mortgage bonds as well. In the perspective of the 2004 repeal of disclosure obligations for SPVs by the Dutch central bank (see above), it was a lucky stroke that the mortgage-backed securities ended being traded at a formal exchange, for this allowed the Dutch central bank to tap into the NYSE Euronext register and keep track of the assets and liabilities of the SPVs established in the Netherlands. This would have been impossible in an OTC environment.

5.6 Shaping the End-Investor

Most buyers of Dutch RMBS are banks and large institutional investors, although hedge funds and other alternative investment bonds started to absorb an increasing share of bonds issued

before the crisis. Foreign investors that do not offer retail services in the Netherlands face no regulatory requirements at all. Only if they start selling financial products to Dutch retail clients (individuals with a net worth below €50,000) do investors have to obtain a license. Moreover, individual traders and analysts have to obtain a certificate from the AFM in order to practice their trade in the Netherlands. These certificates are linked to training programs and exams offered by NIBE/SVV, a private agency funded by the industry. The regulator merely focuses on fairness, market conduct and fraud, while relying predominantly on the market-based reputation mechanism to ensure good quality investment analysis, advice and trading. Dutch regulation, therefore, very much resembles the US prudent man rule, which expects asset managers to follow the precepts of the industry.

While the dominant image of the industry after the crisis is, surprisingly, still very much one of superior knowledge and expertise, the actual practice of finance is one of young traders running in herd-like fashion after the latest thing while managing astonishing amounts of money with too little backup staff, resulting in backlogs and processing failures.²³ This partly explains why most traders blindly believed the rating agencies: there was simply no time and/or expertise to do any independent assessment. Besides, asset managers act as agents for a very splintered group of principals, who are often relatively finance illiterate, such as pensioners and insurance holders. This constellation is prone to generating agency and other incentive problems. The absence of an effective quality check on such an important link in the securitization chain, besides general 'good faith' clauses, seems to be crying out for abuse. Interestingly, hedge funds, especially those directly commissioned by wealthy individuals, do appear to possess more knowledge and expertise needed to open up the black box of securitized assets.²⁴ Moreover, they appear to be less prone to agency problems than many of the world's largest pension funds, including Dutch ones, the biggest buyers of Dutch RMBS.

After a period of incremental liberalization, Dutch pension funds no longer face direct investment restrictions. Control over investment behavior has been legally delegated to the board of directors which is composed of an equal number of trustees from capital and labor. These trustees are legally required to serve the interests of the fund participants, but these requirements are not backed up by legal sanctions nor do participants have any control rights over their trustees. Instead, pension funds have become subject to increasing parametric regulation, stipulating asset versus liability ratios, minimum and maximum values for demographic projections and returns on investment as well as legal obligations to inform the regulator (DNB/PVK) how the fund is planning to improve its financial health if the asset-liability ratio falls below 105 percent. These requirements are spelled out in the 2003 Pensions and Savings Act, which was the legal response to the large hits that the Dutch pension funds had to take from the bursting of the ICT bubble in 2001, wiping out over 30

percent of their equity investment. The very same Act also shifted regulatory responsibilities from the Pension and Insurance Chamber (PVK) to the central bank by enforcing a merger between the two.

According to some observers, pension fund governance is going through a gradual shift from a trustee model to a model based on expertise as a result of this new regulatory framework.²⁵ Others, however, claim that this transformation is only halfway and that trustee professionalism still leaves much to be desired. With a view to the dismal performance of Dutch pension funds during the recent securitization crisis, regulators have stepped up the pressure for more professional governance. The Department of Social Affairs has set up three separate committees to look at different aspects of pension governance, which has resulted in a call for stricter regulation by the central bank, stricter asset requirements and a greater emphasis on professionalism and expertise.

5.7 Shaping the Rating

As for every bond emitted on the Dutch bond market (or, for that matter, most other bond markets), RMBSS issued in the Netherlands also require a rating from at least two recognized rating agencies. The 1997 Memorandum on Securitization stipulates that rating agencies should focus in particular on the origination and structuring process in order to determine the quality of the different tranches of bonds. The Dutch central bank also has a final say on which rating agencies are legally recognized.²⁶ The register of recognized agencies in the Netherlands includes the top three: Moody's, Standard & Poor's and Fitch, as well as the less well-known Canadian rating agency DBRS. In practice, most Dutch RMBSS are graded by Moody's, Standard & Poor's or Fitch, all (part of) publicly quoted firms.

Since the outbreak of the crisis, rating agencies have increasingly come under fire for the dismal quality of their ratings, claiming especially that their reputation as quasi-public market regulators resulting from decades of experience in the corporate bond markets obfuscated their relative inexperience in the market for mortgage-backed securities, implicitly suggesting to end investors that triple-A-rated RMBSS are as secure as triple-A-rated corporate or even government bonds.²⁷ When probed, rating agencies claim that ratings are relative to other securities in the same asset class and that they are not claiming that triple-As from different asset categories are the same in terms of risk and return profiles. However, it was effectively presented as such, and this misperception was furthered by regulation that classified every triple-A asset as 'investment grade' and, hence, as safe for big and dumb institutional investors. It is striking how well the 'big three' have weathered the crisis and are again being hired for post-crisis securitizations without having made any fundamental

changes at the operational level, apart from public apologies and the establishment of Chinese Walls between credit ratings and advisory departments.

The type of assessments required to rate bonds emitted on the back of a pool of around 10,000 mortgage contracts (a so-called granular portfolio: many small loans, low correlation) is radically different from rating a portfolio based on loans to a few big corporations (so-called non-granular portfolios: few large loans, high correlation). Given their presence in the corporate bond market for many decades, rating agencies have built up large data sets and theoretical expertise on the probabilities of credit moments (default, renegotiation of terms, rolling over of debt) that could affect the quality of corporate bonds. This allowed them to come up with relatively robust assessments of the default risks. However, they lacked similar longitudinal data on developments in mortgage markets and did not possess the same level of professional expertise they had in corporate bond markets. Especially data on origination were hard to come by and costly and cumbersome to analyze. Instead, rating agencies resorted to random checks of the quality of the underlying mortgage contracts, usually on the basis of numerical data in databases such as Excel. Visual inspection of the underlying real estate and the neighborhood of the property, as well as personal contact with the mortgage holders, were and are virtually non-existent. Some argue that full investigation of the quality of every underlying contract would have made the rating process simply too costly for the structurer and would have severely constrained the development of the RMBS market. In hindsight, it is clear that this negatively reflected on the quality of RMBS ratings, while end-investors treated the ratings as equally robust and reliable as those of corporate bonds.

An even more pressing problem highlighted by the crisis is the conflicts of interest nested in the business model of the largest rating agencies. Because rating agencies are paid by the issuer, there are strong incentives on the side of rating agencies to accommodate the wishes of the issuer. Before the mid-1990s, this incentive was kept in check by the simultaneous need on the side of rating agencies to maintain their market reputation. Being seen as being co-opted by issuers at the end of the day would make the rating exercise obsolete. This was in the interest neither of issuers and investors, who relied on ratings as marks of default risks, nor of those of the agencies themselves. However, from the mid-1990s onward, the largest rating agencies transformed themselves into or were taken over by publicly quoted corporations that were subject to 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 that aimed to maximize revenues and profitability.²⁸ To do so, rating agencies increasingly became involved in the handsomely paying market for structured products. In 2007, Moody's, for instance, earned more than 40

percent of its annual revenues, compared to 30 percent 10 years earlier, from rating mortgage-backed securities.

According to some commentators, these changes have negatively impacted the quality of the internal rating process. Formerly, raters were end-of-pipeline actors who were called upon to assess the credit quality of already existing financial products; recently they have become much more involved with structurers during the structuring process to ensure that most of the tranches of securitized mortgage obtain an 'investment grade' rating in order to maximize their marketability. Instead of neutral assessors of financial products, they have become 'co-producers' of structured products.²⁹ Rating agencies increasingly help structurers to design the securitization process in such a fashion as to obtain the highest ratings. This is enhanced by structurers' shopping behavior: order flows go to those rating agencies that are most willing to work together with structurers to enhance the size of investment grade tranches, further eroding the check of market reputation on opportunistic rating behavior. Apart from these incentive problems and breaches of due diligence, it also seems that long-term collaboration fosters personal ties, which make it 'uncomfortable' for the rater to be seen as overly critical and strict, creating a bias towards more lenient rating. In short, rather than acting as brakes on financial innovation and the marketization of new financial products, as legally mandated tests do in the case of Big Pharma to protect public health, rating agencies actually facilitated financial innovation running amok and greatly accelerated the increase in sheer quantity of structured financial products on offer by giving a false sense of security, supported and further enforced by the regulator.

In response, rating agencies have raised their information requirements and their level of expertise on mortgage markets, hiring former employees from originators and structurers who, as a result of the crisis, had lost their jobs. They now request more quantitative information on the underlying assets and want more documentation from originators and structurers. Market insiders are skeptical as to whether these measures enhance the quality of the ratings and whether these improvements are substantial enough to justify the additional administrative burden. Furthermore, rating agencies have desperately tried to deepen their historical databases on housing price developments to bring them up to the level of their corporate bond databases. This increasing emphasis on prudence, however, has not resulted in a shift in manpower and capital to the origination phase of the securitization chain. The focus is still predominantly on the structuring phase. Apparently, rating agencies are more comfortable with the sterile environment of large data sets and mathematical models than with the messy world of real people buying real estate. It is telling, for instance, that rating agencies conduct their assessment of Dutch RMBSS from their offices in London,

based on short visits to the structuring bank only, and have not felt a need to establish offices in the Netherlands, more proximate to their assessment objects.

While the regulatory response to the role of rating agencies in the crisis is still imminent, the proposals now on the table fail to address the real issue, which is the incompatibility of regulatory responsibilities with a business model that is strongly geared to maximizing fees by accommodating the principal as much as possible. Not all rating agencies, however, follow such a business model and are hence subject to such an incentive structure. Morningstar is an example of a rating agency that provides assessments of securities and funds to investors in return for a lump sum for access to their ratings. Their ratings are not commissioned by the issuer but responses to investors' demand. Due to the human aspect of the rating process, e.g., personal meetings with fund managers and others, there are still opportunities for bias in their ratings. However, compared to the conflict of interests in the business models of the 'big three,' these are negligible. It is not hard to understand why issuers prefer the financial dependence of rating agencies on their commission, but it is harder to comprehend why regulators have granted such an important legal status to agencies that are so blatantly subject to conflict of interest, while failing formally to 'recognize' competitors not subject to these conflicts.

5.8 Shaping through Lawyers

Law firms too are highly implicated in the transformation of illiquid, opaque assets into tradable, transparent securities, by legally facilitating sale of income flows and corresponding obligations at each link of the securitization chain. This starts with the original deed between bank and mortgagee that forms the feedstock of the chain. Next is the sales contract, which determines the conditions of delivery of a stipulated quantity of mortgage contracts of a predetermined quality to a structurer in return for a specified sum that becomes transferable at a specified date. Connected to such contracts are contracts between originator, structurer and servicer, specifying the legal responsibilities concerning the collection of the payments of interest and principal of each of the mortgagees according to the details of the mortgage contracts as well as their transfer to the SPV. Next in line is legal work related to the establishment of SPVs and their management. Mostly, this is undertaken by specialized trust lawyers connected to the large, commercial, Amsterdam-based law firms. The subsequent emission of bonds requires a legal prospectus to ensure that end-investors can practice due diligence. These documents run to hundreds of pages and must fulfill certain legal transparency requirements. Checking whether these requirements are fulfilled has been delegated to the exchange operator, in this case NYSE Euronext, who is legally obliged to demand a more or less standardized prospectus on the sales conditions of the bonds from the

issuer. While the writing of deeds at the retail end of the chain is mainly conducted by notaries, the rest of the legal work involved in the securitization chain is securely controlled by large commercial law firms such as Looyens & Loeff, Baker MacKenzie, Houthoff Buruma, Greenfield and Allen & Overy, many of them located in Amsterdam, near the Zuid-As. Because the Dutch legal market has undergone strong consolidation, the biggest law firms have set up or bought their own notaries, implying that some of them generate fee incomes for the firm from each and every legal contract that needs to be drawn up throughout the chain, which can reach up to seven or eight different sorts of contracts generating millions of euros per transaction.

Since the quality of the legal services is crucial for guaranteeing the quality of both feedstock and end-product of the securitization chain, as well as for a non-actionable allocation of risks, responsibilities and rewards over the different actors involved in securitization, the individual lawyer's level of expertise and competence is crucial. In the Netherlands, this is guaranteed by a closed shop, meaning that using the title of lawyer or notary is exclusively restricted to individuals that have obtained a law degree from one of the Dutch universities combined with a mandatory three-year period of on-the-job training at one of the Dutch law firms as an assistant-solicitor, as it is called in the UK.

At Dutch universities, there is no certified specialty in securitization law or trust law as there is in labor law, public law or private law. In most instances, the specialized knowledge required to be able to function in this field is acquired through on-the-job training, mostly by an old hand in the field, international courses, trade fairs and the exchange of international best practices through exchange programs or through working with lawyers from other law firms. As a result, Dutch securitization lawyers, like their US and UK counterparts, tend to be strong on contract law, securities law and legal details, but lack overview and mathematical skills. This is exacerbated by the fact that securitization transactions are often of an international nature and cross the boundaries of different legal jurisdictions, swamping the lawyers involved with hundreds of pages full of legalese.

In contrast to the situation in the UK/US, where a legal opinion elicited from a lawyer is perceived as a guarantee of lawfulness, no such certainty is possible under Dutch law. Dutch lawyers can only give 'opinions'; whether their interpretation of law is indeed backed by the law is ultimately decided by a judge if two parties to a contract contest its specificities. This uncertainty has two sources. In contrast to US/UK case law, Dutch civil code law contains open clauses such as 'good faith,' 'proportionality,' 'fairness,' etc. that require ceaseless interpretation and can even override contractual ownership rights in some instances.³⁰ This can be highly unsettling to UK/US investors. Secondly, Dutch law in the field of securitization

is as yet underdeveloped and, hence, unclear on legal rights and responsibilities from the perspectives of the 'open clauses' described above. This uncertain legal situation is perceived as a disadvantage of the Dutch system as it creates relatively high (perceived) contractual risks compared to issuance in the US/UK. However, with a view to the recent fallout over CDOs constructed by Goldman Sachs and sold to Dutch and German investors, some claim that more open rules and more space for litigation would be an even better check on financial innovation running wild than more detailed regulation.³¹ In practice, Dutch 'open end' clauses have a similar function and could be used to raise banks' awareness of the risky nature of their activities.

Though there are no indications of insufficient expertise, incompetence or down and out fraud on the side of securitization lawyers in the Netherlands, the newly appointed chair of the Order of Dutch Councilors interestingly raised the issue of moral responsibility of lawyers in facilitating the construction of poor-quality financial products and aiding banks to dodge their legal requirements; shouldn't they express remorse for their involvement?³² According to the chair, lawyers have responsibilities over and above the responsibilities to their clients, namely obligations vis-à-vis the integrity of the rule of law, which is the founding stone of their social position.

Since the early 1990s, however, Dutch law firms have increasingly adopted management practices, remuneration schemes, business models and working practices that were first developed in the US and the UK.³³ These models have inculcated working practices that put a growing stress on maximizing fees by closely collaborating with clients to solve their legal/fiscal problems. As a result, a gradual shift in the self-perception of corporate lawyers and the corporate identity of law firms can be observed, which has enhanced the importance of commercial goals and has eroded the importance of the guarding the rule of law. In other words, law firms, like rating agencies, no longer serve as brakes on financial innovation but see themselves instead as solving the regulator problems of their financial clients and have thus accelerated the production of new structured products. There are as yet no policy measures on the table addressing the role of lawyers in the 2007-2009 meltdown.

Notes

- 1 DNB Statistisch Bulletin, June 2009, 9
- 2 See Schwartz & Seabrook (eds.) Comparative European Politics. Special Issue: The political cost of property booms, 6(3).
- 3 Aalbers, M.B. (2005) 'The quantified customer', or how financial institutions value risk. In P. Boelhouwer, J. Doling and M. Elsinga (eds.), Home ownership: getting in, getting from, getting out, Delft University Press, Delft.
- 4 See report ambtelijke commissie...
- 5 See <http://www.nvb.nl/index.php?p=18328>
- 6 Alink, Bruggink Van der Harst BEB mei 1998
- 7 Tweede Kamer der Staten Generaal 28 878
- 8 NRC Juni 2009
- 9 Lelyveldt & Prast 2004
- 10 G10. 2001. "Consolidation in the Financial Sector." Pp. 463. Geneva: Bank for International Settlements.
- 11 See www.prommise.com
- 12 Mügge (2008) Widen the Market, Narrow the Competition. The emergence of supranational governance in EU capital markets. PhD Thesis: University of Amsterdam
- 13 Alink, Bruggink, Van der Harst BEB Mei 1998
- 14 Mügge, *ibid.*
- 15 Holton (2002) 'History of Value-at-Risk 1922-1998', Working Paper, July 25, 2002; Holton (20023) Value at Risk. Theory and Practice; see also Tett, *ibid.*
- 16 Van den Berg et al. 'The Dutch Trust Industry; Facts and Figures', Amsterdam: SEO.
- 17 DNB, Memorandum inzake Securitatisatie en Toezicht
- 18 And, during the period in question, under chairmanship of Gerrit Zalm.
- 19 Posner & Véron (2010) 'The EU and financial regulation. Power without purpose', Journal of European Public policy 17(3): 400-415.
- 20 See Valukas report
- 21 See <http://www.accountancynieuws.nl/actueel/accountancymarkt/jules-muis-accountants-hadden-wel-kunnen.89638.lynkx>
- 22 Posner & Véron, *ibid.*
- 23 Lowenstein; Knee; Ishikawa;
- 24 See Lewis 2010; Zuckerman (2010) The greatest trade ever.
- 25 Clark 2009
- 26 DNB *ibid.*
- 27 See paper that makes this claim; MacKenzie 2009
- 28 Sinclair 2005; 2010
- 29 MacKenzie 2009; zie ook Lowenstein, Triple-A Failure, NYT, 27 April 2008.
- 30 Teubner's Good faith piece in Hall & Soskice
- 31 Turner & Partnoy (2010) 'Off balance sheet', www.makemarketsbemarkets.org/modals/report_off.php
- 32 NRC Handelsblad, 'Je moet de client goed de waarheid zeggen', 26 februari 2010.
- 33 Faulconbridge, James & Muzio, Daniel. 2009. "The financialization of large law firms : situated discourses and practices of reorganization." Journal of Economic Geography 9 641-661.

6 CONCLUSIONS

From the foregoing, we draw a number of conclusions with conceptual consequences that are relevant for the WRR project to which this report contributes:

1. While formally a 'private law' field, and one that, due to its opaqueness and technicality, has not been very politicized, not even after the crisis, it is shaped by complex mixes of direct, indirect, autonomous and delegated regulation undertaken by a wide array of organizations: public, private and semi-public. Private agencies such as the Basle Committee [Comment (w1): Basle committee lijkt mij geen private agency], the AIDB, commercial rating agencies, law firms and accountancy firms ensure a certain dose of compliance with public goals such as transparency, reasonableness, good faith, contractual justice etc. on behalf of the state, which has more or less willingly delegated parts of its regulatory responsibilities to these gatekeepers. This is most evident in the case of rating agencies, but the role of law firms and accountancy firms can also be seen in this perspective. An interesting but briefly discussed aspect in this report is the complex mix of national and supranational regulation in this field. In many cases, financial market regulation, solvency requirements and the taxation of financial conglomerates that have been established on the basis of prolonged consultation rounds with industry insiders still require regional and national translation in the course of being implemented by national states and national regulators. The central bank (in the case of Basle 1 and 2) and the market conduct regulator (in the case of IFRS accountancy) rule. The picture that arises from this is one of public goals being reworked by private agencies into sets of rules that accommodate industry interests and that are subsequently formalized by EU directives pushing national regulators to implement those rules. While the push towards regulation comes from the state and state-like agents, the reworking in terms of rules of the game is very much left to private agencies.
2. While commonly depicted as a shadow banking system, i.e., a free-for-all devoid of any rules, the state, as this report clearly demonstrates, is actually everywhere: the hand of the state is more or less visible at each link of the securitization chain and in the behavior of every party involved in 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. As we suggested above, while broad public concerns (competitiveness, stability, capital access) stood at the cradle of the regulatory changes of the past 15 years, the content, style and impact of regulation were very much determined by private initiatives that were subsequently formalized by state agencies. Moreover, we see unintended effects in many instances, as in the securitization chain as such, which has been designed by

private agents to practice regulatory arbitrage in response to new supranational regulation (the Basle 1 agreement).

3. The state is rarely the initiator of change and developments, at least not in this segment of the Dutch economy. Rather, the state is very much seen to respond to calls for regulatory change from industry insiders, even using the arguments of those insiders for regulatory change to convince political adversaries. As Posner and Véron have argued for EU financial regulation as a whole, the role of the state in allowing and facilitating securitization fits the image of ‘power without purpose.’¹ 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 was ‘ad hoc globalization,’ which was strongly informed by perceptions of the financial markets that were prevalent among UK/US financial interests based in London and were derived from mainstream finance theories.² The most vocal supporters of self-regulation, securitization and financial market integration on the European continent were those banks that saw themselves as partaking in similar activities as UK based investments banks, such as Deutsche Bank in Germany, Société Générale in France and ABN Amro in the Netherlands. This is not ‘regulatory capture’ as set out in Stigler’s public choice model,³ but rather ‘cognitive closure’, i.e., the inability to formulate an alternative perspective on the aims and goals of financial globalization over and above the ‘ad hoc globalization’ pursued by UK/US financial interests.⁴

4. The regulatory developments described in this report cannot easily be captured with terms such as deregulation or liberalization. The 1997 Memorandum on Securitization, for instance, sets out a whole series of new regulatory requirements to allow for ordered market exchange in a field of activity that was virtually unregulated before 1997. One could even maintain that the Memorandum, which responded to calls from industry insiders for general rules in order to allow them to go beyond case-by-case approvals of securitizations by the central bank, helped to establish a formally regulated securitization market in the Netherlands that was co-produced by regulator and regulated. While the 2004 amendment does seem to fit the deregulatory/liberalizing mode of regulation that is seen to have dominated the 1990s and 2000s, it too merely responded to the new reality of a well-ordered securitization market that did not seem to require any further attention from the central bank.

What is striking about both pieces of legislation is the extent to which the central bank bought into the functionality of securitization as a means to overcome the capital reserve requirements of Basle 1 and 2, which broadly required banks to keep capital reserves of 4

percent on every mortgage. The main concern voiced by the central bank relates to claims that might endanger banks' solvency that flow from remaining material links between originator/structurer and SPV. Both documents predominantly aim to make sure that the sale of assets in a securitization is a 'true 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 subscribed to the arguments for credit expansion used by industry insiders, i.e., enhancing the amounts of investable capital, thus lowering the costs of capital, resulting in wider accessibility of capital. In the light of the crisis, which demonstrated that banks were overleveraged and possessed too thin capital reserves, the willing collaboration of the Dutch central bank to help banks under its supervision to minimize their capital reserves seems to call for greater cognitive/intellectual distance between regulator and regulated. As FSA house-intellectual Adair Turner has observed:

In the pre-crisis years, 'using bank capital more efficiently' (i.e. 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 Basle 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.⁵

How to overcome this form of cognitive/intellectual closure is, of course, another matter.⁶

Similar conclusions can be drawn from the role of legally mandated gatekeepers such as rating agencies, accountancy firms and law firms in the securitization chain in particular and financial markets in general, as described in this report. The agents that share the responsibility for ensuring rule-based behavior by financial agents, well-ordered market exchange, faithful financial reporting and good faith-based market conduct have each failed to distance themselves sufficiently from their paymasters for different reasons. The 'co-production' of SPVs, the securitization chain and the overall shadow banking system of which they stand accused clearly indicate the need to revisit the issue of conflict of interest. While these gatekeepers have state regulation to thank for their monopolistic positions (which has moved some to designate their turnover as rents) and, hence, could be expected to take the public good of social equity, institutional integrity and financial stability more seriously than short-term profit considerations, we have actually observed the reverse during the wave of financial innovation of the past 15 years. This raises awkward questions about how private profit interests should be rebalanced with the public interests for financial stability. In all three cases, this could be done by including explicitly stated social goals in the charters of professional organizations and by granting

these organizations more legal powers to discipline members that breach these social goals.

5. The above suggests that traditional ‘state versus market’ and ‘private versus public’ dichotomies fail to capture the complexity of the real world of regulation, even in a field as putatively ‘private’ and ‘market’ as securitization chains. Following recent developments in Comparative Political Economy, we instead propose to conceptualize the intricate linkages between private and public regulation, the co-production of regulated markets and the delegated nature of much regulation as a ‘hybrid institutional configuration’, that is, a field of activity that is not hierarchically controlled by any one agent (which, in most perspectives, would be called the state), but that is instead subject to constant renegotiations between interested parties, some formally public and others formally private, who all have an interest in designing the field in such a way as to allow for ordered exchange of assets and liabilities.⁷

This is not to say that state-society interactions should take this shape in every field, but merely that this might be the case in fields in which the stakes for private enrichment are large; which are of crucial importance to the wider collective through a wide array of positive and negative ‘overflows;’⁸ which are characterized by strong information asymmetries between regulators and regulated; and in which the regulated have more exit possibilities than the regulator, bound as the latter is to the national jurisdiction, or possesses instruments to contain them. While the question whether the crisis has not demonstrated that this arrangement contains insufficient checks and balances to constrain opportunistic behavior is a legitimate one, we do feel that reregulatory attempts aiming to transform this field into a hierarchically structured one that looks more like the market as it is conceptualized in a more straightforward ‘market versus state’ perspective are doomed to fail. The same is true for movements in the other direction. Transforming these fields into bureaucratic hierarchies is no solution either. The objects of regulation in fields such as these are simply too manifold, too complex, too interconnected, too mobile and too dynamic to be containable by a single set of rules wielded by a single hierarchical center

Notes

- 1 Posner & Véron, *ibid.*'
- 2 See MacKenzie, D. 2006. *An Engine, Not A Camera. How Financial Models Shape Markets*. Cambridge: MIT Press for a description of these theories and how they perform their implicit worldview.
- 3 Stigler, G. (1971) 'The theory of economic regulation'. *Bell J. Econ. Man. Sci.* 2:3-21; Laffont, J. J., & Tirole, J. (1991). 'The politics of government decision making. A theory of regulatory capture. *Quarterly Journal of Economics* 106(4): 1089-1127.
- 4 Posner & Véron (2010); Abdelal (2007)
- 5 Turner (2010) 'What do banks do, what should they do and what public policies are needed to ensure best results for the real economy?', available at www.fsa.gov.uk
- 6 See CRESC Banking Report for some suggestions for breaking open cognitive closure.
- 7 Lit CPE
- 8 Callon, M., C. Méadal & V. Rabeharisoa. 2005. "The economy of qualities." Pp. 28-50 in *The Technological Economy*, edited by A. & D. Slater Barry. London: Routledge.