

Financialization of Housing: The role of national institutions in mediating the global wall of money

By

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Submitted to

Central European University

Department of Political Science

In partial fulfilment of the requirements for the degree of Masters of Arts

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Budapest, Hungary

(2017)

The research contained in this thesis was sponsored by Central European University Foundation, Budapest (CEUBPF). The theses explained herein represent the own ideas of the author, and do not necessarily reflect the opinion of CEUBPF.

1. Abstract

The most important change in the housing market of most developed countries in the last two decades has been the increased importance of financial actors, markets and motives. Actors increasingly seek to make profit not through investment in the provision of housing but through investment in financial products connected to housing. However, this phenomenon, termed financialization, has not uniformly affected housing markets. Existing literature is not able to explain the different degrees of financialization across housing markets. This thesis uses comparative case study analysis, focusing on the Netherlands and Germany from the period prior to the rise of the global wall of money until just prior to the Global Financial Crisis in 2008. It charts the impact of key institutions in preventing or facilitating financialization, in the face of similar degrees of exposure to the global wall of money. This thesis highlights the role played by owner-occupation in driving forward financialization. The institutional framework of a housing market determines where incentives lie for investors, which in turn determines whether investment will be in the provision of housing or in financial products connected to housing. Financialization occurs, it concludes, in housing markets where there are little alternatives to owner-occupation and the use of housing finance is explicitly encouraged by government institutions. Financialization is prevented when there are easily accessible and affordable alternatives to owner-occupation and the use of housing finance is restricted.

2. Acknowledgements

This thesis has not been a solo endeavour. It has come into fruition with the help, support and advice of many people – directly and indirectly. Firstly, I must thank my supervisors, Borbala Kovacs and Dorothee Bohle. I am grateful to Bori for her quick responses to my (often frantic) emails, to the hours spent going through multiple versions of this thesis and to her insistence on the early production of a theoretical framework. I thank Doro for her guidance in my development of a thorough understanding of financialization, and all her comments throughout this process. She was not obliged to help, and I am thankful that she did! I would also like to thank the very helpful people at the Federal Statistical Office of Germany and Faculty of Architecture and the Built Environment at TU Delft for data. Thanks also to the Budapest Collective for Critical Urban Studies for letting me attend the discussion with Manuel Aalbers; meeting one's favourite scholar in person is always a very exciting moment. Finally, thank you to Jane Haggarty for the moral support and for feeding me all my life, and Robert Drake: I hope that he can see an improvement in this thesis from my bachelor's thesis!

3. Table of Contents

1. Abstract.....	i
2. Acknowledgements	ii
3. Table of Contents.....	iii
4. List of Figures.....	v
5. Introduction	1
5.1. Puzzle	1
5.2. Argument.....	2
5.3. Roadmap.....	3
6. Literature Review	4
6.1. Defining financialization.....	4
6.2. Financialization or Varieties of Residential Capitalism.....	6
6.3. The causes of financialization	10
6.4. The global wall of money and the housing market	11
6.5. The welfare state	13
6.6. Owner-occupation	16
6.7. Conclusion.....	17
7. Theoretical Framework.....	19
7.1. The causal mechanism	21
7.2. Cross-case differences.....	24
7.3. Conclusion.....	27
8. Methods	28
8.1. Independent, intervening and dependent variables	28
8.2. Case selection.....	29
8.3. Data	31
8.4. Limitations of the study.....	31
9. Measuring Financialization	34
9.1. The increasing role of financial institutions.....	34
9.2. The financialization of actors' motives.....	38
9.3. The role of financial motives in rented housing.....	41
9.4. Financial Markets.....	42
9.5. Conclusion.....	44
10. Determinants of Variation in Financialization.....	46
10.1. Summary of figures	46
10.2. Housing finance	50

10.2.1.	Mortgage interest deductibility	50
10.2.2.	Loan-To-Value ratios	51
10.2.3.	National Mortgage Guarantee	52
10.2.4.	Equity withdrawal	53
10.3.	Alternatives to Owner-Occupation	55
10.3.1.	Social housing	55
10.3.2.	Rent regulation	58
10.3.3.	Capital gains	59
10.3.4.	Private-rental subsidies	59
10.4.	Pension scheme differences	60
10.5.	Conclusion	62
11.	Conclusion	63
12.	Bibliography	66

4. List of Figures

Figure 1: Mortgage debt-to-GDP and owner-occupation 1992-2002 (%).....	7
Figure 2: Household debt-to-net disposable income (%), Eurozone 1995-2008.....	19
Figure 3: Capital switching into real estate.....	23
Figure 4: Institutional facilitators or barriers to financialization	26
Figure 5: Household debt-to-net disposable income (%) 1995-2008	36
Figure 6: Owner-occupiers with mortgages (%) 1993-2007	37
Figure 7: Hhouse prices and home-ownership rates (% housing stock) (Indexed to 1995)	40
Figure 8: The chain of causality facilitating financialization in the Netherlands	47
Figure 9: The chain of causality preventing financialization in Germany.....	49

5. Introduction

Housing occupies a unique position as a social good, long recognised as a basic human right, that simultaneously is usually a household's most important financial asset, being the largest component of wealth in some countries (Zhu 2014). It is the most market-facing element of the welfare state, if it is even considered part of the welfare state at all. In recent years, the role of finance in the housing market has increased: housing is no longer viewed as a financial asset capable of generating capital just by the owners of these houses but by financial institutions too. Investment in the housing market by these financial actors has typically not focused on the production or provision of housing but rather on the creation of liquid tradable investment products tied, often rather tenuously, to houses. This process has been termed the financialization of the housing market and is the focus of this thesis.

5.1. Puzzle

The literature on financialization within the housing market provides an account of how housing becomes financialized through the rise of a global wall of money seeking investment opportunities in times of global low interest rates and poor performing equities markets (Farha 2017; Fernandez and Aalbers 2016; Gotham 2009; Aalbers 2008; Louargand 1992). The literature focuses on the global shift towards financialization, using a framework of convergence (Fernandez and Aalbers 2016; Aalbers 2008). But financialization is not evenly felt. The variation is great enough to warrant further examination. It remains unclear why countries that ought to experience the same build-up in the global wall of capital do not experience the same levels of financialization in their housing markets. The literature hints that institutional frameworks forming national housing markets are responsible for encouraging or prohibiting financialization, pointing to three key institutional areas: the welfare state, housing finance and the finance sector. However, the specifics of which

institutions provide a barrier or incentive and the mechanism of how these institutions work as a barrier or incentive for financialization is not specified.

This thesis takes this puzzle of how some countries are able to prevent financialization in their housing markets as its starting point. It uses comparative case study analysis and a historical institutional theoretical framework to assess the housing markets of the Netherlands and Germany prior to and after the build-up of the global wall of money. Germany and the Netherlands are the chosen cases of this thesis as they are broadly similar in terms of the economic factors that the literature on financialization posits as causing financialization, but have very different degrees of financialization in their housing markets, caused by very different housing market institutions. Until 1990s, the indicators of financialization were broadly similar across the two countries but after this date the Netherlands saw a rapid build-up of mortgage debt and a rise in house-prices, whereas Germany saw continuity in both of these variables, as Figure 7 of this thesis shows. The question remains of why this was the case. This is a theory modification exercise, in that it seeks to add scope conditions to the existing theory of why financialization occurs, in order to account for different degrees of financialization across seemingly similar cases.

5.2. Argument

This thesis analyses which institutions are responsible for facilitating financialization in the Netherlands and which have provided a barrier to financialization in Germany. The key institutions have been in place since before the global wall of money came into existence. The two main institutional barriers to financialization in Germany are an easily accessible and high-quality alternative to owner-occupation and a restrictive housing finance system. In the Netherlands, for many households there is no viable alternative to owner-occupation and housing finance is particularly accessible to households because of government support. The impact of these institutions on the housing market then changed as the environment within

which they operated changed with the advent of the global wall of money. Thus, the path dependence created within the housing market by these institutions determined which country would see financialization and which would not.

5.3. Roadmap

This thesis begins with a review of the literature on financialization and housing, it then sets out the theoretical framework that guides this study, detailing exactly how financialization occurs and the methods used to achieve the stated research goals. It will then move onto a comparative evaluation of the degree of financialization in the German and Dutch housing markets and how this has changed over time, before building a picture of the housing markets of the Netherlands and Germany, unpacking the structural impediments or encouragements of financialization. It finishes with a conclusion pointing to possible future avenues of research.

6. Literature Review

The literature review of this thesis will begin by assessing the state of the art with regards to financialization, both as a process and as a field of study. The two main theories within the field of housing finance studies are assessed, before the cause of financialization is examined. The reasons behind the build-up of the global wall of money are detailed and why this was channelled into housing, as discussed in the literature, is expanded on, before the complex role of housing within the welfare state is touched upon. The literature on financialization within the housing market is limited by its lack of focus on national institutions, and this forms the basis of the research question of this study.

6.1. Defining financialization

In terms of the definition of financialization, most studies draw on the rather general definition offered by Epstein (2005 pg. 3) (e.g. Farha 2017; Callaghan 2013; Dore 2008), which states that financialization means “*the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies*”. This can easily be applied to a single market within the economy, by substituting the final four words for whatever market one is examining. Epstein (2005) does not elaborate on the definition in terms of the most appropriate way to operationalize or measure financialization, but makes clear later in the introductory chapter that the financial institutions he is referring to are synonymous with financial corporations and financial actors. This definition provides an overview of what to look for when determining whether financialization has occurred, but does not capture the mechanics behind financialization. This study focuses on financialization as a specific process through which investment becomes decoupled from productive activity and instead seeks to generate profit through investment in financial services and innovations (i.e. through money management) (van der Zwan 2014; Krippner 2005). This approach to studying the financialization of the housing

market was first adopted by Aalbers (2008). Farha (2017) also emphasizes the need to distinguish between the investment of capital into real estate for the purpose of the production of housing and the investment in real estate for the purpose of profit-accumulation. This macro-economic concept fits into the idea of financialization as a regime of accumulation, and draws on Krippner's¹ (2005:174) definition of financialization as, "*a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production*".

A study of the financialization of the housing market could be extended to a much broader assessment of the increasing role of market relations in the provision of housing. Some studies, such as Wijburg and Aalbers (2017), do focus on this aspect of financialization. But, fundamentally, the provision of housing within capitalist societies has always been for the most part a market relation (Malpass 2008). However, as this thesis will go on to highlight, market provision of housing can actually provide a barrier to financialization if the market provision is well-regulated and focuses on private-renting. The role of markets in providing housing captures only a partial and incomplete element of financialization and thus will not be focused on in this study.

The relationship between the decline in the manufacturing of goods and the rise of finance-led accumulation has largely been posited as a trade-off, with researchers arguing that at times of stagnation in production finance-led accumulation increases (van der Zwan 2014). However, the direction of causality is not tested. With housing, the relationship is also not clear. Financialization can occur in housing markets also at times of booms in the production

¹This thesis draws once more on Krippner's (2005) study in that it seeks to first prove that financialization has occurred or, in the case of Germany, is absent before moving onto explanations of why this is the case. Krippner (2005) criticises the work of other scholars of financialization for failing to prove the existence of financialization. The indeterminacy of variables that indicate the presence and degree of financialization was a barrier to proving its existence, meaning the study of financialization was largely theory-centred prior to Krippner's (2005) study of the phenomenon.

of housing², as was seen in Spain and Ireland in the run-up to the Global Financial Crisis (Dellepiane et al. 2013). Thus, given that there is not necessarily a negative correlation between the production of housing and finance-led accumulation, the production of housing and financialization in the housing market are deemed to be two separate (albeit interrelated) phenomena and the relationship between the two will not be explored in any further detail in this thesis. It is entirely possible that there are shared causes, particularly the production of housing for owner-occupation, but determining whether this is the case can only happen after the variables that determine the degree of financialization are established.

6.2. Financialization or Varieties of Residential Capitalism

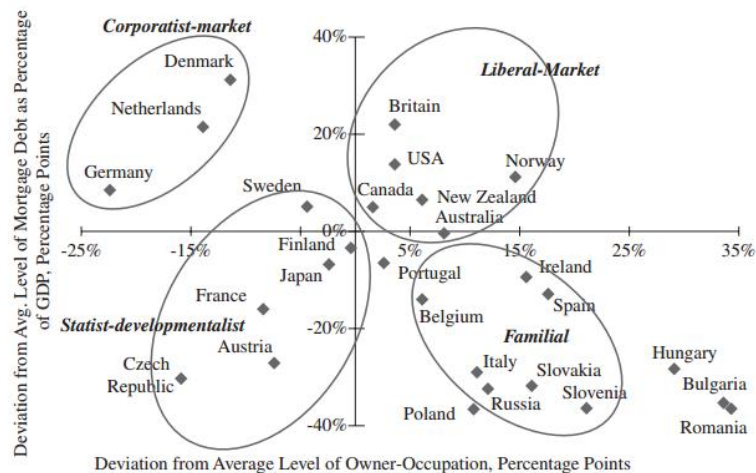
The field of comparative housing finance regimes first developed as a distinct discipline within political economy with Schwartz and Seabrooke's (2008) study of the Varieties of Residential Capitalism. Schwartz and Seabrooke (2008) draw on the Varieties of Capitalism literature to argue that there are clear Varieties of Residential Capitalism present in OECD countries, stressing the interplay between global capital markets and national institutional frameworks. The theory of Varieties of Residential Capitalism diverges from the typologies of Varieties of Capitalism because financial repression or liberalness in the wider economy does not always translate to financial repression or liberalness in housing finance (Schwartz and Seabrooke 2008). The role of the global capital markets means that there is a need for a distinct conceptualisation of the Varieties of Residential Capitalism.

They identify two key indicators for determining the type of housing finance regime a country has, owner-occupation levels and mortgage debt to-GDP-ratio (Schwartz and Seabrooke 2008). Based on these two variables, they create four ideal-types of housing

² Indeed, Fernandez and Aalbers (2016) include the percentage employed in the construction industry as proxy for housing construction, which is a key variable in determining which trajectory of financialization a country belonged to.

finance regimes. Whilst they emphasise that no housing market is an archetype, they delineate four typologies of residential capitalism, as shown in Figure 1 below.

Figure 1: Relative deviation from average OECD levels of mortgage debt-to-GDP and owner-occupation 1992-2002 (%)



Source: Schwartz and Seabrooke 2008:244

In their model, the difference between housing finance markets “ultimately boils down to the degree to which mortgages are securitized and the depth and internationalization of mortgage pools” (Schwartz and Seabrooke 2008:248). The logic behind this claim is that mortgage markets expand when financial institutions are able to shift the risk of lending away from themselves. Securitisation allows them to do this, and international mortgage pools provides the demand for mortgage securities.

According to the typologies developed by Schwartz and Seabrooke (2008), the Netherlands and Germany ought to be largely very similar in terms of housing finance, but as the Measuring Financialization chapter of this thesis explains, the mortgage debt-to-disposable income ratio in the Netherlands has risen far more rapidly than in Germany, and its housing market has become financialized whereas financialization is largely absent from the German housing market. Both countries permit securitization of mortgages, which led to them being both categorized as corporatist-market regimes, but the use of mortgage-securitization is

extremely limited in Germany³ and far more widespread in the Netherlands (Housing Finance Network n.d.; Aalbers 2008). Thus, single institutions alone do not explain differences among countries; the interaction between institutions and the overall structure of the housing market must be examined in order to account for differences. Developments in residential capitalism in the two countries have taken place over a much longer period than is considered by Schwartz and Seabrooke (2008). The data they use in their study is either largely static, or from a 10-year time period (between 1992-2003).

Due to the relative static nature of their typologies, the global trends over time in residential capitalism are largely absent from Schwartz and Seabrooke's (2008) study. Taking the dynamism of housing finance as their starting point, Fernandez and Aalbers (2016) shift the emphasise onto the impact of global changes over time, and the importance of global phenomena in inducing structural changes in national housing markets. This approach, termed the financialization of housing approach, has been pioneered by Manuel Aalbers, who has published extensively on this topic. This approach has become increasingly more widespread than the Varieties of Residential Capitalism approach, and several scholars have conducted single case studies of financialization within the housing markets of countries or cities (e.g. Fields (2015) and New York City, Klink and Denaldi (2014) and Brazil, Watson (2009) and the UK, Smart and Lee (2003) and Hong Kong). This approach builds upon the work of Schwartz and Seabrooke (2008) by bringing together national divergence and broad global trends.

In their 2016 study of financialization in housing markets, Fernandez and Aalbers emphasize four different trajectories of financialization, reflecting the emphasis of the financialization school of thought on dynamism but acknowledging the empirical fact of the substantial

³ Mortgage-securitization remains limited but the use of mortgage-backed covered bonds is far more widespread. See the measuring financialization section of this thesis for an overview of this, and a discussion of the difference between securities and covered bonds.

differences in levels of financialization between different housing markets. Fernandez and Aalbers (2016) emphasize the importance of housing finance-led owner-occupation in driving forward financialization through adopting the key variables of owner-occupation rates and mortgage debt-to-GDP ratios when measuring financialization. Their study also uses the key variables of mortgage market openness and the construction sector, which indicates whether capital was channelled into the housing market in order to produce housing or just to finance housing consumption of households, or both. It is through the owner-occupied sector that financialization develops, but specifically through the involvement of financial institutions in enabling owner-occupation, and mortgage debt-to-GDP and owner-occupation rates function as indicators of the degree of finance-led home-ownership.

By and large, the financialization trajectories mirror the typologies of Schwartz and Seabrooke (2008), with the exception of Germany. But the major contribution of both the financialization and the Varieties of Residential Capitalism literature is not the categorization of housing markets but the focus on the transnational rise in importance of housing finance and the role housing has played in facilitating the development of finance capitalism across cases over the last thirty years. As Fernandez and Aalbers (2016:16) note “*housing is central to the real-world political economy*”. It represents the biggest expenditure most households will ever make and the housing market is a market in which every individual participates, albeit to different degrees.

Both Fernandez and Aalbers (2016) and Schwartz and Seabrooke (2008) conduct research focusing on all countries within the OECD. The inclusion of all countries within the OECD means that nuance is lost in the name of parsimony. Both studies acknowledge that there are institutional differences between cases but do not explore why these differences exist. A small-N study permits these differences to be explored and a greater understanding of why differences emerge.

6.3. The causes of financialization

Financialization occurs in a housing market because there is a build-up of a global wall of money looking for an outlet in which to be channelled (Farha 2017; Fernandez and Aalbers 2016). Farha (2017:8) termed financialization the “*effects of excess global capital*”. Housing represents Harvey’s (1985:26) “*spatial fix*”, allowing the over-accumulation of capital to be reinvested to generate further profits. When the manufacturing and productive sector is saturated and the profit-rate falls, capital is moved into the built environment⁴ both as a way to continue profit-generation but also as a way to increase demand for goods within the manufacturing sector (Harvey 2001). Thus, the built environment both directly and indirectly generates profit. Harvey (2001) gives the example of the suburbanization of America after 1945, which created a demand for cars that previously had not existed, increasing profits in the manufacturing sector. However, there are two ways in which housing can represent this spatial fix: either through investment designed to produce or manufacture housing, or as investment in housing finance (Aalbers 2008). The reasons for the different degrees of investment in housing finance are the central puzzle of this thesis.

There are four different sources adding to this wall of money identified by Fernandez and Aalbers (2016): the first comes from the privatization of pensions and the build-up of other similar institutional investors, these funds of capital seek investment opportunities generating a stable income. Mortgage loans sold on the securities market represent fixed income products, particularly attractive to these types of investors. The second source identified comes from the trade surplus of emerging economies, this “*savings glut*” (Fernandez and Aalbers 2016:74) is then channelled into the housing finance markets of developed economies. Quantitative easing policies pursued by Central Banks around the world has also

⁴ Charney (2001) offers a concise definition of the built environment that will be used for the purpose of this study: the built environment “*consists of the physically discernible structures and the parcels of land they stand on. These real estate properties are by definition immobile and represent capital investment in concrete and fixed assets*” (Charney 2001:740).

increased the demand for high-quality capital, and the final source of the global wall of money comes from the accumulated profits of companies around the world. Thanks to tax-avoidance policies and declines in corporation tax around the world, as well as off-shoring of manufacturing and stagnant wages, the profit share of large corporations has increased substantially (Farha 2017). This capital then seeks new investment opportunities. This process gathered pace from the 1980s and can be seen in the soaring private debt ratio, from the historically constant level of 50-60% to 118% in 2010 (Jorda et al. 2016).

As the section above details, there is a well-developed theory about financialization on the global level, but the story so far neglects the national picture. The explanation for why there are different degrees of financialization in housing markets has not been systematically explored. Following from the logic of the build-up of the global wall of capital, all housing markets ought to be equally affected if they are advanced industrial economies with low interest rates and an open banking sector. Fernandez and Aalbers (2016) argue that institutional filters across different countries impede financialization but do not delve further into what institutional filters specifically halt financialization nor the mechanism through which they do this. They do, however, point the reader towards three main groups of institutional filters of financialization: housing finance, welfare state and the financial sector.

6.4. The global wall of money and the housing market

Fernandez and Aalbers (2016) identify four sources of capital that have fed into the global wall of capital that has driven forward financialization in some housing markets. As detailed above, these sources are pension fund capitalism, the growing trade surplus of emerging economies, the rise in accumulated profits and loose monetary policy, i.e. quantitative easing. As quantitative easing only developed as a policy response to the Global Financial Crisis which began in 2008⁵ (Joyce et al. 2012), it will be excluded from the assessment of the

⁵With the exception of Japan, where quantitative easing was adopted as a policy in 1990s (Joyce et al. 2012).

evolution of the global wall of money as this time period is outside of the period of interest of this thesis. Fernandez and Aalbers (2016) have a well-developed section on the origins of the global wall of money, so this section will focus on how and why this global wall of money came to be channelled into the housing market.

In terms of why the global wall of money was switched into the housing finance sector, Crotty (2008:3) focuses on the role played by the “*New Financial Architecture*” (NFA), which is an institutional framework within the global financial sector that emerged in 1980s. Crotty (2008) argues that the investment strategy of institutional investors to diversify their portfolio holdings into housing finance stemmed from the flawed logic of the NFA, namely that diversification of securities overcomes the risk associated with a lack of perfect information regarding these investment products (Crotty 2008). The flawed theoretical underpinnings of the NFA, as Crotty (2008) demonstrates, led to a surge in investment by institutional investors in mortgage-backed securities who were attracted by the seemingly low risk investment opportunities to diversify their portfolios in a low interest rate environment.

As Louargand (1992) explains, the specific targeting of pension fund investment in real estate rose to the fore in 1980s. These funds invest both directly in real estate as an asset and indirectly in mortgages and mortgage-backed securities (Louargand (1992). Real estate became attractive as an asset class because of the poor performance of the equities market coupled with booming property markets, as well as its potential to act as a hedge against inflation (ibid). Direct investment in real estate tends to be less attractive to pension funds because of property’s illiquid nature as well as the transaction costs associated with managing and procuring real estate, investment in financial products linked to real estate is considerably more popular with pension funds as they overcome these drawbacks whilst still preserving the benefits of investment in real estate (Louargand 1992).

This provides the missing link as to why the global wall of money invested in housing finance, but what remains unclear is the national stories and unevenness in degrees of investment across countries.

6.5. The welfare state

Housing finance regime research is a relatively recent field of study, and an alternative, more well-developed strand of comparative housing research focuses on relationship between housing and the welfare state. As this is a key institutional filter of financialization, an overview of this literature is beneficial for this study. However, it must be noted that the literature on both financialization in housing markets (Fernandez and Aalbers 2016) and Varieties of Residential Capitalism (Schwartz and Seabrooke 2008) stresses the separation between housing finance and the welfare state. The type of welfare state a country has does not determine the level of financialization in that country's housing market.

Before assessing the relationship between housing and the welfare state, this literature review will analyse the role of pensions in financialization of housing. Most industrialized economies have aging populations which has placed increasing pressure on the traditional Bismarckian pay-as-you-go (PAYG) pension schemes, where wages are taxed to directly fund pensions, as there are fewer and fewer workers for every pensioner (Haverland 2011; Brooks 2005). This led to the rise of pillarized pension schemes. Pillarized pension schemes are comprised of a PAYG pillar, a second mandatory occupational pillar that is paid into a pension fund, and a third optional private pension scheme that is also paid into a pension fund. Pillarized pension funds are comprised of different sized funded pillars, which vary across countries (Brooks 2005). Rather than the income from taxes being paid out directly as occurs with PAYG pensions, pension funds build up large reserves of capital that require investment.

In the period between 1980 and 2000 18 countries around the world adopted a market-based funded pension provision strategy⁶ according to research by Brooks (2005), whilst Orenstein (2011) found that 30 countries fully or partially replaced PAYG pensions with a system based on pillarized pension schemes. With pension fund management, there is a need to adopt low risk strategies whilst securing the highest reward possible; poor performance of investment must be avoided, but simultaneously so must excessive volatility of investments (Davis 2005). This trade-off typically leads to a diverse portfolio holding on the part of the pension funds. If the government is encouraging a particular form of tenure, pension funds can be guaranteed relatively low risk returns by investing either directly or indirectly in this tenure form, and investment is often incentivized with subsidies or tax breaks (Balchin 1994). The investment strategies of these institutional investors vary considerably, particularly in the extent to which they invest domestically or internationally. In terms of general investment habits of investors, research by international property firm Cushman and Wakefield has shown that in 2014 59% investors concentrate their real estate investments in a single geographical location (Almond 2016:4). Thus, concentrating on the national differences is a worthwhile scholarly activity.

The literature on the welfare state and housing is mainly focused on understanding the role of housing as either the “*wobbly pillar or cornerstone*” of the welfare state (Malpass 2008:1). Housing is categorised as being a part of the welfare state when it is provided by the state, this would be social-housing if directly provided but institutions of the welfare state can also be used to promote a particular tenure type (Montgomerie and Budenbender 2015). Castles (1998:5) was the first to demonstrate a connection between welfare state spending and owner-occupation levels, arguing there is a “*really big trade-off*” between home-ownership rates and spending specifically on old-age care and pensions. The promotion of owner-

⁶ In Western Europe these countries were the United Kingdom, the Netherlands, Sweden, Denmark and Switzerland (Brooks 2005).

occupation allows households to cash in this asset in old age in order to fund care in later life, however the direction of causality is far from clear (Kemeny 2005; Castles 1998).

The debate about the role of housing in the welfare state is long-standing. Some authors, such as Balchin (1994), claim that housing policies match up to Esping-Andersen's (1990) categorisation of welfare states. Social democratic welfare states promote rented and co-operative housing, corporatist welfare states encourage both private- and social-rented housing but without seeking to amend social classes or the market, and liberal welfare states are categorised by their reliance on the market for the provision of housing (Balchin 1994).

However, Balchin's (1994) approach to housing faces the same criticism that is levelled at the Varieties of Residential Capitalism (Schwartz and Seabrooke 2008) in that it is overtly static. The number of studies that have been conducted amending or offering alternatives to Esping-Anderson's (1990) study to include housing is testament to the dynamic nature of housing and housing policy, in that these studies are relevant only for the particular time period they examine but subsequent studies of the same cases can produce vastly different results. Sweden is an excellent example of this, with Hedin et al. (2012) classifying Sweden as neoliberal, whereas Headey (1978) termed Sweden a socialist housing regime, and in 1990 Lundquist et al. emphasized the hybrid housing regime in Sweden. All are right but the change in housing policy has been so rapid that housing in Sweden warrants re-evaluation every few years.

Researcher of comparative housing studies face a choice between analysing convergence and divergence in housing regimes, i.e. focusing on the broad similarities or the national differences between cases (Kemeny and Lowe 1997). Studies that emphasize the divergence of housing regimes will formulate typologies and it will always be possible to criticize these studies for their staidness. On the other hand, studies that solely focus on the global or cross-case similarities will be criticized for their vagueness and ignorance of national differences.

This thesis borrows methods from the divergence school of research through focusing on qualitative historically grounded approaches, but seeks to bring together the divergence and convergence approaches by seeking to account not merely for differences in cases but by analysing how these differences interact with processes taking place at the global cross-case level.

6.6. Owner-occupation

Linked to the welfare state is the relationship between government policy and housing tenure choice. As this thesis will go on to argue, financialization depends on government promotion of housing finance-led owner-occupation, thus it is through the owner-occupied sector that the housing market becomes financialized. There is a need to examine the literature's treatment of the interconnected nature of housing tenure and government policy. Most comparative housing research focuses on explaining the different levels of home-ownership, with a definite bias towards the Anglophone world (e.g. Ronald 2008; Fisher and Jaffe 2003; Doling 1993). This literature largely focuses on the role played by government policy in (dis)incentivizing ownership, according to the review of the literature by Lawson (2013). The form of tenure promoted by government policy is termed "*tenure strategy*" by Kemeny (1981:23). The tenure strategy of a country is either tenure-neutral, equally promoting social renting, private renting and home-ownership, or it specifically encourages one form of tenure.

The tenure strategy of a country, Kemeny (1981) argues, is not the result of a concerted, well-planned initiative, but is the result of incremental policy responses to situations arisen. This is then disputed by Doling (1993) who argues, in the context of overt owner-occupation promotion in the United Kingdom, that the three-pronged approach, reducing entry costs, the elimination of rental alternatives and extending finance, was anything but accidental. Doling (1993) notes that the tenure choice of a household is the function of particular individual needs interacting with structural (dis)incentives created by government housing policy.

Accidental or not, promoting home-ownership does not in itself provide the structural preconditions for the financialization of housing markets. However, most government policies designed to promote home-ownership involve explicit encouragement of the use of housing finance (Balchin 1994; Doling 1993). Increasing home-ownership through promoting mortgages is inextricably linked to financialization of housing markets because it increases the number of people exposed to financial institutions and, consequently, the ubiquity of financial institutions. As Balchin (1994) and Forrest and Hirayama (2014) note, mortgages were historically provided by institutions that were either state sponsored or strongly connected to the state. Obtaining a mortgage involved face-to-face interviews to ascertain the reliability of the borrower and there was a paternalistic relationship between borrower and lender (Forrest and Hirayama 2014). However, it is well-documented that in the United States lending habits shifted, leading to the creation of secondary mortgage markets, in which mortgage-backed securities were traded, which in turn led to the financialization of the American housing market (Gotham 2009). In order to determine how financialized a housing market is, it necessary to understand how many homes have mortgages but also what kind of institutions provide mortgages and whether a secondary mortgage market exists.

Home-ownership thus drives financialization when it increases the connection between citizens and financial institutions through mortgages lent by institutions disconnected to the borrower. Home-owners are not automatically market participants, which means the policies by which home-ownership are promoted are actually more important for an evaluation of financialization than rates of home-ownership as a variable itself.

6.7. Conclusion

The literature on financialization in the housing market has provided a coherent theory for why financialization occurs and how it occurs, through the rise of the global wall of money in the 1980s. Financialization is a process through which profit is derived through financial

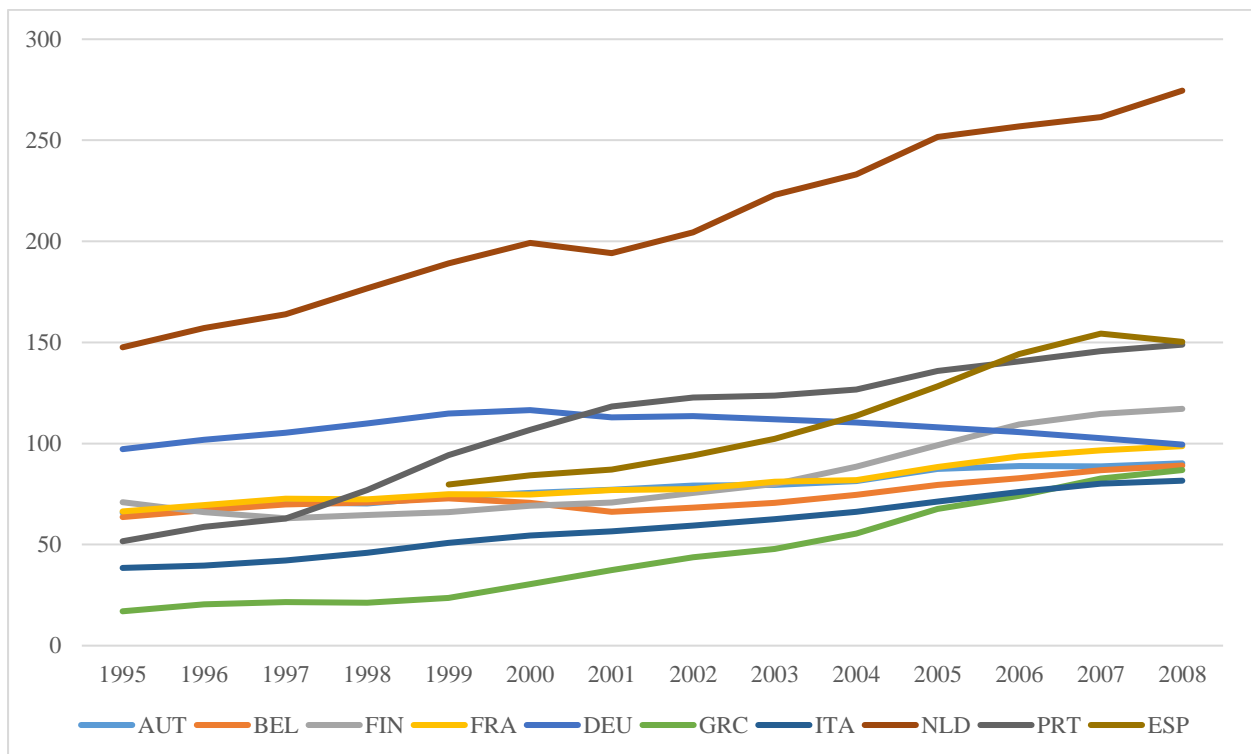
channels, tied to housing, and manifests through the increasing activity in the market by financial institutions. This study does not focus on the global wall of money but on the national institutional framework for why particular housing markets were deemed more attractive investments than others. This focus is justified because the literature thus far has not accounted for why financialization occurs in some cases but not others. The ‘convergence’ aspect of the story has been told, i.e. the global wall of money, but the casual link between the global wall of money and national institutions has not been addressed by the literature until now. As is recognised by the financialization literature, it is through home-ownership, but specifically the use of housing finance, that financialization occurs but the process linking institutional filters, i.e. government policy, to financialization is still unknown. The purpose of this thesis is to answer the research question of why there are different levels of financialization in housing markets, particularly when these markets ought to be equally exposed to the global wall of capital. To this end, this thesis will assess the policy instruments through which governments promote or discourage the use of housing finance, and which policy instruments lead to or provide a barrier to financialization.

7. Theoretical Framework

This chapter details the theoretical framework that underpins this study, explaining why historical institutionalism is the most appropriate framework through which to analyse the research questions of this thesis before moving onto an exploring the process of financialization. It details what exactly financialization is and how it occurs, before theorizing the explanation of differences in the degree of financialization across housing markets in Europe. A theory of cross-case variation in financialization can be pulled together from the work of scholars writing about financialization, but has not yet been tested.

This study begins with a question: *why are there such great differences in the levels of financialization in the housing markets of Europe?* The chart below uses a rudimentary but widely-used measure of financialization, household debt-to-net disposable income since 1995 to highlight the different degrees of financialization in the housing markets of Eurozone countries.

Figure 2: Household debt-to-net disposable income (%), Eurozone 1995-2008



Source: BIS 2017

As Figure 2 shows, there was an upward trend in mortgage debt in most countries between 1995 and 2008. The amount of mortgage debt was very different across-cases in 1995, with countries following distinct paths until 2008. Understanding why these differences across cases exists points to the need to understand the different historical institutional contexts of the different housing markets in Europe. Financialization is a process, and processes do not emerge due to a single variable, instead a myriad of institutions feed into the realisation of a process. Thus, this study draws on existing research techniques from within historical institutionalist literature⁷ and moves from an overview of the macro-level phenomenon of financialization into an analysis of the micro-level explanations for why this outcome occurs in some countries but not in others, focusing on the development of key institutions within the institutional framework of the housing market. The focus of historical institutionalism on the role of the wider context and the causal role played by the institutional structure lends greater credibility to causal claims. This is because it specifies a focus on not just the different variables but how the variables interact to drive a process forward, or hold it back (Pierson and Skocpol 2002).

As Hall and Taylor (1996:6) note, historical institutionalism starts from the notion that the state is “*a complex of institutions capable of structuring the character and outcomes of group conflicts*”. The outcome of conflicts within the state thus can vary from country to country. Institutions within the context of historical institutionalism are typically defined as formal rules or conventions within a context, and play the vital role of structuring the preferences of actors operating within this context (Hall and Taylor 1996).

This study argues that the formation of actors’ preferences within the housing market is endogenous, shaped by the institutional setting in which they operate: this is a fundamental

⁷ See Thelen 1999.

tenet of historical institutionalism (Thelen 1999). These preferences then alter the demand for housing finance which in turn affects the level of financialization in the housing market. The decision to use a historical institutionalist framework stems from the recognition that key institutional differences across cases were long-standing and shaped the response of market participants to the rise of the global wall of money. The path dependent nature of the housing market is characterized by the reinforcement of patterns of action into the future that are then very difficult to reverse.

7.1. The causal mechanism

Capital switching is Harvey's (1985) now-famous conceptualization of a process through which capital is moved from the primary circuit (i.e. the productive sector) to the secondary circuit (the built environment); the built environment grows and develops through this new investment which enables the wider economy to grow, whilst it also provides investment opportunities at times of crisis in the primary circuit (Klink and Denaldi 2014; Aalbers 2008 citing Harvey 1985; Beauregard 1994). Capital that is generated in the economy seeks new opportunities to generate higher returns and is moved from the sector in which it was generated into building projects in the built environment, among other places. However, for this study, the switching of capital into the residential housing market is the only aspect of this phenomenon that will be examined. For Harvey, a fundamental element of capital switching is that it takes place at times of saturation in one sector: there is a glut of capital in one sector and the ability to generate further profits in that sector halts, so capital is moved to a sector where it is still possible to generate profit (Aalbers 2008 citing Harvey 1985).

According to the already well-developed literature on this topic, financialization is caused by the build-up of a global wall of money looking for new investment opportunities, as has been examined in the literature review of this study. This capital comes from a variety of different geographical locations, emerging from organizations operating within the national boundaries

or from international sources (Rolnik 2013). Housing allows the over-accumulation of capital in one sector to be reinvested in other sectors in order to generate further profits. Thus, at times of overaccumulation, capital is channelled into the housing market, among other locations. This wall of money comes from four different areas, as has been detailed in the literature review.

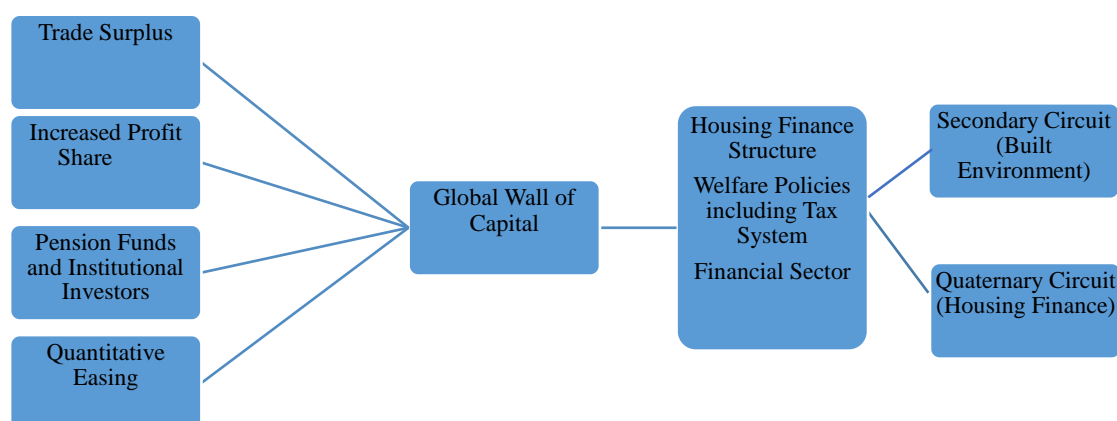
Financialization occurs in the housing market when this build-up of capital is switched not from the primary to the secondary circuits, but from the primary to what Aalbers (2008:149) calls the “*quaternary circuit of capital*”. The quaternary circuit is the circuit of finance: capital is circulated with the aim of generating more capital, decoupled from manufacturing or other productive investment (Aalbers 2008; Beauregard 1994). As this thesis will go on to show, whether capital is switched into the built environment as investment in the production or manufacturing of housing or whether it is switched into the quaternary circuit as housing finance depends on the wider institutional framework of the housing market. This framework determines the incentive structure of each possibility, with capital opting for the circuit that provides the highest returns.

The quaternary circuit is linked to housing through mortgage markets, which represent a version of a financial market; mortgage markets transform housing from a spatially fixed good to something liquid that can be traded as a profit-making asset (Klink and Denaldi 2014). With financialization, capital does not flow into the housing market in order to build more houses but rather it flows into the market as housing finance to fund the purchasing of housing that has already been constructed or to enable households to extract equity from owner-occupied housing. This increases demand for houses but the supply stagnates through lack of investment, driving up prices (and the mortgage required to buy a house) and in turn increasing capital accumulation of lenders. Capital accumulation is also facilitated through the lowering of lending standards which expands the number of households able to receive

housing finance, and through regulations that allow for households to become further indebted to financial institutions.

It is necessary to differentiate between capital switching for the purpose of construction of housing and capital switching for the purpose of purchasing already constructed housing, i.e. owner-occupation. Mortgage loans typically do not differentiate between loans for construction or loans for purchasing, nor do they specify whether they have been given to institutional house building companies or individual borrowers. Capital switching into loans for large-scale house building projects is a long existing phenomenon which is necessary to generate housing as a social good. It is removed from affecting individual households as the relationship is a business transaction between firm and lender, and thus the power of finance does not permeate into wider society. This study uses household debt as a way to differentiate between institutional loans for house building and loans for the purchasing of housing for owner-occupation. Capital switching into the quaternary circuit (the finance circuit) becomes decoupled from production or manufacturing, and it is used to fuel mortgage loans for the purchasing of housing already in existence. The diagram below visualises the process through which capital is switched into the built environment for productive activity or switched into the financial circuit.

Figure 3: Capital switching into real estate



The mobilization of accumulated savings as capital for mortgage loans is particularly attractive as these loans use houses as collateral, meaning risk is minimised for the lender because the house can be resold in the event of a loan becoming non-performing. Houses with mortgages are thus considered to be high-quality collateral (Fernandez and Aalbers 2016). The attractiveness of these loans to institutional investors leads to the development of a market for mortgage-backed securities and other similar financial innovations, with capital funding the purchasing of these products coming from the aforementioned global wall of capital. These products allow banks to transform houses and mortgages on houses into investment products, and thus there is a decoupling of capital accumulation from the original good from which these products stem.

The wall of capital reaches a greater number of households through the deregulation of mortgage lending which allows banks to lend to households who present a higher risk of default, or who have lower and less stable monthly incomes (Pellandini-Simanyi et al. 2015). The global wall of money is not exclusively channelled into housing, hence the wide variety of research on the financialization of other markets.

7.2. Cross-case differences

Whilst the build-up of capital is a global phenomenon that transcends borders, housing is very much a local asset. The channelling of this global capital into the housing market depends on national structures that are determined by states. National housing markets constrain the behaviour of market participants in different ways. However, institutions directly relating to housing alone do not account for the full variation in the levels of financialization across cases, other institutions with an indirect connection to housing also shape the opportunities for financialization. There are three institutional areas that must be focused on if we are to understand why there are different levels of financialization in housing markets (Fernandez and Aalbers 2016).

Firstly, the institutions that make up a country's housing finance sector constrain the possibilities for financialization. Certain housing finance regimes provide incentives and opportunities for actors to invest in the quaternary circuit. As the literature review of this thesis detailed, it is through the housing finance regime of a country that individual households can become connected to the global wall of finance⁸.

The second set of institutions playing a role in determining the degree of financialization are the institutions that make up the welfare state. These institutions work directly to incentivise households to choose a particular tenure type, in turn structuring demand for financial products. The welfare regime is also the area from which the influence of pension funds emerges. The shift away from Pay-As-You-Go pensions, in which current workers pay the pensions of current retirees, towards a pillarized pension scheme which involves (to different degrees) occupational and/or individual level pension funds that invest the employee contributions to generate returns led to the creation of large pools of capital looking for high reward but low risk investment opportunities (Leimgruber 2012; Pordes 1994). Given the increase in average age in most developed countries, these pension funds are increasing in size and are increasingly seeking new investment opportunities to ensure that they stay fully funded (i.e. reserves meet all outstanding obligations) (Leimgruber 2012). Thus, the institutions of the welfare state play a role in the supply of capital facilitating financialization, as well as the demand for this capital to facilitate home-ownership.

The final area is the financial sector: how developed the financial sector is matters. Without commercial banks offering mortgages financialization could not occur. This thesis has limited the cases under evaluation to Eurozone member states, working under the rather simplistic assumption that all these states have broadly similar development levels in their financial sectors. This is done as a control to ensure that exposure to the global wall of money ought to

⁸ For specific housing finance regimes, see the table from Schwartz and Seabrooke (2008) in the literature review.

be equally possible in all these different countries. This enables the focus not to be on different levels of the global wall of money but on the different institutional environments in which the global wall of money operates. For the purpose of this study, the financial sector will not be a variable of interest.

The below table specifies the types of institutions within the policy areas of housing finance and welfare sectors that either prevent or facilitate financialization:

Figure 4: Institutional facilitators or barriers to financialization⁹

Institutional Area	Facilitating Financialization	Preventing Financialization
Housing Finance	<ul style="list-style-type: none"> • High loan to value ratios • Housing equity release products • No limit on which institutions can lend housing finance • Diverse mortgage products • Mortgage-backed securities 	<ul style="list-style-type: none"> • Low loan to value ratios • Only banks can lend mortgage finance • Little to no innovation in the mortgage products available • No securitization of mortgages
Welfare Regime	<ul style="list-style-type: none"> • Little to no alternatives to owner-occupation as a tenure type • Strict limits on entrance to the social-rented sector, if one exists • Housing viewed as a commodity • Tax system favouring owner-occupation • Pillarized pension systems 	<ul style="list-style-type: none"> • Well-developed and easily accessible social and publicly subsidized private rented sector • Housing viewed as a social good • Housing construction subsidised by the state • Tenure-neutral tax system • Pay-as-you-go pension system

The above institutions identified as responsible for the different levels of financialization in the housing market are the result of government policy choices. States play just as important of a role in the creation of institutions in financialized housing markets as in non-financialized housing markets. However, the role states play in financialized housing market

⁹There is an additional factor that provides a barrier to financialization. In Central and Eastern Europe, the nature of the move to the privatisation of housing resulted in high levels of home-ownership without the need for housing finance. This means that demand for housing finance is minimal, and thus the degree of financialization in these housing markets is lower than in other European Union member states. The unique history of these countries is the cause of different levels of financialization in these countries, but this argument does not travel beyond the borders of this region and thus remains outside of the scope of this study.

is different: they encourage households to move into owner-occupied housing and create an institutional structure that incentivizes households to participate in the housing finance sphere.

7.3. Conclusion

There has been a build-up of capital over the last few decades. This capital seeks alternative investment opportunities outside of the sphere in which it was originally produced, and some of this capital is channelled into the housing market. The domestic institutions already in place then determine whether it is channelled into the housing market as capital invested in the provision of housing, or whether it is invested in the housing finance sector, to generate further capital without producing or manufacturing any goods. This latter option is the quaternary circuit, the finance circuit. Through this circuit, capital is generated not through building but through financial innovations that decouple capital from housing as a good. This requires an ever-increasing base of households from which to draw on. This base is created through domestic institutions: specifically, the domestic institutions within the welfare regimes and the housing finance regime. An institutional framework that encourages housing finance-led owner-occupation must be in place before financialization can occur, and this thesis will go on to demonstrate that institutional differences been present in cases since before the build-up in the global wall of money incentivized different behaviours on the part of market actors as the exogenous global wall of money hit their housing market. Particular patterns of behaviour were then reinforced by institutions, leading to path dependent shifts in overall levels of financialization. Thus, it was not recent changes in the institutional framework of the housing market that brought about financialization, but instead key institutions that had been in place for many years. The next section of this study will detail the methods that will be used to achieve the stated research goal of this study.

8. Methods

This study uses systematic two-country comparative case study analysis to assess why there are different levels of financialization in housing markets. It seeks to modify an existing theory put forward by Fernandez and Aalbers (2016) that provides an explanation of why financialization occurs by examining the role played by national institutions in preventing or enabling financialization.

Quantitative studies lack the nuance that permits the causal mechanism behind the degree of financialization in a housing market to be determined. They do not give detail on how institutions interact with and shape financialization, and how this has changed over time. Based on these open questions, qualitative case study analysis was deemed the most appropriate way to gain the nuance missing currently from the literature. This study uses historical narrative analysis, drawn on as it allows the researcher to “*refuse the choice between modelling causal relationships and studying history*”, to identify and explain causal relationships with temporal dimensions (Buthe 2002:481). As financialization is a process, there is a clear temporal dimension to this study. Historical narrative analysis is the most appropriate methodology for this study as it allows for the whole causal process to be visible throughout the analysis, and is particularly useful for testing theory (Buthe 2002).

8.1. Independent, intervening and dependent variables

This study seeks to unpack the intervening variables that mediate common background conditions (i.e. the global wall of money) into different outcomes. The dependent variable of this study is the financialization of housing markets and the independent variable is the global wall of money. As specified in the literature review, previous research has confirmed the role played by the global wall of money in driving forward financialization but was not able to provide explanation for why there are different levels of financialization in countries that had

equal possibility of being exposed to the global wall of money (mainly Fernandez and Aalbers 2016).

Based on this deficiency, there is a need to add additional scope conditions (intervening variables) onto this hypothesis, namely that housing market institutions must incentivise owner-occupation through the use of housing finance for financialization to occur. This study does not focus on the independent variable, taking this largely as a given, focusing instead on the intervening variables of national housing market institutions.

Thus, the modified hypothesis that will be tested for this study is:

H1: Financialization only occurs in housing markets when housing market institutions encourage housing finance-led owner-occupation

8.2. Case selection

The period of interest for this thesis is 1970 to 2008. This period has been selected as it enables analysis to document the institutional structure of the housing market prior to financialization in order to trace the role played by these institutions in facilitating or preventing financialization. Following the Global Financial Crisis (GFC) of 2008, many countries recognised the role that housing finance played in creating risk within the financial systems and enacted reforms to limit the spread of this risk. This study is not concerned with the short-term effects that emerged as a result of policy change following the GFC but is interested in long-term structural changes in the housing markets. In order to rule out changes following 2008 being as a result of the GFC and not because of financialization the period after 2008 will be outside of the bounds of this study.

Spatially, the population of cases to be considered by this study is limited to Western Eurozone member states. As is detailed in footnote 10, the unique socio-economic experience of Central and Eastern Europe means the development of housing market institutions are not

comparable across East and West Europe. The role played by capital market integration through European Monetary Union in allowing for cross-border transfers in the Eurozone area means that member-countries should have been equally exposed to any build of capital (Fratzscher 2002). Limiting the selection of cases only to countries within the Eurozone area holds potential exposure to the global wall of capital constant, ensuring that divergence in financialization is not as a result of access to capital on the macro-level.

This study is theory-centred and seeks to modify an existing theory that details how financialization occurs. Based on this, the appropriate case selection method is to focus analysis on deviant cases (Rohlfing 2012). However, as the modification involves the testing of theory that specifies the structural preconditions that facilitate financialization, and has not been subject to a rigorous empirical test before. It is wiser, therefore, to examine either typical or diverse cases (Rohlfing 2012). Figure 2 in the theoretical framework is used to aid with distribution-based case selection.

This study views the need to avoid the possibility that the difference in outcome is due to chance as a priority, and thus selects cases with as large of a difference in the Y-score as possible. In order to ensure that indeterminacy is avoided as much as possible, the cases should have equal scores on all other competing explanations (Rohlfing 2012). In this study, the alternative explanation for variation in degree of financialization is differences in the size of the global wall of money across cases. For this reason, Mill's Method of Difference is selected as the most appropriate case selection method.

To ensure maximum variation on the dependent variable, this study will choose a case that is highly financialized and a case that is barely financialized. This selection method follows the strategy of allowing variance-on-Y design which is necessary to test the determinants of an outcome (Rohlfing 2012). The Netherlands and Germany make excellent comparative cases because they have very similar starting points in their housing markets and economies: both

suffered from significant housing shortages following the Second World War, both are frequently grouped together in terms of welfare state¹⁰, and both economies are export-oriented and are strongly interwoven (Mulder and Wagner 2001). In 1970, the period at which this study begins, both countries had a similar tenure distribution and pursued similar housing policy goals: the provision of high-quality housing for low-income groups and support for the owner-occupied sector (ibid). However, the way they pursued these policy aims differed. There are no other cases that are so diverse in terms of the independent variable and so similar in terms of other dependent variables outside of the dependent variable of interest, housing market institutions.

Furthermore, the impact of the GFC on the Netherlands and Germany was limited in comparison to other countries (Kickert 2012). Therefore, the changes in the housing market can be attributed to a structural shift towards financialization with greater accuracy than in countries that experienced large housing bubbles in 2008.

8.3. Data

This study uses secondary sources to piece together a picture of the housing market in the Netherlands and Germany from 1970 to 2008. In chapter 9, data is also obtained from secondary sources, much of which comes from Statistics Netherlands and the German Federal Statistical Office who were contacted to provide data that was not publicly available.

8.4. Limitations of the study

Like most research, this study faces the limitation of potential indeterminacy. Whilst the causal story is laid out as rigorously and convincingly as possible, there is always the possibility that an unexplored excluded variable is the real cause of differences in levels of financialization. However, this study has taken steps to ensure that the risk of indeterminacy is minimised. It considers the housing market holistically, building up a complete view from

¹⁰ See Bambra 2007:328 for a table specifying the studies that compare welfare states and group the Netherlands and Germany together.

a diverse and extensive list of secondary sources of the housing market over a 40-year time period, thus seeking to ensure that no key variable has been excluded. The use of secondary sources also ensures that the research conducted is based on reliable sources written by scholars who have also had to ensure their work is convincing and accurate.

A further limitation that this study faces is concerns over external validity: national institutions are the independent variables of this study and these do not travel well across cases. The policy instruments that are (partly) responsible for financialization are not present or formulated differently in cases that also see financialization. Mortgage interest deductibility is a key policy instrument responsible for financialization in the Netherlands but yet it was abolished in 2000 in the United Kingdom, despite there also being financialization in the British housing market (Crook and Kemp 2013:184). Whilst this is an unavoidable limitation, it must be noted that the exact policy instruments might differ but the ideas behind the institutions do travel across cases. In the United Kingdom, the explicit promotion of owner-occupation is well-documented (Crook and Kemp 2013; Conley and Gifford 2006). In the Netherlands, mortgage interest deductibility functions as a key policy instrument through which owner-occupation is promoted. Thus, whilst the institution itself might differ, the core idea around which the institution develops is the same. This study seeks to focus on the ideas behind the institutions when analysing the institutions thus allowing for a greater external validity than if the institutions alone were analysed. Future research ought to focus on the broad ideas that determine the degree of financialization rather than testing for the presence of specific policy instruments.

One of the most pressing but again unavoidable limitations of the study pertains to the different measures of financialization employed in chapter 9. The operationalization of financialization through measures of owner-occupancy rates, house prices and mortgage debt-to-disposable income leads to a confusion between the independent and dependent

variables. High house prices are simultaneously a cause of financialization and a measure of financialization, when combined with other variables. This measure also faces the problem of indeterminacy as there could be many different causes of increased house prices and increased mortgage debt-to-disposable income beyond just financialization. However, because there is no index of financialization and the measures are widely used by other researchers, there is no better alternative to these measures. Furthermore, the period of assessment was as long of a period as possible in order to limit indeterminacy through presenting a complete picture of the state of the housing market and its change over time. The subsequent construction of a plausible causal story in the analysis chapter of this study highlights that it really is financialization that is responsible for the different scores on the indicators.

A less pressing final limitation but one worth noting nonetheless is the failure of this study to consider the impact of German unification on the country's housing market. It assumes that the catch-up process in the East German housing market was rapid and had no significant or lasting impact on the development of financialization in the country. This decision was made as this follows the broader trend of comparative case studies that assess the German housing market.

9. Measuring Financialization

This chapter will evaluate the degree of financialization of the housing markets of Germany and Netherlands in terms of the definition of financialization used in this study, namely that financialization entails “*the increasing role of financial actors and financial institutions¹¹, financial motives and financial markets in the operation of the domestic and international economies*” (Epstein 2005:3). It will assess each aspect of the definition and the extent to which this can be said to be true for each housing market, highlighting that the Dutch housing market can be said to be very financialized, whilst the German housing market is only marginally financialized. The change in the Dutch housing market has been stark since 1970s, whilst in Germany change has been minimal. The temporal bounds of this chapter mirror the bounds of the study as a whole and are focused on the period from 1970 to 2008. These comparative statics are necessary as Schwartz and Seabrooke (2008), when compiling their typologies of the different varieties of residential capitalism, grouped the Netherlands and Germany together. This section highlights that the differences are far greater than the similarities between the two countries, making comparison meaningful. They also serve to highlight the way in which financialization has developed in the two countries, allowing critical points in the process to be identified.

9.1. The increasing role of financial institutions

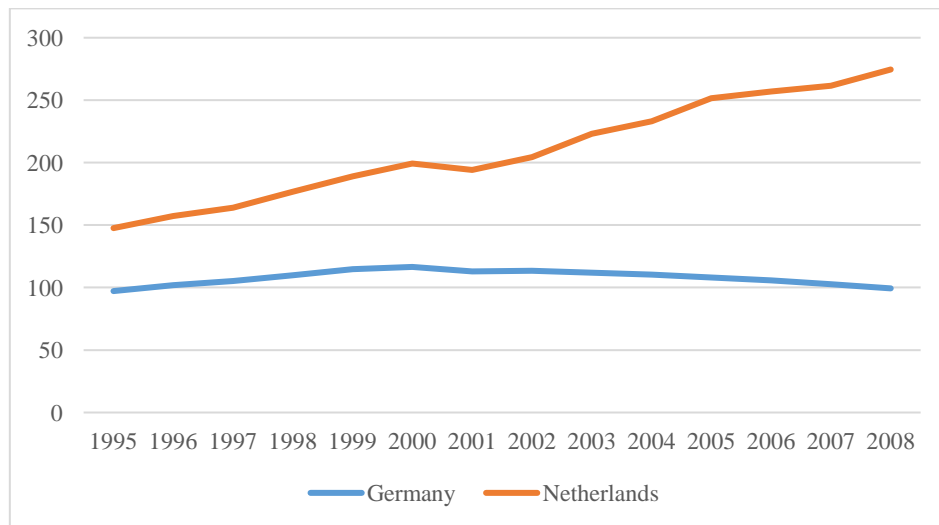
A central part of the definition of financialization is the increase in the importance of financial institutions, such as banks, in the housing market. The depth of the relationship between individuals and financial institutions and this change over time can most clearly be seen in the change in value of mortgages over time. The financialization of the housing market is caused by capital switched into the housing market, not for the purpose of the

¹¹Epstein (2005) makes no meaningful distinction between financial actors and institutions, so for the purpose of parsimony these two elements will be assessed together. Institutions are defined as financial organizations, such as banks.

construction of housing, but for the purpose of generating more capital decoupled from production or manufacturing. Loans for the purchasing of existing houses generate capital for the lender without resulting in the production of anything new.

In order to ensure this switching to the quaternary circuit is being measured, it is necessary to distinguish between mortgage loans to households from mortgage loans to house-building firms. The best way to do this is to look at household loans-to-disposable income, rather than mortgage loans-to-GDP despite this being the more commonly used indicator in the literature. As the biggest loan a household will typically take out is a mortgage loan, measures of household debt are largely composed of mortgage debt. Figure 5 shows the change in household debt as a proportion of net disposable income in Germany and the Netherlands between 1995 and 2008. Whilst debt in Germany has remained stable at around 100% of net disposable income, household debt in the Netherlands has almost doubled in the time period. Dutch households have become highly leveraged throughout the 1990s and 2000s, and the depth of their relationship to financial institutions has increased whilst the depth of the relationship between financial institutions and German households remains unchanged. Based on Figure 5, it is clear that in terms of the depth of the connection between the housing market and financial institutions, the relationship is far stronger and has increased considerably more in the Netherlands than in Germany.

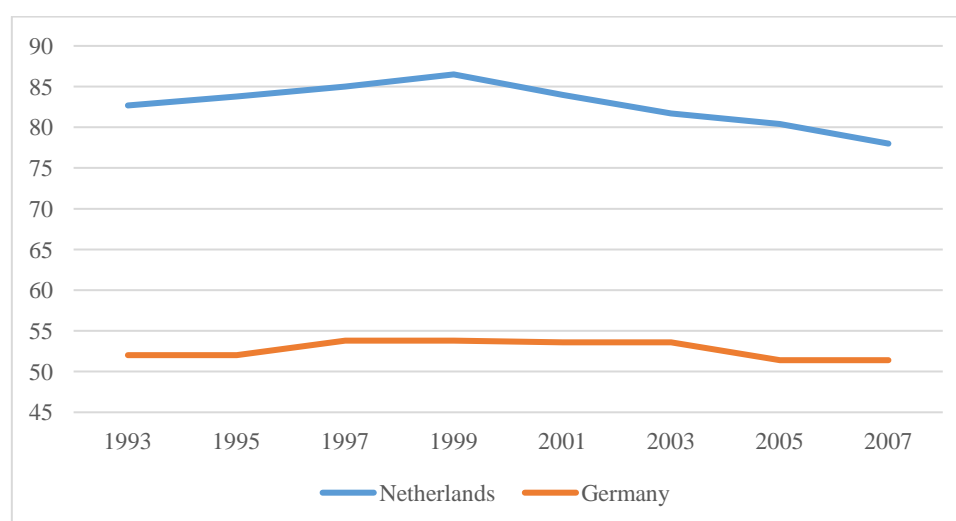
Figure 5: Household debt-to-net disposable income (%) in Germany and the Netherlands, 1995-2008



Source: Federal Statistical Office, Dutch National Housing Demand Survey

However, the connection between financial institutions and households is not just one of depth, but also breadth – i.e. the percentage of households with connections to financial institutions. The most common link between housing, households and financial institutions is through mortgages; financialized housing markets see most owner-occupied households having a mortgage, whereas in non-financialized housing markets owner-occupation without a mortgage is common. In the Netherlands, data about this is extracted from the Netherlands' Housing Survey which is a representative survey conducted on a yearly basis since 1981 whereas in Germany data was provided by the Federal Statistics Office.

Figure 6: Owner-occupiers with mortgages (%) the Netherlands and Germany 1993-2007



Source: Eurostat (2017)

In Germany, the percentage of owner-occupiers with a mortgage since 1993 has remained largely consistent, just over 1 in 2 owner-occupiers had an outstanding obligation to a financial institution across the whole time period, a much smaller figure than seen in Netherlands in the same time period which saw a high of 9/10 owner-occupiers having a mortgage in 1999. It must be noted however that due to data limitations it is not possible to pinpoint when the divergence in the percentage of owners with mortgages occurred between the two countries. Furthermore, there has been a slight downward trend in the number of owner-occupiers with mortgages since 1999 in the Netherlands. Regardless of this, it can clearly be seen that the breadth of the connection to financial actors in the Netherlands is much wider than in Germany. On a micro-level, the connection between households and financial institutions was far stronger in the Netherlands with an average Loan-to-Value (LTV) ratio of 114% compared to Germany's 76% (der Putten 2013:10; Hypostat 2015:45). Not just are more households connected to financial institutions in the Netherlands, these connections are far larger than in Germany. When analysing Figure 5 together with Figure 6, the slight decline in the percentage of households with mortgages since 2000 but the increase

in overall debt levels suggests that households were taking out increasingly large loans in the Netherlands.

9.2. The financialization of actors' motives

The financialization of the housing market in terms of a rise in importance of financial actors is just one aspect of the definition of financialization. Financialization of housing markets also concerns the change in actors' motives when participating in the housing market. In a financialized housing market, housing is an investment good, whereas in a non-financialized housing market, housing is a consumption good. Market participants view housing as a store-of-value or as a way to generate capital. Given that the cause of financialization is a shift away from investing for the purpose of production or manufacturing to the generation of capital through investing in financial products, it is necessary to disconnect investors who purchase housing to rent out from investors purchasing housing for speculative purposes. There is a fundamental difference between an investor buying houses but never living in them before selling them for a profit, providing no service to the wider economy, and an investor buying houses to rent out, thus providing a service.

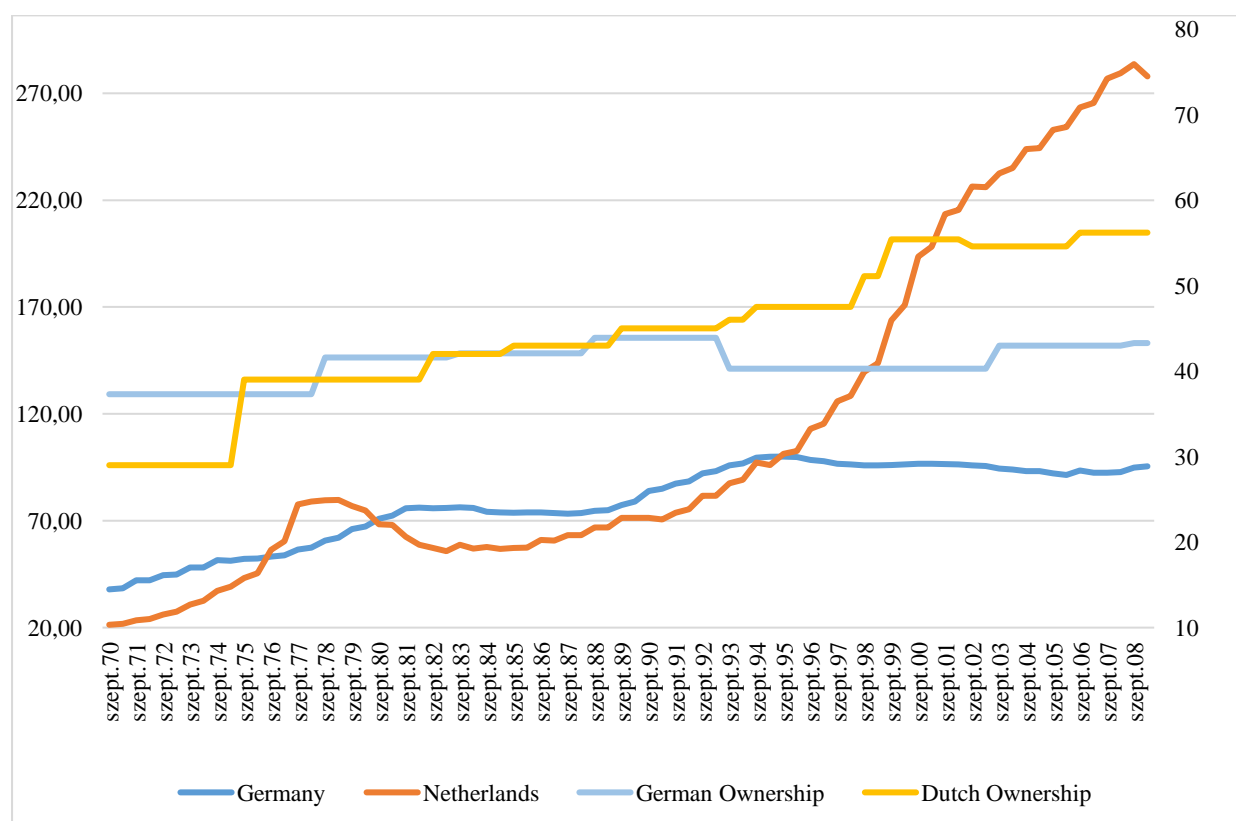
In the Netherlands, housing is treated as an investment good for tax purposes, whereas in Germany it is treated as a consumption good for tax purposes (Toussaint et al. 2007). This shows the fundamental difference in government policy approach towards housing in the two countries, however tells us little about the motives of individual market participants. On a household level, the same approach can be seen. The re-sale market for houses in Germany is limited, with most owner-occupiers buying a house only once in their life (Toussaint et al. 2007). Thus, households do not buy with the view to generate returns on the property through speculation. In the Netherlands, housing is viewed as a ladder that must be climbed with increases in property prices enabling households to build equity and purchase larger, more

expensive houses in the future (Toussaint et al. 2007). Thus, a house is viewed as an investment good that generates income without the need to produce or manufacture.

As the study conducted by Toussaint et al. was carried out in 2007, it is pertinent to see if actors' motives have changed over time since 1970s. Short of a time-machine, the best proxy for this view is the change in home-ownership rates over time. If home-ownership has increased then this is a rough indication that a greater share of the population have come to view housing as an investment good. As Figure 7 below shows, the rates of owner-occupation in the Netherlands have increased steadily and continuously throughout the period from 1971 to 2008. Contrastingly, in Germany rates of owner-occupation have remained relatively static throughout the period. Despite initially starting at a lower rate of owner-occupation than Germany, ownership rates in the Netherlands grew particularly fast between 1973 and 1975, and from the early 1990s onwards, with growth slowing in the early 2000s.

Speculation is accompanied by an increase in prices of the good being speculated on. Again, a very rough imperfect measure of the degree of speculation within the housing market is the changes in property prices over time. Figure 7 traces the property prices in the Netherlands and Germany since 1970. The lack of growth in owner-occupation rates in Germany mirrors the low rate of increase in house prices in Germany since 1970s. House prices rise slightly in the 1990s and this is met with a decrease in the percentage of owner-occupiers, suggesting that potential buyers were deterred because of the increase in price. This stands in stark contrast to the large growth in prices and smaller (but still significant) growth in owner-occupation rates in the Netherlands in the same time period. House price growth was particularly strong in the late 1990s and early 2000s, as Figure 7 shows. Despite this increase in house prices, owner-occupier rates continued to grow, hinting that the motives of buyers shifted towards profit making.

Figure 7: Long-term trends in house prices and home-ownership rates (% housing stock) Germany and the Netherlands (Indexed to 1995)



Source: BIS (2017), Central Bureau of Statistics, Balchin (1996), Federal Statistical Office of Germany

It is difficult to draw concrete conclusions from the above graph with regard to financialization of the housing markets. However, it can be said that the growth in owner-occupation rates in the Netherlands in spite of the large increases in price to buyers could hint that buyers did not just view their purchase of a house as a purchase of a social good, but actually the purchase of an investment asset. Similarly, the lack of increase in home-ownership rates in Germany in the face of a lack of increase in prices suggests that Germans recognise that investing in real estate does not generate sufficient returns to make the additional costs associated with purchasing a property worth it. This mirrors the findings of Toussaint et al. (2007).

9.3. The role of financial motives in rented housing

As noted above, the presence of financial motives in the housing market alone does not indicate the financialization of the housing market, as these motives can still be linked to the production or manufacturing of a good. Whilst this is a form of capital switching, it is not necessarily capital switching to the quaternary circuit, i.e. it does not involve generating capital from investments in the capital market. There are different levels of commodification in the Dutch and German housing markets with commodification becoming a stronger phenomenon in recent years in both housing markets, but commodification is different to financialization as it still involves the provision or production of a good.

Institutional investors in Germany have a long history with investing in the production and provision of private-rented housing which represents a sizable chunk of the German housing stock (Balchin 1994). These investors grew in importance following the abolition of social-rented housing as a separate tenure type in 1989, after which all housing companies became market actors (Housing Europe 2010). Thus there is a full commodification of rented housing in Germany, as all rented housing is provided for profit. However, as these institutional actors are still providing a good, the rental market is not financialized.

In the Netherlands, there is a very small private-rented sector and non-profit housing associations own 75% of the rental stock, meaning the opportunity for profit-driven institutional investors to generate returns through the production or provision of rented accommodation is limited (Elsinga and Wassenberg 2007:1). Investors have looked elsewhere for ways to generate returns from housing. Mortgage lending in the Netherlands is now no longer the remit of just banks or traditional financial institutions (Hale 2016). Pension funds and insurance companies have also begun originating mortgages. Some 20% of all new mortgages are now provided by non-bank institutions (Hale 2016). Thus, the global wall of capital which has partly emerged because of the rise of pension funds is not just playing an

indirect role in bringing about financialization in the Netherlands through providing banks with liquidity but is playing a direct role in linking together households and finance.

9.4. Financial Markets

The link between financial markets and housing is best seen through the way in which mortgage lending is financed. The transformation of mortgages into investment products creates a link between housing and financial markets, but so does banks borrowing on the capital markets to fund mortgage lending. The transformation of mortgages into investment products transforms housing from a spatially confined illiquid good into a liquid product that can be traded across national borders, removed from its geographical location. It enables frictions in the housing market to be lessened, and thus the housing market comes to resemble a typical financial market. Financial markets in Germany have played a limited but stable role in the provision of capital for mortgage lending, whereas recent financial innovations in the Netherlands have increased the role of financial markets in mortgage lending.

Germany has a long history with covered bonds, which played an important role in providing capital for mortgage lending since 17th Century (Carbo-Valverde et al. 2017). Covered bonds retain a close link with the originating banks: the bank ring fences a pool of mortgages and issues a bond which is funded by these mortgages (ibid). If a mortgage in the pool is repaid early or defaults, then the bank replaces this mortgage with a new one and the income the purchaser of the bond receives does not change (ibid). Furthermore, in addition to a claim on the pool of mortgages from which the covered bond is issued, the investor has a general claim on the assets of the bank (ibid). Thus, the link between mortgage, investor and bank is strong. Germany has the largest market for covered bonds in Europe, making up 10% of the European market (Hypostat 2016:56).

Whilst there is a strong and historic link between capital markets and the housing market in Germany, it would be wrong to overstate this relationship. In Germany 75% of mortgage

lending is financed by deposits, in part because of the role played by Bausparkassen in mortgage lending (Konig 2015:3). Bausparkassen operate in a separate closed circuit, removed from wider capital markets. They finance their loans entirely from deposits in their savings accounts and offer interest rates that are disconnected from the wider national interest rates (Hamm 2008). It is also important to remember that mortgage lending in Germany is much lower than in the Netherlands and, as Figure 5 shows, has remained relatively stable over time.

The housing market in the Netherlands has a far stronger connection to capital markets and one that has strengthened over recent years due to the introduction of mortgage-backed securities in 1996 (Aalbers et al. 2011). These differ from covered bonds because they break down the link between the mortgage originating institution (i.e. the bank) and the mortgage borrower, as the mortgage (and its associated risk) is sold to a Special Purpose Vehicle (SPV) which then packages up mortgages and sells them as a bond, using the money earned from the bond to pay for the mortgages it has purchased and the revenue from the mortgages to pay investors (Carbo-Valverde et al. 2017). This transfer from bank to SPV means the purchaser of the bond takes on the risk of mortgage default and the mortgage is taken off the books of the lender (ibid). This frees up further capital for the lender to lend to other borrowers, thus generating more profit than would be possible if the mortgages remained on the balance sheets of the lender. Securitization in the Dutch housing market was thus a way for banks to overcome the capital reserve requirements that were imposed on banks as part of the Basel 1 and 2 banking regulations (Aalbers et al. 2011). The securities market in the Netherlands is now the second largest in Europe after the United Kingdom (Aalbers et al. 2011:1783). Covered bonds, on the other hand, play a negligible role in the housing finance system in the Netherlands (Konig 2015).

Whilst mortgage-backed securities are important in the Dutch housing market, most mortgage are still funded by savings deposits. Deposits fund 70% of mortgages, which is only fractionally lower than in Germany in relative terms but significantly lower in absolute terms, given the larger absolute size of the Dutch mortgage market (Konig 2015:3). Financial markets play a more important role in the Dutch housing market than in the German housing market, and this role has increased with the rise of securitization since 1996.

9.5. Conclusion

It is important to understand that the statistics above do not operate in isolation. They combine to give a full picture of the housing market in the Netherlands and Germany. In Germany, fewer people own houses and the owner-occupier rate has remained relatively stable since 1970s, thus the macro-level mortgage debt has remained stable and much lower than in the Netherlands. House prices have also remained stable. However, the low mortgage debt on the macro-level also reflects a low mortgage-debt on the micro level: individual households have an average LTV ratio that is much lower than in the Netherlands and so, their connections to financial institutions have remained stable and comparatively low since 1970s. Institutional investors remain connected to the provision and production of housing rather than the provision of housing finance.

In the Netherlands, the opposite is true. There has been a considerable increase over time in house prices, mortgage debt on the macro- and micro-level and owner-occupier rates. More households have deeper connections to financial institutions and markets than ever before. Additionally, financial motives are far more dominant in the housing market of the Netherlands than in Germany, the clearest evidence of which is the different classification of housing for tax purposes in both countries: as an investment good in the Netherlands and as a consumption good in Germany.

The differences between the Dutch and German housing markets were relatively minor until the early 1990s when their paths diverged significantly, and the Netherlands became highly financialized and Germany did not. This chapter has shown that there are clear differences between the two countries worthy of further exploration. The different market outcomes are now clear but the reasons why there are such different market outcomes are far from clear. The next chapter will focus on understanding why these different market outcomes can be seen in the Netherlands and Germany.

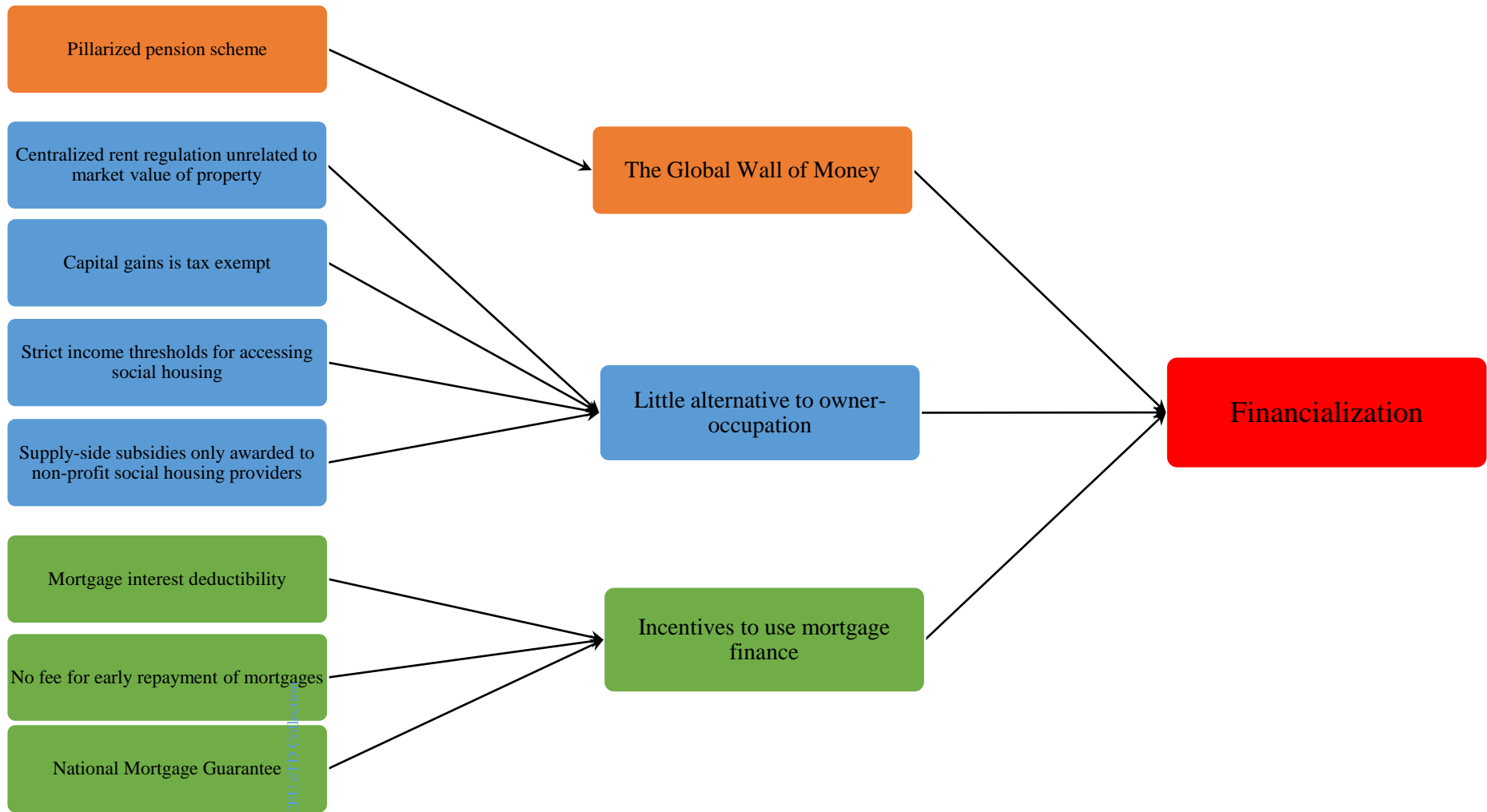
10. Determinants of Variation in Financialization

An assessment of the structure of the housing market prior to the rise of the global wall of capital reveals that there were certain institutions in the Netherlands and Germany that determined whether or not the housing market would become financialized. Figures 8 and 9 (below) specify the causal process through which certain policy instruments combine to determine the broad shape of the housing market. This in turn determines where the incentives lay for investors in the housing market, and thus whether capital is invested in the production and provision of housing or in the quaternary circuit, i.e. housing finance sector. As the Measuring Financialization section of this thesis has shown, both the Netherlands and Germany have (relatively) even exposure to the global wall of money, but see very different outcomes in terms of financialization of the housing market. Thus, the global wall of money in and of itself does not produce financialization. The institutional features of a housing market – notably the presence or not of owner-occupation as the main tenure type and the functioning of mortgage markets – determine where financialization occurs.

10.1. Summary of figures

In the Netherlands, housing policy combines to present a clear incentive for households to take out housing finance. This is reinforced by there being little alternative for many middle to high income households for any tenure type other than owner-occupation. Figure 8 shows the process through which specific policy instruments dictate the shape of the housing market, combining to cause financialization. The two variables of ‘little alternative to owner-occupation’ and ‘incentives to use housing finance’ are the additional scope conditions discussed in the theoretical framework chapter of this thesis that need to be added to the ‘global wall of money’ in order to account for the high level of financialization in the Netherlands. These two variables create an incentive structure that makes housing finance a more attractive investment than the provision of housing.

Figure 8: The chain of causality facilitating financialization in the Netherlands

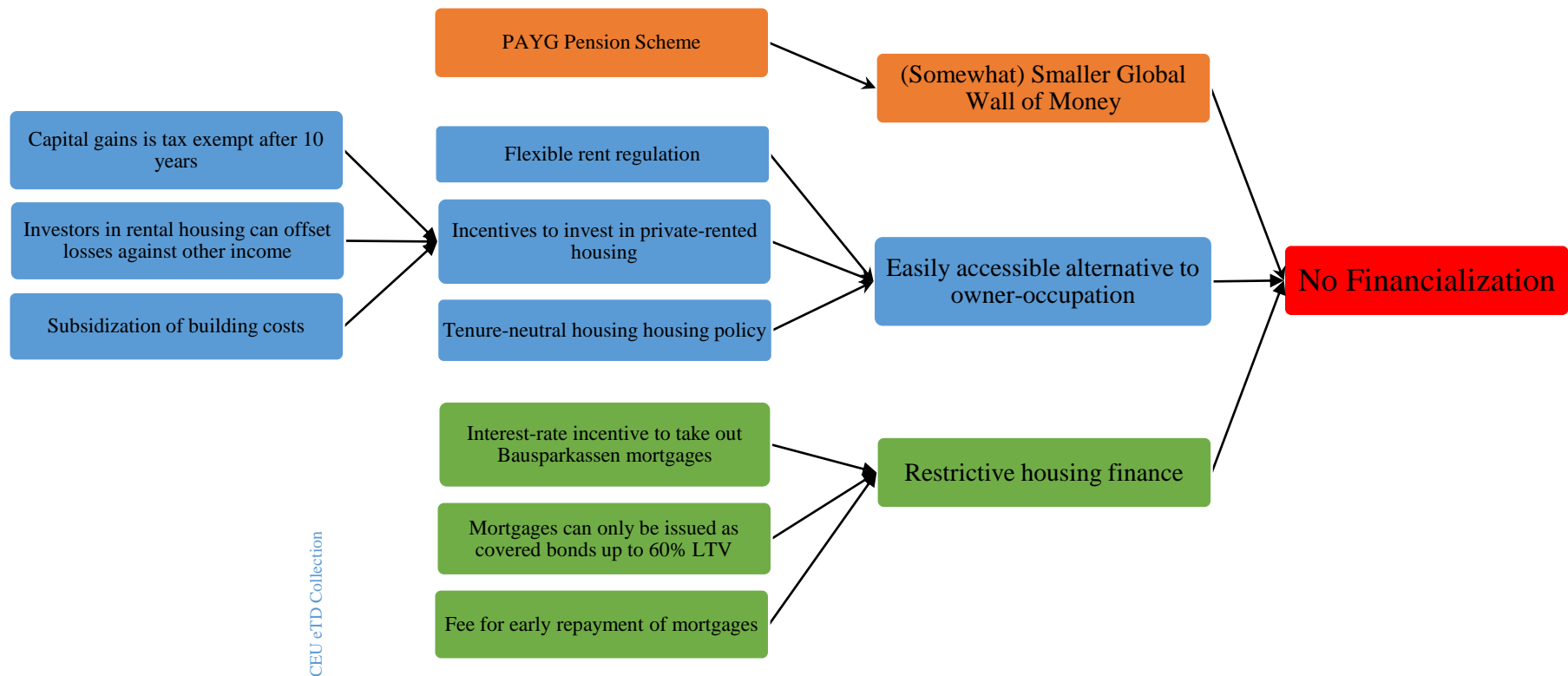


In Germany, housing finance is difficult to obtain but there is an easily accessible and high quality alternative to owner-occupation in the form of the private-rental sector. As Figure 9 below details, these two variables combine to provide the scope conditions that prevent financialization from occurring in the German housing market. By its very nature as a global variable, the global wall of money ought to affect the housing market to the same extent as in the Netherlands. However, the scope conditions of ‘easily accessible alternative to owner-occupation’ and ‘restrictive housing finance’ create different investment opportunities in the German housing market and capital is not channelled into housing finance but rather into the provision of housing. There is a smaller build-up in domestic capital in Germany as it had until recently a Pay-As-You-Go pension scheme, but as this section will go on to explain this does not sufficiently account for the variation in financialization.

It is possible to be sure of the direction of causality because these institutions have been in existence since long before financialization occurred, providing the structural pre-conditions for financialization. Linking these institutional areas shown in the figures above and below to the institutional filters specified by Fernandez and Aalbers (2016), the global wall of money represents the financial sector, the (little) alternative to owner-occupation is composed of welfare state institutions¹² and the accessibility of housing finance corresponds to the housing finance sector. This chapter gives detail of the specific way in which the institutions detailed in Figures 8 and 9 connect to financialization, beginning with an examination of the institutions that make up the housing finance sector before moving onto the institutions that determine the attractiveness of owner-occupation. It will finish by examining how these two institutional areas combine to facilitate or prevent financialization.

¹² As discussed in the literature review, there is dispute about whether housing actually forms a part of the welfare state. For the purpose of this study, housing is considered to be a part of the welfare state.

Figure 9: The chain of causality preventing financialization in Germany



10.2. Housing finance

10.2.1. Mortgage interest deductibility

There is a strong hidden subsidization of owner-occupation in the Netherlands in the form of mortgage interest deductibility that is absent in Germany. Mortgage interest deductibility allows borrowers to deduct a maximum of 52% of the interest paid on a mortgage from income tax for a period of 30 years (Rouwendal 2007:370). The regulation concerning the taxation of housing in the Netherlands has remained stable since 1970 but the impact of these tax deductions changed considerably between then and 2008. Whilst figures for the foregone tax due to mortgage interest deductibility are not available from 1970, in 1995 the foregone tax stood at 6bn euros but by 2008 this figure had doubled (Rouwendal 2007:371). The institution remains unchanged since the beginning of 20th century, but changes in the exogenous conditions have altered the impact of the institution.

Whilst the tax-incentive for owner-occupation funded with a mortgage had long existed, it was only with the rise of the global wall of money and its channelling into the housing finance market that the impact of mortgage interest deductibility changed so rapidly. In 1990s, spurred on by the need to be competitive and witnessing increased demand for more affordable mortgages from consumers in the face of increasing house prices¹³ and rents, banks offered innovative mortgage products that maximised the mortgage interest deductibility tax break, and minimised monthly repayments (Boelhouver 2002). Mortgage interest deductibility encourages households to take out mortgages because the costs associated with borrowing are much diminished. Imputed rent tax¹⁴, despite being set at just 0.6% of the estimated (and below market) rent of the property, did lead to some households having a negative net tax benefit from owner-occupation if they did not have a mortgage (or

¹³ House prices increased initially due to strong economic performance in the early 1990s (Boelhouver 2002).

¹⁴ Imputed rent tax is a tax designed to recoup the losses from income tax that come from people owning their own homes rather than renting and that income landlords receive from rent being taxed.

had only a small mortgage) on their property (Rouwendal 2007:340). Thus, there was a tax incentive to always have a mortgage on an owner-occupied property. As can be seen in Figure 6, approximately 90% of all Dutch owner-occupiers have a mortgage on their property. In Germany, where such tax policies do not exist, there is no particular benefit associated with having a mortgage, and only half of all owner-occupiers have mortgages. The different treatments of owner-occupation and income-related benefits associated with mortgages within the housing market translate into meaningful differences in the use of housing finance, which in turn determine the linkage between housing and financial markets and institutions.

10.2.2. Loan-To-Value ratios

In addition to the different tax treatments of home-ownership in the Netherlands and Germany, there is also different housing finance opportunities in the two countries, which in turn affect the level of financialization in the housing markets. In Germany, only loans with a LTV ratio of 60% or less can be issued as covered bonds, and any borrowing required above this LTV ratio is only possible at considerably higher repayment rates (Tomann 1994:58). This limit has created a two-tiered lending system, whereby the first part of the mortgage up to 60% LTV is borrowed from a mortgage bank whilst the second part is borrowed through Bausparkassen (savings banks) (Hamm 2008). Bausparkassen loans are lent according to a savings contract in which borrowers must save a certain pre-agreed amount prior to the loan being issued. The loan is then made at a favourable interest-rate and funded solely through deposits, completely removed from the wider capital markets (Hackethal et al. 2006). This structure of mortgage borrowing has been in place since the Second World War (Ball et al. 1988). The connection between the borrower and wider financial markets is therefore small, and so is the size of the financial obligation a borrower can take on. This in turn prevents the financialization of the housing market as it caps how much profit a financial institution can

generate from housing, thus limiting the attractiveness of housing finance as an investment opportunity.

In contrast, the Dutch housing finance sector is formulated in a very different way. As noted above, high LTV ratios are only possible in Germany at much higher interest rates, and the institutions are structured to incentivise households to save a large deposit in order to finance owner-occupation. Compared to an average LTV ratio in Germany of 76% (Hypostat 2015:45), in the Netherlands, the average LTV ratio in 2007 was 114%, covering the entire cost of the property and the additional costs associated with buying a house (der Putten 2013:10). As will be discussed below, through the Municipal Mortgage Guarantee and its successor the National Mortgage Guarantee (NMG), loan-to-value ratios of 100% had been possible in the Netherlands since 1973 (Boelhouwer 2002:170). Thus, owner-occupation is less accessible in Germany than the Netherlands because of the more restrictive housing finance sector, in turn meaning that financialization is lower in Germany than the Netherlands.

10.2.3. National Mortgage Guarantee

Such high LTV ratios have become so common in the Netherlands also because of the National Mortgage Guarantee. This was first introduced in Netherlands as the Municipal Mortgage Guarantee in 1973, covering both existing and new dwellings, but was privatized and reformulated in 1995 (Boelhouwer 2002:170). It enables lenders to off-load the risk of default onto the NMG Fund, backed up by the Government, and thus to grant mortgages with a LTV ratio of over 100% (Boelhouwer 2002). After 1995, households could buy a NMG for their mortgage for 0.4% of the loan's value and by 2008 almost all new purchases were made with a NMG loan (Ronald and Dol 2011:100).

Lenders are not required to put equity towards NMG mortgages, whereas with non-NMG loans they are required to retain 50-100% of the value of the mortgage on their books

(Aalbers 2005:106). This enables them to lend to more borrowers, whilst also enabling households to become home-owners without having to save for a deposit. This opens up owner-occupation as a tenure choice to households much earlier than would otherwise have been possible and thus there is no need for households to live in rental accommodation whilst they save for a deposit as is the case in Germany. This also has the effect of increasing both the volume and number of mortgages in the Dutch housing market, thus increasing the role of financial institutions in the housing market, a key feature of the definition of financialization.

In addition, the National Mortgage Guarantee makes investment in housing finance very attractive: because the NMG removes any risks associated with mortgage lending, lenders can be sure that they will recoup the full value of the mortgage. Thus, as the global wall of capital emerged, channelling it into investment in the quaternary circuit was a sensible choice on the part of investors; it ensured low risk returns, far more so than investing in the production of rental housing as demand for *rental* housing was minimised through the possibility to borrow the full cost of *purchasing* a house.

10.2.4. Equity withdrawal

Financialization is also encouraged by housing equity withdrawal. Housing equity withdrawal is the act of borrowing against the value of one's property, essentially adding a mortgage to a (mortgaged) house. Equity withdrawal allows housing to be treated as a liquid asset that owners can draw on to fund consumption. Capital is produced through equity withdrawal without any good being manufactured or produced. In the Netherlands, due to rapidly increasing house prices, a number of households built up substantial equity reserves in their house in the late 1990s to early 2000s without any investment or productive activity. Equity release products were very popular in this time period and the money released was

used to finance home improvements and consumer consumption¹⁵ (Doling and Ford 2007). Housing in the Netherlands, therefore, became a (relatively) liquid asset, similar to a savings account, from which capital could be withdrawn as and when the owners so desired. This represents a break-down in the traditional view of housing as a social good and a move to the view of housing as an investment product on the part of households. This results in the subsequent financialization of daily life through the incorporation of more households into financial markets through this financial innovation.

In contrast, in Germany, equity withdrawal products do exist, but their use is far from widespread. The question of why the popularity of these products has remained limited in Germany has not been dealt with, but it is likely that the stable house prices mean that German households do not view housing equity in the same way as Dutch households. House prices in Germany are stable because access to the market is limited by the need for a large deposit, meaning demand is less affected by fluctuations in the economy. Thus, owner-occupation has not enriched German households in the same way that it has Dutch households owning homes and there is less demand for products that allow households to access this wealth without having to sell their house.

In summary, this section has explained how differently housing finance is structured in Germany and the Netherlands, and the incentives to access owner-occupation through housing finance are also very different across the two countries. In the Netherlands, owner-occupiers receive considerable state support, particularly compared to renters, whereas this support is absent in Germany. Added to this are a host of financial instruments which further

¹⁵ The literature commonly posits a negative correlation between welfare spending and equity release products, which feeds into Kemeny (2005) and Castle's (1998) wider argument that there is a negative correlation between home-ownership levels and welfare spending. Equity release products are typically viewed to be used by the elderly to fund retirement and care in their old age, this has been termed "*asset-based welfare*" (Doling and Ford 2010:166). The Netherlands here once again presents itself as an interesting outlier as equity release is not used to fund welfare spending, or to support children in their home-ownership goals, but used for consumption purposes.

push Dutch, but not German households to treat their homes as assets rather than as social goods. The next section will explore the way that the institutions of the welfare state further strengthen the magnitude of financialization or, as is the case of Germany, less so.

10.3. Alternatives to Owner-Occupation

Even if housing finance is easily accessible and offers mortgages of high LTV ratios, demand for these products would be lessened if there was an easily accessible and high-quality alternative to owner-occupation. In other words, if owner occupation were attractive to a smaller share of all households, the level of financialization would be (much) lower. Germany is the case in point. One must therefore understand why owner-occupation is the most popular form of tenure in financialized housing markets.

A primary driver of the move to owner-occupation is the desire for more living space, which is thought to only be possible in owner-occupied housing. In some housing markets this is true, but in countries such as Germany, the quality in the rental and owner-occupied market is the same and the demand for owner-occupied housing is minimised as a result (Clark et al. 1997). Thus, the combination of a restrictive housing finance system and a high-quality rental sector discourages market participants from becoming home-owners and minimises demand for greater mortgage market innovation among consumers. This section explores why there is a viable alternative to owner-occupation in Germany but not in the Netherlands.

10.3.1. Social housing

Both countries faced a housing shortage in the period following the Second World War, and they both used social housing as a way to alleviate this. By 1960s both had overcome the housing shortage (Crook and Kemp 2014; Harloe and Martens 1985). However, the approach to state subsidised social housing differed, which had lasting consequences for domestic housing markets.

In Germany since 1965, the Federal Government was tenure-neutral in its approach to housing support: households receive cash transfers to support their housing expenditures, regardless of tenure type (Crook and Kemp 2014). Social-rented housing as a separate tenure to private-rented housing ceased to exist in 1989 when the non-profit tax status of landlords was abolished (Priemus and Maclennan 1998). Social housing is a term applied to any housing in receipt of supply-side subsidies (*ibid*). Subsidies for housing construction have never been tenure-specific, nor did subsidies specifically apply to institutional investors. Subsidies for the construction of housing were proportional to reported building costs, which encouraged households also to build their own homes (Ball et al. 1988). Anyone could qualify for government subsidies or tax deductions if they wished to invest in housing, provided they accepted tenants recommended by the local municipality (Cornelius and Ryznik 2014). After 30 years, when the Government loan had been repaid and the subsidy had expired, landlords could charge market rents. Bricks and mortar subsidies were cut from 1960s, so by 2008 most rented properties in receipt of government subsidies had transitioned into private-rented properties. Thus, in Germany, there was a long-term transfer of social housing into the private-rented sector.

In the Netherlands, the flow was in the opposite direction. Here, subsidies focused on large-scale investors building social housing, and the long-term incentive for private landlords to hold onto social-rented properties was absent (Boelhouwer et al. 1994). The stock of private-rented housing was in poor condition in the immediate post-war period and this sector housed low-income households who were not allocated a property in the higher quality social-rented sector, however as the social-rented sector expanded many private tenants were able to move into this sector (Oxley and Smith 1995). Private landlords could not compete with the quality of dwellings in the social-rented sector, nor the rent levels they were offered at, particularly after 1975 when supply-side subsidies to the private-rented sector were cut (*ibid*). This cut in

subsidies in 1975 also coincided with an extension of rent-setting to the private-rented sector which calculated rents and subsidies over a 50-year period and set rent at a very low rate (Oxley and Smith 1996:149). Thus, the returns from investing in private-rented housing were low and construction all but halted in this sector from 1975 onwards (Oxley and Smith 1996). It also affected current landlords who suffered both low demand for their poor quality private-rented housing, and no financial incentive to upgrade the quality of their properties. During this time period, many private-landlords sold their properties to housing associations or the owner-occupied sector (Boelhouwer et al. 1994).

This depleted the private rented stock, which historically had been owned more by individual landlords than institutional investors (Government of Netherlands 2016). Thus, rather than there being a transfer of housing from the social- to private-rented sector as in Germany, there was a transfer of housing from the private- to the social-rented sector. This forced middle- to high-income households to become owner-occupiers as there are restrictions on who can enter the social housing sector in the Netherlands. Housing associations, who own 75% of the rental stock, must let 80% of housing to low-income groups, 10% to lower-middle income groups and can only let up to 10% to higher income groups (Government of the Netherlands 2016).

In 1996, subsidies for social housing were cut and many social-housing associations began to sell off some houses to fund maintenance and construction, thus there was a (slight) decrease in the overall size of the social-rented sector (van Kempen and Priemus 2002). This occurred at the same time as rents in the social-rented sector were increased, up to 70-80% of the maximum rent chargeable (Boelhouwer et al. 1997:517). Thus, social-rented housing has become more expensive and scarcer, which encouraged many middle-income households to move from social-housing to owner-occupation, particularly as the private-rented sector is so small and poor-quality (van Kempen and Priemus 2002).

10.3.2. Rent regulation

The lack of incentive to invest in the provision of housing in the Netherlands is further compounded by the heavily-centralized regulation of rent. Rent regulation applies to new contracts and existing ones. Only 6.5% of the rental market is unregulated (de Boer and Bitetti 2014:18). Market value of a property is not taken into account when setting rents, instead only objective qualities are considered, which disregards key factors that typically affect rent price such as location. Properties surpassing a certain quality threshold are not regulated (Kadi 2011). Thus, the private-rented sector is largely composed of extremely high-quality and very expensive units, as it is only high-quality units that are not subject to rent regulation. This heavy rent regulation combined with the lack of financial support for private landlords and the tax incentives to become a homeowner have both depleted supply and demand for private-rented housing, while promoting owner-occupation as the most desirable tenure for households across the income spectrum.

In Germany, rent regulation also exists, but it is much more flexible, treading a delicate balance between allowing landlords to profit whilst also protecting tenants. Rent cannot be increased by more than 20% in three years, and must be set according to the local Mietspiegel (reference rent database) or three similar properties in the area (Haffner et al. 2008:227). By tying rent increases to similar properties locally through the Mietspiegel (database of local rents), landlords charge market rates whilst also being incentivized to improve the quality of their properties in order to be able to increase their prices and stay competitive. This means that the quality of housing in the rental and owner-occupied sectors does not vary (Kemp and Kofner 2010). Households looking for accommodation do not have to compromise on housing quality if they choose to rent accommodation rather than buy. Combined with the tenure-blind housing allowance for low-income households, this means that households across the income spectrum remain tenure-neutral.

10.3.3. Capital gains

In addition to the flexible rent regulation in place in Germany, the private-rented sector receives investment because of the way that capital gains are treated by the tax system. Capital gains were tax exempt if the owner had owned the property for more than three years, but in 2000 it was deemed that this did not go far enough in discouraging speculative investment in housing and so it was decided that this would be changed to ten years (Reisenbichler 2016:285; Borsch-Supan 2003:86). In the Netherlands, such a 'stick' to force investors to hold on to properties for a long period does not exist. Capital gains are completely tax-exempt (Boelhouwer et al. 2004). There is no disincentive to refrain from speculative investment in property.

10.3.4. Private-rental subsidies

It is also possible in Germany for investors in rental housing to offset any losses from their investment against other income for tax purposes (Tomann 1994). Thus, the sunk costs from investing in rental property are minimised and investors can see profit from relatively early on. This is an amended version of previous subsidy for investment in rental housing which allowed 10% of the total cost of the construction of a new dwelling to be deducted from taxable income for the first two years, then 3% for the next ten years (Crook and Kemp 2014:30). These subsidies are available to all, but naturally benefit large-scale investors the most. They overcome a major obstacle to investment in rental housing, in that such investment requires an initial large outlay but generates small returns over a long period, thus taking a longer time for investors to break even compared to investing in owner-occupied housing. No such fiscal incentives exist to encourage investment in rental housing in the Netherlands.

In Germany, this alternative to owner-occupation is attractive for households, but crucially also for investors. The state encourages investors to channel capital into the built

environment, through investment in private-rented housing. The institutions that encourage this investment have been in existence in varying forms since before the rise of the global wall of capital in 1980s. Through the flexible nature of rent regulation in Germany, there is also a mutual satisfaction with the functioning of rental housing between landlords and tenants. In the Netherlands, there is no particular incentive for investors to invest in private-rented housing, and in fact there is a disincentive in the form of rent regulation. This, combined with the favourable treatment of owner-occupation and the encouragement of the use of housing finance created an institutional framework that encouraged the global wall of capital to channel investment into the quaternary circuit.

10.4. Pension scheme differences

One of the key actors feeding into the global wall of money are pension funds, however there are different numbers of pension funds operating in the Netherlands and Germany. Germany shifted away from a Pay-As-You-Go (PAYG) pension system towards a pillarized pension system in 2002¹⁶ with the Riester-Reform, but the reform has been slow and uptake limited (Stiefermann 2004). The Netherlands moved to a pillarized pension system in the 1980s, with a significant proportion funded through pension funds (Haverland 2011).

The German state pension remains sufficient for households to continue with the standard of living that they enjoyed during their working life, and the state pension is the main source of income for most when they reach retirement age (Jones *et al.* 2012). However, there are concerns among Germans about the aging demographic and the pressure this places on the pension system, which has encouraged some to make alternative plans for retirement. Rather than using equity withdrawal products as a way to finance retirement, many Germans view investments in the rental property market as a better approach because of the guaranteed

¹⁶ For a description of the difference between Pay-As-You-Go pension schemes and pillarized pension schemes see the literature review.

monthly income that such investments bring, alongside the various state subsidies offered for such investments (Jones *et al.* 2012).

The newness of the pillarized pension system in Germany means there is not the same wall of money as is present in the Netherlands. The Netherlands was an early adopter of the funded model of pensions, with 55% of the pension system funded at a time when the rest of Europe only had around 10-20% funded (Haverland 2011:309). However, the pension funds in the Netherlands have had twenty more years to build up capital for investment. Investments by these pension funds in mortgages are common, whereas in Germany institutional investors prefer to invest in the rental market (Wijburg and Aalbers 2017). By the early 2000s, Dutch pension funds and insurance companies had a market share of 15% of the mortgage market and were significant investors in mortgage-backed securities (Bijlsma *et al.* 2016:3).

The different investment strategies of institutional investors in housing in both countries highlights that these investors do not cause financialization in the housing market. The wider institutional framework of the housing market dictates where the opportunities for investment lie. In Germany, the strong rental market and stagnant house prices make investments in the mortgage market unattractive for institutional investors, whereas in the Netherlands, the subsidization of owner-occupation through the tax regime and the National Mortgage Guarantee scheme makes investment in housing finance comparatively more attractive.

As the term ‘global wall of money’ implies, capital accumulated through pension funds is not necessarily invested in the domestic housing market. In fact, since 1992, domestic investments by Dutch pension funds have fallen considerably (Rubbiani *et al.* 2013): 80% of Dutch pension fund investments were abroad in 2014, whereas only 20% of German pension fund investments were overseas (PwC 2016:8). Thus, whilst there are different sized walls of money in the Netherlands and Germany in terms of pension funds, this is not sufficient to

account for different levels of financialization. This provides clear evidence for the need to shift importance within the theory of financialization posited by Fernandez and Aalbers (2016) away from an overt focus on the global wall of money towards an equal emphasis on the different national institutional settings and the wall of money.

10.5. Conclusion

As this chapter has detailed, the two additional variables that must be added to the causal story of financialization alongside the ‘global wall of money’ are ‘alternatives to owner-occupation’ and ‘housing finance’. In both Germany and the Netherlands, the institutional structure of the housing market remained (relatively) unchanged since prior to the build-up of the global wall of money. However, notable changes such as the privatization of the National Mortgage Guarantee and the cutting of subsidies to the social-rented sector in the Netherlands pushed the housing market further down the path of financialization. The two variables of ‘alternative to owner-occupation’ and ‘housing finance’ created the structural pre-conditions that determined which housing market would become financialized as they created an incentive structure in Germany that encouraged investment in the provision of private-rented housing but the provision of mortgage finance in the Netherlands. The rise of the global wall of money was the trigger cause of financialization in the Netherlands, where it met a porous housing market, whereas in Germany, the institutional set-up of the market meant that the wall of money met an unyielding market.,

11. Conclusion

This thesis began with a question: why are there different degrees of financialization in housing markets with broadly similar exposure to the global wall of money? This question emerged in response to a lack of systematic focus by the existing financialization literature on the back story behind national differences in degrees of financialization. This study has shown that cross-case differences are not inevitable and it has sought to account for how these differences emerged over time.

Using comparative case study analysis focusing on the Most Similar cases with large variance on the Y-variable (financialization), it has shown the degree of financialization in a housing market is a product of the institutional structure of the housing market prior to exposure to the global wall of money. It has shown that there are two specific intervening variables that determine the degree of financialization in a housing market - alternatives to owner-occupation; access to housing finance - and studied the interaction between these variables and the global wall of money in the Netherlands and Germany, and the outcomes these interactions produced.

This thesis has demonstrated that the housing market in the Netherlands became financialized because households were pushed into owner-occupation, aided in this by access to large mortgages backed up by a Government Guarantee. Even households that did not need a mortgage were incentivised to take out housing finance because mortgage interest is income tax-deductible. Preference for owner-occupation was driven by the lack of alternative tenure options: social-rented housing crowded out private-rented housing as government subsidies focused on building up the social-rented sector, and rent regulation stifled investment in the private-rented sector. When prices in the social-rented sector rose in the 1990s, many middle-

income households found they could become home-owners for the same cost as their monthly rent.

In Germany, the housing market remained free from financialization. Housing finance is hard to access without a down-payment of around 30-40% of the value of the property, and there are no state subsidies solely for owner-occupation. Owner-occupation is only accessible for very high-income households or older households who have saved for a number of years. But there is little demand for a less restrictive housing finance regime because private-rented housing is high quality and affordable, aided by flexible rent regulation and tenure-neutral supply- and demand-side subsidies.

The structural framework of the housing market prior to the rise of the global wall of money dictated where in the two countries the investment opportunities lay. In the Netherlands, the global wall of money was switched into the housing finance sector, particularly into mortgage-backed securities when they were introduced in 1996, precisely because the private-rented market was so unattractive for investors, and mortgage finance was in high demand and carried low risks. As a result, the generation of profits became decoupled from the provision of housing. In Germany, despite permitting mortgage-backed securities, investment in these products has been minimal, with more investment in the provision of private-rented housing. Thus, in the Netherlands capital was switched from the manufacturing sector into the quaternary circuit but into the secondary circuit in Germany.

A recent United Nations report on financialization in the housing market has hinted that developing countries are starting to experience financialization, and the consequences are much more severe there than in developed countries because of less developed systems of property rights and rule of law (Fahra 2017). Given that studies of financialization in housing markets have largely been limited to developed countries, it is necessary to extend this

research beyond such a narrow constellation of cases to understand whether the factors that determine the degree of financialization in the housing markets of developing countries are the same as in developed countries. Further research should focus on testing this modified theory on a larger number of cases in order to ascertain the extent to which this theory applies beyond Eurozone member states.

The shift towards generating profits through investments connected to housing without leading to the *production* of housing might deliver short-term economic gains through rising house prices and easier access to owner-occupation. In the long-run, however, financialization creates instability by over-leveraging households, often putting them in situations of negative equity and making them vulnerable to house price fluctuations, and expands the divide between market-insiders and outsiders. The cycle of housing booms and busts is not inevitable, as Germany's example has shown. Through prudent government policy-making and the creation of alternatives to owner-occupation, housing markets can avoid loading market participants with debt and can produce a compromise that is satisfactory to all.

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