Financialisation and the Politics of Growth in Denmark and Ireland

Patrick John Gallagher

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National University of Ireland Maynooth

Department of Sociology

Supervisor: Professor Séan Ó Riain

Second Reader: Professor Mary P. Corcoran

Head of Department: Professor Séan Ó Riain

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List of Abbreviations

ACC: Agricultural Credit Corporation

AIB: Allied Irish Bank

ARM: Adjustable Rate Mortgage

BIS: Bank of International Settlements

BTL: Buy to Let

CEE: Central and Eastern Europe

CEO: Chief Executive Officer

DK: Denmark

EBS: Educational Building Society

ECB: European Central Bank

EEC: European Economic Community

EMU: Economic and Monetary Union

ESB: Electricity Supply Board

EU: European Union

FDI: Foreign Direct Investment

FED: Federal Reserve Bank

FTB: First Time Buyer

GDP: Gross Domestic Product

GFC: Global Financial Crisis

GFCF: Gross Fixed Capital Formation

GNP: Gross National Product

HQC: High Quality Collateral

IFSC: Irish Financial Services Centre

IL&P: Irish Life and Permanent

IMF: International Monetary Fund

INBS: Irish National Building Society

IO: Interest Only Mortgage Loans

IPE: International Political Economy

IRL: Ireland

LTV: Loan to Value (Ratio)

MFI: Monetary Financial Institution

MNC: Multi-National Corporation

NAMA: National Asset Management Agency

NEL: Net External Liability

NFC: Non-Financial Corporation

NIB: National Irish Bank

NPL: Non Performing Loan

OECD: Organization for Economic Co-operation and Development

PDH: Private Dwelling Home

PSC: Private Sector Credit

RBS: Royal Bank of Scotland

SIFI: Systemically Important Financial Institutions

SME: Small and Medium Enterprise

SSB: Second-Time and Subsequent Buyers

UK: United Kingdom

Chapter 1

Introduction

The concept of financialisation was developed to describe a general trend in which finance and financial considerations have become increasingly critical to the functioning of the real economy and over time have altered the functioning of democratic society (Davis and Kim, 2015). It has arguably been the most critical development in global capitalism in the last 50 years. Since the oil crisis of 1978, the developed nations have turned to finance as a solution to the faltering production and stagflation which characterised the end of the Fordist era of production and signalled the demise of traditional Keynesian macroeconomic policy (Baccaro and Pontusson, 2016). By turning to financial markets, governments have avoided politically awkward decisions about the allocation of scarce resources (Krippner, 2011).

Finance has become more central to the functioning of the real economy, arguably in some countries more so than others, but who stood to gain, what did it offer, to whom and why? (van der Zwan, 2014). These are the central questions which will help us to understand this broad-based transformation of the advanced industrial economies over the last five decades. The emergence of financialisation has been investigated at a range of levels. From the very macro global story of the ebb and flow of finance over time, to meso-level descriptions of changes at the level of the firm which see shareholder value begin to dictate managerial strategy, right down to micro level descriptions of individual households increased dependence on markets for housing and pensions (Arrighi, 2010; Davis, 2009).

These various levels of analysis correspond to distinct understandings of how financialisation works (van der Zwan, 2014). At the macro-level, Marxist and world systems theories see financialisation as being generated by deep-seated tendencies inherent to capitalism and point to the crisis of accumulation in the late 1970s as its starting point (Arrighi, 2010). Coming down a level of analysis another perspective points to the

emergence of new forms of management as the key driver of the financialisation process (Davis, 2009). These firm-level theories suggest that pressure from markets to generate shareholder value pushed firms towards favouring the short term profits garnered from financial trading over longer-term strategies of productive investment. A final perspective and perhaps the most mainstream sees financialisation as a series of speculative manias, enabled by new technologies and financial innovation, which have swept the global economy since the 1970s (Reinhart et al., 2009).

To be sure, all of these manifestations of financialisation offered various solutions to different sets of actors in the post-industrial economy. At the macro level, the process offered a way for America (the global hegemon) to re-assert itself on the global stage and resolve its crisis of over-accumulation (Arrighi, 2010). For firms and their managers, it offered a way to avoid hostile takeover in markets for corporate control which dominated American corporate culture in the 1980s (Crotty, 2003). Generating enormous profits for multinational corporations (MNC) through financial trading, with a corresponding rise in chief executive officers (CEO) pay, and thus ensured its survival as a mode of governance (Davis and Kim, 2015). In both America and Europe, the rise of credit markets allowed a range of states to withdraw from the provision of essential services, such as housing and pensions and replaced government debt of Keynesian era with the household debt of the Neo-Liberal age (Crouch, 2009). For individual households the debt and the rising asset values it produced allowed them to shore up their stagnating real wages and maintain their consumption levels (Brenner, 1998). Financialisation, it seemed, had something to offer to all of the key players in the post-industrial age.

The macro story which tends to emphasise the relatively consistent rise and fall of financial power over time captures changes which occurred in America in the wake of the second oil crisis. The state and large American firms turned to financial markets as a solution

to the stagflation and over accumulation which defined the era (Krippner, 2011). While the American economy appears to have financialised earlier, Europe had its own distinct mode of financialisation in the 2000s, which was empirically distinct to the American process and characterised by growing finance and the build-up of household debt. In Europe, banks replaced firms as the principal carrier of financialisation (Ó Riain, 2014). This process was intrinsically linked to the process of European integration but also to national processes of financial liberalisation which commenced in the 1980s (Baccaro and Pontusson, 2016, Bohle, 2017). Suggesting that the roots of the European financialisation may be located long before the housing bubbles which defined the process began to emerge in the mid-2000s. Indeed, when financialisation became apparent in Europe and house prices began to escalate; America, too, had a housing bubble suggesting that financialisation had created new connections across the global economy.

Unlike America, social Europe had, in part at least, resisted the turn to liberal capitalism and labour unions and welfare states remained intact in the wake of the oil crises (Esping-Andersen, 1990). Indeed, in its early stages, the field of comparative political economy was characterised by attempts to classify European nations, clustering them into the constellations of institutions which defined individual countries approach to political economy in an increasingly globalised world (Baccaro and Pontusson, 2016). Europe contained both liberal market economies, such as the UK and to a lesser extent Ireland, but also coordinated market economies, such as Germany, Denmark and Sweden. However, within these two broad categories, there was diversity and disagreement about what type of economy each represented (Esping-Andersen, 1990). From this burgeoning debate sprung an exciting, and long-lived project of scholarly endeavour into how to classify and cluster the varieties of capitalism which defined the European model. Within this debate, some scholars suggested it was the structure of the welfare state and associated patterns of redistribution

which defined capitalism, while others focused more on firms and variation within their mode of production and firm finance as the critical components of capitalist variety (Hall and Soskice, 2001, Esping-Andersen, 1990). This distinction led to different clusters with the former group arguing for a range of varieties, including, Liberal, Christian Democratic, Social Democratic and Mediterranean, while the latter group took a dichotomous approach and simply argued for coordinated versus liberal which corresponded directly to the mode of firm finance, bank versus market (Zysman, 1983). More recently the central debate within the field has concerned the trajectory of change in the institutions of coordinated capitalism, with some scholars arguing that all capitalism is converging on the liberal model, while others point to continued diversity within crucial sets of institutions. (Glynn, 2006, Hall and Soskice, 2001,Thelen, 2014, Streeck, 2009)

While the process of financialisation has most closely been associated with the liberal market economies, the financial crisis revealed that both coordinated and market economies of Europe had engaged in financial excess (Grossman and Woll, 2014). German banks became deeply connected to the American sub-prime crisis and several failed during the global financial crisis (GFC). Denmark had a national banking crisis caused by a housing bubble connected to pools of both national and transnational capital. Iceland was possibly the most financialised economy in Europe, and their banking sector went into almost complete collapse with the onset of the GFC (Grossman and Woll, 2014). The process of financialisation had infiltrated the world of equitable capitalism. A fact which was somewhat puzzling, as while it seemed clear what financialisation had to offer to American firms, it was less than clear what it had to offer to Europe's social economies?

Financialisation, it seemed, played out in different ways across different jurisdictions and yet the process connected these jurisdictions. To be sure, the empirical differences between American and European capitalism meant that studying a single process which had

connected these two jurisdictions offered an exciting opportunity to traverse the worlds of capitalism beyond the bounds of the traditional explanations of capitalist variety. Here was a process, most closely associated with the liberal economies, which had emerged in nationally distinct ways across a host of varieties, including the coordinated European, the Social Nordic and the Mediterranean economies.

However, while financialisation was playing out in empirically distinct forms, these forms and the connections between them made up a global trend. In 2003 Ben Bernanke of the Federal Reserve Bank (FED) famously announced that the global economy had entered a new period of ‘great moderation' (Aalbers, 2015). A time when low inflation accompanied high growth and rising asset values, the new, low-interest rate monetary policy of the European Central Bank (ECB) and the FED appeared to be a success, and the global economy boomed (Aalbers, 2015). Denmark and Ireland, two small open economies located on the periphery of Europe could both have been poster children for the new global economy. The 1990s were kind to both countries, producing employment growth, productivity gains, export growth and economic prosperity. In Denmark, the period became known as the Danish employment ‘miracle’ and shifted the Danes from the edge of abyss in the 1980s to buying the world in the 2000s. While in the same period, Ireland had morphed from being the sick man of Europe to roaring ahead with the Celtic tiger and the best little economy in the world.

During the 1990s and into the 2000s in Denmark and Ireland, alongside growing exports, housing was playing an increasingly important role in driving demand. Mortgage credit grew in line with the availability of a new range of variable rate mortgage products which lowered the price of credit. The great moderation had reduced interest rates from 22% to 3%, figures that would have been unimaginable to the previous generation of homeowners, and product innovations had allowed households to gain access to this cheap capital. This new role for housing produced favourable results, states benefitted from the growth cycle

implications, households from the wealth implications of rising asset values and cheap debt, while banks got rich on the profits from increased loan activity (Ó Riain, 2014).

However, by 2010, when the governor of the Irish Central Bank Patrick Honohan, speaking from the headquarters of the ECB, announced that Ireland was to be a ward of the court of the European Union and the International Monetary Fund, it was clear that the great moderation had been built upon shaky foundations. The GFC revealed the gaps in Mr Bernake's reasoning and it became apparent that underpinning the great moderation was a mountain of household debt which had sustained the rising asset values upon which the globe had become reliant. Furthermore, it was apparent that the global property bubble was only the last in a series of bubbles which had risen and fallen during the current phase of financialisation. The nature of housing, its centrality to daily life and its growth cycle implications had made it the perfect receptacle for financialisation.

If housing was the endpoint, the receiver of financialisation, banks were the transmission mechanism which facilitated its flow. Driving the housing bubbles which emerged in a range of European nations was a global 'wall of money' being channelled through a new group of large international banks which had merged investment and commercial banking activities (Schoenmaker and Wagner, 2013). These banks funnelled money towards booming property markets in both Europe and the US (Fernandez and Aalbers, 2016). The flow of this 'wall of money' was enabled by new practices within these global banks, and also by new practices within national banks which saw them increasingly cover long-term mortgage and property debt with short-term funding (Popov and Udell, 2012). This practice created a distinct liquidity risk, which swept across the globe in 2008 unleashing a financial crisis of the type which had not occurred since the great Wall Street crash of 1939 (Hardie and Howarth, 2013).

During the 2000s, both Denmark and Ireland experienced a general process of financialisation, which included the growth of their financial sectors, and the build-up of household debt. The debt was primarily connected to rising asset values and produced two housing bubbles both of which subsequently went into collapse in 2007-2008. Figure 1.0 shows that Denmark and Ireland have been on a common trajectory of growing finance since the early 1990s and also points to the very different consequences which flowed from the GFC in 2008. While in the wake of the GFC bank assets declined in Denmark from 222 % in 2008 to 178 % 2015, in Ireland assets collapsed falling from 177% in 2008 to 64% in 2015.

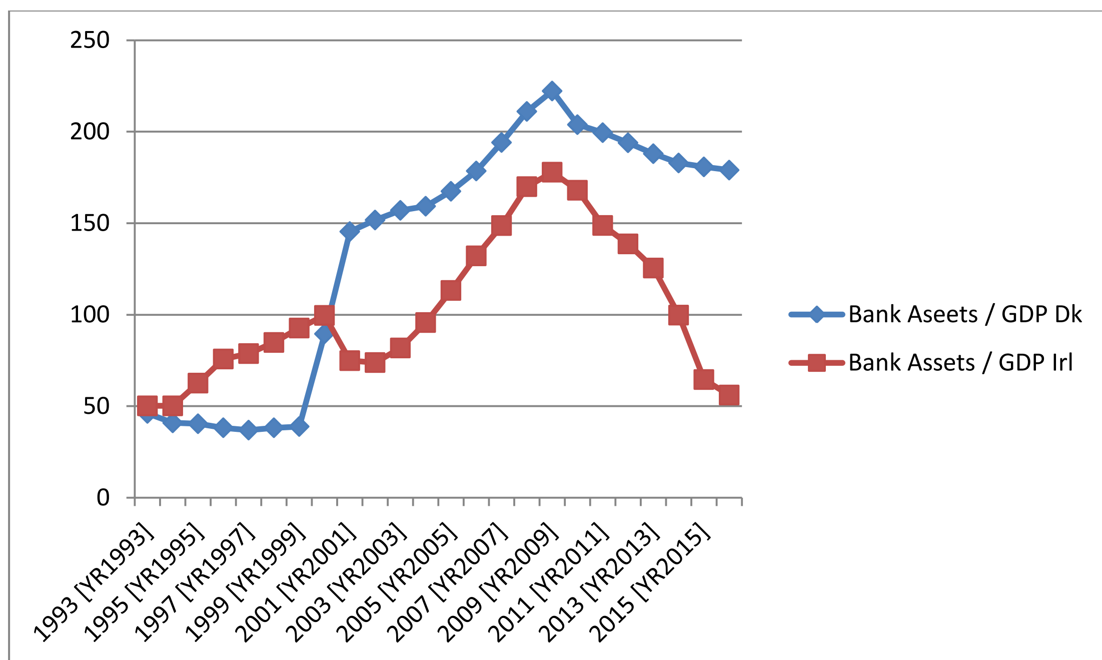


Figure 1.0, Bank Asset to GDP Denmark and Ireland 1993-2015

Source World Bank Financial Development Data Set

While on the face of it these two cases of financialisation looked quite similar the different performances during the financial crisis suggested that real differences existed in how financialisation worked in Denmark and Ireland. Despite the similarities in the general process, Denmark survived the crisis, and their banks returned to profitability in 2012, while

Ireland went into almost complete collapse and became a ward of the European Union and IMF. Standard explanations of the difference in outcome during the crisis argue that Denmark and Ireland shared a similar exposure across a range of macro-level indicators, such as credit to GDP levels and household debt and that the differences in institutional capacity for action explained the different bank bailout programs (Grossman and Woll, 2014). However, even a cursory look at the figures and the empirical details of these two cases suggested that underneath the institutional capacity lay very different worlds of banking (Amable, 2003). While these worlds of banking had experienced a general process of financialisation, they had done so in nationally specific ways which had affected their capacity to respond to the GFC. Comparative case analysis offered a unique and exciting opportunity to develop a narrative of how and why these worlds of banking worked and subsequently employ these descriptions as a means of explaining the very different consequences which had flowed from these two cases of financialisation.

Indeed, the field of the comparative political economy seemed somewhat ill-equipped to tackle the range of puzzles posed by how and why financialisation worked across the varieties of capitalism. A preliminary look at Denmark and Ireland suggested that they were two cases of financialisation which connected to the general process in different ways and produced different results. The general process in Europe was primarily centred in banks, which reflected the bank based nature of the European system; however, the field of political economy has paid little attention to banks and has focused to a far greater extent on the supply side as being the critical determinant of capitalist variety (Baccaro and Pontusson, 2016). In this respect, banks are conceptualised in an over simplistic, deterministic way which sees variety as dichotomous and split between banks based and market-based systems centred upon the mode of firm finance (Hall and Soskice, 2001). This dichotomy does little to

explain what took place within both the case countries. Empirically banks were changing, and the change had little to do with how firms were financing investment.

In both economies, banks became increasingly focused on lending to households, particular for the purchase of property (Lapavitsas, 2013). Mortgage debt as a percentage of GDP increased steadily in both economies throughout the 1990s and reached bubble proportions in the 2000s. Processes of financial liberalisation and integration were driving these changes within national banking sectors. Furthermore, both the cases were bank based, which suggested that if variety did exist, a fact implied by the differing outcomes of the process, that it existed across dimensions which were not captured by the original bank versus market-based dichotomy.

A recent strand of the investigation into the changing nature of bank behaviour and practice challenged the old dichotomy of bank versus market-based systems suggesting that all banks had become more market-based (Hardie et al., 2013). Hardie et al. (2013) developed a new typology of market-based banking which had clear links to the process of financialisation. Their work captured the changing nature of finance; highlighting new modes of banking such as shadow banking, securitisation, funding gaps and a new model of 'originate and distribute' banking. In Denmark and Ireland, the bubbles which emerged in the 2000s were connected to the increased use of market-based funding. However, there was variation in how and why banks had turned towards markets suggesting that Hardie et al. (2013) were overstating the commonality of various systems convergence on market-based forms of banking. In Denmark, securitisation was the primary mode of funding within mortgage markets, while deposit deficits within the commercial banks were used to cover increased lending. In Ireland, there was limited use of securitisation, and Irish banks contained the most significant deposit deficits in Europe.

At the same time that banks were changing, an equally profound shift was taking place in a host of European housing regimes. Schwartz & Seabrooke (2008) recognised that across a range of European nations housing was increasingly driving growth. Furthermore, their theory of varieties of residential capitalism outlined that the intersection of housing systems and housing finance could be conceptualised as a type of capitalist variety. Within their theory, they outline four distinct varieties: The liberal market, corporatist market, statist-devlopmentalist and familial. Denmark is classified as corporatist and Ireland as familial. Corporatist systems are characterised by sophisticated finance, with high levels of mortgage debt and medium housing tenure which de-commodifies sections of populous through the provision of different forms of social housing. The familial variety is characterised by relatively unsophisticated housing finance system, low levels of mortgage debt, high housing tenure which is mostly mortgage free and low social housing.

The thesis offers a critique of the varieties of residential capitalism paying greater attention to the actions of banks to explain the rise of both asset bubbles. While the theory captured the structure of the housing regime as a form of capitalist variety which was evident in both the cases it was unable to explain the rise of asset bubbles and the associated build-up of household debt in the familial varieties of capitalism (Bohle, 2017). Indeed the theory suggested that the familial varieties of capitalism lacked the sophisticated financial innovation (securitisation) which was central to the rising debt levels. The empirical data on rising household debt across Europe, however, told a very different story to the one proposed by Schwartz and Seabrooke (2008), outlining that debt had exponentially increased in the peripheral nations, many of which fell into the familial variety of residential capitalism (Jorda et al). If debt could grow without securitisation then perhaps it was not the securitisation which was driving the debt in the economies which did have securitisation? Banking and housing were intersecting in ways which were not being captured within the literature, while

the literature captured the significant changes; it struggled to explain the dynamics of these changes.

Comparative empirical case analysis offered the opportunity to understand how and why financialisation had harnessed European banks, large and small, liberal and coordinated, as a vehicle to propel itself across space and time. The analysis revealed that Denmark and Ireland had both experienced two distinct but inter-connected types of financialisation. Type 1, which was enabled by the European banking directive of 1993, consisted of banks crossing borders and setting up new operations in peripheral markets (Bohel, 2017). Type 2 financialisation, was characterised by the use of wholesale funding within national banking sectors. This second type was enabled by the emergence of a new type of global bank which during the 2000s invested heavily in peripheral markets. The investment was made possible by the rise of interbank lending which formed a crucial strand of new forms of market-based banking across Europe (Hardie et al., 2013).

	Denmark	Ireland
Financialisation 1	Danish Banks are *Carriers* of this type of financialisation into Irish and Baltic Markets.	Irish Markets are *Receivers* of this type of Financialisation. UK, Nordic & Dutch Banks.
Financialisation 2	Small and Medium-sized Banks act as a *Buffer* Containing worst of problem, insulating Large Banks. Mortgage Bond Market act as a *Buffer*. Pension Funds act as a *Buffer*.	Foreign Capital spread broadly and deeply throughout all of the Banks. No Institutional *Buffers.* Strong Historical Ties to UK Money Markets *Filter* Capital towards Irish Banks.

Table 1.0 Financialisation Type 1 & 2 in Denmark & Ireland (Reproduced From Chapter 6)

While both Denmark and Ireland had turned towards market-based banking, the analysis revealed that there was variation in how the two types of financialisation worked in both economies. The variation was explained by a range of institutional *buffers* and *filters* contained within the national models of banking which were shaped by the embeddedness of banks within the institutions of coordinated and liberal capitalism. Variety within bank based forms of capitalism was far more complex than the simple bank versus market-based dichotomy and change was more diverse than a generic turn towards market-based banking. While both sectors had turned towards markets, this process was shaped by the existing financial system, and it was these institutional configurations which determined how each connected to the general process of financialisation. The very different sets of consequences which flowed from these national forms of financialisation made understanding these varieties of market-based banking and the institutional *buffers* and *filters* that defined them an important task.

Research Question:

The similarities and differences between Danish and Irish financialisation led to the development of a set of twin research questions and a complimentary collection of empirical puzzles.

Research Questions:

1. Given the general international trend towards financialisation, how much difference was there between different national forms of financialisation, and why?
    - Why is Ireland's collapse so much worse than Denmark's?

2. If there are different national forms, then why does financialisation exist as a social process with a reach far beyond national economies?
    - Why do Ireland and Denmark, liberal and coordinated political economies respectively, both end up with high household debt ratios and processes of financialisation in the 2000s?
    - Why do institutional and regulatory changes in the 1990s only have significant financialisation effects in the 2000s?

To identify, compare and contrast the national forms of the process within the empirical chapters, some flesh needs to be put on the bones of what financialisation means in the two case studies. The next chapter will conduct a review of the literature which centres on the tension between financialisation as both a general and specific process. The literature review begins the task of building a model of financialisation which captures both these general and specific features which will subsequently be used within the empirical chapters to address the research questions and empirical puzzles.

Structure of the Thesis

The introduction, thus far, makes it clear that the politics of financial liberalisation and integration were a central feature of the emergence of financialisation across Europe. Therefore the empirical chapters are built around sets of political dilemmas, and their crucial policy responses, which link directly to the growth of the financial sector and the rise of household debt in both cases. This is achieved through the use of a periodisation covering four distinct periods which are bookended by critical moments in the global process of financialisation. This approach allowed for an analysis of national politics which remained sensitive to the impact of global processes of financialisation. The empirical chapters are framed by the use a periodisation. 1982-1991 is a period which has been identified as crucial to establishing the roots of American financialisation. 1992-2000 was the rise of the dot.com bubble and the age of employment miracles. 2001-2007 was the fall of the dot.com and the rise of a global housing bubble. Finally, 2008-2015 was the GFC and the start of national recoveries.

Table 1.0, and Table 1.1 outline the ruling political parties in Denmark and Ireland during these four periods and include the critical policies which both shaped and were shaped by the financialisation process. Building the analysis in this way offered the opportunity to unpack what financialisation had to offer to each state, how and why, it provided a solution to the various political and social dilemmas which confronted individual nations. As the chapters progress, it emerges that while financialisation initially required substantial political support, over time, the process gathered momentum and required less support as increasingly powerful banks directed the trajectory of change. Furthermore, while housing was a central feature of this discussion, the analysis goes beyond a simple mapping of Seabrooke's (2008) varieties of residential capitalism onto each case.

Danish Politics (1982-2015)			
		Government	Key Policies
1982-1992	 Minority Coalition Minority Coalition Minority Coalition	Prime Minister: Poul Schulter (1982-1993) 1982-88: Conservatives, Liberals, Radical Liberals 1988-90: Conservatives, Liberals, Radical Liberals 1990-93: Conservatives, Liberals	New economic outlook, growth through foreign trade. Hard pegging of Danish Krone & Full Liberalisation of capital flow. 1987: Austerity Package Potato Diet.
1993-2002	 Majority Coalition	Prime Minister: Poul Nyrup Rasmussen. (Social Democrats) Social Democratic Party, Danish Social Liberal Party, Centre Democrats, Christian Peoples Party	Growth through a combination of Trade and Consumption. Liberalisation of Mortgage Lending. Establishment of Pension Funds. Establishment of Flexicurity Model.
2002-2011	 Majority Coalition (2001-2005) (2005-2007) (2007-2011)	Prime Minister: Anders Fogh Rasmussen (Venstre 2002-2009) Venstre, Conservative People's Party, Danish People's Party Minority Minority	Housing Based Growth Model. Pro-cyclical Housing Tax. Introduction of Amortised Mortgage Loans. Privatisation of Danish Housing Commons 2008 Austerity Measures
2011-2015	Minority Coalition	Prime Minister: Helle Throning-Schmidt (Social Democrats) Social Democrats, Social Liberal party & Socialist People's Party	Austerity to Increase competitiveness Support of EU Financial Pact.

Table 1.1 Danish Politics 1982-2015

Irish Politics 1982-2015			
		Government	Key Policies
1982-1992	Majority Coalition Minority Government Majority Coalition	1982-87 Fine Gael & The Labour Party. Taoiseach Garret Fitzgerald. 1987-89 Fianna Fáil Taoiseach Charles j Haughey. 1989-92 Fianna Fáil & The Progressive Democrats	Commenced Liberalisation of Banking to Break Interest Rate Cartels. Wide Spread Austerity Measures Formation of Social Partnerships. The Building Societies Act 1989.
1992-2000	Majority Coalition No Election Majority required independent support.	1992-94 Fianna Fáil & The Labour Party. Taoiseach Albert Reynolds. 1994-97: The Rainbow Coalition, Fine Gael, The Labour Party & Democratic Left. 1997-02 Fianna Fáil & The Progressive Democrats and independents Taoiseach Bertie Ahern	Liberalisation of Banking completed. Lowering of Capital Gains Tax.
2001-2007	Majority Coalition Majority Coalition	2002-07 Fianna Fáil & The Progressive Democrats. Taoiseach Bertie Ahern 2007-08 Fianna Fáil, Green Party & The Progressive Democrats. Taoiseach Bertie Ahern	Stamp Duty Ties State Finances to Housing. Introduction of the Bank Guarantee.
2008-2011		2008-11 Fianna Fáil & The Green Party Taoiseach Brian Cowan	Austerity Measures. Troika Deal.
2011-2015	Majority Coalition	2011-2015 Fine Gael & Labour Taoiseach Enda Kenny	Austerity

Table 1.2 Irish Politics 1982-2015

Chapter 2 engages with the literature on financialisation. The chapter focuses on the tension between financialisation as a general process which has nationally specific forms. To address this puzzle, the chapter moves from a discussion of general theories of financialisation down to the institutional regimes of banking and housing which are crucial areas of diversity. Discussion of the general theories highlights the lack of European material and the theoretical challenges of using American theories to fill this gap. This discussion is based on the empirical differences between American and European financialisation highlighting the central role of banks and housing within the European process. The discussion then focuses on two core debates about change produced by financialisation, the theory of varieties of residential capitalism and new typologies of banking. Having identified significant weaknesses within both theories to explain the emergence of financialisation in Denmark and Ireland the chapter outlines a conceptual model which draws on both theories and links them to general theories of financialisation. The end product is a conceptual model of financialisation which captures both the general and specific features of the process. The model brings banks into the political economy of housing and houses into the political economy of banking.

Chapter 3 outlines and explains both the basic approach to the research methodology and the methodological complexities attached to analysing the process of financialisation. The chapter outlines the approach to using comparative case analysis and process tracing as a means of investigating a single general process across the two cases over time. However, there were methodological complexities attached to the analysis of a process which had both general and specific/national forms which linked to both national and transnational dynamics. As a means of overcoming and indeed capitalising upon these complexities, the research employed the conceptual model developed within the literature review. The model captures both the general and specific features of the process and allows these to be analysed

regarding their national and transnational dynamics. Furthermore, chapter 3 outlines a periodisation which frames the transnational process of financialisation in which the model can be described and subsequently analysed in line with the global process of financialisation and national political dilemmas.

Chapter 4 (1982-1991) has two main aims; firstly it maps the roots of financialisation in Denmark and Ireland, and secondly, it develops a comparative starting point of distinct varieties of bank based models of capitalism in Denmark and Ireland. Chapter 4 (1982-92), looks at the politics of growth which emerged in response to the oil crisis. This period is highlighted within the literature as being central to the emergence of financialisation, and therefore the chapter asks if financialisation offered a solution to the oil crisis? In both cases, it emerges that the roots of financialisation were established as the *unintended consequence* of macroeconomic policy decisions to meet the challenges of low growth and high unemployment in the wake of the oil crisis.

Chapter 4 outlines how Denmark turned towards export-led growth as a means of resolving the high unemployment and low growth which were linked to the oil crisis. To increases competitiveness, the Danes made structural changes to currency policy which caused a financial crisis and eventually lead to the emergence of large, powerful, commercial banks. In Ireland, a bankrupt Irish state commenced a process of welfare retrenchment in 1987, as a means of withdrawing from the provision of housing and housing finance. Fiscal restraint necessitated a process of financial liberalisation which produced changes in the institutions of both banking and housing; commercial and mortgage banking became connected through the Building Societies Act of 1989 and housing provision became increasingly privatised (Norris, 2016). Despite all of these changes very little happened in Irish banks, they remained passive and underdeveloped, and private credit remained stable;

however, the institutional building blocks for financialisation, liberalised banking and marketised housing, had been put in place.

Finally, chapter 4 outlines the history and evolution of the political economy of banking and growth models in the two case countries. The chapter demonstrates that while the two systems shared similar characteristics, small open economies, export-orientated growth, roughly comparable in size, they differed in their level of industrial development and the structure of their financial systems. In Denmark, the influence of both the foundations and cooperative movement was apparent in both mortgage and commercial banking, as was their status as an earlier industrialiser which was linked to a significant presence of small and medium-sized banks to facilitate the well-developed SME sector. The Irish system looked very different; it contained a small number of relatively large powerful banks that were conservative and operated a type of oligopolistic control over the market. This nationally specific structure was shaped by the lack of national industry and strong ties to the UK system. It was clear that the banking systems in each case reflected the social and market tendencies of the two political economies. The chapter closes by outlining two distinct varieties of bank based capitalism (Table 1.3) which serve as a comparative starting point.

	Denmark	Ireland
Varieties of Bank Based Capitalism	Developed, Coordinated, Passive Bank Based Model.	Under Developed, Liberal, Passive Bank Based Model, with Presence of Foreign Banks.

Table 1.3 (reproduced from chapter 4)

Chapter 5 (1992-2000), builds around the age of employment miracles in both cases. The chapter outlines two very different stories of how the politics of growth pursued by each country shaped change within their financial system. In Denmark, the Social Democrats were hampered by low growth, high unemployment and an extended balance of payments problem causing macroeconomic instability. To overcome these national challenges the Social

Democrats employed financial liberalisation of the mortgage model to ‘kick start' economic growth. The Social Democrats took a balanced approach to this new demand-side strategy and created large sector-wide pension funds which could be used to both fund and balance the risk of rising household debt levels. The chapter outlines a nationally specific type of mortgage price Keynesianism which replaced the government debt of classic Keynesian approach with household debt and in doing so ensured macroeconomic stability.

Ireland was hampered by a different set of challenges, under development and failed fiscal policy had left the Fianna Fáil / Progressive Democrat Coalition to address high levels of government debt and high structural unemployment. Fiscal stabilisation and the attraction of foreign direct investment (FDI) were the key strategies to produce growth in the economy. In a bid to restore state finances in 1987, finance was put through a profound process of liberalisation and required no further intervention during the 1990s. However, by isolating finance from the productive miracle of the Celtic tiger, the FDI growth strategy pursued by the Fianna Fáil / Progressive Democrat coalition had a profound effect on the trajectory of growth within the financial sector. Recently liberalised banks, starved of opportunity and lacking experience in productive investment, turned to new models of lending, initially to finance and subsequently to assets.

The general characteristics of the financialisation process outlined in this chapter include a process of banks turning towards households as a more important source of business, and an associated build-up of household debt which involved the creation of deeper connections between the mortgage and commercial banking sectors. However across the two cases, very different dynamics drove these connections; in Denmark, a series of cooperative agreements underpinned the coordinated dynamics between commercial and mortgage banking, while in Ireland competitive dynamics created by the process of financial liberalisation in the previous period were linked to the entrance of foreign lenders into Irish

domestic markets. Furthermore, by the end of the period, Denmark was far more stable, national, balanced and better funded than their Irish counterparts, which seemed underfunded, highly internationalised and too small to deal with the rapid economic growth which was taking place.

Chapter 6, (2001-2007), traces the rise and fall of two housing bubbles in Denmark and Ireland. During this period finance required less political support and began to direct the trajectory of change within both national economies. In both cases, a housing bubble emerged, which while they required some state support, arguably more so in Denmark, were primarily driven by the actions of increasingly powerful banks. In Denmark, a newly elected Liberal-Conservative coalition dismantled the balanced approach of the Social Democrats, introducing housing tax breaks and allowing the financial sector to issue Interest-only (IO) loans. The loans acted as a concession to the upper-income deciles and transformed debt into a luxury good. In Ireland, the Fianna Fáil / Progressive Democrat coalition lowered capital gains tax in 1999 and in doing so created conditions which were conducive to a new type of property investment the *buy to let* (BTL) phenomenon. While the bubble required no change to the regulation of finance, Fianna Fáil and the Progressive Democrats undoubtedly supported it through its progression, selling state banks to foreign entrants as a part of a wave of privatisations and subsequently becoming heavily dependent on the tax revenues and employment which the housing bubble generated.

During this period two distinct types of financialisation emerged across Europe, labelled Type 1 & Type 2. Type 1 involved the direct penetration of foreign banks into national credit markets, and Type 2 involved the use of wholesale funding by national banking sectors to fuel the credit growth. The chapter outlines diversity across the cases within these two types of financialisation. Denmark becomes a carrier of Type 1 financialisation, as large Danish banks sought to overcome the limitations of coordinated

capitalism and entered the Irish and Baltic mortgage markets. Ireland became a receiver of Type 1 financialisation, the underdeveloped nature of the Irish system combined with rising asset values and a booming economy posed a perfect opportunity for speculative foreign banks to enter Irish markets and grow through economies of scale.

In Denmark, a range of institutional buffers produce two subtypes of Type 2 financialisation, one located in the mortgage banks and the other in the small and medium-sized banks. In the mortgage banks, a new type of interbank lending emerged which saw commercial banks become the principal investor in the new amortised mortgage loans which were driving market conditions. In the small and medium-sized banks funding gaps emerged as these banks turned to transnational capital to fund their increased loans to a small group of property developers. Both of these subtypes provided institutional buffers which shielded the largest banks from the most speculative lending in Denmark. In Ireland Type 2 financialisation relied almost exclusively on transnational capital which was accessed by the running of substantial funding gaps within all of the banks both large and small. Furthermore, the 'hyper-competition' created by Type 1 financialisation had caused a crowding into the market and exposed all the banks to a high degree of property based lending. Ireland contained institutional *filters* which connected it to UK money markets, where global banks enabled by the new accounting standards of Basel 11 were highly engaged in interbank lending. This *filter* combined with the lack of any of the institutional buffers like those in the Danish system meant that the reach of Type 2 financialisation was deeper and broader in the underdeveloped Irish banking sector.

Chapter 7 (2008-2015) takes a fresh look at the concept of financial power in the wake of two very different bank bailout programs which both ultimately led to periods of austerity. While initially, Denmark's response to the financial crisis suggested that finance had less power in the coordinated economies, in the post-crisis period the Social Democrats

have supported finance while limiting their support for the welfares state. This development pointed to a new type of financial power which was not captured by the standard explanations of coordinated responses to financial crises. The increased use of foreign funding and the sensitivity of household debt to interest rates have tied the hands of the Social Democrats forcing them to placate the markets with fiscal restraint. These developments revealed a type of globalised financial power, produced by the increased presence of foreign capital and dependence interest rate stability. Ultimately, this new form of financial power has limited the capacity for state intervention in the economy as market forces dictate the need for fiscal prudence.

In Ireland, while standard explanations of the bailout program point to a lack of institutional capacity as being explanatory of Ireland's strategy during the GFC, what was more puzzling was the level of commitment within the ECB to ensure the survival of the Irish financial system? The sheer scale of the funding and the very different treatment of other small European economies such as Greece and Portugal suggest that there was something unique about the Irish case. Something prompted the ECB to pump nearly a quarter of the total funding supplied to Europe into a national banking sector which only contained 1% of the total capital in Europe. Again globalised financial power, the interconnection of financial systems and the power of market confidence explain the actions of the ECB. It was the fear that Ireland posed a contagion threat, which could bring down the Euro that promoted the ECB to provide such extraordinary levels of funding. While globalised financial power did not allow Irish banks much capacity for strategic action, it did ensure their survival through a crisis which should, were capitalism allowed to be capitalism, have destroyed them.

Finally, chapter 7 engages with the empirical puzzle: *why was Ireland's collapse so much worse than Denmarks?* Looking across the two types of financialisation introduced in chapter 6, it was the deeper and broader penetration of foreign banks and capital into the Irish

market which explained the different outcomes. The institutional *buffers* contained within the Danish financial system refracted Type 2 financialisation and limited the reach of transnational capital. On the other hand, an underdeveloped Irish system, badly required capital to fund credit growth and existing institutional *filters* to UK money markets proved to be the perfect conduit over which financialisation flowed across space. These different national forms of Type 2 financialisation left both sectors with very different options when the global liquidity crisis struck in 2008. Large Danish banks still had the capacity for action and acted as a crucial support to both small and medium banks and the mortgage sector. While in Ireland, the exodus of capital and banks on a grand scale effectively paralysed the Irish banking system.

Chapter 8 returns to the twin research questions and related empirical puzzles about the complexity of understanding financialisation as both a general and specific process. The chapter opens with table 8.0 which outlines the critical institutional changes within the two cases. The table reveals that financialisation has been both a general and specific process which emerged over time within both cases. The general process has entailed a turn towards market-based banking, which involved commercial banks getting more involved in mortgage lending and a build-up of household debt. The national forms of this general trend were shaped by the embeddedness of the financial system with the institutions of coordinated and liberal capitalism and produced a range of institutional *buffers* and *filters* which defined the national form.

Returning to the first research question chapter 8 revisits both Type 1 and Type 2 financialisation and shows that these processes were shaped by the institutions of banking within both economies making it clear that institutions matter. The second research question reveals that despite their differences both varieties of market-based banking connected to the global of wall of money through global banks. While the institutional context shaped these

connections and the consequences which flowed from them it did not prevent the penetration of global banks. It was these Global banks, enabled by the process of European financial integration, which employed new forms of market based banking to produce temporal loops of debt and become the crucial transmission mechanism for financialisation across Europe.

Chapter 2: Literature Review

Introduction

The theoretical backdrop to the current thesis is the body of work on the process of financialisation (van der Zwan, 2014). Finance has come to play an increasingly important role in the operation of the real economy; this development has been linked to changes at a variety of levels in society from the increased trading of financial products, to the dependence of firms on financial profits, right down to individual households increased dependence upon financial markets for housing and pensions.

There remains a tension within this body of literature on how to reconcile the general trend of financialisation with the specific local/national conditions/varieties of the phenomenon (Ó Riain, 2014). This tension is complicated by the dominance of descriptions of American financialisation within the literature. American theories tend to see the process as an exogenous force on European economies. Boyer's (2000) view neglects the complex set of social and political conditions (both National and European) which have underpinned growing financial sectors in Europe. On both the global and national scale finance has become increasingly powerful and influential and financial systems have become far more interconnected. However, this process has been uneven and has developed in ways that are qualitatively different within individual countries and across jurisdictions.

This variation means that the tension between the general trend and its local varieties is a tension about how the general process itself is understood, of what is it made? However, the empirical literature makes it clear that Europe was not just a passive receiver of financialisation. Instead, it was an active player in the global trend. To be sure, national and European politics underpinned the emergence of a range of housing bubbles across the periphery of Europe, national banking sectors actively invested into these bubbles. These new

patterns of investment were based upon increased access to capital made available through global banks (Bohle, 2017). Global banks were active investors in both peripheral and American housing and equity bubbles through national banking sector. Financialisation was more complex and diverse than the regime of accumulation scholars suggested. Furthermore, European financialisation was rooted in specific national politics and investment communities, shaped by the varieties of capitalism and linked to the process of European monetary union (EMU). To reduce the explanations of growing finance in Europe to the growth of the financial sector in America was over simplistic, while the two processes were linked and formed part of a broader trend, European financialisation had distinctly European characteristics.

The current chapter begins by addressing American theories of financialisation highlighting their weakness as an explanatory model of the European process. The core weakness of these theories lies in the empirical differences between the American and European processes. However, despite this weakness American authors have much to offer in terms understanding both the politics and macroeconomics of financialisation, pointing respectively, to critical junctures and a set of core conditions to which the process responds (Krippner, 2011). It is in this way, perhaps, that these theories can be interpreted as general theories of financialisation.

Turning to European theories of financialisation, their macro-level focus on the dynamics between nations, in particular, the core and periphery, means they are ill-equipped to untangle the general and specific features of the financialisation process. Arguably, these theories are stronger at capturing the general trend but do so at the expense of empirical detail on the national forms which make up its component parts. To address this weakness in the European literature, the investigation comes down a level of analysis and focuses on mid-range theories of housing and banking. These mid-range theories allow for greater scope in

untangling the dynamics between the general and specific/national forms of financialisation and the connections between these national forms.

The literature review of these mid-range theories highlights the need to bring banks into the political economy of housing and houses into the political economy of banking. Banks were central to the process of European financialisation acting as both the extenders of credit onto national markets and as a transmission mechanism for international capital flows. In this way, banks acted as the critical connection between the national forms and the general process of financialisation. Housing also played a central role in both European and the later phase of American financialisation acting as the recipient of the process, absorbing vast amounts of the 'wall of money' which circulated the globe. The dynamics of and between the various *buffers* and *filters* contained in these two institutional regimes shaped how national models of banking and housing connected to one another and to the global 'wall of money.' These institutional configurations and the connections between them produced nationally distinct forms of financialisation from which flowed different sets of consequences.

Given the mutually shaping dialectical nature of financialisation, it is felt that the best explanatory outcomes will be achieved by building a conceptual model which captures both the general and the specific features of the process. In both cases, the general process has included the growth of the financial sector and the build-up of household debt, however, within this general trend there is continued diversity. To date, there have been few attempts to untangle national diversity in financialisation within the varieties of capitalism. The diversity lies in the dynamics between national banking and housing systems and their connections to the general process which are captured by the conceptual model developed in the current chapter

General Theories: Their limitations as an Explanatory Model

For Arrighi (2010) financialisation represents a re-occurring phase of capitalist development which results from declining hegemonic power (America in the Latest Phase). The turn to finance is a last-ditch attempt by the declining hegemon to re-assert control over the global economy. He draws our attention to the behaviour of previous global hegemons such as the British and Dutch empires and demonstrates that they too financialised in their final days. Arrighi (2010) suggests that to maintain control of the global economy, the elites within the now declining hegemon, who still possess a dominant market position and access to capital, alter their investment strategies and inflate asset bubbles. This process is facilitated by the altering of the rules of the game through liberalisation and deregulation as elites seek new sources of financial profits to replace their declining productive profits. For Arrighi (2010) the bursting of these bubbles marks the end of the old order and the beginning of the new. While this process captures the transformation of America since the 1970s, it does little to explain why asset bubbles inflated in a whole range of European economies?

Krippner (2005:174) proposes that financialisation is 'a pattern of accumulation where profits accrue primarily through financial channels rather than through trade and commodity production.' Therefore, financialisation is empirically observable through the rising share of profits which accrue through financial trading.

Krippner (2005) outlines that American financialisation has two key indicators, the growth of profits in the financial sector and the growing share of non-financial sectors profits derived from financial activity. Empirical studies from economists in both the Marxist and post-Keynesian schools confirmed Krippner's (2011) findings. Crotty (2003), for example, found that not only had American firms increasingly turned towards financial profits but that a reverse process was also taking place, where finance had become increasingly dependent on

non-financial corporations. This dual movement has meant that financialisation has led to a slowdown in accumulation, due to crowding out of productive investment (van der Zwan, 2014).

Krippner's (2011) work progresses in three stages, The first chapter is statistical and outlines the manifestations of financialisation in the growing share of profits through financial channels. The second chapter analyses the social politics of financial deregulation and employs a series of interviews with principal actors and academics. The final chapter outlines the making of US monetary policy and examines the transcripts of the Federal Reserve committee (Boyer, 2012). This eclectic methodology allows Krippner (2011) first to demonstrate the existence of financialisation and subsequently to trace its roots to specific conjunctures.

Arrighi (2010) implicitly implies that the latest period of American financialisation emerged as a solution to the crisis of the 1970s but does not develop an account of the specific mechanisms and institutional details of how this solution worked. Krippner (2011) notes this weakness and retains the original puzzle raised by Arrighi's (2010) work. By placing her focus on the actions of the state, she develops a fuller account of how and why finance offered a solution to the stagflation produced by the oil crisis, posing the question:

> 'How did the turn to finance offer a solution to the crisis of the 1970s, particularly from the perspective of the state?' (Krippner 2011:15)

Krippner (2011) comes down a level of analysis from the very macro, global descriptions contained in Arrighi's (2010) work, and focuses on the actions of the state developing a sociological concept of 'depoliticization.' Indeed her key criticism of the world systems approach is that the macro level of the analysis excludes descriptions of the mechanisms through which financialisation has emerged and therefore is unable to address

the general and specific features of financialisation. She employs the concept of 'depoliticization' to explain the actions of the state when faced with a series of social, fiscal and legitimacy crises during the 1970s caused by the slowing of the growth rate. For Krippner (2011) financialisation arises as an unintended consequence of attempts by the state to resolve these crises by turning to markets as a means of avoiding the politically contentious question of how to allocate scare resource (capital) between competing spheres of the economy.

Krippner (2011) argues that the solution to this crisis was not the post-industrial service economy suggested by Daniel Bell (1973). Instead, it was a series of financial deregulations combined with financial globalisation which removed the constraints on the flow of credit. The author proposes that the removal of Regulation Q, which limits the interest payable on deposits, altered the flow of credit onto the American economy (Krippner, 2011). The motivation behind the removal of the regulation was to avoid the politically awkward decisions about the allocation of scarce capital between competing resources. In this way, Krippner (2011) sees financialisation very much as the unintended consequence of a political process driven by the desire of the state to avoid politically contentious decisions. In so doing this work points us towards particular conjunctures in time as being central to the emergence of financialisation.

However, it is unclear whether Krippner (2011) adequately resolves the tension between the general trend which she identifies and a specific national form which she describes. Krippner (2011) is at pains to tell us that the financialisation of America emerged as the '*unintended consequence'* of political decisions at particular historical conjunctures. While Arrighi (2010) identifies the general turn towards finance by elites, and in so doing proposes a general theory of the ebb and flow of finance over time. Krippner's (2011) work is more specific and highlights the national political dilemmas which emerged in the American

economy and the how the state responded to these. Therefore, it becomes difficult to reconcile what is mostly a historically specific case study of growing finance with the emergence of a general turn towards global finance. Her work reads more to the particular than to the general and, in essence, is a country-specific case study of the growing importance of finance and the social, economic and political dilemmas which enabled that growth in America.

The empirical differences between American and European financialisation compound the theoretical tension of interpreting Krippner’s (2011) work as a general theory of financialisation. The increased use of financial trading by NFC's has mainly been limited to the American economy making America somewhat of an empirical outlier in the comparative data. Indeed, Krippner (2005) argues that America's position as a global currency was central to what took place in American domestic credit markets. Capital inflow from surplus nations, in particular, China, allowed American banks to extend credit to new levels and changed the nature of capital, from a scarce resource to one of abundance. Krippner (2005) outlines the central role that the interest rates played in both the national and transnational dynamics of American financialisation. Unusually high-interest rates attracted the attention of foreign investors and given the liberalisation of capital flow provided unlimited capital to American markets. The same interest rate affected the behaviour of American NFCs who suddenly found it was more beneficial to profit from financial trading rather than engage in productive investment. Therefore what the author is describing is a particular set of national conditions, linked to a set of transnational dynamics, which have been central to the emergence of American financialisation through the removal of the constraints on the flow of credit.

In both the Ireland and Denmark, large corporations have remained separate from finance, and yet financial sector profits have increased as a share of total profits (Figure 5.5).

European financialisation was not defined by crowding out of investment in the industrial sector in the same way as the American case or by the rise of shareholder value (Davis 2010). Indeed, neither Ireland nor Denmark has an active market for corporate control (Rose and Mejer, 2003). European financialisation, in general, was primarily but not exclusively focused on housing, property and consumption booms rather than the type of transformation outlined by Krippner (2011) in American firms. Furthermore, European financialisation was primarily located in banks, which reflected the bank based nature of the European system as a whole.

In both the Irish and Danish case, there were specific national reasons why finance remained separate from large corporate firms. In Ireland, the corporate sector was (and still is) dominated by American firms who have off-shored their production and these firms have primarily financed their activity from abroad through FDI (Honohan and Walsh, 2002). While this links Ireland to the process of financialisation and globalisation in America, the evidence suggests that American firms in Ireland, outside of the Irish Financial Services Centre (IFSC), have focused on production rather than financial trading (Ó Riain, 2014). The Danish corporate sector was dominated by large foundations and cooperatives that have a tradition of being self-financing (Thomsen, 2016). The regulation of Danish banks after the 1930 financial crisis prohibits the type of involvement that German banks take in corporate governance. Neither country had an active market for corporate control which forms part of the story of the related field of shareholder value orientation to which Davis (2009) links the emergence of financialisation.

Despite the empirical differences, American theories can contribute to understanding the macroeconomic conditions which formed the backdrop to European financialisation. Krippner (2011) demonstrates that it was the combination of liberalised financial flows, financial deregulation, and changing monetary policy which created a set of conditions in

which the American economy financialised. Broadly across Europe, a very similar set of macroeconomic conditions have formed the backdrop to the formation of EMU (Honohan, 2010). Therefore, rather than resulting from an exogenous shock, European financialisation emerged when the necessary set of conditions were provided by the processes of EMU. Both the American and European experience suggest that when these conditions prevail, economies will to different extents financialise in nationally specific ways. Suggesting that the process, whatever it is made up of, responds to a general set of conditions.

It is also important to note that at the time that American firms began the process of financial trading, interest rates were extraordinarily high, which favoured financial trading rather than productive investment. In a European context, financialisation emerged in a climate of falling interest rates which make large-scale financial operations of the type devised in America less attractive. Boyer (2012:407) points out that it is a pity that Krippners (2011) analysis only extended to the 2000s, and suggested that a study of the great moderation period when interest rates became low would lend much insight into the dynamics of states 'muddling through' the most recent crisis in America and Europe.

However, while this gives us a broad set of conditions, it still leaves us with a puzzle about the national/local specificity of financialisation and how to explain it? In this respect, Krippners (2011) work is of little use in untangling the empirical case specifics. However, by directing us to specific conjunctures and a general set of conditions Krippner (2011) has added to the method of research into financialisation. Pointing us to critical points in time when a set of dilemmas collide and produce a set of conditions conducive to financialisation.

In comparing the European story of financialisation to the American story told by Krippner (2011), what emerges is that the core conditions which enabled the financialisation of the American economy have formed a crucial part of the project of European monetary

union, financial deregulation, financial integration, and a new monetary policy regime were all central features of EMU (Białek, 2015). Unlike America, however, capital flow and financial deregulation have not occurred in a high and rising interest rate environment; instead, they emerged in a climate of ever falling interest rates (Honohan, 2010). Also dissimilar to the American case European financialisation was mediated through banks, and increasingly focused on households as a new source of profit, which reflects the mostly bank-based nature of the system (Lapavitsas, 2011, Lapavitsas and Mendieta-Munoz, 2016). The bank based nature of the European system has meant that unlike America where rising interest rates create conditions that are conducive to the financialisation of firms, falling interest rates reduce the price the credit for households and create conditions which are conducive to the build-up of debt.

This fascinating and engaging literature has much to offer to scholars of financialisation. However, it is unable to resolve all of its own problems. The empirical difficulties which arise in transposing American theories onto European institutions seem something of a bridge too far. Therefore there remains a tension between how the general and specific features of financialisation can be resolved. However, while the empirical characteristic of European financialisation may be different to those outlined by Krippner (2011), she does point us to a critical point in time, suggesting that financialisation emerged as a solution to the crisis of the 1970's. This incredibly insightful and empirically rich account of financialisation points to a puzzle about European financialisation, did the growth of European finance offer a solution to the crisis of stagflation? The comparative political economy literature to date has tended to focus on how European nations adjusted to the crisis of stagflation on their supply side, and there has been little, if any, focus on the demand side (Baccaro and Pontusson, 2016). Indeed, the field of Comparative Political Economy has its foundation within the body of literature which sought to explain capitalist variety in terms of

the various supply-side responses across country clusters. However, to date, how the growth of European finance may have offered a solution to the crisis of the 1970s remains under-explored.

European Theories of Financialisation

Scholars who fit broadly into the regime of accumulation literature have investigated the financialisation of the European economy focusing on the dynamic between countries as a means of trying to explain the emergence of asset bubbles. However, the dynamics which they outline exist at a very macro level, and therefore, lack empirical detail on the difference between the nations at the level of institutions and reduce explanations of the cause of financialisation to imbalances between the core and periphery nation's growth cycles. It is in the empirical detail at the level of institutions that the answers to the set of puzzles connected to the general and specific features of European financialisation are contained. Therefore, these macro-level European theories paint an overly deterministic, hierarchical picture of financialisation which sidesteps the actions and effects of the intersection between national banking and housing systems.

Lapavitsas & Kouvelakis (2012) tackle financialisation at a macro level in a European context from a world-systems perspective and suggest that it results from the imbalances between European nations. These imbalances caused capital to flow from the core to the periphery once they became connected through the creation of the euro. For Lapavitsas & Kouvelakis (2012) this has been an exploitative process based upon the low growth cores ability to squeeze wages which have left the high growth periphery with little option but to financialise in the face of heightened international competition.

Similarly, Stokhammer (2012) works at a macro level and focuses on the volatility of asset prices and the accumulation of debt and shows how these tendencies have produced

recurring crises. His work is in line with that of Lapavitsas (2012) as both points to a new regime of accumulation which is dependent on the build-up of debt and linked to the imbalances between surplus and deficit nations which have become more interconnected by the liberalisation of capital flows. Stockhammer (2012) highlights how this phenomenon is particularly pronounced in developing countries and has led to increasingly volatile boom-bust cycles and exchange rate volatility. Financialisation for these scholars has produced a new inequality between global capitalisms.

The macro level systemic explanations of the emergence of financialisation which these authors develop lack empirical detail on the institutions through which financialisation was filtered in individual countries and transmitted between countries. They highlight how assets price bubbles and debt accumulation have added to the instability of global capitalism, making it more prone to a reoccurring crisis but lend little insight into national diversity in the process. Stockhammer (2012) and Lapavitsas & Kouvelakis (2012) both argue that at a macro level the imbalance between core and periphery nations have produced two distinct growth models but both authors ignore the national politics of growth which underpin the growth of finance. Other authors highlight a very profound problem with the functioning of the EURO system, namely that there is a common monetary policy and fiscal policy is severely restricted (Lane, 2012). For both Stockhammer (2012) and Lapavitsas & Kouvelakis (2012), the core has remained sluggish and employed wage moderation to tackle inflation while the periphery has opted for bubble-driven growth strategies that 'reflected their history, politics and social structures' (Lapavitsas & Kouvelakis, 2012:324). Neither of the authors focuses on how banks in either the core or the periphery have been changing, and how this change has intersected with the real economy. The descriptions like many macro-level world systems theories are overly deterministic and sidestep the process of institutional

transformation within individual nations which enabled the emergence of financialisation in nationally specific forms.

Lapavitsas and Kouvélakis (2012) argue that the nature of a single currency means exchange rate adjustments are no longer available to European nations; this severely curtails the ability of the participating countries to make adjustments to compensate for inflation. The only route available to tackle inflation and increase competitiveness is wage moderation (Lapavitsas and Kouvélakis, 2012). In short, this has created a severe imbalance between the core and periphery nations, creating a situation where core countries have squeezed wages and re-cycled large trade surpluses into the periphery in the form of credit. This credit has driven demand and asset prices in these nations and therefore proved to be pro-cyclical, in turn causing further capital inflow resulting in asset bubbles. These descriptions, much like the regime of accumulation scholars from America, reduce individual nations (particularly in the periphery) to the passive receivers of financialisation; within their analysis, Germany has replaced America as the Hegemon under whose shadow the rest of Europe must function. This overly deterministic Marxist view sidesteps a whole range of complexities about the general and specific features of financialisation by conceptualising the process as an exogenous force.

Both of these scholars outline that financialisation has produced inequality and instability at a global level between surplus and deficit nations. In the wake of the financial crisis inequality between the core and periphery European nations is evident, with the core becoming heavily exposed to periphery debt (Johnston and Regan, 2016). However, this was an uneven process with some countries being far exposed than others. Suggesting that we need to look in more depth at what was taking place within the countries that experienced housing booms. Furthermore, recent empirical studies from the Irish central bank reveal that

much of the capital which funded the Irish boom was sourced in UK not German banks and was denominated in dollars and sterling.

In a new strand of comparative political economy, Bacarro and Pontusson (2016) call for a reorientation of the field back towards the demand side. Focusing on the demand side grants insight into capitalist diversity which is not apparent in the macro level descriptions offered by the regime of accumulation scholars. Barracaro and Pontusson (2016) develop an analytical approach which focuses on the relative importance of the various components of aggregate demand, exports and household consumption and outlines how these have different implications for distributive outcomes across the varieties of capitalism. The authors suggest that the lack of investigation into the demand-side dynamics of the varieties of capitalism resulted from the death of Keynesianism within the field of economics and the general belief that states could do little to alter demand side dynamic.

This new strand of literature is linked to the financialisation literature as it focuses directly on the actions and motivations of the state for the deregulation of finance. This reorientation means that Baccaro and Pontusson (2016) outline some significant points, firstly that change took place on the demand side of the economy in both the liberal and coordinated economies and secondly that this change resulted in the build-up of household debt. Looking across Europe at the time states where actively engaged in deregulating and liberalising their financial sectors, a development which is noted by Baccaro and Pontusson (2016) who suggest that it was a political project and led to the emergence of household debt as a new driver of growth. Furthermore, they outline that the political and economic motivations for the deregulation of finance differed across the case countries. While Britain unleashed finance to grow its financial and high-end services, Germany sought to expand its manufacturing sector and therefore restrained finance and consumption. Sweden who wished to expand their exports of services was not overly concerned with price sensitivity and could

afford to drive consumption through financial deregulation, while Italy continued along the path of stagflation never resolving the crisis of how to combine exports and consumption. The crucial contribution of this work is that the authors highlight the political nature of the project of financial deregulation as means of stimulating consumption in the post-Keynesian period when a turn towards exports as the critical source of growth demanded a new approach to fiscal stimulus.

How then can the tension be resolved, is it possible to account for diversity within European capitalisms while still recognising that financialisation has been a general process? To address this puzzle, there is a need to turn to two kinds of literature broadly connected to the varieties of capitalism school which focus on the institutions that have been central to the emergence of European financialisation, banks and housing regimes. Contained in the nexus between these two institutional regimes, are some of the explanations of diversity in the form, size, and trajectory of financialisation (the general trend) which continues to progress across Europe. Therefore by focusing on the institutions of banking and housing, we will begin to reconcile some of the tension between financialisation as both a general and specific process. It is in looking at change within these intuitional regimes that the complex dynamics of financialisation both within and between European nations are contained. Developing rich empirical accounts of this change will enable an analysis which begins to reconcile the tensions highlighted within the current review.

Varieties of Residential Capitalism

A natural starting point for an investigation of the literature on housing and finance in Europe is the groundbreaking theory of varieties of residential capitalism. Schwartz and Seabrooke (2008) are responsible for initiating an engaging body of literature which seeks to bring housing into political economy. This work is central in highlighting that change in the role of housing had important consequences for macroeconomic growth, social stability, welfare states, and political behaviour. Schwartz and Seabrooke (2008) develop a typology of residential capitalism which is defined by the ease of access to housing finance (securitisation) and the degree of housing tenure rate (owner occupation v renting). This work was responsible for a reimagining of housing beyond its traditional role (which was scant) as the provider of welfare within the field of political economy. If the real test of a theory is its ability to predict the future then in this sense the varieties of residential capitalism was groundbreaking work. The authors outline four distinct varieties of residential capitalism, the liberal, the corporatist, the familial and the statist-developmental. These typologies combine various combinations of housing finance and tenure ranging from the liberal with a high mortgage to GDP ratio and high tenure rates to the statist with a low mortgage to GDP ratio and low tenure rates.

Schwartz and Seabrooke (2008) reimagine the role of housing in a number of critical ways: firstly they demonstrate that housing can shape both 'political subjectivities and also objective preferences' (Schwartz & Seabrooke, 2008:1) They then go on to argue that housing wealth and social spend are often at odds with each other, highlighting a move to the right in housing politics which poses a direct threat to welfare capitalism (Watson, 2008). The main line of argument is that the global housing boom has created a situation where actors favour low tax, low inflation a combination which could undermine the high tax, high spend welfare regimes of the north (Mortensen and Seabrooke, 2008). Finally, they show that

housing has moved beyond its role as a home, or a source of welfare and is now a driver of economic growth, outlining the growth cycle implications of rising household debt across a range of nations.

To be sure, the critical contribution of Schwartz and Seabrooke (2008) was the development of a typology of residential capitalism based on two dimensions, housing finance and housing tenure, change in which has been a central feature of the emergence of financialisation in Europe. The theory provides a natural starting point for an investigation of institutional change in both of these dimensions which explicitly considers continued diversity within individual nations (Thelen, 2014).

The two cases, Ireland and Denmark, fall into two distinct varieties within Sebrooke's (2008) typology. Denmark tends towards the corporatist market along with Germany and the Netherlands. Ireland is predominantly familial along with Spain, Portugal and Italy. This variation poses a puzzle regarding financialisation as both Denmark, and the Netherlands have experienced housing based financialisation while Germany has not, and both Ireland and Spain have experienced housing based financialisation while Italy has not. This difference suggests that the theory as it stands is ill-equipped to deal with the rapid build-up of household debt which has swept across a range of periphery nations.

The corporatist-market variety combines liberal mortgage finance with lower levels of homeownership and the continued presence of the welfare state within the housing regime, while the familial variety combines high levels of homeownership (usually passed down), with low levels of mortgage debt and low levels of securitisation (Schwartz and Seabrooke, 2008). The critical contribution of this work is that it highlights that there are differences in how individual nations combine housing tenure and access to housing finance to produce the

various housing regimes and that variation in these dimensions can be conceptualised as a type of capitalist variety.

While this work is the critical starting point, there are some empirical anomalies which need to be addressed. Dependence on securitisation as the crucial development in housing finance is a source of stickiness within the internal logic of the theory (Schwartz and Seabrooke, 2008). In part, it explains its inability to outline why the varieties have gone through such rapid change, by oversimplifying the role of finance within the build-up of household debt and reducing it to a single variable, securitisation. This dependence on a single variable misses a range of changes which were taking place within European banks at this time which fundamentally altered the flow of credit onto European economies and increased household access to mortgage finance (Fernandez and Aalbers, 2016). These changes go far beyond the practice of securitising debt and have inspired a body of work which seeks to develop a new typology of 'market-based banking'(Hardie et, al. 2013, Hardie and Howarth, 2013). To address the puzzle of what has changed in European mortgage finance, there is a need to consider the broader set of changes which have taken place within European banks, changes which have seen banks increasingly turn towards market-based activity and how this has altered the flow of credit both within and between nations.

The familial variety of capitalism outlined by Sebrooke (2008) has gone through unusually rapid and extensive change which is not explained by the growth of securitisation (Bohle, 2017). In the Irish case, for example, securitisation has not played a significant role in the growth of mortgage credit and yet credit expanded at one of the fastest rates in Europe during the 2000s. Fung and Forrest (2011) found that securitisation did not explain the growth of mortgage debt in Hong Kong; instead, they point to the presence of a small number of powerful banks that became starved of other opportunities due to a phase of de-industrialisation and turned to mortgage lending as a new source of business. Similarly,

Bohle (2017) finds that change in familial housing systems resulted from the actions of banks, a point to which we will return below. All of these studies point to banks being central to the growth of mortgage lending and suggest that there is a need to go beyond Schwartz & Seabrooke's (2008) dependence upon securitisation as the critical mode of housing finance and look in greater depth at the changing role of banks.

Furthermore, the focus the Schwartz and Seabrooke (2008) place on the supply side of mortgage finance underestimates the capacity for demand-side changes to impact on the growth of mortgage credit. The Danish mortgage model is a case in point; securitization was in place long before the latest period of growth, demand-side changes, in the form of variable rate and amortized mortgage loans, were introduced during the growth period suggesting that the growth of mortgage finance has been a more involved process than simple access to funding (Bardhan et al., 2012). The closing section will return to this point developing a conceptual model of financialisation which considers a broader range of dimensions including product innovations.

On the housing side, Schwartz and Seabrooke (2008) employ housing tenure rates as a broad measure of the de-commodification of housing; this insightful approach offers a way in which to conceptualise a critical role of housing within the political economy. Schwartz & Seabrooke (2008:8) suggest that looking at owner-occupation 'tells us something but not everything' about how de-commodified housing might be. The logic is that those countries with high homeownership rates, a significant portion of indebted owners, are more likely to see housing as an investment strategy and can be defined as liberal systems. These stand in contrast to a system with a high provision of social, and social rental housing where people are more likely to perceive housing as a social right and the familial where housing is passed down through the generations and mortgage debt is low.

The theoretical contribution of this work is that it developed a framework for considering the intersection of housing tenure with housing finance and explains capitalist diversity in terms of how the various tenures protect sections of the population from market forces while exposing others to these same forces. Schwartz & Seabrooke's (2008) did not focus on financialisation, and therefore they depended heavily on the idea of de-commodification. However, financialisation generally has been a process of commodification, and therefore there is a need to extend their thinking about the role of housing and consider how various housing regimes have commodified rather than de-commodified sections of the tenure. How have housing systems enabled individual households to become financial speculators, seeking to make capital gains during periods of rising asset values?

Schwartz and Seabrooke's (2008) theory of residential capitalism is a crucial contribution; it offers a new way to 'think' about housing and housing finance and in so doing it marks a starting point to understanding the intersection of national financial and housing systems. However, like other theories of variety in contemporary capitalism, it has difficulty dealing with change.

Aalbers (2016) work in many respects is a response to the inability of the theory of varieties of residential capitalism to explain the common features of the change which took place in a range of nations from the 1990s onwards. The book contains a series of papers linking housing to the broader processes of financialisation and neo-liberalisation suggesting that housing has been central to the new financial regime of accumulation. Powell (2017) reviews the contribution and indicates that the strength of it lies in unwavering attempts to address the commonality of developments within individual nations.

Aalbers (2015) sees housing as playing a vital role in the new financial regime of accumulation as finance comes to dominate the globe. This work is connected to general theories of financialisation by conceptualising housing as a new source of speculative investment which forms a vital layer of the new financial regime of accumulation. Aalbers (2016) employs David Harvey's (2010) concept of capital circuits and develops a model in which developments within housing finance have enabled capital to switch from the primary to the quaternary circuit of capital. Central to this capital switching was the practice of securitisation which has turned large chunks of mortgage debt into tradable products. Much like Schwartz & Seabrooke (2008), Aalbers (2016) sees the practice of securitisation as being central to the financialisation of mortgage credit and the influence of American theorists is evident in his work.

However, Fernandez and Aalbers (2016) do go on to address the central weakness of Schwartz and Seabrooke (2008) by attempting to explain the general process of housing based financialisation across the varieties of capitalism. Their work develops four common trajectories of financialization which are built on and extend Seabrook's original typology. The most significant group correlates with Seabrooke's familial group and includes the Mediterranean countries, CEE (Central and Eastern European) economies and some developing countries. These countries have high tenure rates and low mortgage credit and low capital flows. The existence of a large stock of mortgage-free homes and little institutional support for mortgage credit has shielded these nations from financialisation. They do note that Spain is the critical case for understanding this group, as it was once a part of it. Therefore familial residential capitalism is no guarantee of protection. Work by Bohel (2017) looks in depth at this group and includes a role for banks which I will outline in greater detail below.

Trajectory two is primarily the liberal market economies, which have high capital flows, sophisticated financial systems and high mortgage to GDP levels. The authors outline differences in how these countries have fared, highlighting that some have experienced housing and construction booms (Ireland and Spain) while others have managed to employ loose monetary policy to maintain their trajectory, the US and the UK. The next trajectory is the smallest containing only Denmark and the Netherlands, who are distinguished by their high levels of mortgage debt and moderate homeownership rates. The high debt levels reflect the low share of debt-free property; these countries experienced the highest growth in their tenure rates during the financial expansion. Finally, they outline those countries which have resisted housing based financialisation. This group includes Germany, Switzerland, Austria and France. The focus in this group is on how the structure of their housing finance regime has resisted the in-flow of foreign capital.

They argue that we should pay more attention to the commonality of the process of financialisation which is taking place in the case countries, rather than continue to focus on diversity. Their focus on commonality, however, comes at the price of empirical detail into the processes of change which have been taking place in the various trajectories which they outline. Therefore they place Ireland and Spain in the liberal trajectory but have little to say about how or why these countries transformed from their familial roots. They do however refer to the diversity which is still apparent within their cases and outline that national systems are made up of various institutional arrangement which serves as filters and buffers against financialisation and highlight the complexity of these processes while not delving into this complexity in any great detail.

For Fernandez and Alabers (2016) the institutional filters contained in Schwartz and Seabrook's (2008) original typology produce variegation as they filter the connection

between individual housing systems and the global wall of money. They are however more interested in commonality than diversity.

> The current variety of financialised capitalism is closely related to the remaining obstacles and institutional filters that insulate particular national housing markets from the global forces of finance (Fernandez & Aalbers 2016:10).

They propose that housing has served as an absorber of the ‘wall of money’ which built up during the great moderation and that financialization is a variegated process due to differences in national housing finance and housing systems.

Empirically this work is located at a very macro level and in a somewhat similar to fashion to the world systems approach of Lapavitsas and Kouvélakis (2012) conceptualises capital as a faceless force which circumvents the globe. For Fernandez and Aalbers (2016) capital is a ‘wall of money' which has built up in the global economy and is seeking out high-quality collateral (HQC) in which to invest. They suggest that capital has flowed towards housing as it is one of only a few investments which are identified as HQC. While this is in part true, it oversimplifies capital and grants it a kind abstract status. They have little to say about ‘how' or ‘why’ this wall of money was absorbed by national systems and pay little attention to the central feature of European financialisation was has primarily been bank based. The ‘wall of money’ of which they speak was mediated through national banking sectors, and in doing so, these sectors have directly affected the trajectory of financialization in individual countries and produced a dynamic between nations. Fernnadez & Aalbers (2016) focus on the general process of financialisation was achieved at the expense of empirical detail on how the general process has been shaped by the specific national context and how in turn this has shaped connections to the general process.

Therefore while their focus on common trajectories brings the general process of financialisation into the debate, they lack the empirical details of how this general process contains specific national forms. The real complexity of the dynamics between the general and specific features of financialisation lie in how the general process was mediated through the institutional arrangements in the various national models, in particular, the financial and housing system and how this has changed over time. It is here that we stand to learn the most about the capacity of financialisation to cause both structural and intuitional change across Europe.

Bohle (2017) draws on Schwartz and Sebrooke (2008) in her work into housing based financialisation in Europe's periphery. Her work includes focus on the role of banks in the familial varieties of capitalism and in so doing goes beyond Schwartz and Seabrook's (2008) dependence on securitisation. Bohle (2017) conducts four in-depth case studies of peripheral nations, Ireland, Iceland, Hungary & Latvia, using two from Western Europe and two form the Central and Eastern Europe (CEE) economies. Despite the differences in these economies, she finds that there are two, non-mutually exclusive, forms of financialisation occurring in these periphery nations:

> The evolving EU framework for free movement of capital and provision of financial services as well as the availability of ample and cheap credit has induced a trajectory of financialization in these countries, which has taken two primary but not mutually exclusive forms: domestic financial institutions' reliance on (increasingly short-term) funding from wholesale interbank markets, and direct penetration of foreign financial institutions setting off a – mostly foreign currency – mortgage lending boom (Bohle 2017:2).

Bohle (2017) recognises that the project of financial integration was central to the changing behaviour of banks allowing them to cross borders and alter their investment strategies. This is important work as it goes beyond Schwartz & Seabrooke's (2008), and demonstrates that

relatively underdeveloped banking sectors have financialised very quickly without the (extensive) use of securitisation. Furthermore, while not elaborating in detail Bohle (2017) points to the fact that it was under development within these systems which made them susceptible to financialisation.

> In three of the four countries, inexperienced banks were at the origin of the mortgage booms, and in all states, governments and supervisory authorities were either unwilling or unable (and typically both) to rein in banks and the risky lending boom (Bohle, 2017:39)

Bohle (2017) highlights two types of financialisation which progressed within the familial varieties of capitalism both of which were enabled by the evolving framework for financial integration. The first type is characterised by the use of wholesale funding by national banking sectors and the second type by the direct penetration of foreign banks into domestic markets. In outlining these two types of financialisation and linking them to specific varieties of residential capitalism Bohle (2017) has begun the project of bringing banks into the political economy of housing and housing into the political economy banking.

Bohle (2017) points to both the general and specific features of the financialisation process, outlining that the general characteristics within her two financialised cases Iceland and Ireland included growth in mortgage credit to GDP and rising levels of household debt. Furthermore, the general process was linked to the liberalisation of national banking sectors and the project of European financial integration which allowed foreign bank entry into new markets and provided capital to national banking sectors through wholesale funding.

However, Bohle (2017) does not outline in great detail how or why these two types of financialisation progressed so rapidly in Ireland. Leaving gaps in our knowledge about what it was about Ireland that proved so attractive to foreign banks and capital? Bohle (2017) cites the lack of regulation and a cosy relationship between the state and property elites as being

central to the progression of the Irish bubble economy, and while these characteristics tell us something about how Irish banks turned to financialised lending, they tell us little about why foreign banks invested so heavily in Ireland. This work points us to, two crucial processes of financialisation which require further investigation, the movement of banks and the movement of capital across Europe during the project of financial integration.

This is important work that captures two forms of financialisation which have progressed across Europe and links these forms to the evolving framework for European financial integration. Turning now to the literature on comparative political economy of banking will develop fuller descriptions of how and why banks and capital have flowed across Europe and extend the project of bringing banks in the story of European housing based financialisation commenced by Bohle (2017).

In closing, this new and engaging literature has sought to combine the concept of financialisation with the typology of residential capitalism. In so doing this body of work has begun to address a central weakness with the original theory that struggled to explain the rapid and transformative change that has swept across Europe in the last two decades. However, Fernandez and Aalber's (2016) focus on commonality at the expense of empirical detail of continued diversity. Furthermore, the macro-level conceptualisation of capital develops trajectories of financialisation which effectively lets banks off the hook. Bohle (2017) begins to address this problem in her investigation of the transformation of familial housing regimes and highlights the need to bring banks into the picture in sharper focus. However, again within this work, there is a lack of empirical detail on how and why banks were attracted to the familial varieties. To address this lack of empirical detail and clarity, there is a need to consider in more detail the literature on the political economy of banking within the varieties of capitalism and subsequently develop links between the research on banking and housing. A project that Bohle (2017) has already commenced. In broad strokes

what emerges from this literature is that the varieties of residential capitalism need more banks to be dynamic and capture the complex institutional change which has underpinned the build-up of household debt in Europe.

The review of the literature on the varieties of residential capitalism has made it clear that new connections between banks, housing and a global wall of money were central to the European process of financialisation. To date, how these new connections were formed and subsequently acted as a transmission mechanism for European financialisation remains under-investigated. To be sure, there is a need to develop an analysis which accounts for how and why banks and housing have become more inter-connected, why banks have turned towards housing as a new business model, and subsequently, how and why, have these various national forms of financialisation connected to the general process.

Banks in Comparative Political Economy

The rise of global finance has caused profound change within the world of banking, change which the field of comparative political economy has failed to keep abreast of. While the field continues to focus on how banks provide capital to firms, banks have transformed themselves in response to new opportunities created by financialisation. In Europe new large banks have emerged which are far more international in their outlook, crossing borders and merging investment and traditional banking activities and acting as a transmission mechanism for the 'global wall of money.' These developments have connected national models of banking to the funding contained in these new larger banks and allowed for growth that would not previously have been possible. Within national models, there has been a general turn towards households as a new source of profit, and mortgage lending has become a vital strand of bank business. Furthermore, this change took place across the varieties of capitalism, with banks from both the liberal and coordinated economies engaging in new forms of market-based activity.

This new role for banks poses a challenge to the field of political economy which has traditionally focused on the relationship between banks and firms and conceptualised banks as being static and dichotomously spilt between 'bank and market-based systems' (Hall & Soskice, 2001). A relatively small body of literature within the area has recognised that there has been a radical change in European banking Hardie et al. (2013), Deeg (2010), and Dos Santos (2009). All outline that key to the shift in banking has been their increased use of markets.

The following section traces the transformation of banking from the dichotomous world of Zysman (1983), through to the market-based world of Hardie et al. (2013). It traces the rise of markets as a new source of funding for banks and outlines how this has

fundamentally extended banks capacity for action in the market. In the closing section of the chapter, a conceptual model of financialisation is outlined with the stated aim of extending the current model of market-based banking to capture banks turn towards households as a new business model. This model captures the emergence of financialisation over time and includes a broader range of changes than those evident within the literature.

The Changing World of Banks: Zysman's World:

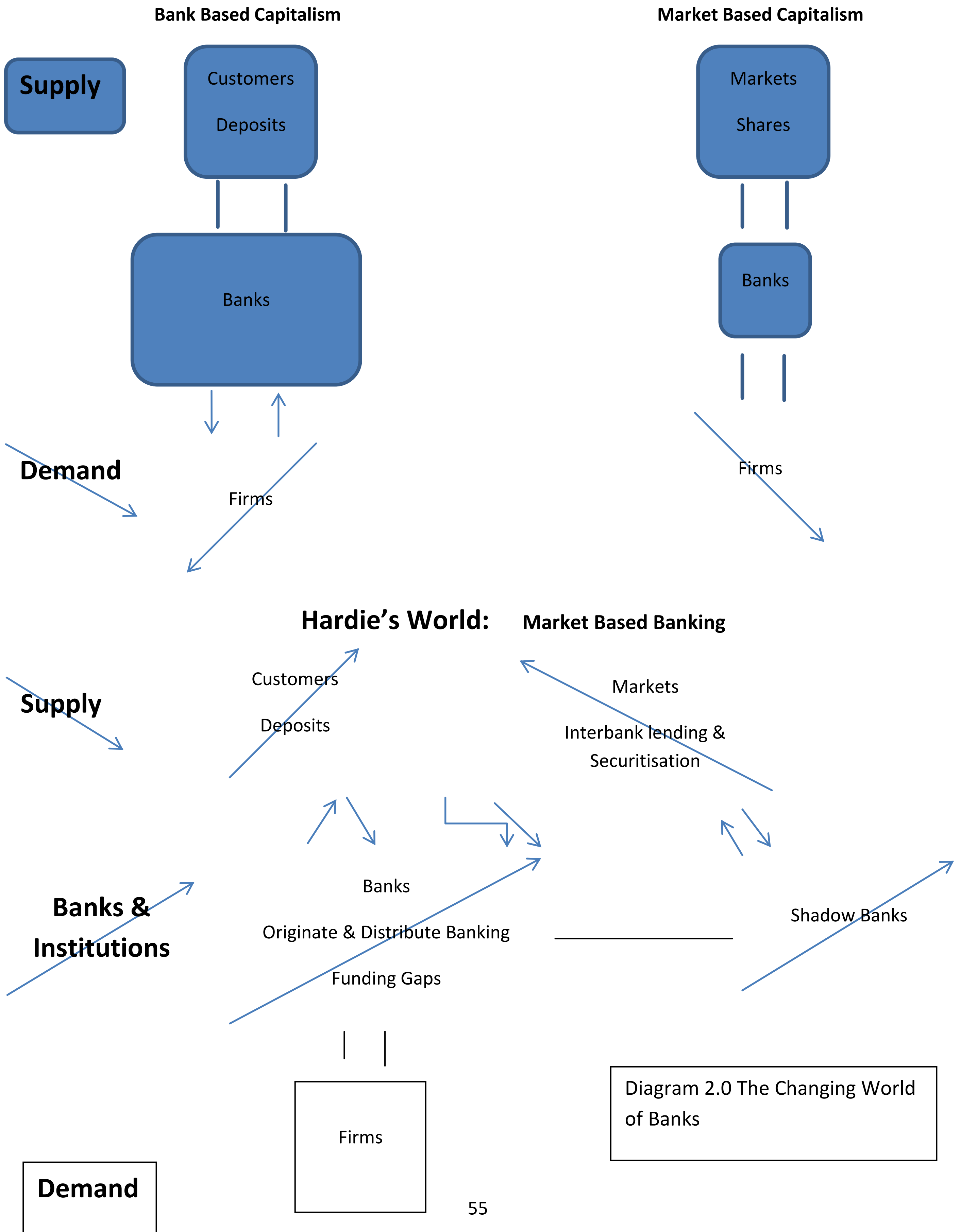


Diagram 2.0 The Changing World of Banks

From Bank versus Market to Market Based Banking

Traditionally within the field of political economy, the primary interest in banks has been in their role as the providers of finance to firms (Hall and Soskice, 2001). In no short measure, this is due to the work of Hall and Soskice (2001), which centred the bank versus market-based dichotomy in the consciousness of many political economists. Banks within this theory of capitalist diversity are conceptualised as static and dichotomous. The dichotomy originated from the work of John Zysman (1983), who made the original distinction between banking systems which directly provided loans to NFCs and those which acted as market intermediaries.

The critical contribution that Zysman made in 1983 was to demonstrate that the structure of the financial system could shape the scope of action available to both governments and non-financial corporation's (Hardie et al., 2013). Zysman (1983) distinguished between three main types of financial systems: capital market based, in which markets set the price; credit based in which government set the price and intervened in the market, and credit based in which banks played a more autonomous role and made decisions about lending and creditworthiness (Zysman, 1983). His worked focused extensively on how reliance on two main types of markets, capital and loan, can shape the kind of pressure experienced by firms (Hardie et al., 2013). His work was simplified and came to underpin the traditional bank versus market-based dichotomy within political economy (Hall and Soskice, 2001). In brief, the dichotomy suggests that loan markets provide a type of 'patient capital' while capital markets provide a more footloose form of capital. The 'patience' of banks results from their financial power to make long-term decisions (Hall and Soskice, 2001). This 'power' however was based on the assumption that banks did not face constraints on the liability side of their balance sheet, and that depositors were loyal.

While these systems were seen as being static, Zysman (1983:287) identified the need for continued research in the field, particularly given the transformative power of 'ever more elaborated markets.' Somewhat surprisingly the field of political economy did not take up the challenge laid down by Zysman (1983), and since his original work, there has been little effort to engage with how financial systems are changing. While the financial crisis in 2008 spurred a renewed interest in the field of varieties of financial systems our knowledge on the subject remains somewhat scant and underdeveloped.

Amable (2003) challenged the dichotomous framing of bank versus market-based system which underpinned the *varieties of capitalism* arguing that there was diversity within the bank based systems (Hall and Soskice, 2001). He outlined two new types of bank-based models based on both credit to GDP levels and the dominant form of corporate governance. Amable (2003) developed classifications of financial systems in the OECD using data from several sources, data on financial intermediation were constructed using data from OECD financial statistics and are three-year averages 1994-6. Amable (2003) conducted a cluster analysis and found that financial systems where more complex than implied by the dichotomous framing between banks and markets suggested by the varieties of capitalism (Hall and Soskice, 2001). Alongside the classic market based and bank-based system, Amable (2003) also identified two other varieties of bank-based systems. One he described as passive, due to low credit to GDP levels and the ownership concentration of firms among families, this group contained mostly Nordic economies. The other type he noted consisted of small countries such as Ireland and Switzerland, these were also passive but distinguished by the significant presence of foreign banks.

A relatively new body of work poses a more fundamental challenge about the continued salience of the bank versus market-based dichotomy proposing that all banks have become more market-based. Adrian and Shin (2008) were the first to employ the term

market-based banking, to describe the 'shadow banking system.' Broadly the shadow banking system are those parts of the financial system which provide credit but are outside the standard commercial banking sector; it includes money market funds, investment banks, and special purpose vehicle often created by commercial banks to trade in securitisations. Deeg (2010) points to similar developments within European banks; his focus is on what he terms 'deal based banking' and there are clear links to Hardie et al. 's (2013). Erturk and Solari (2007) focus on changes in the source of bank profits, while Aglietta and Breton (2001) demonstrate that banks have begun to add a market based 'portfolio' to their business model. All of these authors pointed to the rise of market forces within banking as central to the changes which were taking place.

Hardie et al. (2013) develop a new typology of 'market-based banking' which has four key characteristics, shadow banking, a new originate and distribute model, marked to market pricing and the increased use of wholesale funding. They extend the definition of 'market-based banking' within Adrin and Shin's (2008) work to include three new characteristics and argue that these developments have rendered the bank versus market-based dichotomy obsolete (Hardie et al., 2013). Suggesting that all banks have become more market-based.

There are two broad themes contained within this work; one focuses on challenging the dominant conceptualisation of financial systems and the other on demonstrating that the changes within financial systems have increased market-based risk and can be used to explain the severity of the financial crisis (Hardie et al. 2013, Hardie and Howarth, 2013). Both of these strands are important to the current investigation as one speaks to institutional change within financial systems, while the other links these changes to broader processes of financialisation. Taken as a whole these changes have produced a global banking system that has become increasingly dependent upon markets and as a result become more inter-

connected through markets, a development which has increased systemic risk (Hardie and Howarth, 2013).

The four characteristics within this work are inter-related and work to allow banks to extend the range of their business activity on both the asset and liability side of their balance sheet. On the asset side banks increasingly use 'mark-to-market' pricing to asses the value of their assets which they retain on their books, this practice directly affects the profitability of banks and allows them to retain earnings to increase their equity. Banks increasingly practice a new '*originate and distribute'* model of banking, where loans are either sold directly into the market or form part of larger securitisations which are sold into the market. This development links to the rise of shadow banking, which is the growth of non-deposit taking institutors who perform some of the traditional activities of banks and are the primary vehicles for the sale of securitisations. Moreover, finally, banks increasingly depend on markets on the liability side of their balance sheet as they expand their use of wholesale funding to cover the assets which they retain on their balance sheet.

This increased use of market-based funding has led to the emergence of what is known as funding gaps in banks, where loans, which were traditionally balanced, now exceed customer deposits. Funding gaps lead to an increase in 'risk' which Hardie et al. (2013) link to their understanding of the term financialisation, the increased trading of, and in, risk. The risk they envisage is a new type of bank run, where banks that now have a new type of customer, other banks that are far more volatile and financially savvy than traditional depositors. Therefore in times of financial turmoil, this new type of investor will be quicker to withdraw their funds from banks leading to an increase in market volatility, in particular generating liquidity crisis. Hardie and Howarth (2013) go on to suggest that the size of the funding gaps which emerged within banks during the period of financialisation are a key explanatory variable in the severity of the financial crisis. This work poses a challenge to the

convergence debate which suggested that capital markets would lead to the disintermediation of banks. Hardie et al. (2013) clearly show that empirically this has not happened; in fact, banks have extended more credit than ever before, so while banks have become more market based they have also become more bank-based (Glyn, 2006).

A criticism of their work is that they did not pay greater attention to the international dynamics between countries which are evident within this typology of market-based banking. This is especially surprising given the fact that the formation of EMU formed the backdrop to many of the changes which they outline. Hardie and Howarth (2013) argue that the new typology of market-based banking has left banks with three distinct possibilities for market-based activity. Option one is non-market based liabilities fund market-based assets, in all the countries, studied only Japan had deposits which exceed loans. Option two: market-based liabilities fund non-market-based assets; this possibility describes an extension of traditional banking models which replaces customer deposits with market-based sources of finance such as inter-bank lending (Hardie et al., 2013). This option captures the growth of market-based banking in the periphery, where market-based funding was used to cover the growth in lending for property purposes. Finally, the third and most market-based option is one where market-based liabilities fund market-based assets, this option is central to the transformation of large European banks which have used international capital to add a new more investment type strategy to their commercial operations. Given that the literature makes it clear that the flow of capital across Europe has been central to the emergence of financialisation, it surprising that Hardie et al. (2013) paid little attention to this.

The strength of the market-based banking typology developed by Hardie et al. (2013), is that it outlines how banks have increasingly come to rely on markets as a source of funding and in so doing have become increasingly interconnected. It brings the actions of banks into the political economy debate. The degree to which banks rely on markets explains why

banking systems that relied heavily on these practices where so unstable after the outbreak of the GFC. Hardie and Howarth (2013) find that there is a direct correlation between banking systems use of short-term liabilities to cover longer-term debts and the severity of the financial crisis. In demonstrating this correlation, they link the actions of banks to broader processes of financialisation.

Furthermore, by showing how banks have become more marketised the authors develop a range of macro-level indicators which can be used to demonstrate the kinds of connections in the European banking system which Ó Riain (2014) outlines in his work on the financialisation of the Irish economy. Ó Riain (2014) argues for the central role played by 'market-based banking' in both the national and international dynamic of Ireland's property boom and bust. Ó Riain (2014) focuses on the social and political construction of investment patterns, rather than directly on the actions of banks. He clearly outlines both the national and transnational dynamics which emerged in European banking, highlighting how capital flowed from the core to the periphery through banks. Lapavitsas and Kouvélakis (2012) outline the same dynamics of the flow of capital between the European core and periphery during the period of financialization.

Interestingly Hardie and Howarth (2013) do not point out the hierarchical dynamics between core and periphery banking sectors. While their work is incredibly useful, the level of analysis which they employ means that they have failed to capture the international dynamics of bank based financialisation. The four characteristics which they outline have distinct global dynamics which link to the rise of the large, influential European, UK and US banks (Schoenmaker and Wagner, 2013). In very basic terms what we see across Europe (including the UK) is that large, influential banking sectors have invested in both the periphery and emerging economies and that a few huge financial institutions have driven much of this activity (Bohle, 2017). These institutions have achieved this as part of their

international growth strategies in two distinct ways. Firstly they have entered domestic markets in both the periphery and emerging economies as the providers of credit, through mergers and acquisitions of local banks and establishing subsidiary operations in these economies (Bohle, 2017, Claessens et al. 2010, Classens and Van Horen, 2014). Secondly, they have provided liquidity to the banking sectors of these smaller emerging nations as the buyers of peripheral and emerging economy bank debt (Bohle, 2017).

If one accounts for the international dynamics of what took place in European banking, it is possible to argue that what Hardie and Howarth (2013) outline are two distinct forms of market-based banking. One which is predominantly, but not exclusively found in the small emerging or peripheral economies, where banks have increased their funding of non-market based assets (mainly housing and property) through market-based liabilities. A second form where larger, more powerful banks in the UK and European Core, have increased the market influence on both the asset and liability side of their balance sheet. These larger banks have been involved in a broader range of market-based activity mainly the trading of loans and securitised products; their focus has been far more international than their smaller neighbours. A part of this international strategy has been both expanding into peripheral markets directly and also increasing their purchases of peripheral bank debt (Bohle, 2017).

Unusually for political economy Hardie et al. (2013) focus directly on banks and show how their actions shaped the impact of the financial crisis on national economies. They show how changes in the behaviour of banks have produced credit growth which is increasingly market-based and therefore risky. However, Hardie et al. (2013) continue to focus on NFC's finance and how the increased use of markets has affected firms. They pay little attention to housing or property. This fact is somewhat surprising given the central role that housing and property have played in the growth of European banking and their openly critical stance on the field of political economy to address the gap between empirical data and

theory. None the less, this work has significant implications for understanding both the national and transnational components of European financialisation once it has been extended to take account of the role of housing and mortgage credit.

Housing has been a central feature of changing banking practice (Lapavitsas, 2011). To be sure, while the current literature outlines how banks have changed internally, it does little to capture changes in the model of banking empirically. These changes in the model of banking will form a crucial piece of the conceptual model developed in the following section. The real challenge is to take the typology of market-based banking developed by Hardie et al. (2013) and connect it to both the general theories of financialisation and the varieties of residential capitalism and in so doing create an outline of how distinct varieties of market-based banking have emerged. Hardie et al. (2013) suggest that the new form of market-based banking have invalidated the distinction between bank based and market-based systems, as all banking systems have become increasingly market-based. However, within this process of marketisation, there is continued diversity, in overstating the lack of distinction between systems the authors miss a critical puzzle about how different forms of market-based banking have emerged within distinct varieties of capitalism.

The conceptual model will pay close attention to how the institutions of banking have been shaped by the political economy in which they are embedded. Outlining that while there has been a convergence on market-based banking practice, within this convergence, exists continued national diversity. This diversity links to the historical development of finance within the capabilities produced by the variety of capitalism, to the variety of residential capitalism and to national politics of financial liberalisation and integration, and is situated within a host of national and transnational dilemmas. The following section will outline a conceptual model of financialisation which draws extensively on Hardie et al. 's. (2013) work and extends it to address the weaknesses outlined above.

International Political Economy

The change in European banking which is outlined above was located within a set of international governance arrangements set out by the Basel Committee on Banking and the various European Treaties which formed the backdrop to the process of European Economic and Monetary Union (EMU). Before outlining a conceptual model which captures the general and specific features of European financialisation it is vital to engage with the International Political Economy (IPE) in which the model was located. The following section, therefore, briefly outlines the key components of the Basel Committee on banking and the three stages of EMU.

The Basel Committee

The Basel Committee on Banking Supervision was established in 1974 by the governors of the central banks from the G 10 countries. The purpose of the committee was to provide a forum for cooperation on the supervision of banking and thus improve the quality of banking supervision worldwide. The committee has no founding treaty and therefore, rather than issue binding regulation, it functions at a more informal level. However, despite its somewhat informal organisational structure, the committee has played an essential role in the setting of standards and policy agendas for the regulation and supervision of finance worldwide. In particular, the committee has been at the forefront of setting standards in the realm of capital adequacy, banking supervision and cross border banking. In this respect, the committee has formulated various accords setting out standards and guidelines for best practice which national authorities implement through their national financial system.

Basel I & II

In July 1988 Basel I was introduced, setting out that from that date, that an international bank should aim to hold 8 % capital against regular loan business. However, almost as soon the accord was finalised arguments about its implementation began. The system included a set of risk weights which delineated the level of capital required to hold against different types of debt. Short term, low-risk debt such as Government debts were given the lowest risk weighting requiring no capital to be held. Mortgage securities were also viewed favourably and given low-risk weights. The interpretive nature of the Basel I accord meant that regulators allowed banks to hold vast quantities of debt in special purpose vehicles (off their books) and fund them through the issuance of asset backed commercial paper. This meant that banks were not required to commit much capital to cover these loans. The inadequacies of Basel I led the committee to initiate negotiations for the second Basel accord, commonly known as Basel II.

In June 2004 the Basel Committee published the second Basel banking accord. The purpose of Basel II was to govern the international banking standard regarding how much capital banks were required to hold to ensure financial stability by mitigating against the operating risks of banks. However, rather than address the weaknesses of Basel I, the second accord actually increased the level of risk in the global banking system by further reducing international banks capital requirements (Blundell-Wignall et al, 2008). The reduction occurred because the accord proposed that banks would apply their value at risk accounting standards to their lending and therefore left bank's scope to interpret the level of risk contained in their lending activity. The mark to market pricing of assets and application of their own risk weighting priorities to the assets held on the bank's books meant that banks required even less capital to back their loan activity (Hardie et al, 2013). Tooze (2018: 86) outlines that the capital weight required for mortgage-backed securities was reduced from

50per cent to 35 per cent by Basel II and therefore allowed banks to ‘sustain larger balance sheets than ever before.' Therefore, just as the trading in securitised mortgage products was booming in the global banking sector and creating destabilising connections between large European and American banks, the regulations which governed these banks were loosened allowing them even greater leverage in global markets. It was this increase in leverage which allowed large international banks to flood peripheral banking sectors with cheap capital which national sectors subsequently directed towards mortgage and property markets.

Economic and Monetary Union

The Economic and Monetary Union (EMU) is a term which captures a series of policies ratified under the Maastricht Treaty and the Treaty of Amsterdam. These policies aimed to create conditions under which it would be possible to promote the economic convergence of the member states of the European Union. The idea that Europe could achieve closer economic convergence between nations was first raised by the European Commission in 1969 and at this early stage they drew up a plan in The Hague. These early negotiations resulted in the Werner plan, a staged strategy for the closer economic integration of the European economies. However, global unrest at this time, in particular currency instability, the collapse of the Breton Woods system and the oil crisis posed a real threat to European stability and as a result the plans for monetary union were delayed.

While talks about the possibility of creating an economic and monetary union go back as far the 1960s it was the Delors report of 1989 which set out the union as we know it today. The debate on monetary union had been reignited at the Hanover summit in 1988 when the Delors committee of central bankers was designated to deliver a three stage plan for the creation of monetary union which resulted in the publication of the Delors report the following year. The report set out a plan to introduce Economic and Monetary Union (EMU) in three stages and

began the task of creating the institutional framework which would support its implementation.

The Three Stages

Stage one of EMU was commenced in 1990 and completed in 1993. On the 1st of July 1990 exchange controls were abolished in the EEC, this development structurally removed the barriers to the flow of capital between EMU member states. In 1992 the Maastricht Treaty set out the completion of European Monetary Union as a definite objective and outlined formal economic convergence criteria for participating countries. The treaty came into effect in 1993 and marks the transition to the next phase.

The second stage of EMU commenced in 1994 with the establishment of the European Monetary Institute, the forerunner of the European Central Bank. The purpose of the institute was to deepen cooperation between member states on monetary policy and allow for a smooth transition to the adoption of the Euro as a single currency. In June of 1997 the stability and growth pact, negotiated at the summit in Amsterdam set out the budgetary criteria for Euro zone membership. The European Council also introduced the new exchange rate policy, ERM II to ensure that stability for those countries which had not yet joined the Euro. Countries wishing to join the union must demonstrate minimum deviation from the rate in the years prior to joining. Then in June of 1998 the creation of the European Central Bank ushered in the final phase of EMU.

On the 1st of June 1999 the ECB formally took over from the EMI and then on the 1st of January with the introduction of the Euro it assumed its full powers. While it took three years of transition to get the Euro currency into circulation, it was in 1999 that it became legal tender while the other currencies which were slowly phased out of circulation. The introduction of the Euro in 1999 coincided with the implementation of a single monetary

policy for all the participating states which was set and governed by the ECB. By 2002 transition to the Euro had been completed.

Conceptual Model of Financialisation

The current section will develop a conceptual model of financialisation which captures both the general and specific/national forms of the process over time. Market-based banking was the carrier of financialisation, it was the essential transmission mechanism of the process across the global economy, and variation within the national form shaped how individual nations connected to the global process. Approaching the analysis through a model which recognises these differences from the outset will develop crucial insight into how national forms of financialisation have connected to the global process and what this has meant for both the national form and the general process. Furthermore, it is envisaged that these varieties of market-based banking will be central to explaining the different sets of consequences which flowed from these two cases of financialisation.

The conceptual model extends Hardie and Howrath's (2013) work in a number of crucial ways. Firstly for Hardie, the real shift in bank behaviour was the increased use of markets, which led to all system becoming more market based but also more bank-based. In essence Hardie et al. (2013) suggest that one model will cover all system, however across the varieties of capitalism the model operated in different ways. Therefore the current model is designed in order to capture variety within its crucial building blocks. While Hardie et al. (2013) suggests that all banks are more market based, the current chapter refutes this claim, suggesting that while banks have become more market-based, within this turn to markets there exist varieties of market-based banking. Furthermore, these varieties shaped the general process of financialisation through the national institutions of banking which defined them.

While the current model draws extensively on Hardie and Howarths's (2013) work on market-based funding, it recognises that within this dimension there is national variation in funding models, in particular, the level of dependence on funding gaps and securitisation, but

also in the national and transnational characteristics of the funding. It also considers a broader range of funders than those included in Hardie's (2013) model, as within the Danish case pension funds have been a crucial source of capital to the financialisation process across a nationally specific type of mortgage bond market. These dimensions of the model will capture how national models connected to the general process.

Furthermore, while Hardie et al. (2013) continued to focus on firm finance; banks had turned towards households as a new source of profit. This gradual process of change which commenced in the 1990s eventually produced a range of housing bubbles in the 2000s. These bubbles were driven by a new model of asset-based lending and were empirically distinct producing different outcomes within different economies. So while Hardie and Howarth (2013) suggest that the critical shift in banks was a new 'originate and distribute model of banking', the current model suggests that underneath this lies a more fundamental shift towards asset-based lending of which the originate distribute model forms a crucial part.

This turn towards households by banks was enabled by processes of financial liberalisation which included the introduction of new market-based mortgage products. This process, similar to the funding markets, was also empirically distinct as national systems had different starting points and nationally unique structures of banking in particular mortgage lending. Therefore the model pushes Hardie and Howarth's (2013) work forward by considering a whole new set of markets located on the demand side of the economy which were directly linked to banks turn towards asset-based lending and the financial product innovation which drove this new model of banking.

Finally, while Hardie (2013) focused on the increased pressure which this new model of market-based banking placed on NFC finance, the current model focuses on how the varieties of market-based banking connected to their national housing regime. Given that the

real shift in banking was towards asset and property based lending it is vital that we understand the dynamics between these two institutional regimes and how these new connections have increased risk for banks, households and ultimately national economies.

This broader set of dimensions was developed through engagement with a combination of literature on financialisation, banking crisis, housing regimes, empirical research, ethnographic research, interviews and Macro level data. It was clear that banks were changing in a more fundamental way that was outlined by Hardie et al.'s (2013) typology and that these changes were occurring within the existing structures of banking within the two cases that were empirically distinct in form.

Conceptual Model of Financialisation:

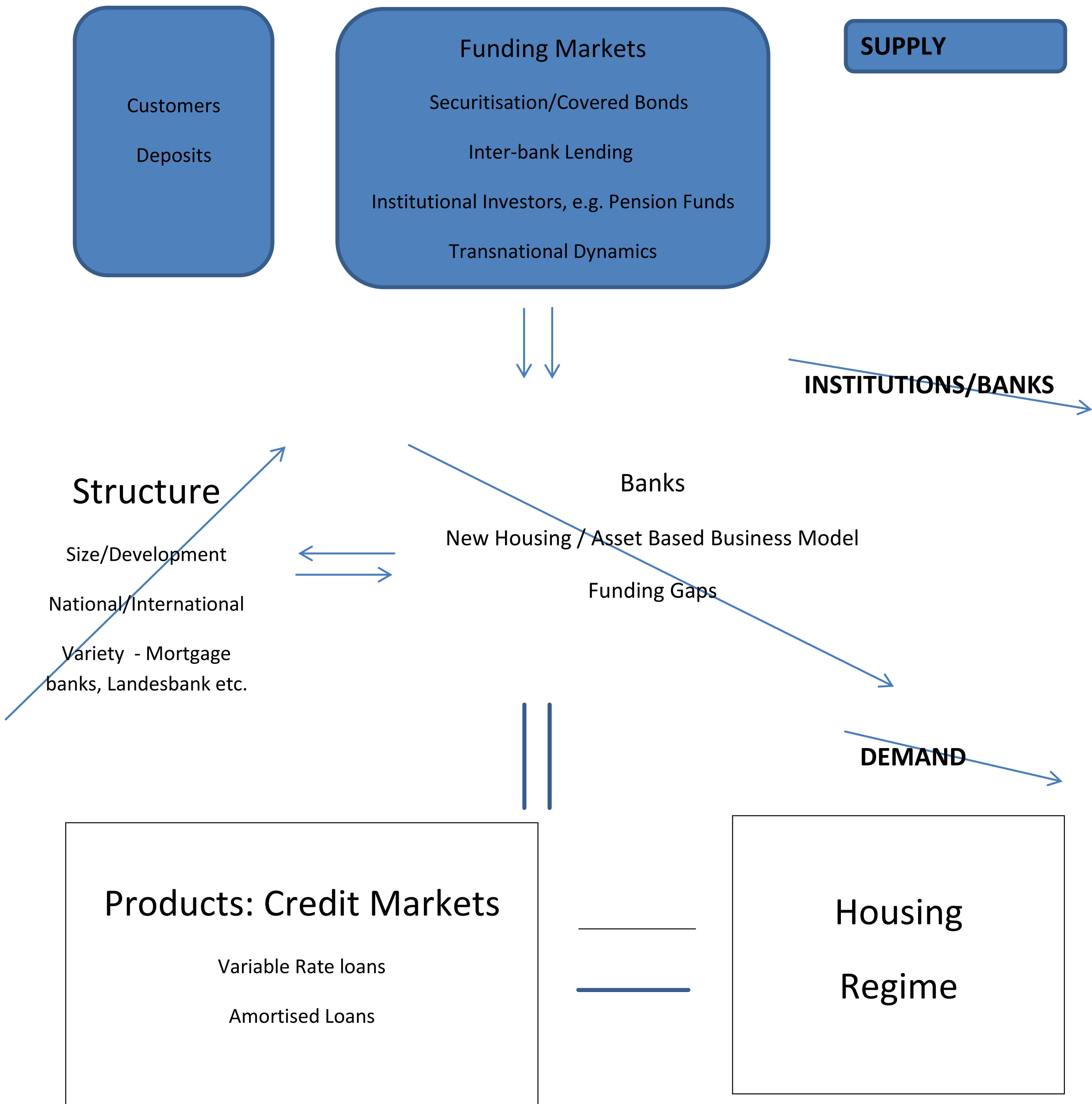


Diagram 2.1 Conceptual Model of Financialisation.

Structure

The general process of financialisation included changes in the structure of the national financial system as mortgage and property lending became a more critical strand of banks business models. This new business model included changes in the structure of banking which displayed general features across both cases, banks and mortgage banks became more connected, and banks crossed borders for the purpose of mortgage and property lending.

However, while there was a general trend, the development of mortgage lending in both the case countries was deeply rooted in the development of broader institutions of the political economy which produced variety through both the existing financial and housing system. Therefore the structure of the financial system captures the general and specific features of financialisation showing how the different structures were shaped by the coordinated and liberal characteristics in the two cases. In the 1980s Denmark had a sizeable well-developed mortgage industry that functioned on Social Democratic principles and was separated from the commercial banking sector. Furthermore commercial banking was dominated by a significant number of small and medium sized banks with strong ties to the cooperative movement. Ireland had a small, underdeveloped mortgage sector, in which the State was a crucial player and banks were excluded from the process. Financialisation was about to change the characteristics of both of these nationally unique structures in unpredictable ways.

In both cases, during the mid-1990s commercial banks increasingly turned towards mortgage and property lending. However, this was organised and shaped by two nationally unique banking sectors, mortgage models and broader financial systems. These sectors in turn were shaped by the variety of capitalism in which they were embedded. The structure of financial systems, how banks were organised across sectors and how this related to the

coordinated or liberal characteristics of the real economy where therefore considered as a vital strand of the model. Banks turning towards household was producing a change in the dynamic of the various strands of banking, commercial and building societies were becoming more connected and involved in each other business model, however, within this commonality, there was continued diversity. In Denmark banks and mortgage banks acted cooperatively, while in Ireland the dynamic was more competitive and these differences shaped the general process of financialisation in fundamental ways.

Finally, the general process of financialisation included banks crossing borders for property lending (Bohle, 2017). While this was a general trend in both the cases countries, again there was continued diversity; Denmark was an exporter of financial services, while Ireland was an importer. Therefore how banking and finance were structured lends critical insight into the transnational dynamics of financialisation and shows how market-based banking has worked as a transmission mechanism for the process between countries.

Products

The turn towards households as a new business model led to the build-up of household debt, and the expansion of mortgage credit to GDP levels within both the cases. This process was driven by the introduction of a whole range of new mortgage products; these products were liberal in origin and have formed a key strand of financialisation across the varieties of capitalism. The products were linked to both processes of financial liberalisation and financial integration in both the cases and formed crucial strand of the general trend of increased mortgage lending but also formed part of the story of the increased connection between mortgage and commercial banks. Therefore the model will pay close attention to these product innovations and how they have intersected with the other dimensions of the model to produce a national form of financialisation.

In the early stages of the ethnographic fieldwork, it became clear that product innovation had driven the Danish mortgage boom and that these innovations were causing a more comprehensive set of changes in both the financial and housing system. Upon further investigation it was apparent that Ireland too had seen a host of product innovations and that these had been driven by foreign banks, adding a further layer of complexity between the general/specific and national/transnational characteristics of financialisation. Therefore products came to form a vital dimension of the model.

Central Bank data from both countries made it clear that the turn towards mortgage lending was driven by a set of product innovations which altered the functioning of national mortgage models and mortgage lending more generally. (Abildgren 2010, Doyle 2009) Furthermore, these changes were linked to the core conditions of financialisation as outlined by Krippner (2011) as the products sought to capitalise on shifting monetary conditions which accompanied EMU. Product innovations form a central strand of what is referred to

broadly in the literature as banks turning towards households as a new source of profit. The inclusion of mortgage product innovations within the model offers an empirically richer account of how banks have turned towards households and what this means for these households and the real economy.

Funding

The market-based funding which was employed by both mortgage and commercial banks to fund credit growth forms a vital strand of the model. In this respect the model will draw heavily on the work of Hardie et al. (2013), paying particularly close attention to two practices, securitisation and deposit deficits, which were a central feature of both cases to varying degrees. However, the model will also consider a broader range of market-based funding to include the role of the institutional investor's, as the growth of substantial pension funds has been central to the Danish story of financialisation. Furthermore, the model will pay close attention to the national and transnational dynamics of the funding which enabled the emergence of financialisation. The flow of capital across Europe was a crucial feature of the European experience of financialisation and points to hierarchical relationship between the core and the periphery.

The increased use of market-based funding and the increased connection between banks this new practice produced was a general feature of both cases. However, the dynamics of this were shaped by the structure of the existing financial system. For example, during the 1990s, the presence of substantial pension funds in Denmark acted as a *buffer* against international capital. However, in Ireland, no such *buffer* existed, and an underdeveloped financial sector required international capital in order to grow. Therefore it was clear that there were feedback loops between the various strands of the model, that the structure of the system could shape the funding model.

Time

It was clear as the research progressed that the structure of the financial system was shaping the national funding model and that the structure itself was being shaped by the feedback loops that the financialisation was creating. Change was occurring over time, unpredictably and cumulatively. Therefore the model needed to be dynamic enough to conceptualise change over time. The feedback loops between the model and the general process point to the salience of approaching the research through a periodisation which enables the analysis to track how each dimension within the model has shifted over time.

Time is a crucial dimension within the model for a number of critical reasons. Firstly the two cases had different starting points. As noted above the structure of the two bank-based systems were influenced by the political economy in which they were embedded and therefore were nationally unique. The study of change of over time implies that we have a definite starting point which necessitates benchmarking the individual cases. Therefore the model is benchmarked in chapter 4 by the variety of banking being practised before any changes began to take place.

Secondly, Financialisation has emerged over time; the literature points us to critical junctures at which states faced dilemmas about the allocation of resources. This literature is heavily biased towards America, and to date, there has been little work investigating the roots of European financialisation. Indeed reading about financialisation in Europe one could believe it appeared in the mid-2000s as Europe became subject to American processes. However, Europe has its own history of financialisation, which is linked to sets of demand-side changes introduced in response to the oil crisis of 1973. Therefore untangling how and why financialisation has worked in both cases, requires a historical approach to the investigation.

Conclusion

The model was developed to broaden the field of investigation and link the changes outlined by Hardie et al. (2013) in the funding practices of banks to a broader set of characteristics which capture the general and specific/national process of financialisation in the two cases. Understanding how financialisation has been mediated through these varieties of market-based banking and subsequently connected to the housing regime will lend critical insight into both the general and specific/national dynamic of the process and the variation in outcomes produced by the process.

The model, in essence, was developed as an analytical tool which allowed the researcher to develop accounts of the critical characteristics of the general process of financialisation and how these varied across the two cases. Part of this variation was contained in the connections between national models and the general process itself. Banks were central to these connections; therefore variations within nation banking models which were captured by the model were used to explain variation within these connections.

The model was developed through an extension of Hardie et al.'s (2013) work which challenged the typology, insisting that variety was evident within national structures of market-based banking. Furthermore, the existence of variety at the level of institutions has shaped both how national banking systems connected to the general process and the also the shape of the general process within national economies. Therefore the model broadens the scope of the investigation commenced by Hardie et al. (2013) to include both the existing structure of the financial system, the level of financial system development, the introduction of product innovations and their market-based funding models.

The model contributes to a range of literature and on both the general and specific characteristics of financialisation by bridging some of the gaps identified within the literature

review. Understanding how and why financialisation has worked within two small open economies located within both the Social Democratic and the liberal market economies will make broad contributions to the field of both comparative political economy and the field of economic sociology. Indeed the project as whole may begin to bridge some the gaps between the two disciplines and make a general contribution to the study of financialisation.

By including the actions of the state as a crucial source of change within the model the thesis contributes to the emerging literature which seeks to ‘rethink political economy' and return to analysis which looks directly at the demand side of the economy. In this respect the model allows for analysis which asks what changed on the demand side of the economy and why did the state make these changes? Since the 1980s processes of financial liberalisation have progressed steadily across Europe and to date, remain under-investigated. The model, therefore, contributes to this new demand-side focus and offers rich empirical accounts of how these changes worked.

In this respect, the model extends the project on financialisation initiated by Krippner (2011) in America and asks how the process has offered a solution to the crisis of the 1970s within two distinct varieties of capitalism. By looking at changes within the model and linking these to the actions of the state, the thesis will develop accounts of how and in what ways financialisation as a general process has offered a solution to the state.

The model will also contribute to the debate on trajectory of change within contemporary capitalism. The design of the model means that we expect to see variation within the core building blocks, this design will develop empirical descriptions of how variation has worked across the general characteristics of financialisation. The model, therefore, will contribute to the convergence debate by outlining two cases of institutional change on a shared trajectory of financialisation with continued institutional diversity.

Mapping how two varieties of banks based capitalism, the coordinated and liberal have negotiated the rise of financialised capitalism.

The model will also contribute to the debate which centres on how financialisation has progressed across the ‘varieties of residential capitalism’; by taking finance out of the ‘black box’ in which this literature places it and bringing banks into the theory of residential capitalism. The model will explain both how and why the different varieties experienced housing bubbles in the noughties and also why these bubbles varied in terms of both characteristics and impact. In doing so, the model will update the theory of residential capitalism.

Finally, the model will contribute to European theories of Financialisation by developing an account of the fundamental transmission mechanism for the process across Europe. The model is particularly suited to the study of Europe as its designs pre-suppose the existence of intuitional diversity and employs this diversity to explain how various nations have connected in different ways to a single transmission mechanism. Current theories function very much at a macro-level and conceptualise the flow of capital in a very hierarchical Marxist way. By coming down a level of analysis and focusing on the actions of banks the model will contribute to the story of the dynamics which emerged between the core and periphery nations and address the myth of German banks as the principal drivers of peripheral nation’s financialisation. The flow of capital and the movement of banks is a more complex and nationally diverse process than re-cycling of German trade surpluses into the European periphery. The model offers a way to connect the general and specific features of financialisation across the European varieties of capitalism.

Chapter 3: Methodology

Financialisation; How it works and why - A ‘general process’.

The current study is concerned with how the general process of financialisation works in Denmark and Ireland. Both countries have experienced a general process of financialisation which has included the growth of the financial sector and the build-up of household debt. The growth of the financial sector and associated build-up of debt have included a broad set of changes within banking which were outlined within the conceptual model developed in Chapter 2. Figures from the Organisation for Economic Co-operation and Development (OECD) reveal that in 2015 Denmark was the most heavily indebted of the member nations with household debt standing at staggering 293 % of disposable income, Ireland ranks fifth with debt standing at 185 % of disposable income. Alongside the growth in debt, there has been profound growth in the Danish and Irish financial sectors, bank assets as a percentage of GDP have increased roughly in line with each other from 50% in 1990 to over 200 % in 2008.

However, while Denmark and Ireland were both cases of a general process of financialisation, this process had critical empirical differences which required further investigation and explanation. Indeed, the salience of the empirical diversity between the two cases was reflected in the different outcomes produced in the wake of the GFC. By 2015, bank assets in Denmark stood at 180% of GDP whereas in Ireland assets had declined to 55% of GDP. The very different impact of the GFC made it clear that these two small open economies did not connect to the general process of financialisation in a generic way. Denmark managed to rescue its banking sector with little state intervention, but Ireland experienced a general collapse despite extensive state intervention. Suggesting that possible

explanations for some of the differences that financialisation produced may have been located in core differences in their political economy. Therefore comparative case study offered an ideal method to investigate how the process of financialisation worked within two distinct varieties of capitalism.

Comparative Case Method

This PhD was undertaken as part of the New Deals in the New Economy project. This project was ERC funded and located at the National University of Ireland Maynooth, with Professor Sean Ó Riain as the principal investigator. The project sought to link the political economy and sociology of work in order to develop insight into the changing nature of post-industrial workplace bargains across Europe. In order to achieve this, the project was split across two broad categories, a macro level employing EWCS data to identify and analyse various regimes of working conditions across Europe, and a comparative case study of working conditions and institutional contexts in Denmark and Ireland. This PhD made up part of the comparative case study project.

As a member of the comparative case team, my role primarily consisted of that of a research assistant. The task initially was to build a comprehensive, country-specific and comparative bibliography of the two cases. This review of the literature assisted with my research as there was a distinct crossover in the literature, in particular, publications on capitalist variety and financialisation. My role also consisted of contacting key interviewees and conducting 'expert interviews' in both Denmark and Ireland. In this respect, I was particularly focused on the health sector. While health and finance may at first glance seem worlds apart from one another my role on the project aligned reasonably well with my research and offered me the opportunity to be ethnographically immersed in the institutional difference across the 'worlds of capitalism.'

The principal investigator initially chose Denmark and Ireland as they both represent small, open economies of similar size and population, with similar agrarian histories, located on the periphery of Europe. However, both are typically grouped in different categories of political economy; Denmark is usually associated with the Nordic Social Democracies and seen as a coordinated economy, Ireland, on the other hand, falls into the Anglo-Saxon group of liberal market economies to which financialisation has usually been more closely associated.

While the project focused on working conditions and workplace bargains, I developed a separate strand of research which specifically focused on the changing face of capital and its relation to the real economy. The two case countries posed particularly interesting opportunity to study the progression of financialisation across time in both the coordinated and liberal varieties of capitalism. The project provided me with the opportunity to travel to Denmark and interview critical actors in the financial sector and also provided transcription for both my Danish and Irish interviews. While my research ran parallel to that of the New Deals project it was conducted independently.

The basic approach to the research was to employ a comparative case method for the analysis of the general process of financialisation within the two countries. This method offered the opportunity to study the rise of finance within two distinct varieties of capitalism which shared a very similar set of transnational conditions. Looking at how and why financialisation emerged within the two cases countries and subsequently comparing these descriptions allowed me to outline the general and specific features of financialisation and also the connections between them. The method allowed me to compare and contrast how the various types of banks and broader financial systems worked, and how they mediated the flow of financialisation. Developing descriptions of how the process of financialisation was

refracted by the varieties of capitalism to produce nationally specific forms of the phenomenon, highlighting that institutions mattered.

Furthermore, these descriptions flew in the face of the stereotypical financialised liberals and socialised Nordics and offered more nuanced, involved descriptions of capitalist variety to a field which insists on placing individual cases within larger clusters. These different forms were subsequently used to describe and explain the very different sets of consequences which flowed from the two processes of financialisation. Finally, a comparison of two nationally specific forms of financialisation offered the opportunity to deepen our understanding of the general trend toward financialisation. Unpacking and untangling how national forms have connected to the general trend and how and why these connections differed ultimately led to a deeper understanding of how the general trend worked.

Process Tracing

The two cases were built form a series of expert interviews and a range of secondary data both qualitative and quantitative, based on a principle of triangulation, developing what is called 'thick descriptions' (Geertz, 1973). The within cases analysis was conducted through the use of process tracing (Collier, 2011). Collier (2011:823) describes process tracing as the 'systematic examination of diagnostic evidence selected and analysed in light of research questions and hypotheses posed by the investigator.' Given the range of competing, theoretical and empirical, descriptions of the process, it was felt that process tracing offered the best opportunity to develop causal explanations of how and why the general process of financialisation worked within the two cases.

In this respect process tracing offered a set of analytical tools which could be applied to the data in order to establish varying degrees of causal inference (Bennett, 2010). It is important to point out that there are two opposing schools within the process tracing world,

one which demands methodological rigour and another which is sceptical of the methodological rigour which process tracing can supply (Collier, 2011; Hay, 2016). Before outlining the various analytical tools employed by process tracers, I will locate the current study within the tradition of process tracing to which it adheres.

Colin Hay (2016) suggests that process tracing is an ambition as opposed to a methodology. Process tracing is employed extensively by political scientists, who in their endeavours to develop causal inference designed a range of tests to identify, track and trace processes (Brady and Collier, 2010). Hay (2016) is somewhat sceptical of the methodological rigour offered by process tracing, pointing out that the ‘self-proclaimed process tracers' have mislabelled what they ‘seek to describe and proselytise for.' (Hay, 2016:500) The problem as Hay (2016) sees it is that process tracing as a task implies a degree of methodological complexity which process tracing as a methodology is ill-equipped to supply. Hay's (2016) main line of argument is that the task of identifying and subsequently tracking and tracing processes to build causal explanations is challenging and poses a host of methodological complexities. In line with Hay's (2016) views, the following section of the chapter is dedicated to untangling how to overcome and capitalise upon the methodological complexity of analysing a process which has both general and specific features.

Collier (2011) outlines four empirical tests for process tracers which can be used to establish causal inference. It was within the Hay (2016) tradition of process tracing that these tools were applied to the data. The four tests are as follows; straw in the wind, hoop, smoking gun and doubly decisive. Straw in the wind tests place the least demands on the empirical data and very much serve to increase plausibility of a competing explanation and develop finer empirical details of the case. Hoop tests are more rigorous in so far as the hypotheses must jump through the hoop to remain under consideration. Collier (2011) suggests that while hoop tests cannot confirm a hypothesis, they can rule it out. Smoking gun tests, perhaps the

most employed test during the analysis, are based on the idea that the suspect holding the smoking gun is very likely to be guilty but do not rule out other suspects with no gun. An example of how this type of test was applied to European financialisation is included in the section of the challenges of the research process. Finally, doubly decisive tests provide strong evidence for causal inference and confirm a hypothesis while ruling out others (Collier, 2011). Bennett (2010) notes that a single test that can establish causation in social science is rare, and suggests that researchers applying multiple tests which support each other is a more common form of proof.

Methodological Complexity: Financialisation a General and Specific Process

Within the literature, there is a lack of clarity as to what constitute the boundaries of a case. Collier et al. (2010:182) describe a case as ‘one instance of the unit of analysis employed in a given study.' Furthermore, they suggest that the case should correspond to political or social processes about which information is gathered. Defining the boundaries of two cases of financialisation located within two distinct varieties of capitalism posed a methodological challenge; therefore, the current chapter dedicates a section to establishing these boundaries. In particular, it focuses on two key areas, financialisation as a general and specific process and variety within bank based models of capitalism. Banks were the central transmission mechanism for financialisation across both time and space; this extended the boundaries of the cases beyond being two cases of a general process of financialisation, as these were also two cases of bank based capitalism over which the financialisation had flowed.

The complexity of financialisation, a process which has both general and specific characteristics, implied that studying the process across two cases would entail some methodological complexity. The following section aims to address this complexity and

demonstrate how the research design overcame and indeed capitalised on it through the use of the conceptual model developed in the literature review. The process of financialisation; is both a general and specific/national process and a transnational phenomenon; the general process is made up of the sum of all the national forms of the general process; however, it also consists of the complex interactions and connections between these national forms. Therefore, financialisation is a process that is made up of the sum of its parts and the connections between them.

For example, while there was a general process of financialisation in both Denmark and Ireland, these general processes were empirically distinct in form. While both of these made up part of the general European process, they were also shaped by their connections to the European process and more global processes. Which in turn were shaped by a host of national and transnational dynamics and processes and created a whole range of feedback loops which could further drive both processes? The story was complicated; the risk was that research would become enmeshed in complexity and see all processes as equally causal in the emergence of the general process. In essence, everything becomes financialisation, which is caused by everything. Therefore, the critical question for the research design was how to make sense of this complexity and employ it to deepen our understanding of the general process.

It was possible to make sense of the complexity by employing the conceptual model developed within the literate review. The model was developed through engagement with the current literature on banking and financialisation with particular reference to capitalist variety, and also through ethnographic, quantitative and historical research. The model offered core building blocks which were common to both cases and captured the general process of financialisation. Hardie and Howarth's (2013) market-based banking typology formed the mainstay of the banking model, which was connected to Schwartz and Sebrooke's

(2008) varieties of residential capitalism and Krippner's (2011) core conditions of financialisation. These core building blocks were used in the process of defining the boundaries of the cases (Ragin and Becker, 1992).

As the research progressed a combination of ethnographic, historical, and quantitative investigation made it clear that within the turn to markets by banks there remained a degree of capitalist diversity. Therefore, while we expect the core building block to be present in each case, we also expect them to look different. Banks and new connections between national models of banking were a core feature of European financialisation; these core building blocks were connected to the varieties of residential capitalism, national varieties of capitalism, and national politics all of which could shape the process of financialisation. Therefore, while we expect to find the core building blocks, we also expect variation within them and in the outcome produced based on these connections. The model, therefore, allows the researcher to mediate between the general and the specific features of the process and outline the various connections between the general and the specific.

Cases of What?

Regarding capitalist variety, it was clear from the outset that the two cases did not conform to the standard categorisation of banking contained within the varieties of capitalism literature. Indeed, the literature itself seemed somewhat contradictory. Denmark was classified as a Social Democracy and a bank based system. Ireland was classified as a liberal market economy but also a bank based system (Amable, 2003). However, there was little or no recognition or investigation of how bank based capitalism may vary across liberal and coordinated market economies.

Furthermore, the literature on the emergence of market-based banking suggested that the classic distinction between market and bank-based systems had been rendered defunct

because of the rise of markets (Hardie et al. 2013). Suggesting that all systems had converged on a new type of market-based banking. In many ways, this only served to deepen the puzzle about variety because while the old model was defunct, its failure to explain the cases had more to do with the conceptual simplicity of the model itself rather than a lack of empirical variety within contemporary banking sectors. Indeed, even in the very early stages of the ethnographic research fieldwork pointed to *profound differences in how these two banks based models worked*.

If the conceptual model hoped to address not just the general trend of financialisation but also the specific/national features of the process, then it would need to be able to capture capitalist diversity in a more nuanced way than the current literature (Amable, 2003). Which left me with a question central to most social science; what are these cases of? (Ragin and Becker, 1992). While broadly it was clear that these were cases of the financialisation of coordinated and liberal capitalism, how coordination and liberalism were defined was less than clear. Returning to the puzzle about how variety worked within bank based models of capitalism proved central to defining the boundaries of each case. In order to achieve clarity it was necessary to draw upon to two understandings of what constitutes a case; cases as empirical units and cases as theoretical constructs (Ragin and Becker, 1992). It was the tension between the empirical and theoretical dimensions of each case and frustration with the current theoretical understanding of cases of bank based capitalism which led to a more nuanced understanding of capitalist variety (Byrne and Ragin, 2009).

Ragin and Becker (1992) outline that researchers who see cases as general theoretical constructs, see these constructions as the product of collective scholarly work and therefore external to any research effort. However, they also note that general frustration with the how these cases are defined can lead researchers to intensify their empirical efforts and to define cases and their boundaries in a more inductive manner (Ragin and Becker, 1992). Inductively

defining cases means that the researcher views the case as empirically real and bounded, but specific. In this more empirically grounded understanding of cases; the boundaries of the case are found throughout the course of the empirical research (Ragin and Becker, 1992). It was frustration with the lack of connection between the empirical reality of variety within bank based capitalisms and theoretical categorisations which led to the extension of the boundaries of the cases across both time and space.

Denmark contained a range of banks which were not evident in Ireland, and they had been there for a long time. This historical empirical difference suggested that the boundaries of the cases were being stretched across time. In order to understand these cases of financialisation, I would need to go further back into history than I had initially planned. Ó Riain (2009) refers to this as a process of stretching the boundaries of the empirical case study. Similarly, Gille (2001) points to the fact that ethnographers have increasingly come to realise that historical analysis is critical to the ethnographic enterprise.

Chapter 4 contextualises the two cases and locates them historically within their specific political economy. By conceptualising cases as both theoretical and empirical units, the chapter builds upon and extends the current theory of variety in bank-based models of capitalism (Amable, 2003). Employing data from expert interviews, macro-level quantitative data and historical research to outline a more nuanced description of how variety works in national models of banking. Table 3.0 outlines these extensions of the cases and contains both Amable’s (2003) original descriptions of the two cases and the newly extended descriptions. The extended descriptions include new characteristics which pertain to the political economy and level of industrial development. Their development is described below. In taking this approach chapter 4, establishes a comparative starting point for the two cases contained in Table 4.0.

1982-1992		
	Denmark	Ireland
Amable (2003)	Passive bank-based model	Passive bank-based model with a significant presence of foreign banks
Varieties of bank based capitalism	Developed, coordinated, passive bank-based model	Underdeveloped, liberal, passive bank-based model, with the presence of foreign banks

Table 3.0 Extending the Boundaries of the Case

While both cases were bank based, both were embedded within distinct political economies, Social Democratic Denmark and liberal Ireland. It was the embeddedness of the bank based models within their social and political context which allowed me to establish what the cases were made of. Denmark's bank-based system was embedded within a range of coordinated institutions which had shaped the development of the banking sector. Therefore, while the Danish system was bank based, it did not conform to the German archetypal bank-based model. Amable (2003) recognised this and described the system as passive; however, while acknowledging the passivity of the system, historical research revealed that other forms of coordination also defined the Danish system. While large banks did not play a significant role in large firms, as per the German model, small and medium-sized banks had long established relations with the SME sector and provided patient capital (Culpepper, 2005). So while the coordination was different from the German model, it was coordination none the less. This type of coordination was shaped by the history of industrial development in Denmark, which was rooted in the strength of the cooperative movement and the presence of large foundations. This unique structure of corporate governance had produced a nationally unique form of coordinated banking. The influence of these forms of governance was also apparent in the mortgage sector, where large mortgage banks operated on Social Democratic principles and contained elements of both foundations and cooperatives. Indeed, Amable (2003) noted the dominance of cooperatives and families within the corporate governance of Denmark but did not theorise about how this might shape either agency or structure within the banking sector.

As the research progressed a combination of ethnography and macro-level data revealed that there was a capacity for collective action within the Danish financial sector. The various strands of the financial system worked in conjunction with one another and produced a model of finance that was predominately nationally funded. There was a long history of negotiation across sectors in the Danish political economy, and this trait was reflected in the macro functioning of the financial system (Campbell and Pedersen, 2007). This capacity revealed itself in response to the financial crisis of 1987 and 2008 when larger banks negotiated with smaller insolvent banks and ensured their survival; it also emerged in funding practices, when large pension funds recycled national savings into the growth of mortgage credit to produce economic growth.

Similarly, it was clear that embeddedness within a liberal market economy had shaped the development of Irish banking. However, in the course of looking at the development of Irish bank based capitalism and comparing it to Denmark, it became clear the level of industrial development within the Irish economy had also shaped the trajectory of institutional change within Irish banks. Ireland lacked the small and medium-sized banks which typified the Danish system; instead, it contained two relatively large powerful banks and a small building society sector. The mortgage sector was strikingly different to the sophisticated market-based system used in Denmark, and historical research revealed that up until the 1980s the state had been the primary provider of mortgage finance. This combination of comparative historical research stretched the boundaries of the cases to include the level of development within the financial sector as this was a definite factor in the empirical differences between the two cases. In closing chapter four outlines two distinct varieties of bank based capitalism which served as a comparative starting point for the remainder of the empirical chapters (Table 4.0).

The Politics of Financialisation: Contingency and Periodisation

Financialisation as a general process required political support in order to gain momentum. In a European context, it has been linked to national projects of financial liberalisation but also to broader European political projects of financial integration, in particular, the creation of a single currency. Comparative case analysis offered the opportunity to engage with how and why Denmark and Ireland had turned to financial markets, what it offered to these two small open economies which were functioning in an increasingly globalised and financialised world.

While Schwartz and Seabrooke (2008) were interested in mapping how changes in housing finance and housing systems might shape national politics, the politics of financialisation were more complicated than a simple mapping of this theory onto the process. Instead, it demanded that attention be paid to how the political process had unfolded over time within each country. Over time financialisation created new contingencies and offered states solutions to various sets of social and political dilemmas. Indeed, the growth cycle implications of the general process of financialisation suggested that the politics of unleashing finance offered states fundamental solutions to the crises of capitalism and were not just linked to the politics of housing.

Krippner's (2011) work on the politics of financialisation outlined a method which could be transposed onto a European context in three crucial ways. Firstly, Krippner (2011) outlined a set of core conditions to which financialisation responded, secondly she highlighted the role of critical junctures, and thirdly she pointed out that financialisation emerged as an unintended consequence of efforts to resolve entirely separate crises. Krippner (2011:15) drew on Arrighi's (2010) analysis of the global ebb and flow of finance over time to pose a crucial puzzle within in her work; 'How did the turn to finance offer a solution to

the crisis of the 1970's, particularly from the perspective of the state?' In answering this puzzle, Krippner (2011) found that the financialisation of the American economy was the unintended consequence of policy changes introduced to avoid the politically contentious decisions about the distribution of scarce resources. She points to critical junctures at which the state faced dilemmas about how to allocate scarce resources within the Americas and how their efforts to circumvent these choices unleashed finance and caused a change in the behaviour of NFCs.

The core conditions outlined by Krippner (2011) were; financial deregulation, the liberalisation of capital flows and a new monetary policy regime, all of which were central features of European financialisation and were linked in different ways to the actions of the state (Białek, 2015). These conditions had emerged over time across Europe and while some were predominately national processes rooted in national politics other were more transnational and rooted in the politics of European integration. Therefore, what was required was a research design which could account for how and why these conditions emerged over time in the two cases countries while considering the fact that their emergence may be the unintended consequence of decisions to address entirely separate issues and political projects.

Over time it became clear that financialisation was a cumulative process, which produced institutional change and that these changes would produce a whole new set of contingencies which needed to be accounted for. Alongside institutional change, were a set of shifting transnational conditions, which could also shape the national politics of financial liberalisation and financial integration. Both of which were key to Krippner's (2011) puzzle.

In the light of this complexity, it was decided that the best explanatory outcomes would be produced by an adopting a periodisation which takes as its starting point the second oil crisis and then follows the distinct phases of global financialisation. The rise and fall of

the two most massive asset bubbles, the dot.com and the global housing bubble. The use of a periodisation allowed the research to progress in stages, using process tracing to identify, track and trace the critical junctures which defined the process and untangle the national stories of the politics of financialisation and how these linked to Krippner's (2011) core conditions. The use of periods meant that within each chapter, the relevant set of contingencies could be considered when asking how did state action shape the trajectory of the process and how did it offer them a solution? Furthermore, as the periods progressed the changes from the previous period were considered in the development of causal explanations through process tracing.

The periodisation, therefore, was built around critical junctures in the rise of global financialisation and linked these to the growth of finance within both the case countries by applying the conceptual model of finance outlined in the literature review. This approach allowed the researcher to compare and contrast the two cases across the dimensions of the model over time while remaining sensitive to the effect of the transnational processes on the individual cases.

The Periods:

1982-1991 the Second Oil Crisis & the Roots of Financialisation.

1992-2000 Employment Miracles, Institutional Change & Market Based Banking

2001-2007 Housing Driven Growth, Market-Based Banking & the Wall of Money

2008-2015 Globalised Financial Power, from the GFC into Recovery.

Financialisation and Institutional Change

The current study is concerned with institutional change over time in two varieties of capitalism. Capitalism was changing, housing was changing, and banks were changing. This change was taking place within the advanced political economies; however, given its dependence on path dependent models of change the field of comparative political economy was ill-equipped to deal with the kind of change produced by financialisation. If financialisation were the kind of exogenous force that the 'regime of accumulation scholars' suggested, then varieties of capitalism would be well equipped to tackle change within the advance political economies which result from the process.

However, a review of the literature has revealed that financialisation was not an exogenous force; instead, it has developed within individual countries, in nationally specific ways through a process of institutional transformation over time. While there are tipping points such as the bursting of bubbles, these have been preceded by periods in which change has been slow and incremental. Therefore there was a need to look outside of the classic path dependence models of change which dominates the field of political economy.

Streeck and Thelen (2005) developed a model of change within their work, *Beyond Continuity* which was employed as a tool of analysis within the current study to capture the various types of change linked to the general process of financialisation within the two cases. Streeck and Thelen (2005) reject the capitalist convergence hypothesis and suggest that the change within the advanced political economies has been a gradual process of liberalisation with continued diversity. This view of the trajectory of change, continued diversity within a single general trend towards liberalisation across the varieties of capitalism, fitted neatly with how the current study viewed the general trend of financialisation.

Streeck and Thelen (2005) point out that there is disagreement within the literature on what type of change is associated with path dependence, suggesting there are two types of path dependence. Ebbinghaus (2005:7) draws upon the metaphors of the 'well-trodden trail' and 'junctures in the road' to highlight how these two approaches take a different view of historical sequencing. He suggests that the first model sees institutions suddenly emerge and then become entrenched, while the second model stresses that institutions are a sequence of alternative futures. However, some scholars demand a more rigorous assessment of what path dependence is and what type of change it produces, these scholars tend to draw a solid line between institutional innovation and reproduction (Krasner, 1988). In doing so, scholars such as Mahoney (2000) draw our attention to the difference between specific conjunctures, which produce institutional change based upon the set of characteristics that are specific to the institution and the long periods of stability which characterise continuity. This type of path dependence argues then for long periods of continuity which are interrupted during 'critical junctures' by sudden upheaval producing institutional change.

Streeck and Thelen (2005) make a similar argument to Ebbinghaus (2005), suggesting that the literature consists of two distinct forms of change which are opposed to one another, one where minor changes are continuous, and another where significant upheavals are discontinuous. Sreeck and Thelen (2005:8) edited a collection of empirical work Beyond Continuity in which they argue that path-dependent models of change within the field of political economy, such as those outlined by Mahoney (2000), 'make excessively high demands on real change to be recognised as such and tend to reduce most or all observable changes to adjustments for the purpose of stability.' They propose a new model of change which they argue better 'fits' the type of change which is currently taking place in advanced political economies and in so doing addresses the bias within the field of political economy which favours abrupt change. This bias, they argue, has led to a situation where much change

within advanced political economies is conceptualised as adaptation, however, in their view, these small changes add up to a process of incremental change and gradual transformation.

Streeck and Thelen (2005) problematise the processes of change and continuity and develop a table (included below) to describe four possibilities which extend the traditional conception of change within path dependent models. Within this model, they highlight the possibility that in reality within abrupt change there is often continuity this they refer to as survival and return, of greater importance, however, is the upper right cell, gradual transformation, which they suggest often results in dramatic institutional reconfiguration under the guise of continued stability. The appearance of continued stability is produced by the subtle and incremental nature of the changes which happen over time.

		Results of Change	
		Continuity	Discontinuity
Process of Change	Incremental	Reproduction by adaption	Gradual Transformation
	Abrupt	Survival and Return	Breakdown and Replacement

Table 3.1 Types of Institutional Change, Processes and Results. (Streeck and Thelen 2005:9)

The current study employs this model of change as a tool of analysis as it was felt that it offered the best means of explaining how financialisation has worked within the two case studies. The process has included many different forms of change, slow incremental change, but also rapid upheaval. Furthermore, while the process emerged through a process of institutional change, it also caused institutional change. Therefore, employing a model which captures the more complex dynamics of change within the advanced political economies and also considers different forms of change and the results these produced offered the best

chance of understanding the trajectories of the cause and effect of institutional changes which were central to the process of financialisation.

Case Study Research

Primary research material was collected utilising qualitative expert interviews with a range of actors within both cases. The interviews were primarily conducted face to face; however, one interview took place over Skype as the actor concerned would not otherwise have been available. The interviews were semi-structured to allow the participant to range freely over topics which they felt where of particular importance. Finally, the interviews were based upon the principle of triangulation, a process whereby the information gathered would be cross-referenced with alternative sources, in particular, secondary data including Marco level statistics and publications from central banks, the World Bank and the IMF.

The interviews were conducted between 2013 and mid-2017. Pre-clearance was acquired from the ethics committee of the National University of Ireland Maynooth as part of the New Deals in the New Economy project. Interviews were anonymised in accordance with the ethics procedure; however, interviewees consented to be identified simply as an expert within their field. These conditions were made clear at the outset of the interview and interviewees were given a consent form which is included in Appendix 1.

Danish Interviews				
Code: Sector/Country	Job Description	Purpose	Gender	Date
Finsec 1/DK	Senior Figure in Danish Mortgage Industry.	Direct Quotation	Male	07/11/2013
Finsec 2/DK	Senior Figure in Private Equity	Background	Male	24/03/2014
Finsec 3/DK	Senior Danish Financial Regulator	Direct Quotation	Male	27/03/2014
Finsec 4/DK	Senior Figure in Danish Mortgage Industry	Direct Quotation	Male	10/10/2014
Finsec 5/DK	Senior Economist in Danish Pension Sector	Direct Quotation	Male	01/12.2015
Finsec 6/DK	Senior Figure in Danish Mortgage Industry	Direct Quotation	Female	02/12/2015
Finsec 7/DK	Senior Figure in Danish Pension Sector	Direct Quotation	Male	25/01/2016
Finsec 8/DK	Senior Economist in Danish Mortgage Industry	Direct Quotation	Male	26/01/2016
Finsec 9/DK	Senior Figure in Danish Commercial Banking	Direct Quotation	Male	30/11/2016
Finsec 10/DK	Representative from Financial Sector Union	Background	Female	26/03/2014
CB 1/DK	Senior Employee in Danish and European Central Banking	Direct Quotation	Female	08/11/2013
CB 2/DK	Senior Economist in Danish Central Banking	Direct Quotation	Male	27/01/2016
Uni 1/DK	Expert on Danish Housing System	Background	Male	24/03/2014
Uni 2/DK	Expert on Danish Corporate Governance & Finance	Background	Male	04/12/2015
Pol 1/DK	Senior Political Advisor and Expert on Danish Finance	Background	Male	26/03/2014
Pol 2/DK	Senior Political Figure	Background	Male	
Hous 1/DK	Representative from Construction Sector (Employers Association)	Direct Quotation	Female	01/12/2016

Table 3.2 Danish Expert Interviews

Irish Interviews				
Code: Sector/Country	Job Description	Purpose	Gender	Date
Finsec 1/IRL	Senior Figure in Irish Commercial Banking.	Direct Quotation	Male	03/05/2017
Finsec 2/IRL	Senior Employee in Irish Commercial Banking	Background	Male	20/02/2017
Finsec 3/IRL	Senior Employee in Irish Commercial and State Banks	Direct Quotation	Male	12/06/2017
Finsec 4/IRL	Senior Figure in Irish Pension Sector	Direct Quotation	Male	28/02/2017
Finsec 5/IRL	Senior Figure in Irish and Global Banking	Direct Quotation	Male	02/11/2017
CB 1/IRL	Senior Economist in Irish Central Banking	Direct Quotation	Male	05/12/2017
CB 2/IRL	Senior Economist in Irish Central Banking	Direct Quotation	Male	28/02/2017
Hous 1/IRL	Senior Economist & Expert in Irish Housing System	Background	Male	30/03/2017
Uni 1/IRL	Senior Figure in Irish Mortgage Industry and Academic Expert in Irish Housing.	Direct Quotation	Female	25/01/2017
Uni 2/IRL	Expert on Irish Corporate Governance and Finance	Direct Quotation	Female	15/04/2016

Table 3.3 Irish Expert Interviews

I made five field trips to Denmark between 2013 and 2016 and conducted a total of 17 interviews. Due to the ease of access to the field Interviews in Ireland were conducted in a shorter time frame during 2017. In Ireland, the researcher conducted a total of 10 interviews.

In Denmark sic of the interviewees came from the world of banking, (4 from mortgage banks, one from the commercial sector and one financial regulator). Two interviewees came from the pension sector, two from central banking, one trade union representative and one from other financial. Two university experts were interviewed from the worlds of housing and corporate governance, two politicians with connections to finance and one housing expert from the employers association.

In Ireland four of the interviewees came from the world of banking, two from large commercial and mortgage banks, one from large commercial and state banks and one regulator. Two central bankers and one pension expert were interviewed, alongside two

academic experts from the worlds of housing and corporate governance and one housing expert from a state think tank.

Expert interviews were employed as they offered the best means of gathering data on the world of finance, which is highly specialised and subject to insider knowledge (Bogner et al. 2009). Therefore, experts within specific sectors of the world of finance where chosen as it was deemed that they would have access to insider knowledge about the system and could be conceptualised as being representative of a full circle of players within this world. This led to the choice of experts that broadly represented the various strands of the model of banking, or would have insider knowledge about the model and also the housing system to which the model was connected. Furthermore, it was felt that central bankers would be a good source of data that was more historical given their role as the regulators of finance and finally it was felt that academics would have a broader view of the transformation of finance and would, therefore, lend critical insights into the process of change over time.

The data collected through these expert interviews were audio recorded and transcribed. The analysis of the transcribed interviews scripts was conducted using MaxQDA in order to explore the totality of the data collected for the emergence of common themes and arguments. Coding exercises were carried out to define, classify and refine salient themes. The interviews were initially coded using a broad coding system across the various sectors of the financial system, commercial banks, mortgage banks, pension funds and housing systems. Over time, with the development of the conceptual model interviews were re-coded across the critical dimensions of the model, including time and the transnational context.

This data was analysed using the principle of triangulation, meaning that data which emerged in the interviews were subsequently checked against relevant empirical sources and alternative explanations were explored. In this respect, the World Bank dataset on financial

development and the OECD Stan dataset proved to be invaluable sources of macro-level data on the worlds of finance. Also of great importance were data sets and empirical papers published by the central banking authorities of both case countries. These datasets offered key comparative data on the products, structure and funding of Danish and Irish finance which assisted in the framing of the on-going semi-structured interviews. Other sources included the Bank of International Settlements (BIS), Hypostat and the International Monetary Fund.

The data gathered in the interviews contributed to the analysis in many ways. Firstly given the complexity of the national financial system the interviews provided background knowledge into 'how finance worked' in both of the cases. This broad insight was complemented by the more focused use of the data which sought to employ the interviews within the process tracing framework as a critical source of identifying, tracking and tracing processes within the two cases. Furthermore, during interviews which were conducted towards the end of the process, it was possible to pose critical puzzles and alternative explanations to experts and in doing so gather their opinions on the causal mechanisms of financialisation.

Challenges and Limitations

The process tracing of financialisation proved to be quite a challenge for a number of reasons. Firstly the range of competing explanations came from a variety of academic disciplines and required a working knowledge of a diverse range of subjects from macroeconomics to economic geography. This complexity in competing explanations required that I reacquaint myself with some basic macroeconomics and economic geography and begin to unpack how balance of payments worked, how monetary and fiscal policy intersected with one and another and how were they changing. This involved gathering macro-level data on the geography of capital flow, interest rates, levels of government and private debt. This process was both time consuming, and at times frustrating.

The plausibility of some of the arguments about what caused European financialisation, particularly those which related to imbalances in the euro proved a particular challenge, raising a range of questions and competing explanations. For example, if financialisation resulted from capital flow from the core to the periphery, then how did banks fit in this picture, what did that mean about global processes of financialisation? Furthermore, the quality of the macro data seemed to support these macro-level descriptions of trade imbalances and the removal of exchange rate risk causing bubbles in the periphery. Perhaps the squeezing of German workers through the dualization of German labour markets was to blame for rising debt levels in the periphery (Lapavitsas and Kouvélakis, 2012)?

However, as the research progressed and my knowledge of capital flow, monetary policy, and financial integration deepened what started as a real challenge became a source of excitement and academic endeavour. It became clear that the Euro in some ways was very much the smoking gun of European financialisation (Collier, 2011). Indeed, during one of my interviews with an expert in Global banking, they pointed out that the Euro was the obvious

thing to blame (the smoking gun) for what had happened, it was the significant change, and therefore it must be causal. (Finsec 5/IRL) While the figures seemed to add up, and there was a trade imbalance between the core and the periphery, it was not clear how precisely a single currency had caused the bubbles. While the Euro had removed exchange rate risk was this enough to cause the kind of capital flow which had produced a range of housing bubbles across Europe and also why did America have a Housing bubble at the same time? Irish accounts of financialisation were dominated by descriptions of the role of German banks. Finally, during an interview with an Irish central banker, he pointed out that we needed to know where the money had come from? (CB 2/IRL)The macro-level data revealed that the funding of Irish banks had come from UK money markets, not German banks, and was denominated in sterling and dollars, not Euro. While the Euro was the obvious suspect, global banks were the culprits. While the task was challenging, it also proved to be stimulating and exciting. Benette (2010) suggests that process tracers are like detectives uncovering clues and solving puzzles as they go. My long-lived obsession with the genre, allowed me to emulate, all be it in a humbler fashion, my childhood hero Sherlock Holmes and embark on a journey of discovery into the how and why of European financialisation.

One of the most challenging aspects of the interview process was gaining access to the world of finance in Ireland. Working as part of the New Deals project meant I was working to the project timetable and built my interview schedule around that of the project. Therefore, I commenced the project by interviewing actors from the world of finance in Denmark. Access to these actors in Denmark proved to be relatively straightforward, an important finding in its own respect. However, having left the Irish interviews until the later part of the project based on the idea that I had better access to the field, I was soon to find that gaining access to Irish finance was going to be far more challenging than I had initially thought. In Ireland, a range of actors, from banking, regulation, professional bodies and the

state, either politely refused or didn't respond to my emails. Irish finance, it seemed, was not something anyone wanted to talk about. On one occasion I had gained access to a professional body, but when asked for a description of my project, which I provided, was politely refused on the grounds of workload and offered access to macro-level data. The most responsive sector in Ireland was academia, and it was through these contacts that I eventually began to penetrate the world of Irish finance. Respondents from academia passed me on to experts they knew in the world of finance, and their recommendations got me past the gatekeepers to this social world.

Conclusion

The current study is concerned with how and why financialisation works in Denmark and Ireland 1982-2015. The study fits within a long tradition of small N comparative case analysis across the varieties of capitalism, tracing two cases of a general process of financialisation in coordinated Denmark and liberal Ireland.

The study of a general process which occurs in nationally specific forms posed a range of methodological complexities which are overcome through the use of a conceptual model. The model outlines core building blocks of the general process which we expect to find in both cases. However, we also expect to find variation within these core building blocks based on their connection to the broader political economy. Therefore, the model allows for mediation between the general and specific features of the process.

The cases were constructed by employing two understandings of what constitutes a case and stretching these boundaries across both space and time. This understanding of what constitutes a case was chosen because of frustration with lack of congruity between theoretical understandings of bank based forms of capitalism and the empirical content of banking in Denmark and Ireland. This process developed more nuanced descriptions of variety within contemporary forms banks-based capitalism than those within the current literature. Extending theoretical work by Amable (2003) during the course of the empirical research to include two further characteristics related to the political economy and level of industrial development.

In closing, European financialisation was connected to both national projects of growth and broader European projects of integration and involved complex types of institutional change which go beyond traditional path dependent models. The use of a periodisation allowed for the development of an analysis which outlined the complex dynamics between

financialisation and national and European politics. Developing descriptions of what financialisation had to offer to the two cases countries at specific conjunctures in time. This was a more complicated process than a simple mapping of the varieties of residential capitalism framework onto the current model. Instead, it required that attention be paid to the shifting and unfolding nature of national politics over time. Finally, the application of models of change developed by Streeck and Thelen (2003) allowed for the mapping of processes of institutional change within the crucial regimes of banking and housing over time which goes beyond path dependent models and considers a broader range of changes. In particular, slow incremental change which is non-adaptive and produces gradual transformation.

Chapter 4: (1982 – 1991)

The Second Oil Crisis & the Roots of Financialisation

Introduction

Chapter 4 is bookend by the second oil crisis and focuses on attempts by the state to move beyond the high unemployment and low growth which hampered both economies, in its wake. In both Denmark and Ireland, it was a time of high government debt and high unemployment, and the oil crisis exacerbated these national conditions. In response to national economic crisis, both countries initiated periods of austerity to rebalance the economy.

In Denmark, a national economic crisis brought with it a change of government, with new economic ideas, which envisaged a turn towards export-led growth. To this end, the Liberal-Conservative coalition made structural changes to currency policy with the aim of increasing competitiveness, and, unexpectedly caused a financial crisis. In the wake of the financial turmoil which followed, the solution to failing banks was a process of bank consolidation, which eventually led to the emergence of large, powerful, commercial banks. Therefore, similar to Krippner's (2011) findings on American financialisation, the roots of Danish financialisation arose as the *'unintended consequence'* of political decisions to resolve an entirely separate crisis.

Similarly, Irish financialisation was rooted in the *unintended consequences* of institutional change initiated in response to a national economic crisis. In the Irish case, a bankrupt Fianna Fáil / Progressive Democrat coalition withdrew from the provision of housing and housing finance through processes of welfare retrenchment and financial liberalisation. The dynamics this created *unintentionally* put in place the institutional building

blocks for financialisation, liberalised banking and marketised housing. In seeking to address the challenges of low growth, and high unemployment in the wake of the second oil crisis both countries had unwittingly created a set of conditions conducive to the growth of finance.

Importantly, within the critical building blocks of finance and housing there was institutional diversity. This diversity was related to the variety of capitalism in which the cases were embedded and shaped the nationally specific forms of financialisation which emerged in the 1990s and peaked in the 2000s. Therefore, by extending Amable's (2003) analysis, the current chapter outlines two distinct varieties of coordinated and liberal bank based capitalism which are used as a comparative starting point. The analysis outlines Denmark as a well-developed, coordinated, passive bank-based model, while, Ireland is described as an underdeveloped, liberal, passive bank-based model with a significant presence of foreign banks.

Denmark 1982-1991

A Brief History of Growth: External Threat, Cooperatives and the Birth of Keynesianism

After defeat by the Germans in 1864, Denmark was a shadow of its former colonial self. The Danish elite lost considerable power and government was viewed suspiciously by ordinary Danes. Out of this potent mix of external threat and national crisis grew Grundtvigianism, which was the forerunner to the Danish cooperative movement. Nikolaj Frederik Severin Grundtvig was a pastor and social activist who favoured self-help as a form of resistance to what was seen as an illegitimate government in the mid-nineteenth century. From this grew the Danish agricultural producer's organisations, which modernised agricultural in Denmark in the late nineteenth century. The industrial structure of cooperative production is still dominant in Danish agriculture today, where large firms such as ARLA foods dominate the landscape.

The movement encouraged liberal freedom with a cooperative twist, qualities which to this day characterise the Danish political economy (Begg, 2014). The achievements of the Danish cooperative sector can be traced to this unique approach to society, which while it supported the need for cooperative action, also valued individual entrepreneurialism. For a long time, the Danes have combined the individual with the social in a unique way (Campbell and Hall, 2006).

In the 1880s, agricultural production was the primary growth sector in the Danish economy, and up to this time, the sector was primarily focused on the production of grain for the export market. The 1880s brought a change of direction for this sector, which turned towards animal production (Kaergard, 2006). This change in direction led to the establishment of a large number of cooperative dairies and slaughterhouses. The first dairy

cooperatives opened in 1882, and by 1914, 1208 cooperatives and 41 slaughterhouses had been established (Henriksen, 1993).

From 1864 onwards, the threat from external forces would play a significant role in the development of how the Danes approached political economy. The threat from both Germany and later the Soviet Union were real and taken very seriously by the Danes. The Grundtvigian movement, therefore, gained ground and after 1864 the political left and right functioned more cooperatively. Following the general lockout of 1899, unions and employers negotiated and agreed that there should be a general set of rules to govern industrial relations. These negotiations have had a stabilising influence of Danish industrial relations in the last century and form a crucial building block of the negotiated economy (Gill, 1984).

In 1924, the first Social Democrat government was formed under Thorvald Stauning, and this government has been credited was laying the foundations of the Danish welfare state (Esping-Andersen, 1990). The party itself was formed in 1871 by Louis Pio and first entered the Folketing in 1884. Since its foundation, the Social Democratic party has exerted a profound influence on Danish society and to this day remains the most the favoured political party.

The Danish fear of threat from external forces was not unfounded, and during World War 11, Denmark became occupied Nazi territory. However, the gains made by the Social Democrats in 1933 were not lost, and the capacity to negotiate between labour and capital formed the backbone of the post-war economy. These new political arrangements allowed for the first set of Keynesian policies to address post-war conditions. Cross-class collaboration became the mainstay of the Danish political economy and after the war was seen as a way of improving the competitive position of a small open economy like Denmark.

From 1933 up until the first oil crisis, Keynesianism was the dominant approach to Danish macroeconomic policy. Its implementation was assisted by a set of corporatist wage agreements and cross-class collaboration in order to promote international competitiveness. In the post-war period, Denmark capitalised on its status as an early industrialiser in the low to medium tech sectors, with particularly strong growth in their cooperative movements which focused on food and farm production. The cross-class cooperation enabled a massive project of Keynesian inspired public investment, leading to the development of the modern welfare state during this period.

Banking History: (Large Banks, Small and Medium Banks and Mortgage Banks)

Large Banks

The history of commercial banking in Denmark can be defined concerning the presence of the large universal banks which dominated the late nineteenth century (Ornston, 2012). Three banks were at the forefront of this movement in Denmark and were linked to powerful industrial families and supplied credit to their industrial complexes. The influence of this type of banking in Denmark, however, was short-lived and highly concentrated in the capital region. By 1930, banks were prohibited from sitting on the boards of or holding controlling shares in large Danish companies. These measures limited the capacity to develop the type of bank-based model which typified the German system where large universal banks dominated corporate finance (Deeg, 1999).

Large banks were further limited by the unique corporate governance arrangements in Denmark (Thompsen, 2016). The presence of large foundations and a well-developed cooperative movement which provided firms with an alternative means of decentralised finance limited the role played by banks in the Danish political economy. To this day, most of Denmark's largest firms remain independently owned, usually through the presence of a tax-

advantaged foundation (Rose & Mejer, 2003). Firms structured in this way include real giants from Denmark's largest industries, in food Carlsberg and Danfoss, in Pharmaceuticals, Novo Nordisk and Novozymes, and in logistics Maersk shipping. These large foundations typically used less centralised forms of finance such as bond issue, equities markets and self-finance, thus limiting the role of large banks (Thompsen,2016). The 1930's legislation therefore merely institutionalised barriers to entry for banks, which were already present in the corporate governance arrangements.

Small and Medium Banks

The mainstay of Danish banking was a large number of small and medium banks which served the well-developed SME sector. The presence of these banks can be traced to the strength of the Danish cooperative movement. The cooperatives formed separate financial entities as a means of providing finance to small and medium-sized producers (Ornston, 2012). These cooperative banks were the direct antecedents to the small and medium-sized banks which came to dominate Danish finance.

By the 1980s, the Danish commercial banking sector was characterised by the presence of a large number of these small and medium-sized banks, which practised relational banking. Relational banking is a type of coordinated baking in which banks had strong ties to the various sectors to which they provided patient capital. Patient capital was provided by banks for extended periods, on stable terms, and used to fund long-term investments. The patience is characterised by the bank's willingness to wait for their investment to mature in order to profit. In Denmark, the emergence of this type of banking shows the influence that the cooperative movement had on SME banking in Denmark. Indeed, patient capital was a crucial characteristic of Hall & Soskice (2001) conceptualisation

of the coordinated financial system; it was upon the patience of banks that coordinated economies built their comparative advantage.

Mortgage Banks

The Danish Mortgage banking Model was also heavily influenced by the Grundtvigian movement. The sector was established in response to great fire of Copenhagen in 1875 and operated on a nationally unique balance principle (Chong, 2010). The fire destroyed large sections of the city which were not covered by the only available insurance scheme at that time. Furthermore, credit to rebuild the city was in short supply as interest rate caps of 4% meant the risk of making loans was not adequately covered by the return on what would be unsecured loans. A small group of entrepreneurs responded to this crisis and formed Kreditkassen which was the first mortgage institute (Chong, 2010). The group essentially pooled their collateral and used it to back the issuance of bonds and other debt securities which covered the mortgage loans. This system was the forerunner to the contemporary balance principle.

The balance principle operated on a unique institutional arrangement which dictated that a property of equal value must match the value of the mortgage loan (Lunde and Whitehead, 2016). The principal very much reflects the co-operative history of the Danish mortgage banking sector. In practice, the balance principle meant that mortgage banks were insulated from interest rate risk, which was transferred onto investors as all loans were balanced by property of equal value. Furthermore, these loans were backed up by a robust regulatory framework which enabled banks to repossess properties and cover their losses should borrowers get into difficulty. Overall this provided a very safe, equitable, long-term system of mortgage finance. A senior figure from the Danish mortgage sector explained a

simplified version of the balance principle and how it limited the risk contained within the mortgage banks.

> And we do it to this balance principal that is a very key word of the Danish mortgage system. The balance principal is, just to simplify it a bit, just to say that when I grant you a loan, let's say you come in and say, I would like to buy this house. We value it for 1 million, and you can have 80% LTV, so we grant you a loan 800,000 Danish Krones. And you say, I would like a fixed rate loan. Ok, then the market rate at the moment is 3.5% coupon on a fixed for a year, fixed rate. So we issue a covered bond with 3.5% coupon, 30 year annuity bond for 800,000. And the 800,000 I grant you a loan. And that means that the payments will be exactly matched, that is what we call match funding.
>
> As a mortgage bank I keep the loan on my balance so if you are not able to pay back then I have the credit risk on you, but I don't have any market risk, I am not allowed to take any market risk due to the balance principal.
>
> (Finsec 1/DK: Senior Figure Danish Mortgage Industry, 07/11/2013)

In 1850 the Folketing passed the Danish mortgage act and codified the system in law. The mortgage banks operated as a type of cooperative bank which did not take deposits or offer any financial service other than making loans to buy or build property. Therefore they had only one funding source the issuance of mortgage bonds. The sole purpose of these banks was to provide Danish households and businesses, with easy access to an affordable, stable and equitable source of property finance. The system itself was highly equitable, in so far as everyone was subject to the same price for credit. A mortgage expert reflected on the history of the development of the Danish mortgage model, highlighting its longevity and its strong ties to the welfare state.

> The mortgage system, as you probably have heard many times, was founded these 200 or something years ago to fund a growing need and the mortgage market has been growing ever since, except for two years in 1813 and 1814 when we saw the fall of the Danish kingdom, but even the mortgage system survived that. So we have a bit of track record. Since basically the 1930s we have seen the establishment of a welfare state in Denmark, and that needed massive funding. We saw public housing as the urbanisation took off and we also saw growth in private owner-occupied housing and both elements were funded by mortgages originated in this mortgage banking system. Originally mortgage banks were credit associations.
>
> (Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

Both the banks and borrowers were subject to substantial regulation at this time. The mortgage banks were limited to only making loans to buy or build property. Borrowers could only access loans for said purpose, and there was no ability to access equity that had built up in the home. These regulations produced a safe, purpose-specific mortgage system. Furthermore, the system functioned independently of the commercial banking system that was not permitted to make loans for home or property purchase.

The Second Oil Crisis and the Roots of Financialisation

The oil crisis of the 1970's hit Denmark particularly hard, long-term unemployment, enduring balance of payment deficits, growing government and foreign debt were the key characteristics of a national economic crisis. This situation had arisen from repeated attempts by the Social Democratic party, during the 1970s, at Keynesian demand stimulus. However, critical structural problems combined with long-standing balance payments problems meant that Keynesian policies did not prove effective in job creation and the economic stimulus only exacerbated the balance of payment problems (Andersen, 2011). Denmark was caught in a low growth, high debt trap and attempts at demand stimulus caused huge price inflation which further unbalanced the economy.

In1982, the Social Democratic finance minister famously stated that Denmark stood on the edge of the economic abyss (Andersen, 2011). The worsening economic situation brought with it a change of government and in the same year, the Social Democrats were replaced by a Liberal-Conservative coalition. This coalition brought with them a new approach to generating growth in the economy and for the next decade, macroeconomic policy focused on growth that was led by exports rather than consumption. To this end, the Liberal-Conservatives put in place a set of policies aimed at increasing competitiveness through price stability.

The fundamental problems that they faced were a permanent balance of payments deficit and growing foreign debt which did not respond to Keynesian stimulus. As a solution to this, they brought with them a new approach to economic growth. Growth would come from exports, not consumption. This new direction required that competitiveness would have to be improved, government debt kept low and consumption restrained. A set of policies almost the exact opposite to the Keynesianism applied by their predecessors the Social

Democrats. The centre-right coalition faced quite a challenge given that the Keynesian stimulus of the previous period had left Denmark with government debts running to 60% of GDP and foreign debt at 40 % of GDP.

As a means of achieving their new export-led growth strategy, the Liberal-Conservative coalition introduced two new policies with the aim of creating a more stable macroeconomic environment.

- 1982 Fixed currency policy was introduced, pegging the Danish crown to the German mark and subsequently to the euro. This new policy has formed one of the backbones of the national bank's financial stability efforts in the last three decades.
- The liberalisation of capital flows.

(Abildgren et al., 2010)

The objective of these changes was to create currency stability which it was hoped would tackle inflation (which had been volatile during the 1970s) and foster international competitiveness (Andersen, 2011).

This new policy direction produced unexpected and unintended results in both the short and the long term. While the short-term, implications have been well documented in the literature, little attention has been given to the long-term consequences. In the short term the policy caused a financial boom and bust; however, more importantly, it was the long-term effects of the policy shift which would go on to shape the direction of change in Danish finance. This set of changes, unintentionally altered both how credit worked in the Danish economy and the structure of the Danish financial system and so began Danish financialisation. Similarly, Krippner (2011) found the roots of American financialisation in a set of policies which fundamentally altered the flow of credit onto the American economy.

A senior figure from Danish commercial banking expert outlined how fundamental a shift the hard pegging of Danish kroner was, drawing attention to its long-term implications on the relationship between monetary and fiscal policy:

> So we will do the big picture quickly so since the mid-70s we have had a banking system which has been dictated by a number of factors. We have had I think the European project with the change from various attempts at pegs, I think the Irish will recognise that Denmark had a bit of the same issues during the '70s and knocked by a couple of oil crisis. So what are the big changes that happened following a period of turmoil, without saying too much I think you will recognise that from home? The country decided to introduce basically a peg to the German Mark, to be replaced by a peg to the Euro. So I think from understanding a key component in the financial system that has been an important element. Second of all, following this the big policy picture has been, I would argue, has been gradual but almost complete subjugation of fiscal policy to meet the requirements of the fixed exchange rate policy that has been put in place. I think that was not an accident, that was a pretty deliberate choice as the country had a fairly fiscally responsible succession of governments leading up to the early '80s. So I don't think one can see the monetary policy choice independent of a somewhat Italian style fiscal situation by the early '80s. Since then I think that had a, so the fiscal discipline that was imposed implicitly by that choice has had a number of or has impacted I think on the whole economy and hence the financial system. So a new approach to fiscal life meant, I think, curtailing consumption. That was reflected in special tax arrangements both on the banks but also on lending during the '80s.
>
> (Finsec 9/DK: Senior Figure Danish Commercial Banking, 30/11/2016)

The policies which the new Liberal-Conservative coalition introduced to achieve the conditions necessary for growth in exports had two long-term effects on the Danish Economy. Firstly, it reduced the price of credit by tying Danish mortgage bonds to the short-term interest rate. This new price regime would prove a critical enabling factor in the product innovations which drove the mortgage boom of the 1990s and bubble of the 2000s. Secondly, it caused a financial crisis, while the crisis itself was of little importance; attempts to resolve the crisis unleashed a wave of bank consolidation which laid the foundations of a large, powerful financial sector. The strategy of large banks buying up smaller insolvent banks would go on to produce a new type of more powerful bank in Denmark.

Products: Financial Crisis and Bank Consolidation

The new fixed exchange rate policy expectedly caused a financial bubble. The hard pegging of the Kroner produced a drop in interest rates as Denmark became tied to the German rate. Rather than foster competitiveness and increase exports; the falling interest rate released a wave of credit onto the Danish economy as households benefitted from the decrease in price (Andersen, 2011). Demand for credit increased in the economy, as did imports rather than exports, so rather than address balance of payments deficit; the policy change led to the emergence of the most massive deficit ever recorded (Abildgren et al., 2010). The economy was unable to sustain this deficit and required government intervention in the form of an austerity package known as the potato diet. The measures included in the potato diet caused a slowdown in growth, and a financial crisis emerged. The financial crisis was accompanied by a wave of bank insolvency within the small and medium-sized banks. In response to failing banks; the financial sector began a process of consolidation of insolvent banks, with larger solvent banks. The roots of the large banks which drove Danish financialisation during the

2000s were located in this process of consolidation. Diagram 1.0 maps the causation of crisis, outlining the macroeconomic effects and policy responses by the state.

The change in currency policy structurally altered how Danish mortgage markets worked by linking them to German interest rates. The positive expectations about inflation which this new fixed exchange rate policy created caused a significant drop in interest rates. (Abildgren, 2005) This drop in interest rates along with falling unemployment at the time caused a surge in demand for credit and gave a boost to construction activity. These developments caused GDP to grow at a faster rate than at any time during the last decade. The fall in interest rates, credit expansion and a surge in house prices were accompanied by a surge in construction activity and produced a standard housing bubble. Given their highly unfavourable balance of payments position, Denmark was unable to absorb the rapid growth driven by credit expansion, and a vast deficit emerged in their current account.

This situation came to a head in 1987, and the Government responded with a set of austerity policies called the potato diet (Andersen, 2011). The austerity package consisted of a set of policies with the stated aim of returning society to basic living standards and in so doing address the fundamental imbalances in the Danish system. The policy included stricter regulation of the mortgage market. In 1987 the government lowered the tax deductibility of interest payments and reduced the term of mortgage bonds from thirty to twenty years. A senior economist from Danish mortgage banking outlined the impact of these policies and the need for the potato diet.

> Yeah, then we are back to the mid-1980s where we saw this massive current balance deficit and foreign debt building up quite fast. In 1982 the Danish finance minister was quoted for saying, actually it was on public television, that we are not in the abyss but we can see the abyss ahead of us. Then we saw a new government taking office,

we saw a new growth, but even more substantial foreign debts and they turned upside down a new mortgage system by reducing your access to mortgage finance. We saw taxed reductibility going down from 76% for marginal tax to around 40%, so it became extremely expensive to have debt. The real interest rate after tax went from minus 1% or 2% to plus 6% or 7% and that really triggered this mortgage crisis I would say. And we saw a, well a vast reduction in private demand in response to these measures to get the Danish economy back on track. We were simply overspending, and since then we have been over saving.

(Finsec 8/DK Senior Economist Danish Mortgage Sector, 26/012016)

The potato diet set out to dampen demand in the Danish economy and caused a recession in economic growth. The outcome of the tighter regulation of the mortgage industry was a reduction in consumer demand, credit flow and residential property investment. GDP contracted from 5% growth in 1986 to -3% in 1987 and Denmark plunged into a recession that lasted until the early 1990s. (Andersen, 2011) This drop in demand hit both the household, construction and banking sectors particularly hard and resulted in a significant increase in forced sales and bankruptcies and many bank failures concentrated in small and medium-sized banks. (Abildgren et al., 2010)

The bank collapse produced by the financial crisis of 1987 forms part of the story of the emergence of a large and powerful financial sector in Denmark. (Epstein, 2005) Importantly what we see in this period is the start of the consolidation process which would eventually lead to the erosion of sectoral barriers between banks and mortgage banks. It was this process which led to the kinds of large multi-functional financial corporations which define the Danish landscape today. Therefore the roots of a large, powerful, financial sector can be traced to the response by the government and the banking sector to the financial crisis

of 1987. Financial crisis themselves, therefore, are a part of the emergence of processes of financialisation.

Much as Greta Krippner (2011) found the roots of American Financialisation in a set of policy changes implemented during the 1970's as a means of addressing a series of national crisis, the same is true in Denmark, but for different reasons and with different results. In the Danish case, the set of structural policy changes introduced as a means of increasing competitiveness, where the catalyst for change in the structure of the Danish financial system as they produced a financial crisis which led to the reorganisation of the banking sector and the emergence of a new, large, and powerful type of bank.

Furthermore, the alteration of the interest rate regime which was caused by the hard pegging of the Danish kroner proved to be a crucial part of the new mortgage price Keynesian strategy of the next Social Democratic majority government. The combination of fixed exchange rate policy and liberalised capital flow necessitated the mirroring of interest rates and meant that from this point onwards German rates dictated Danish rates. This development meant that in practice the Danish National Bank could no longer set the interest rate and the demand for credit in the Danish economy was increasingly linked to an interest rate that was not determined by national conditions.

The austerity package introduced to deal with the housing boom was effective, and by 1992 when a new Social Democratic majority government came to power, the Danish economy had stabilised. The hard pegging of the kroner combined with liberalised capital flows and a period of austerity had addressed the long-standing balance of payments problems. However long-term unemployment and low growth continued to hamper Danish economic performance.

The Roots of Danish Financialisation

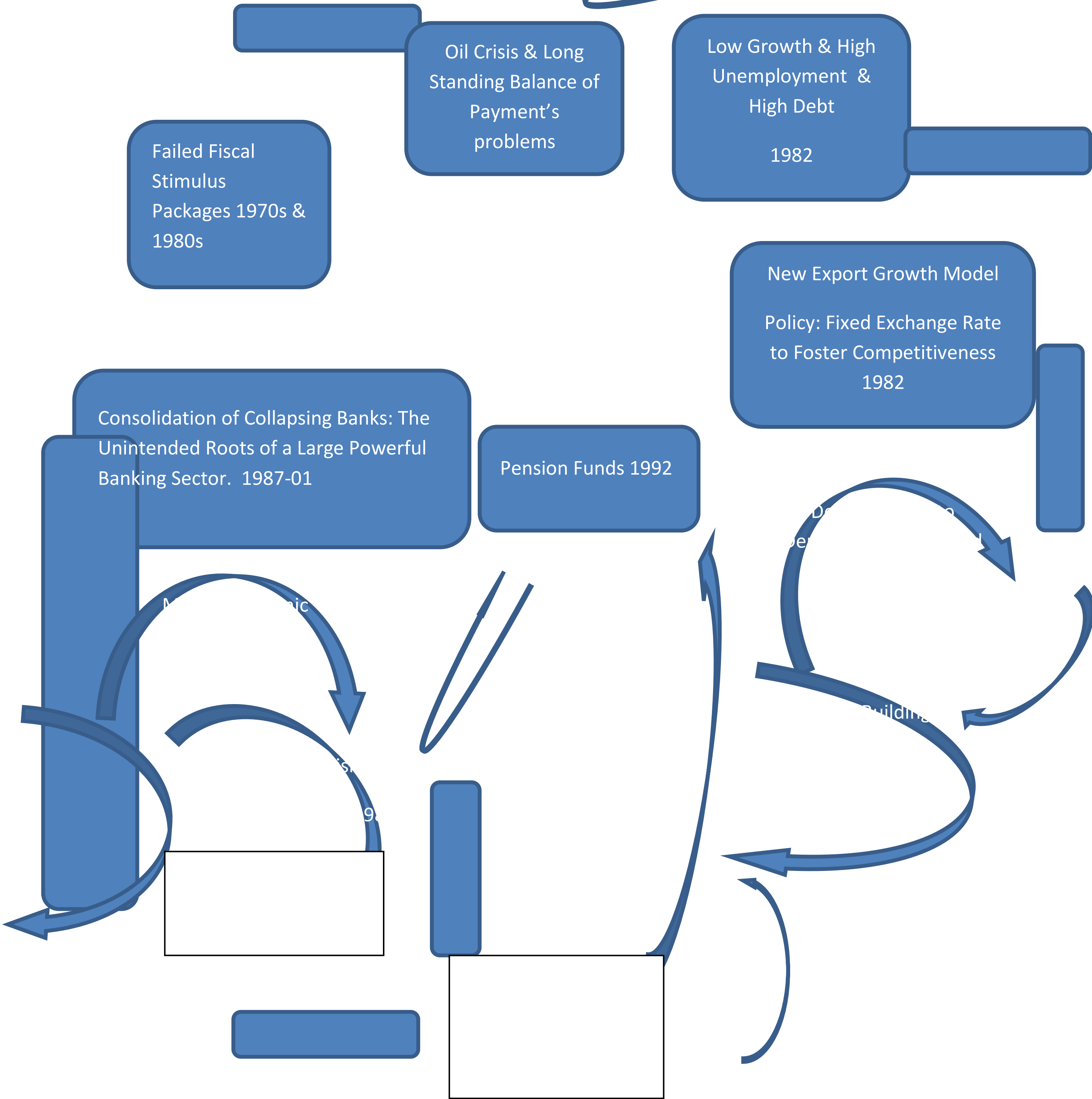


Diagram 4.0

Structure: Extending Amable (2003): Developed, Coordinated, Passive Banking

In order to establish a comparative starting point the following section takes a closer look at the structure of the financial sector during the period 1982-1991 and outlines some of the essential elements which defined the sector. The financial system during this period fits with what Amable (2003) describes as a passive bank-based system, however, both the literature review and the historical analysis of banking in the current chapter, made it clear that bank-based systems are deeply tied to the political economy in which they are embedded. Therefore in extending Amable's (2003) analysis, the current chapter reveals that based upon a combination of historical accounts of the development of Danish finance and application of the model of financialisation Denmark can best be described as a well-developed, coordinated, passive bank-based system.

During the 1980s the Danish financial system was relatively small and bank-based. The system consisted of a large number of small and medium-sized banks, a small number of large banks, a separate mortgage banking sector, small but growing pension funds and a separate insurance industry. The mainstay of bank business was relational banking, providing credit to SMEs and households and this practice was concentrated in the small and medium-sized banks which had strong ties to specific industries. There was a capacity to negotiate and cooperate in the Danish system, and this was linked to the influence of the cooperative movement, which favoured a tradition of patient, relational banking.

Large corporations (Co-operatives & Foundations) remained separated from the banking sector through both structure and legislation. However, there was a small group of large banks with strong ties to the large corporate sector which was dominated by the industrial families. These banks were primarily located in Copenhagen (Ornston, 2012).

Commercial and mortgage banks were separated by legislation, and commercial banks were forbidden from engaging in mortgage lending.

Funding: A Sophisticated, Coordinated Funding Model

The funding of Danish mortgage and commercial banks was separate at this time. The mortgage banks were funded through the mortgage bond market, and the commercial banks practice traditional banking where customer deposits formed the mainstay of the funding source.

Mortgage bonds were a type of market-based funding. However, while the system was market-based, there was a degree of coordination on the investor side with stable national funding sources in the form of large blocks of institutional investors. Amable (2003) found that in the Danish system bank portfolios contained a significant share of bonds and securities, which distinguished them from banks in liberal market economies. While the bond market was allowed to function independently as a market the presence of national investors for mortgage products offered a degree of stability and coordination within the system. Both the state and pension funds were significant investors in mortgage bonds, in fact, pension funds at this time were regulated in such a way they could only invest in safe bonds. The presence of these large blocks of investors produced a very stable, cheap and equitable mortgage market that functioned in a coordinated way at a macro level.

This type of coordinated market-based funding is very different from the volatile market-based capital outlined by Hardie et al. (2013). The stability is explained by the national characteristic of the capital which was located within pension funds, which had direct ties to the mortgage industry. Therefore these funds display far more stability than Hardie and Howarth's (2013) skittish foreign investors.

Following Amables' (2003) classifications of financial systems as being either active or passive, Denmark at this time is best described as a passive system. The overall size of mortgage debt to GDP was relatively low, the funding source was stable, and mortgage banks remained separate from commercial lenders and functioned on social democratic principles. However, extending Amable (2003), Denmark at this time can be described as a well-developed, coordinated, passive bank-based system. There was a history of cooperation between banks and the SME sector. The mortgage banks while they were market-funded, the funding was coordinated across a national bond market and employed sophisticated financial products.

Further coordination was evident in how the mortgage banks operated on Social Democratic principles and their strong ties to the welfare state. The financial products were specifically designed to create equality and access to the market while limiting the risk carried by the mortgage banks. This nationally unique form of securitisation was very different from the financial bundling of different loan types which caused the American sub-prime crisis. In Denmark, there was a high degree of transparency in the loan process.

The capacity to negotiate across the sectors would prove to be a critical enabling factor in the emergence of a large, powerful banking sector. Furthermore, this capacity would also ensure that the Danish economy was not as exposed to international capital as other small open European economies with the outbreak of the financial crisis. The capacity to negotiate was and still is a central cultural trait of Danish finance.

Varieties of Residential Capitalism

The structure of the Danish housing regime emerged through a context of profound social change in the second half of the nineteenth century and was shaped by processes of industrialisation and urbanisation. Urban populations expanded rapidly from the late 1800s to early 1900 increasing from 20% to 42% between 1840 and 1901 (Larsen and Lund Hansen, 2015). This early industrialisation and associated urbanisation meant that housing politics were a crucial battleground in the Danish political economy. The roots of the modern system are found in the 1930s post-war period when housing formed a vital strand of the new welfare state. This focus on housing in Denmark as a crucial area of dispute means that the Danes have always been acutely aware of the supply of housing, in particular, their experiences of early industrialisation and the overcrowding this produced meant that housing was an issue the gained political favour with the working classes (Larsen and Lund Hansen, 2015). In the 1960 and 70s, for instance, the battle cry of the lord mayor of Copenhagen was ‘housing, housing and yet more housing' (Larsen and Lund Hansen, 2015). Therefore not only did the Danes have a corporatist housing system, but they also had a sophisticated and well-stocked housing system that had efficiently dealt with the previous housing crisis and saw housing a central part of the social bargain.

Ireland 1982-1991

A Brief History of Growth: Post-Colonialism, Protectionism and Industrial Development

After independence, the first Irish Government adopted a liberal approach to industrial development and coupled this with a degree of state intervention. During this early period of Irish industrial history, the state was a key player developing large companies such as the ESB (Electricity Supply Board), the Dairy Disposal Company and the Agricultural Credit Union. Both industrial and financial policy mirrored that of Britain, from whom Ireland had inherited the system. The primary focus was on large farmers and increasing production.

The development of Ireland's political economy was deeply connected to its history of colonial rule by Britain. Despite the first government's liberal approach to industrial and agricultural development, national politics quickly undermined Ireland's opportunity to modernise as protectionism replaced liberalism under the leadership of Éamon de Valera. Throughout the 30's, 40's and 50's Ireland remained very much an industrial backwater compared to its European counterparts. The price of economic protectionism, driven by nationalist political discourse and anti-British sentiment, became apparent after the war years when Ireland struggled to make economic progress.

After World War Two, Ireland had reached the limits of its protectionist model. The efforts of two key policymakers, Seán Lemass and T.K Whitaker put the underdeveloped Irish economy on a new path of industrial growth. In the late 1950s, the first programme for economic expansion was published and marked a turning point for Ireland. This new development included a process of European and global integration which was essential to getting the Marshall aid that Ireland so desperately needed. From this point on the primary strategy for industrial growth in Ireland would be attracting foreign direct investment (FDI)

and agriculture and industry would be placed on an equal footing. The policies of protectionism, however, meant that the new era of integration was a painful one for Irish industry as they now faced competition from both the UK and Europe. Joining the European Economic Community (EEC) in 1973 proved to be a challenging time for Irish industry and led to widespread job losses and economic recession. The recession was coupled with high government debt, as Fianna Fáil had borrowed extensively on international markets to fund its ambitious state projects in the 1970s. By 1983, Ireland once again faced economic collapse, as high unemployment, high debt and underdevelopment crippled the economy.

Banking History: Colonialism, Provincial Banks and the Interest Rate Cartel

Much like the broader political economy, the history of Irish banking intertwines with the history of colonial rule. The system itself has its roots in Westminster which introduced legislation in 1824 and 1826 permitting the establishment of joint stock companies (Ó Gráda, 1997). The first Irish banking system was similar to the system in the 2000s in so far as it was a free banking system, in which banks had free entry to the market. The first entrants to the market were British banks, Provincial, Hibernian, Belfast and Northern in the 1820s, the National Bank and the Agricultural and Commercial Bank in 1834, followed by Ulster and Royal in 1836. These early entrants to the market were protestant owned banks, it was not until 1886 that a Catholic bank was established when the Munster and Leinster Bank (largely a provincial bank) began offering services (Ó Gráda, 2012).

The Bank of Ireland (modelled on the Bank of England) was established in 1783 and functioned as a kind of quasi-central bank. It retained certain privileges, and on numerous occasions, the bank came to the aid of other banks which got into difficulty (Ó Gráda, 2012). Acting as the lender of last resort for substantial sums of money; in 1836, Bank of Ireland advanced a total of half a million pounds to the banking system, which was swept by a

liquidity crisis. Then in 1839 a further 150, 000 pounds was advanced to Provincial bank, and other smaller banks (Ó Gráda, 2012).

Irelands first significant bank failure occurred in 1884 when in the wake of the scandal about private loans to board members, depositors lost confidence in Munster Bank and initiated a run to the tune of 250,000 pounds (Ó Gráda, 2012). The bank had been established in 1864 as the National Investment Company, by a group of cork businessmen. Their initial vision was to gather savings to invest in buoyant real estate and fund regional projects. The bank proliferated and competed aggressively for national deposits, expanding its share from 1% in 1865 to reach a peak of 9% by 1877 (Ó Gráda, 2012). The scandal which emerged and eventually toppled the Munster Bank bears striking resemblances to what transpired with Anglo Irish Bank in the 2000s. A rapidly expanding bank, with a close-knit group of directors, was exposed as having been engaged in the making of inappropriate loans, which they subsequently tried to cover up. History it seems has a habit of repeating itself.

The Banking Cartel

In 1919, the Irish banks formed an informal cartel known as the standing committee (Ó Gráda, 1994). This arrangement is criticised as being responsible for effectively freezing the Irish banking sector, limiting competition and creating a powerful banking sector based on the cosy relationship between the banks (Ó Gráda, 1997). Irish banks charged more than their English counterparts exceeding the Bank of England rate by 1% and paying a half per cent less on deposits; furthermore, they regularly froze the credit available in the economy (Ó Gráda, 1997). The performance of the Irish banking sector through the 1930 – 1960s very much mirrors the sluggish and poor performance of the economy.

In the 1960s the change of direction in the growth strategy brought change to the banking sector. The Irish banking system which exists today has its roots in the mid-1960s

with the formation of the two main bank groups, Bank of Ireland Group and Allied Irish Bank. Between the 1960s and 1980s, there was a change in the operation and function of banks in the Irish economy, shifting from the provision of trade credit to a universal banking model which offered a much broader range of services to a broader range of customers. Banks began offering mortgages, providing seed capital, and offering expert investment advice. However, by the 1980s many of the old problems which had typified Irish banking where still present, a small, and powerful banking sector exercised a high degree of control over the availability of credit for which it charged a high price.

Through the course of their development Irish banks have imitated their English counterparts and favoured a market-based approach to finance. There was no development of a patient capital system within the Irish banking sector; instead, they preferred to offer first initial public offerings (IPO) a means of financing firms (Ornston, 2012). A senior economist from the Irish and global banking reflected on the cultural connections between Irish and British banking, pointing out the similarities between the two systems:

> I think the Irish banking scene, there is a cultural transmission through the generations of bankers and I think this goes back a long way. If you look at people writing about British banking in the 19th and early 20th centuries they are always moaning and complaining that the bankers did nothing for the development of industry and they would only make short-term loans in Britain. And in Britain then you have the stock market and the wealth of the landed aristocracy that was put into shipping and trade and so on. So the bankers didn't do much in Britain either compared to Germany, that was always the thing, the commercial bankers, and the Irish bankers were exactly the same.
>
> (Finsec 5/IRL: Senior Economist Irish and Global Banking, 02/11/2017)

Throughout its history, despite its small size, the Irish stock exchange has been an essential source of finance to indigenous firms.

Furthermore, Irish banks frequently invested excess capital into English bond and money markets; instead of seeking out domestic investment opportunities (Ornston, 2012). Unlike the Danish case, where cooperatives branched out into finance, no such diversification happened in the Irish case. Indeed Irish cooperatives where found to be more competitive than their Danish counterparts, and less likely to engage in innovation (Ornston, 2012).

A senior figure from the Irish Central Bank highlighted the links between the underdevelopment of the Irish banking system and its strong ties to UK money markets, drawing attention to links which would go on to prove to be vital to Irish financialisation.

> Yeah, I think it would be better to go back a bit earlier than that. Perhaps I should describe the big system and then down into the detail because there is a tendency to forget the big picture. The big picture is simply this that when Ireland became independent we remained part of the UK currency area and even though we had set up a Central Bank way back in 1942, the Central Bank was essentially a currency board kind of thing. And if you read some of the literature prepared by Patrick Honohan, there is quite a lot about this idea of the links in the currency board, how the currency board constrained Ireland from doing anything outrageous or out of the ordinary. And in fact, they give the example because one of the features of the currency board was the interest rates in the currency area is the same. And we had nominal independence; we weren't independent…
>
> Banks would have collected deposits in Ireland, and there remained loans in Ireland, but they maintained their reserves and all the kind of foreign exchange reserves in their account in the London interbank market. Our Central Bank was a currency

board in nothing else but name, we really didn't have power. The Central Bank Act 1942 gave very little power to do many things.

(CB 1/IRL: Senior Figure Irish Central Bank, 05/12/2017)

Throughout its development, the Irish system included elements of what Zysman (1983) describes as a state system. The state provided credit, regulated the market and controlled the interest rate. In 1927, the state established the Agricultural Credit Corporation (ACC) with the aim of providing finance to the agricultural sector. Following this in 1993, the state established the Irish Credit Corporation (ICC) to provide investment to industry. Alongside this involvement in the provision of finance to agriculture and industry the state also took an active role in the provision of housing finance. In 1899, the Small Dwellings Acquisition Act allowed local authorities to make mortgage loans; while initial application of the act was limited, by the 1960s 30 per cent of all mortgages were issued by local authorities (Norris, 2016).

Furthermore, the state indirectly intervened in the market for housing finance granting the building societies a tax advantage and mortgage interest relief for homeowners. Taken as a whole Norris (2016:89) argues that these direct and indirect interventions created a system in which homeownership was socialised:

> ‘Homeownership in Ireland was not a market service delivered and financed by the private sector, as is the norm in most developed, free-market economies. Rather, in the Irish case homeownership was largely a socialised tenure, which was financed … by direct and indirect exchequer subsidies and local government mortgages [and] was, therefore, a welfare service.'

During the 1970s the state put severe restrictions put on the availability of credit in the Irish economy. In 1973, banks were advised not to increase the level of private sector credit (PSC) to the non-productive sector, and then in 1978 structured credit guidelines were set down for

the personal segment of the PSC market (Kelly and Everett, 2004). Credit policies were complemented by a set of strict capital requirements for banks set at 10 % (Kelly and Everett, 2004). These controls remained in place until 1981 when a process of liberalisation began to remove the restrictions on how much and to whom banks could lend money.

The Crisis of State Finances and the Roots of Irish Financialisation

By 1987, Ireland stood on the edge of financial ruin, the deepest recession since the establishment of the Free State gripped the country. Ireland was crippled by substantial government debts, high unemployment, mass emigration, poor industrial development and weak economic growth. Failed fiscal stimulus policies, during the 1970s and early 1980s, made possible by easy access to international finance, meant that by the mid-1980's government debt stood at a staggering 117% of GDP (Ó Riain, 2014:50). The task of stabilising the economy fell to the Fianna Fáil government under Taoiseach Charles J Haughey T.D. and his then Minister for Finance Charie Mc,Creevy. T.D.

The period after 1987 was a time when the Irish track record of underdevelopment and poor economic performance were turned around (Honohan and Walsh 2002). Ireland's convergence on its European counterparts has been explored in much detail by a variety of authors, whom all draw similar conclusions about Irish development during the 1990s; FDI, social partnership and macroeconomic stability all contributed to the Celtic Tiger (Honohan and Walsh 2002, Ó Riain 2014), However, before any growth could emerge in the Irish economy, state finances would have to be stabilised. This required a period of austerity (welfare retrenchment) which was combined with a process of financial liberalisation. While liberalisation of the financial sector had commenced in 1982, the process was intensified in the late 1980s to address the precarious condition of Irish government coffers. It was hoped

that liberalising the banking sector would allow the state to withdraw from its role as the primary provider of mortgage finance (Norris, 2016).

Interestingly, very little attention has been paid by the field of political economy to how attempts to achieve macroeconomic stability during the late 1980s shaped the dynamics between finance, housing and international capital which went to define the 2000s. Changes made to Irish finance and the Irish housing regime during this period would go on to shape the trajectory of change in both the Celtic tiger of the 1990s and subsequent financial boom and bust of the 2000's.

The roots of Irish financialisation can be traced to the set of institutional changes introduced to resolve the crisis of state finances in 1987. Through processes of financial liberalisation and welfare retrenchment designed to alleviate the pressure on state finances the Fianna Fáil and subsequent Fianna Fáil / Progressive Democrat coalition governments put in place the institutional building blocks for new dynamics between a liberalised banking sector (with access to international capital), and an increasingly privatised housing regime. It was these dynamics which went on to shape the mortgage boom of the 1900s and, subsequently, the housing bubble of the 2000s.

An Irish academic from housing and housing finance suggested that the roots of Irish financialisation could be traced to changes in the institutions of housing and banking in the late 1980s, highlighting that it was the weakness of the Irish economy which masked the implications of these changes which only emerged in the 2000s.

> In Ireland, I feel the causes of our latest bust were actually put in place during our last bust in the '80s. That is when the critical changes were made, and at that time, in that period in the early 1980s, council housing funding was nationalised and massively. Therefore the amount of investment going into council housing as a proportion of

> total housing compared to the population fell dramatically and became much more vulnerable to central government fluctuations. The government pulled out of the socialised homeownership model, pulled out of mortgage lending. In order to fill that gap, who the hell was going to provide mortgages? They completely deregulated building societies, they completely... A regulation of private mortgage lending, as far as I understand it was never strong anyway. And part of the reason is the state did all the lending itself, so you didn't really need to regulate the private sector because it wasn't important. And we didn't have a banking crisis during the Great Depression. We had weak regulation, that was just completely gone out of the way, so we moved from this completely socialised home ownership model to this completely marketised model and a largely marketised system of delivering housing. And in Ireland, they were the critical decisions, and the implications of those decisions was not clear for over a decade because the economy was still weak, we still had emigration, the population was falling. Even though there is no regulation of mortgage lending, who was going to go out and borrow a phenomenal amount of money?
>
> (Uni 1/IRL: Academic Expert in Irish Mortgage Finance & Housing, 25/01/2017)

Before the process of welfare retrenchment, commenced in the 1980s, housing had formed a key strand of welfare policy. The state sought to fill the gaps which welfare retrenchment left in the housing system through a process of financial liberalisation. The impetus for these changes was to create a financial system that could provide both mortgage and development credit to the economy and work in conjunction with an increasingly privatised housing system. It was hoped that by liberalising the banks and enabling the flow of credit that the market could replace the state as the principal provider of housing in Ireland. This caused a profound structural change in the Irish financial system during the 1980’s.

In order to achieve this goal, the state introduced two critical changes to the financial sector. Firstly by lifting credit and interest rate restrictions, it abolished the interest rate cartel which had typified the Irish system up to this point. Secondly, the state subsequently introduced the Building Societies Act of 1989 which effectively removed the distinction between banks and building societies (Norris, 2016). The long-term effect of this was that it created a financial system in which mortgage and commercial banks could compete through product innovations, and both had access to international capital.

The changes made in both the banking and housing systems during this period affected the size, source and trajectory of the housing and construction bubble which emerged during the 2000's. The process of financial liberalisation created a liberal financial system with loose capital controls that was highly competitive. Once economic growth emerged in the next period commercial banks and mortgage banks were free to compete for each other's business model and introduce a range of financialised mortgage products. Ireland is not unique in having a housing based crisis during the 2000s, what was unique was the size of the bubble, the quantity of capital which flowed into the economy and the exposure of the banking system which enabled it.

Interestingly despite widespread financial liberalisation and deregulation during the late 1980s very little happened. PSC did not expand rapidly, no housing boom emerged, and finance remained comparatively small in a European context. However, during the 1980s, the unintended links between housing, finance and global capital were forged, putting in place the institutional building blocks for Irish financialisation, liberalised banking with access to international markets connected to a marketised housing regime.

The Roots of Irish Financialisation

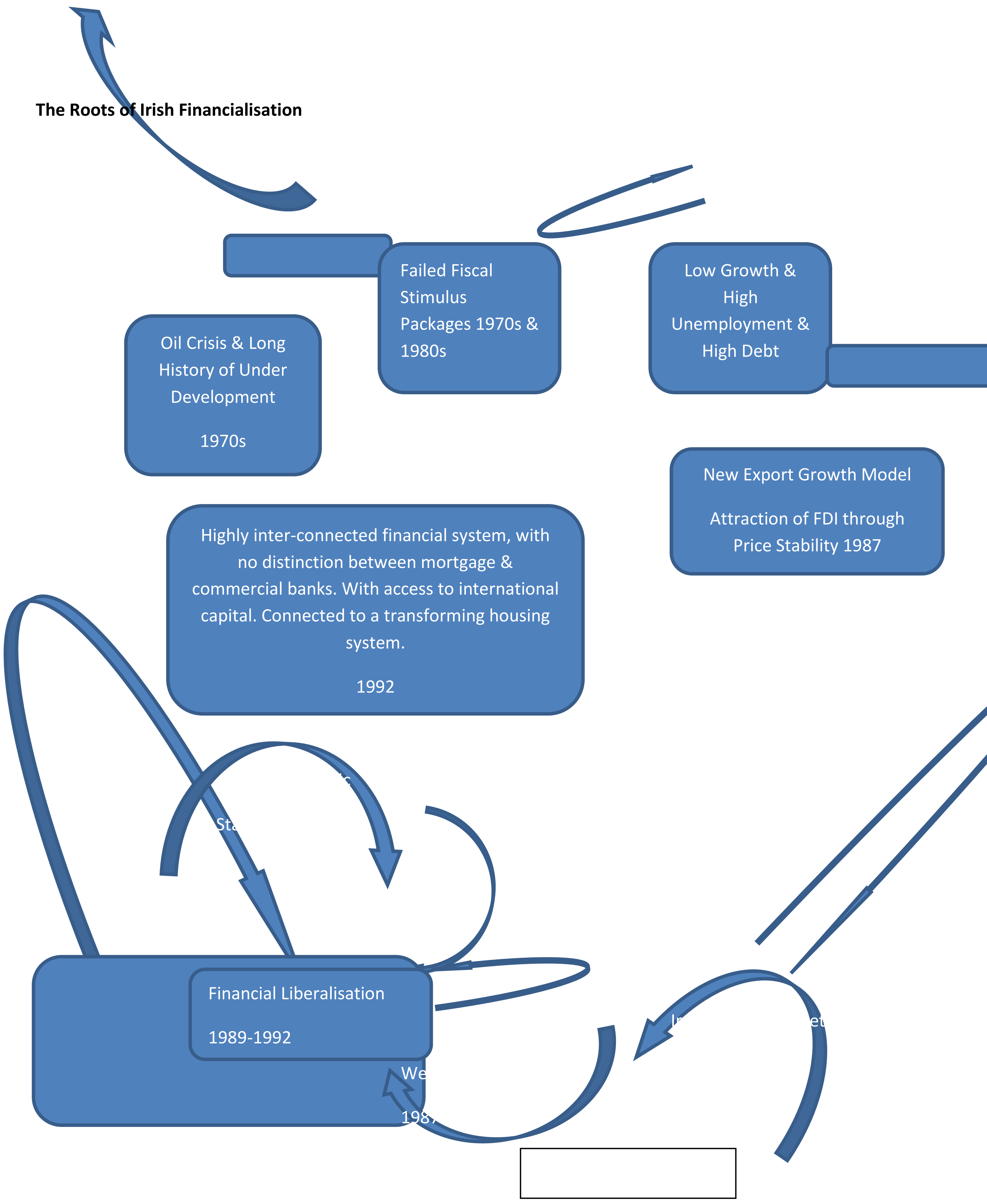


Diagram 4.1

Products: Bank Liberalisation (Breaking the Interest Rate Cartel)

In 1982, the Irish financial system was dominated by small-scale domestic banks that had oligopolistic control of an underdeveloped market for private credit which was characterised by cartel style lending. Clarke and Hardiman (2012) point out that during this period credit rationing was commonplace and the banks had a tendency to overcharge. Furthermore, the state was the largest provider of mortgage credit (Norris 2016). The next decade saw a fundamental change in the Irish financial system as it embarked on a process of financial liberalisation and began the process of financial integration within the European Union. While the changes made during this period had little effect on the ratio of private credit to GDP; their implications would be far-reaching and given the correct set of conditions would eventually result in Ireland having one of the most globalised and financialised banking systems in the world.

The fostering of competition within the Irish banking sector was a crucial impetus for the process of liberalisation. The sector up to this point had been dominated by domestic banks that operated a type of interest rate cartel, where credit rationing was typical, and the loan application process was arduous. A senior economist from Irish and Global Banking pointed to how cartel-style banking worked during the 1980s:

> Yeah, and they were a cartel, so there was nobody, they all fixed the interest rates, and there was actually the Irish Banks standing committee. And what was that? It was to feed the cartel, so it was a formalised cartel.
>
> (Finsec 5/IRL: Senior Economist Irish and Global Banking, 02/11/2017)

The initial phase of liberalisation was introduced to bring an end to cartel style lending and increases access and competitiveness in the market. To this end, throughout the 1980s there were a progressive liberalisation and dismantling of credit, capital and interest rate

restrictions. In February 1984, the government lifted the credit policy; from now on the Central Bank would use monetary policy instruments to affect the supply of money. This move effectively lifted the lid on ceilings placed on lending to the private sector and brought credit rationing to an end.

In May of 1985, new interest rate arrangements were drawn up to encourage competition between the major banks and effectively ending the interest rate cartel. In removing interest rate controls the state had unwittingly created a set of conditions within banking which would enable the banking sector to introduce a set of product innovations in the next period. Increased competition, in particular, foreign competition was about to become one of the hallmarks of the Irish banking system. With the introduction of the Building Societies Act in 1989, banks and building societies were free to compete on what they charged for credit services.

Structure: Bank liberalisation (Removal of Barriers to Mortgage Market)

In order to achieve withdrawal from its role as the provider of housing and housing finance, the state introduced the Building Societies Act of 1989. This Act profoundly changed the structure of Irish banking and altered both the flow and funding of credit. The 1989 act de-mutualised the building societies and effectively turned them into banks.

The Building Societies Act of 1989 allowed for the demutualisation and diversification of traditional building societies. This act had two principal effects firstly it ended the tax advantage that building societies had over banks and fostered a climate of competition in the Irish market which encouraged commercial banks to become involved in mortgage lending. Secondly, it effectively transformed building societies into banks allowing them access to wholesale funding. This new funding source allowed the building societies to diversify their lending activity into the development sector. Their demutualisation meant that

their deposit base no longer constrained the building societies as they now had access to wholesale funding. Combined with the series of earlier changes which brought cartel style lending to an end the process of liberalisation created a sector where banks were free to compete for each other's business on price with new access to funding.

Irish National Building Society and Educational Building Society (INBS and EBS) both of which had previously focused exclusively on residential mortgages entered the finance market and expanded their loan book beyond their deposit base (Clark & Hardiman, 2012). A third building society Irish Life and Permanent (IL&P) reacted to the falling margins and increased market pressure by expanding their loan book. By the mid-1980s, the state had removed fiscal subsidies for the building societies; they now had to function within the 'market' (Norris, 2016). This was the beginning of a new era for Irish finance, credit rationing was a thing of the past, and new access to wholesale funding was about to change to the face of Irelands mortgage market as both funding and competition increased.

During this period the government made two fundamental changes that enabled the development of a large and powerful financial sector, all be it from very humble, underdeveloped roots. Firstly, guided by the idea that the market would provide, the state withdrew from mortgage finance and housing development. Secondly, in order to achieve this goal, the state liberalised the banking sector. It is arguable that the size and ferocity of the financial bubbles experienced in 2008 have their roots in policy changes made in response to the budget crisis of this year. The process of financial liberalisation created a system where there was no distinction between banks and mortgage banks and credit restrictions had been removed. Furthermore, welfare retrenchment created an opportunity in the market for both the banking and the construction sectors. This is not to say that the cause of the most recent financial crisis is located in 1987; instead, these structural changes form a link in a complex

chain of causation which put Ireland on a path of financial liberalisation and housing speculation.

This capacity to use market-based funding would prove central to developments over the next twenty years and would be based upon our connections to the UK market. A senior economist from Irish and global banking reflected on the established connections between the Irish and the UK system which proved to be a key mechanism for the flow of capital onto Irish credit markets in the 2000s:

> They are always closely connected to the London money market. So in the 1950s and 1960s, they had huge surplus funds in London, so it wasn't so much of a change for them to be on the other side of that transaction and say well if we have surplus funds we will place them in London, and if we are short we will take money from London.
>
> (Finsec 5/IRL: Senior Economist Irish and Global Banking, 02/11/2017)

Given the deep recession at the time the impact of liberalisation on levels of PSC in the commercial banks was minimal. However, when economic growth emerged in the next period, the banks were well placed to develop a new model of banking. This new model would contain a far greater provision for their role as the providers of credit to a much broader section of society. The removal of credit restrictions, the lowering of capital requirements, the removal of exchange controls and the merging of commercial and mortgage banking had created a banking sector that was better equipped to function both at home and abroad and had access to a much broader pool of capital. What the banks would choose to do with these new found capabilities remained to be seen, given their history of market speculation and their tendency to imitate their UK counterparts it was uncertain how Irish banks would adjust to an increasingly competitive and integrated financial world.

Funding: Bank Liberalisation, Removing Barriers to International Capital

Having dismantled credit and interest rate controls, the process of liberalisation then focused on removing exchange controls and reducing reserve requirements. By 1991, the primary liquidity ratio had been reduced from 10 % to 8 %, and by 1999, this had been reduced to 2 % (Kelly & Everett, 2004). Then in January 1993, the remaining exchange controls were removed, and Irish banks were free to trade in foreign securities, borrow from foreign banks, and lend into foreign economies. The liberalisation of Irish banking was rapid and extensive, the structural and regulatory changes that were necessary for the emergence of a fully market-based system were put in place early on as were the competitive dynamic's which would go on to shape the system.

Comparative Structure: Developing a Comparative Starting Point

Amable (2003) describes Ireland as a passive bank-based system with a significant presence of foreign banks. Through the analysis of the historical development of Irish finance and comparison to the Danish system, it is possible to extend this description to include two other key characteristics of liberal and underdeveloped. Both of these characteristics will play crucial roles in shaping Irish financialisation.

The liberal tendencies of the Irish system are linked to its close ties to the UK system. Irish banks despite their under development have a history of favouring market-based activity, in particular, close ties to UK stock and money markets (Ornston, 2012). Furthermore, economic under development and late industrialisation meant Ireland did not develop the kind of relational banking structures evident in the Danish case. The Irish systems contained a small number of relatively powerful banks which primarily served the landowning class (Ógrada, 1997). These banks had little experience in funding productive investment, or mortgage lending and typically invested excess funds into English markets (Orsnton, 2012).

Mortgage finance was also underdeveloped, indeed up until the current period the state was the primary provider of mortgages in the Irish economy (Norris, 2016). The process of liberalisation produced a rapid transformation of the system, from a state dominated model, outlined by Zysman (1983), to a liberalised model influenced by their UK neighbours. Unlike their Danish counterparts that had experience of a market-based mortgage model, the Irish system has no such experience, a fact which would shine through in the coming periods.

These two very different histories of development produced banking systems that were structured in very different ways. Denmark had an extensive, coordinated mortgage system that was based upon social democratic principles and was heavily influenced by the

cooperative movement. The presence of a large number of small and medium-sized banks with strong relational ties to the SME sector can be traced to the cooperative movement. Furthermore, the Danes had a long established, experienced mortgage banking sector that employed complex market mechanisms to provide, cheap equitable credit to Danish households. The coordinated political economy shaped the growth of banking in Denmark, the presence of foundations and cooperatives inhibited the growth of large, powerful banks; instead, there were a high number of small and medium-sized banks with strong ties to the cooperative movement.

Ireland, on the other hand, had a small number of relatively large, powerful banks, who had a history of practising cartel style lending. The cooperative or peoples banks which were central to the Danish system were absent. While Ireland did contain a small number of building societies; most mortgage lending was done by the state, who was also the primary builder and supplier of housing (Norris, 2016). Furthermore, the building society sector was transformed by the legislation of 1989 which turned mutualised societies into banks in everything but name by granting them access to wholesale funding.

In a broad sense these two cases represent varieties of bank based capitalism which was not characterised by the mode of firm finance; instead, it was explained by the structure of the financial system and the level of industrial development.

1982-1992		
	Denmark	Ireland
Varieties of Bank Based Capitalism	Developed, Coordinated, Passive Bank Based Model.	Under Developed, Liberal, Passive Bank Based Model, with Presence of Foreign Banks.

Table 4.0

Varieties of Residential Capitalism

The history of the Irish familial housing regime has its roots in Irelands' colonial past and the land reforms introduced by various UK governments to procure nationalist support (Norris 2016). Ireland's property based welfare state is distinctive from their European counterparts where welfare policies focused extensively on income distribution and grew out of the struggle between urban labour movements and capital. In Ireland, for most of the twentieth century, the welfare system was focused on the redistribution of land rather than income and produced a familial housing regime intended to support a Catholic familial, social order (Norris 2016).

Rather than grow out of struggles between urban workers and capital, the Irish housing based welfare system grew out of the struggles between small landholders and their colonial rulers. Once independence was established in 1922 asset-based welfare offered the state a means to support a Catholic familial, social order through the provision of dwellings. While the early phase of land redistribution was focused on smallholders and the landless, the later phases included the urban working and middle classes. This phase included the extensive building of social housing, which included the right to buy, provision of tax relief and grants and mortgage subsidies for the middle classes. By the 1970s, Ireland had some of the highest tenure rates in Europe, over 60% of the population owned their own home, 10% of these had been purchased from a local authority and further 15% rented from the local authority (Norris, 2016). An Irish housing expert reflected on the evolution of the different forms of state financial support for high housing tenure in Ireland:

> From before the state was founded there were supports for homeownership we inherited from the Brits. Then the state was founded, and basically the government stepped in with government grants, they started to grow and grow, there was a

problem with borrowing because there was a very underdeveloped banking system. The state stepped in as a mortgage lender, its role in mortgages grew and grew. Then as interest rates went up interest rate subsidies grew and grew. So we reached a stage where, I have the figures in the book, but I can't remember them off the top of my head, where the vast majority of capital for housing was coming from the state in social housing, homeownership. So we had socialised home ownership, in my view.

(Uni 1/IRL: Academic Expert in Irish Mortgage Finance & Housing, 25/01/2017)

Up to this point, the building of homes by local authorities had formed an integral part of the Irish welfare state, providing low-cost housing to working-class families and giving them the opportunity to purchase these homes (Norris 2016). This system was so successful that the tenure rate in Ireland had reached what Norris (2016:1) calls ‘super-normal levels’. Whatever the reason for the Irish connection to property and land, be it post-colonialism, agrarian history or catholic familialism the empirical evidence is clear Ireland was and is a nation of homeowners. A large of number theses homes were built by the state and subsequently bought by residents through various state-supported ownership schemes. The building activity was funded by local authorities who in a financialised way, had gone to money markets to borrow the capital necessary to fund the building. An Irish housing expert reflected on the role of the local authorities in the provision of housing:

But for a couple of decades in the 20th century, the majority of housing output was council housing, and the level of building was extremely high. Even during the '50s when we were in dire economic situation we managed to build so much social housing that the waiting lists in Dublin were cleared, they had to stop building. And part of it was the funding model, and the funding model meant that... I should also mention they also used rates, local property taxes to pay it down. And the funding

model meant that even though the people running central government were, particularly in Fine Gael's case, ideologically right-wing, senior civil servants were dead against any social spending. I mean TK Whitaker was extremely right wing in that regard, I can't believe no one mentions this in the obituary! They weren't keen on spending any money, particularly on social stuff. But the councils were kind of uncontrollable because they could borrow in their own right and they went mad borrowing basically. And the government gave them a subsidy, but the sector was kind of self-funding in the sense that the rents covered the loan for payments and rates did. And this meant this element of the welfare state managed to thrive when other elements didn't.

(Uni 1/IRL: Academic Expert in Irish Mortgage Finance & Housing, 25/01/2017)

By 1987, a near-bankrupt Irish state could no longer afford to build council property, and therefore Charlie McCreevy, the then minister for finance, removed the capacity for local authorities to borrow money independently. From that point on funding came directly from the state With the fiscal constraint of the time, this naturally led to an ever decreasing number of new units. This development is a crucial piece of what Norris (2016: 203) describes as the 'marketisation' of housing in Ireland and marks the transition of a familial housing system that was welfare orientated to a system that was market orientated. An Irish housing expert reflected on the impact of the fiscal crisis in 1987 and how direct state funding made housing vulnerable to the economic cycle and lowered the production of social housing.

And as you are aware the crisis of the '80s, they jacked up taxes until there were tax marches, they cut other stuff until there was no capacity to do it. And actually social housing, council housing was the last thing to go in those cuts. So it indicates there was a lot of political support but at that stage, there was a decision made in '87, and

from then all council housing was funded by grants, central government grants. And that meant it is very vulnerable to economic cycle and particularly the strength of the exchequer finances. So in the past as well, the other system we had to fund the social housing meant it was possible to have a counter-cyclical economic intervention. So say in the '50s councils borrowed a pile of money, they built houses, the slums in Dublin were finally cleared in the '50s, they built a pile of houses in Dublin, they intervened in the market, provided building jobs when they were necessary, they could do it. From the '80s on, they couldn't do it because the exchequer just didn't have the money.

(Uni 1/Irl: Academic Expert in Irish Mortgage Finance & Housing, 25/01/2017)

The state introduced a range of policy measures during the 1980s which mark a distinct turn around in their support for high homeownership rates. In 1982, the first time buyer's grant of 3000 pounds had its period extended from three to five years; by 2002 this universal grant had been abolished. In 1987 the state reduced the rate of interest deductible on mortgage loans to 10%, and in 1990 a further 25% was cut.

Coupled with this withdrawal from state subsidy of home ownership, was a set of policies which encouraged social housing tenants to surrender their homes and enter the market. This has been a critical factor behind the high tenure rates in Ireland. A range of policy incentives has been used to encourage sitting tenants to purchase their social housing. In 1984, a 5000-pound grant was introduced for tenants that were willing to surrender their council home and buy private property, and 1991, a mortgage allowance scheme was introduced to subsidise social tenants who would surrender their home. A shared ownership scheme was also introduced which included a part rent, part buy arrangement for social

housing in 1991. These policies were so successful that by 1987 a total of 180,000 social units had been privatised, between 1998 and 2005 a further 53,000 social units were sold.

Given that between the 1930s and 1980s the local authorities had built somewhere in the region of 250,000 homes, they had sold 72% of the dwellings that the local authority constructed (Norris & Winston, 2002). Considering that in 1981 the total number of separate dwellings in the country stood at only 896,045 brings the effect of the selling social housing into the market into sharp focus, the state has intentionally privatised nearly a quarter of all housing in the country (Norris & Winston, 2002). During the same period, the local authority built and constructed roughly the same number of units. Therefore there has been a marked deterioration in the provision of social housing as a result of the privatisation process.

A number of authors have theorised about the Irish connection to housing and why private tenure is so prevalent. While not dismissing the cultural, economic, and structural arguments it is clear that state policy up to the 1980s played a crucial role in shaping the housing tenure. Furthermore, the alternative to a familial housing regime is some form of corporatist arrangement which provides affordable rental alternatives. Neither the tax incentives to encourage workers or structural supports have ever been put in place in Ireland to enable the development of this type of system. Unlike mortgage interest rates, rent payments have never attracted much tax relief in Ireland. In 1982, rent tax relief was introduced for people over 55, in 1995 this was extended to cover all renters. The maximum relief was 1,329 euro for a married couple over 55, compared to a maximum of 8,000 euro for first-time buyer's interest-rate relief.

Furthermore, while Ireland had the second highest tenure rates in Europe, roughly 75%, with Spain slightly higher at 80 %, it contained the lowest number of dwellings per capita of all the European nations (Somerville, 2007). These dwellings were concentrated in

detached /semi-detached house making up 51 %, small terraced at 42.9 % and apartments at a mere 3%. Comparing this to Germany where apartments made up 52% and Denmark 33 %, it is clear that Ireland lacked the structural capacity to develop a functioning rental alternative. (Norris & Winston, 2002) This underdeveloped housing stock limited the capacity to develop a housing regime which has lifelong renting as a feasible alternative. Neither the fiscal nor the structural capacity for the development of an alternative housing regime existed in Ireland during this period.

When taken as a whole these policies reflect the new neoliberal housing policy of the Irish state. The influence of the Thatcher government during this period is evident, privatisation and financial liberalisation meant banks would replace the state as the providers of housing finance in the new political economy. Ireland was set to enter a new period of economic growth with a recently liberalised banking sector, demutualised building societies, and a housing regime that exhibited a propensity for homeownership, lacked the structural capacity to provide rented housing and had the lowest housing stock per capita in Europe. The policy of privatising housing was about to become connected to global finance in a whole new way. Economic growth and the rising asset values that it produced would create a wealth effect that was felt by a significant portion of the population.

Up to this point, Ireland had never experienced the kind of growth which could cause house prices to inflate; this, however, would change as the fiscal adjustment combined with a new neo corporatist wage agreement created conditions favourable to economic convergence. How would Irelands underdeveloped, familial housing regime, which up to now had been highly subsidised by the state and protected from market forces by the presence of an underdeveloped banking sector, navigate and transform in the brave new world of, economic boom, population boom, footloose international capital, easy access to mortgage credit and rising asset values?

Comparative Summary

In responding to national economic crises, both Denmark and Ireland, *unintentionally* put in place the roots of financialisation. In both cases turning toward trade-driven growth offered a solution to the high unemployment and low growth which hampered both economies. However, very different levels of industrial development and macroeconomic dynamics meant that turning towards trade necessitated very different policy responses which intersected with national models of finance to forge the roots of financialisation.

Comparative Summary 1982-1991		
	Denmark	Ireland
Politics of growth	The roots of financialisation established as an *unintended* consequence of fixed exchange rate policy to increase competitiveness, in a climate of macroeconomic instability producing a financial crisis.	The roots of financialisation established as an *unintended* consequence of the crisis of state finances and the welfare retrenchment and financial liberalisation introduced to resolve it.
Banking	Well developed system. No liberalisation of banking. Separation between mortgage and commercial banks. Financial crisis causing bank consolidation.	Underdeveloped system. Profound liberalisation of banking. Mortgage and commercial banks became connected through. Financial stability in spite of deep liberalisation.
Housing	Well, stocked corporatist housing system. Medium housing tenure. Housing strongly tied to the bargain between industrial capital and urban labour. Housing system stability.	Poorly stocked familial housing system. High housing tenure. Housing rooted in the struggle for land. Housing system transformation through process of welfare retrenchment.
Varieties of bank based capitalism	Developed, coordinated, passive bank-based model.	Underdeveloped, liberal, passive bank-based model, with presence of foreign banks.

These different policy responses put in place different core conditions for financialisation in the two countries (Krippner, 2011). In Denmark, change to currency policy altered the relationship between monetary and fiscal policy, while in Ireland, financial deregulation formed a key strategy for fiscal consolidation. Meaning the core conditions outlined by Krippner (2011) have emerged in different countries, at different times for different reasons.

Chapter 5: (1992 – 2000)

Employment Miracles, Institutional Change & Market Based Banking

Introduction

Chapter 5 traces the age of 'employment miracles' in the Danish and Irish political economies with particular reference to how paths to growth shaped developments within the financial sector. (Green-Pedersen 2002 & Becker, Schwartz and Ebrary, 2005). What emerges is a story of two small open economies facing very different sets of challenges in an increasingly globalised and financialised world market. Denmark had a well-developed industrial sector but continued to be hampered by low growth and high unemployment; the challenge was to stimulate demand while maintaining macroeconomic balance and competitiveness. Ireland, on the other hand, was underdeveloped, had failed to industrialise and had high levels of structural unemployment. Therefore, job creation and FDI (foreign direct investment) were the keys to success.

While both economies turned toward international trade as the new driver of growth, both took very different approaches to finance. Denmark actively managed a fiscal expansion, while Ireland largely ignored the financial-sector and focused instead on the attraction of FDI. In Denmark, the Social Democrats intentionally used mortgage markets to 'kick-start' a stable but stagnant economy. They balanced the build-up of debt with a build-up of wealth in the pension funds and produced a nationally unique form of mortgage price Keynesian demand stimulus. In Ireland, a Fianna Fáil / Progressive Democrat Coalition did little to influence the financial-sector and only became interested in housing markets in the mid-1990s when the lack of supply became a primary concern (Norris, 2016). However, their focus on growth through the attraction of FDI produced a range of opportunities which Irish banks were quick to capitalise on, and a new asset-based lending model emerged.

By 2000, at the close of the period, both systems looked very different. Denmark looked balanced, while Ireland looked pressurised. In Denmark, mortgage and commercial banks were more connected through coordination, and while debt was building up, it was balanced by national capital in the pension funds. In Ireland, commercial and mortgage banks became connected through competition, national deposit-based funding was exhausted, and while pension funds invested abroad, foreign banks and capital were assuming a more critical role in funding the domestic mortgage market.

Transnational Context

1992-2000 was a time of significant change in the landscape of European finance (Johnston and Regan, 2016). The Maastricht treaty had come into effect in 1992 and paved the way for the creation of a single market. Monetary union and the creation of the Euro took centre stage

as countries implemented the policies necessary to meet the convergence criteria for entry to the Euro Zone. Financial liberalisation was a step towards the creation of a single market and was favoured by even the most co-ordinated of the European economies. The German finance minister famously stated that capital market liberalisation would prove a welcome test to the stability of the new Eurozone (Ó Riain, 2014). The next decade saw Europe embark on a process of unprecedented financial integration.

Financial integration had two primary objectives, firstly harmonisation of the interest rate across the Eurozone, and secondly, free movement of capital, both money and banks would be free cross borders (Bohle 2017). During this period responsibility for monetary policy was transferred to the ECB (European Central Bank) (Beblavý et al., 2014). The effect of this on periphery economies was profound. There was a natural imbalance between the growth cycles of the large core nations and the smaller open periphery nations meaning that in effect many peripheral nations began to have very low, if not, negative real interest rates (Lapavitsas and Kouvélakis, 2012). Therefore, the inflationary targeting practised by the ECB meant that the interest rate taken by the periphery was ill-suited to the high levels of growth occurring at that time (Białek, 2015). With the formation of the Euro, there was a spike in credit levels across a range of periphery nations, as the new lower interest rates made it beneficial to households and NFC's (Non Financial Corporation) to borrow capital.

Alongside capital market liberalisation, changes were taking place within large European banks which would affect the trajectory of periphery countries growth in the subsequent period (Claessens et al., 2010). The flow of capital across Europe was mediated through the existing bank-based system; this was an uneven process with new global banks playing a more significant role than other banks (Schoenmaker and Wagner, 2013). The size and power of these banks were enormous with the 15 largest banks accounting for 150 % of European GDP. These banks merged commercial, and investment activities and their growth

strategies affected the availability of credit in the periphery nations. They acted as both the providers of inter-bank credit and also established themselves in periphery markets through mergers and acquisitions.

Finally, global processes of financialisation and globalisation were also progressing unabated at this time (Arrighi, 2010). The latest in the series of asset bubbles to emerge, the dot.com bubble, was getting underway (Blyth, 2008).

Denmark 1992-2000

The Politics of Growth: Mortgage Price Keynesianism

By the early 1990s, the austerity measures of the 1980s proved successful in correcting the long-standing balance of payments deficits and Denmark achieved macroeconomic stability. However, long-term unemployment problems continued to hamper growth, and the economy remained stable but stagnant (Andersen, 2011).

Indeed, across a range of European nations wage-led growth had faltered in the 1970s and 1980s due to a combination of global shocks and the erosion of union power which had linked wage growth to consumption (Baccaro and Pontusson, 2016). Classic Keynesian stimulus packages had failed to resolve the crisis of stagflation. Therefore, countries turned to new supply and demand side policies to increase international competitiveness and boost levels of national consumption respectively. The field of Comparative Political Economy has focused extensively on the supply side changes seeking to map national economies responses to changes in global markets and production technologies and explain these changes regarding the various institutional arrangements within each economy (Baccaro and Pontusson, 2016). However, less attention has been paid to the demand side changes which were taking place at this time as various countries sought to stimulate economic growth through consumption and replace wage-led growth with debt led growth in the new post-Fordist era.

In 1992, the Social Democrats faced a political dilemma; how to stimulate growth in the Economy while maintaining international competitiveness and macroeconomic stability. Traditional Keynesian demand stimulus had fallen out of favour after several failed attempts at these policies during the 1970s and 1980s had resulted in the build-up of high levels of government debts and associated balance of payments problems (Andersen, 2011). Furthermore, the hard pegging of Kroner in 1982 imposed the need for fiscal prudence limiting the state's options for traditional Keynesian stimulus.

Scharpf (2000:13) noted that the challenges faced in the new era of globalisation differed across the varieties of capitalism. The Scandinavian Social Democrats looked most likely to be affected by the new fiscal restraints imposed by international capital mobility and tax competition. However, Scharpf (2000) finds that capital in Denmark was located within familial SME sector which was not particularly mobile and therefore not sensitive to the tax

increase and employment in the public sector remained high, as did support for the welfare state. The real challenge for the Danish state was to create employment in the private sector, which was below the OECD average while maintaining macroeconomic balance and avoiding the build-up of foreign debt which had caused such severe problems in the previous period. A new approach to stimulating consumption and creating jobs was required. The solution was to combine the focus on exports of the previous government with financial deregulation in order to ‘kick-start' domestic consumption. (Andersen, 2011)

The ‘kick start’ was supplied by the liberalisation of mortgage markets. By relaxing the rules which governed mortgage finance the Social Democrats developed a model of mortgage price Keynesian demand stimulus which released a wave of consumption in the economy. Two Danish bank experts reflected on the deliberate efforts by the Social Democrats to kick-start growth through a process of financial de-regulation which allowed households to re-mortgage out of expensive loans from the previous crisis:

> Interviewee 1: So that is another point. And that liberalisation that you could re-mortgage, that happened way earlier, that was early '90s.
>
> Interviewee 2: That was the social democratic government who wanted to kick-start the economy.
>
> Interviewee 1: Exactly, in '93.
>
> Interviewee 2: So if you want to talk about a big deregulation, that is the...
>
> Interviewee 2: It actually worked. It freed up people from high-interest rates and then it moved consumption from the future into the present and it was a very deliberate choice, it wasn't a, oh we haven't figured that out. It was debated and analysed quite a bit at the time.
>
> (Finsec 9/DK, Senior Figure Danish Commercial Banking, 30/11/2016)

During the early 1990s, the Social Democrats made several failed attempts at reviving activity on mortgage markets including altering the balance principle in 1992 and the reintroduction of 30yr loans. Then in 1996; they allowed the introduction of a new type of mortgage loan, the ARM (Adjustable Rate Mortgage) loan. Combined with the earlier changes, which allowed equity release, these loans provided the stimulus for a new phase of growth in mortgage lending. The loans allowed homeowners to re-mortgage at a lower rate of interest than the loans they had taken out during the previous financial crisis. The project was a success and between 1992 and 2001 demand for credit doubled unleashing a new wave of consumption into the Danish economy.

Mortgage price Keynesianism provided the necessary stimulus for economic growth replacing the foreign debt and government expenditure of the old Keynesian model with bank credit and household debt. This new combination ensured that the Danes could provide a stimulus to the economy without running into the kinds of balance of payments problems which had emerged in 1987. Andersen (2011) argues that the only difference between the consumption boom unleashed in the 1990s and the one in the 1980s is that this time the state was prepared for it. However, rather than just being prepared, the Social Democrats engineered the boom in consumption and actively balanced the build-up of debt with a build-up of savings in sector-wide pension funds.

The Social Democrats approached financial deregulation with the same degree of balance which they applied to their labour market reforms, seeking to limit the risk of unleashing debt with the build-up of national savings in the newly established pension funds. The introduction of liberal-inspired mortgage products, which would look more at home in UK markets, drove a credit expansion by linking mortgage debt to falling interest rates. This liberal strand of institutional change was balanced by the stabilising influence of newly created pension funds that became the critical providers of capital to fund the credit growth.

The funds provided both a source of national savings, which protected households at a micro level and also functioned at a macro-level as a new source of national investment for mortgage markets. To be sure, a range of authors draw attention to the role of the ministry of finance at this time, suggesting it worked as the principal coordinator across the macroeconomy (Andersen, 2011). Therefore, the liberal debt expansion was intentionally balanced at a macro level by the presence of a large block of patient, stable investment in mortgage markets.

Taken as a whole the combination of active labour market policies and financial liberalisation was a profound success, and Denmark entered a period of newfound economic prosperity (Andersen, 2011; Andersen et al., 2016). Between 1993 and 1999, unemployment fell from 11.9 % to 5.2 %, exports boomed in this period and GDP began to grow steadily. After an extended period of decline, known as the seven-year slump, credit growth and rising house prices accompanied GDP growth. Throughout the 1990s the Danish economy went from strength to strength and seemed, at last, to have solved the age-old problem of inflation versus unemployment problem which had hampered competitiveness since the oil crisis.

Krippner (2011), points out that financial deregulation can produce unexpected and unintended consequences when combined with the other necessary conditions of financialisation, liberalised capital flow and changing monetary policy. Changing monetary conditions had been put in place by the hard pegging of the Danish krone, and as a result, the previous financial crisis was already producing a change in the structure of Danish commercial banks. A senior figure from Danish commercial banking pointed to why the state favoured financial deregulation highlighting the risks contained in driving economic activity with mortgage debt;

> The authorities were very keen because it had growth and business cycle implications. I think the desire to kick-start the economy in the early '90s, I think this bank actually argued against it at the time, we went on public record and advised the government it was a hugely risky venture.

(Finsec 9/DK: Senior Figure Danish Commercial Banking, 30/11/2016)

Would the Social Democrats be able to control finance once they had unleashed it or would we see the unexpected results which Krippner (2011) suggests follow financial deregulation?

Products: Mortgage Market Liberalisation and Changing Monetary Conditions

In 1992, the Danish mortgage sector was still recovering from the previous financial crisis. Activity in the sector was at an all-time low after the previous financial crisis, and the austerity package (The Potato Cure) was introduced to bring the economy back online, which had crippled the mortgage banks (Abildgren and Thomsen, 2011). The Potato Cure included strict regulation of the mortgage sector; limiting the capacity to provide credit, increasing the fees and reducing the term of the loans available (Finsec, 9/Dk).

The system was market-based but governed by Social Democratic principles and connected to a large well-developed welfare state which used the system to fund both social and not for profit housing (Schwartz and Seabrooke, 2008). It was separated from the

commercial banking sector and functioned as a provider of affordable housing credit to middle and upper-class households (Lunde and Whitehead, 2016).

The liberalisation process is outlined in Table 5.0 which describes the cumulative steps towards liberalised mortgage lending. Having come through the financial crisis of the 1980s, which in essence was a mortgage crisis caused by falling interest rates and structural problems within the macro-economy (See Diagram 4.1), the Social Democrats turned to their long-established market-based mortgage system as a means of demand stimulus, replacing the Government debt of classic Keynesianism with household debt.

The project began in 1992 with a legislative change to the Danish mortgage market, which allowed homeowners greater access to credit for a broader range of purposes. The 1992 legislation fundamentally altered the Danish mortgage model by linking wealth contained within homes to the current level of consumption (CB 2/DK.). However, despite the fundamental change produced by the 1992 legislation, it did not produce the needed growth, and the market required further stimulus. A further liberalisation, in 1993, also proved unsuccessful at generating new activity on mortgage markets. In this second phase of the process, the Social Democrats reversed the regulations introduced during the Potato Cure and allowed banks to grant 30yr annuity loans once again. Then in 1996, the introduction of ARM loans finally provided the stimulus which the market required (Abildgren et al., 2010). These loans were incredibly popular as they allowed households to re-mortgage out of expensive loans taken out before the last financial crash in 1987 (Finsec, 9/DK).

Year	Policy	Outcome
1992	Alteration of the rules governing the purpose of a mortgage loan.	Changes meaning of houses from home to cash machine, No credit growth.
1993	Reintroduction of 30 yr annuity loans.	No credit growth.

1996	Introduction of ARM loans.	Changes debt reduced price with increased risk. Credit growth.

Table 5.0 The Liberalisation of Mortgage Lending Source: National Bank of Denmark

A senior economist from the Danish mortgage sector reflected on how vital a change mortgage equity releases was to the Danish system:

> And I think the main liberalisation was perhaps back in 1993, until 1993 new lending was, I think you could almost call it demand driven. Either you could take out a new mortgage until 1993 if you bought a new home, or if you could establish that the proceeds would go into refurbishing your home. But you couldn't just take out a new mortgage because you had equity.
>
> (Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

Previous to 1992, mortgage holders could only take a loan from a mortgage bank for the purchase of a home. From 1992 onwards, Danes could take out a loan against their property for any purpose, this allowed Danish owner-occupier to release the equity they had built up in housing. In essence, this change transformed the meaning of housing from a home to a cash machine as owners could now use their home as collateral for any purchase. While this change was essential to the emerging financialisation, it did not generate much new activity in the market until it was combined with a new loan type, the ARM loans.

The ARM loans allowed customers to take out a bond varying from 1to 5 years, with an adjustable rate of interest (Abildgren et al., 2010). These loans proved to be the critical stimulus for the recovery of the Danish mortgage market. The ARM loans reduced the price

of credit by allowing borrowers to access short-term interest rates which were far lower than long-term rates. The loans allowed Danish households to benefit from these lowers rates and caused a reduction in the price of credit. When combined with the 1992 legislation, the ARM loans altered how the Danish mortgage market worked by moving consumption from the future to the present (Finsec 9/DK). From 1996 on, Danes had access to cheap credit and equity release, which could be used to fund current consumption.

Figure 5.0 below shows the increase in the total stock of mortgage lending and demonstrates the effectiveness of the ARM loans in generating activity on mortgage markets.

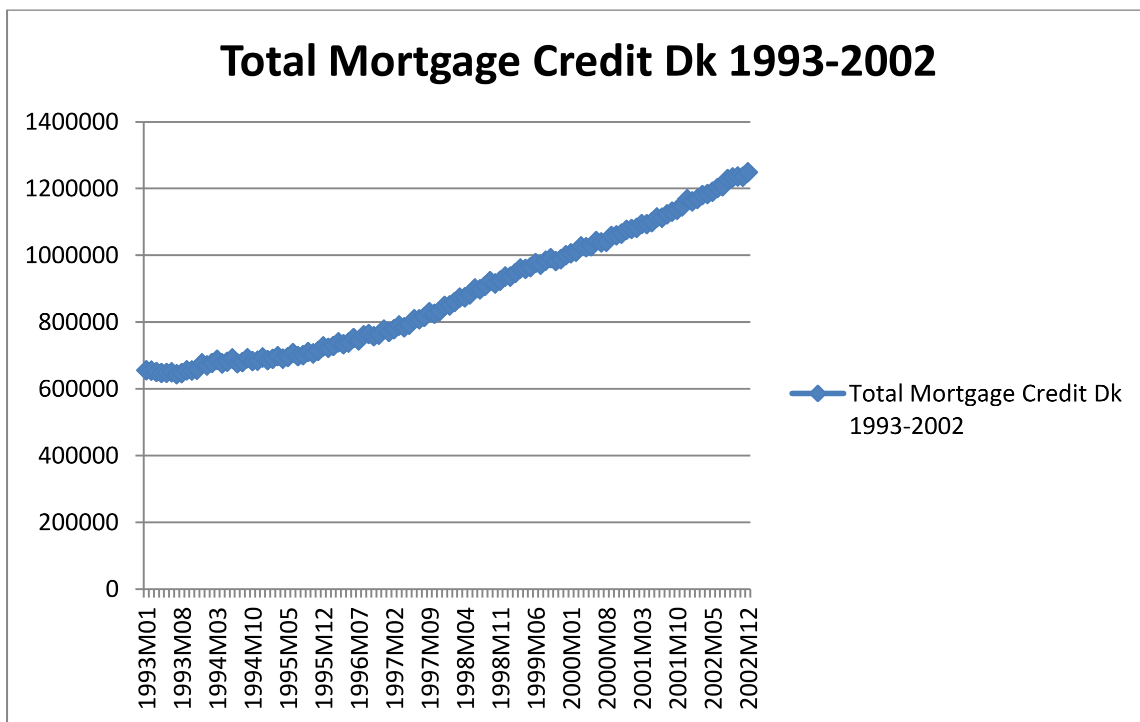


Figure 5.0: Total Mortgage Credit DK 1993-2002.

Source: National Bank of Denmark

From the introduction of ARM loans in 1996 demand for credit grew at an annual rate of 8.38 %, with overall credit levels almost doubling between 1996 and 2002. A senior figure at the National Bank of Denmark highlighted that it was the reduction in the price of credit which caused the growth in ARM loans popularity and that you paid for this reduction.

> Of course, there is this thing that you have to notice before we got the introduction of floating rate or variable interest rate loans, they came in '96 but a couple of years after they got more popular. Then for many years, we had the 30 years loan or 20-year loan, but they were callable, so it meant that, I mean when interest rates went down then people wanted to have an early redemption of their loans and then take out a new loan at a lower interest rate. So in a way, you also had the flexibility when it went downwards, but then, of course, you could say of course you paid for that flexibility.
>
> (CB 2/DK, Senior Figure National Bank Denmark, 27/01/2016)

Before any process of liberalisation was commenced, the Danish mortgage system was a form of market-based banking, which was governed by Social Democratic principles. The ‘balance principle' ensured that banks could only offer a type of pass-through securitisation which meant there was far greater transparency within these bonds than the type of bonds which caused the sub-prime crisis in America (Hardie and Howarth, 2013). However by altering the length of the bonds and including a variable rate the Danish banks harnessed the core conditions of an emerging financialisation across Europe and allowed their customers access to cheaper, riskier credit.

Krippner (2011) found that changing monetary policy was a core condition of American financialisation. In Denmark, changes to monetary policy were caused by the hard pegging of the Danish Kroner in 1982, which in the long term effectively made the Danes

part of Eurozone monetary system. This defacto euro-zone membership meant that the harmonisation of interest rates which accompanied the process of EMU (European Monetary Union) was central to the boom in mortgage finance. While Krippner (2011) outlined high-interest rates causing a change in the behaviour of American firms, the falling rates of EMU produced a change in the behaviour of European households and banks. While the hard pegging of the Kroner had tied Denmark to interest rate harmonisation, it was the actions of the ECB which supplied Krippner's (2011) core condition of changing monetary policy.

Furthermore, the process of financial liberalisation was engineered to allow households to benefit from the new monetary regime created by EMU. The Danes required financial deregulation in the form of the ARM loans, to access the short-term interest rate. Therefore the Social Democrats engineered the financialisation of Danish mortgage debt to benefit from the changing monetary environment in Europe during the formation of the single currency. Figure 5.1 outlines how rapidly interest rates were declining during the late 1980s and early 1990s.

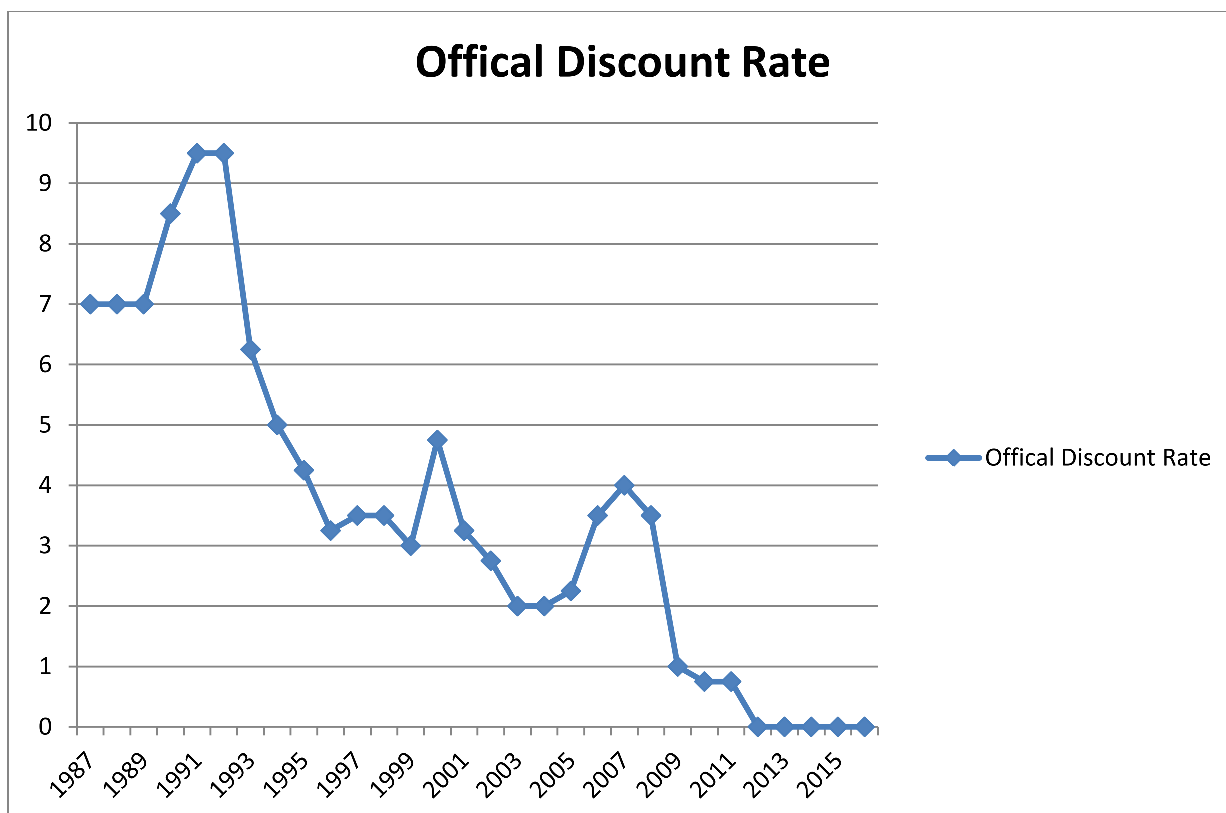


Figure 5.1, Official Discount Rate 1987-2015

Source: National Bank of Denmark

The temporal element to the new bonds was a similar phenomenon to the funding gaps which Hardie et al. (2013) outlined in their typology. Danish mortgage banks found a way to employ short-term capital to cover long-term loans, with bonds as short as one year being issued to cover 30 yr mortgages. This change altered the functioning of the 'balance principle' and exposed both banks and borrowers to new types of market-based risk. Banks became exposed to new refinancing risk, and borrowers carried more interest rate risk. For banks the real risk would emerge, if and when, the mortgage banks could not sell their short-term bonds, leaving them holding the long-term debt with no financing. The financialisation of banking was characterised by the increased use of short-term capital to cover long-term

debt. The introduction of these products mirrors the behaviour of commercial banks and suggests that the new ties between commercial and mortgage banks were affecting the behaviour of the classically risk-averse mortgage sector.

By using housing as a driver of consumption through variable rate products; the Danish state and Danish mortgage banks tied consumption to market conditions. Given the historical fluctuations in house prices and interest rates, this created a more volatile growth model than the Fordist era, wage-led model. Should house prices fall or interest rates rise, consumption which was tied to the value of houses and debt will also rise and fall. The new monetary system which the Danes chose as a means of stabilising their currency added a further layer of uncertainty and tied the real economy, through consumption, to market conditions in the single market. The introduction of these products created a macroeconomy in Denmark which is incredibly sensitive to fluctuations in the interest rate (Finsec 1/DK). Both the OECD and the IMF have highlighted the systemic nature of the risk profile of a system dominated by variable rate products. Therefore it is conceivable that consumption in Denmark would fluctuate not based upon activity in the real Economy, as per the wage-led model, but through activity in financial markets as per the monetary led system.

From 1996 onwards house prices rose steadily, and the increased wealth effects of this drove further growth in demand for credit and household consumption (Niels Arne Dam et al., 2011). In 1999, the Social Democrats realised that the economy was overheating and introduced a set of tax policies to slow the growth in mortgage credit. Seabrooke (2008) describes this development suggesting that it caused a ‘mini market crash' in 2002. Therefore, having achieved the desired goal of ‘kick-starting' their economy, the Social Democrats attempted to limit the effects of the market through direct intervention. However, their housing and immigration policy proved unpopular, and they were replaced by a new Liberal-

Conservative coalition in 2002 which set about dismantling the balanced system that the Social Democrats had tried to create.

Funding: Pension Funds Provide Balance and Institutional Buffer

The Social Democrats sought to balance the risk of using debt to drive economic growth with a build-up of national savings in newly established sector-wide pension funds. Taking a historical approach to looking at the growth of market-based funding over time in Denmark, what emerged was a story of a managed fiscal expansion that relied extensively on national capital contained in the pension funds. Part of the response to the balance of payments crisis in 1987 was to increase saving in the economy. To this end, the Social Democrats created substantial pension funds (See Diagram, 5.0). The funds created a new source of investment which could be channeled towards mortgage markets, in effect recycling household savings into household debt. Therefore, the new Keynesian mortgage price model introduced by the

Social Democrats balanced liberal mortgage products with a coordinated, stable funding source within the pension funds.

In 1992, the Social Democrats managed to achieve a broad consensus on the establishment of sector-wide pension funds, with the direct involvement of the social partners and mandatory contributions from households. At their inception, the funds were required by legislation to invest a certain percentage of their assets into Danish bonds creating a source of national capital available for investment. Amable (2003) notes this variation of pension fund capitalism in his analysis of pension funds investment practices, finding that funds with a significant degree of bond investments fall within a more bank-based model of capitalism.

Looking at the data in figure 5.2 reveals how crucial the Danish pension funds were to the growth of credit during the 1990s. In 1999, the funds accounted for over 33% of the overall market and were the single largest investor in Danish mortgage debt. Their presence in the market is three times greater than any of the other large investors such as banks or foreign capital. Pension funds were a natural investor in Danish mortgage debt, the long-term nature of the debt matches the profile of the pension funds long-term obligations. Their presence ensured that the Danish economy contained sufficient savings to cover the growth in PSC (Private Sector Credit) levels which was required to 'kick-start' the economy (Andersen, 2011).

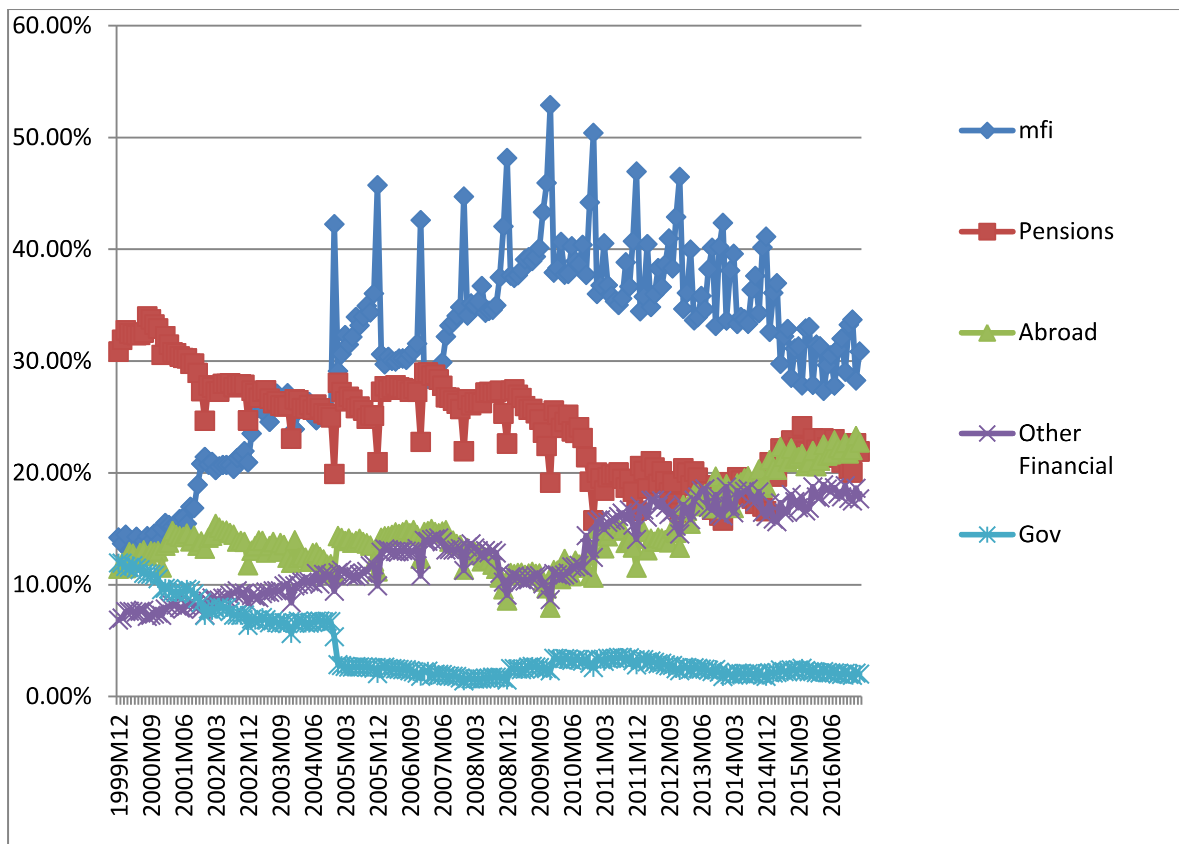


Figure 5.2 Institutional Investors in Mortgage Bonds % of Total

Source: World Bank Financial Development Database

Hardie et al. (2013) focus extensively on changes within banks which enabled them to access new sources of market-based funding. The fundamental changes included the use of securitisation of debt and running funding gaps which allowed banks to access new interbank lending. Hardie et al. (2013) link these new practices to new levels of risk as banks became exposed to a new type of investor (other banks) that was less stable than the classic depositor. They link this new instability to the severity of the financial crisis which was experienced in 2008, outlining that those countries with the highest degree of market-based funding experienced the most profound crisis (Hardie and Howarth, 2013). The growth of interbank lending is a core feature of how Hardie et al. (2013) understand financialisation as the increased trading of, and in risk.

During the 1990s, the Danes developed a coordinated system of market-based funding, which was dominated by the newly established pension funds (Diagram 5.0). The funds provided a higher degree of stability than the inter-bank funding outlined by Hardie et al. (2013). The stability provided by the pension funds was contained in their capacity to act as a *buffer* against the need for *transnational capital* which was the first to take flight when trouble erupted in the market and also in their capacity to absorb financial shocks. Therefore, unlike Hardie and Howarth's (2013) skittish banks, pension funds provided a source of stable market-based funding that was national in characteristic. The outcome of this was a more balanced form of financialisation than was evident in other European nations who relied heavily on interbank lending that was transnational in characteristic.

Coordination, however, was something of a double-edged sword; it was central to both the growth of finance and the limiting of risk. While it was a critical factor in the growth of household debt, which increased risk, at the same time it enabled the limiting of this risk through the provision of stable funding and the build-up of household assets within the pension funds. A senior figure in the Danish commercial banking sector pointed to the double movement created by the build-up of assets in the pension funds.

> So you could say the introduction of the pensions was actually a way to get these liabilities matched by some assets. But in that process of building up the assets, you increase the liabilities even more.
>
> (Finsec, 9/DK, Senior Figure Danish Commercial Banking, 30/11/2016)

While the pension funds supplied balance at a micro level by allowing the individual households who took on more debt to amass more assets, this growth in assets was driving the growth in liabilities (Abildgren, 2009). Financialisation, once it was unleashed, becomes a self-driving process which was challenging to predict and control. While Danish

financialisation was more stable than other European forms, it was financialisation none the less and therefore subject to unexpected and unintended consequences (Krippner, 2011).

A range of financialisation scholars highlights the role of capital flow across Europe in the emergence of household debt, suggesting that financialisation was a hierarchical process between the core and periphery nations based upon imbalances in their growth models (Fernnadez and Aalbers, 2017; Lapazitsas and Kouvelakis, 2012; Stcokhammer, 2012). However, to date, these scholars have not sufficiently untangled either the national or transnational dynamics of the build-up of household debt which has emerged in various national economies. While the build-up of household debt has been a general process, there was national diversity in both the characteristics of the debt and the source of capital which funded it. In Denmark, much of the capital to fund the early phase of credit growth was national in characteristic. This diversity suggests that financialisation was a more complicated process than one where capital flowed from the core to the periphery due to imbalances in their growth models.

Both Fernandez and Albers (2017), and, Schwartz and Seabrooke (2008), suggest that the build-up of household debt in Denmark was linked to financial globalisation. Their analysis, however, was based primarily on a snapshot in time in 2008 and did not consider how market-based funding developed over time in Denmark. Therefore, contrary to what these theories suggest, during the period 1992-2000 most of the capital used to fund the financial expansion in Denmark was national and contained in the newly created pension funds. In the Danish case, financial globalisation does not explain the growth of household debt.

Structure: Bank Consolidation and its Implications

During the 1990s, the liberalisation of the mortgage banking was enabled by the forging of new relationships between the commercial and mortgage banking sectors. These new affiliations, in the form of ownership stakes and cooperative agreements, blurred the boundaries between mortgage and commercial banks and marked a shift in the orientation of the traditionally risk-averse mortgage sector. The new ties allowed the mortgage banks access to a new source of capital, new customer bases and were central in the introduction of product innovations.

The primary strategy for growth in commercial banking during the 1990s was the consolidation of small and medium-sized banks, through mergers and acquisitions, with larger emerging banks (Abildgren et al., 2010). The process produced a new type of large, powerful bank in Denmark (Abildgren et al., 2010). This wave of consolidation was enabled by the previous financial crisis, as small and medium-sized banks became insolvent and merged with larger solvent banks as a rescue package (Abildgren and Thomsen, 2011). After

a period of consolidation of the commercial banking sector, commercial banks were large enough and powerful enough to affiliate themselves with the mortgage industry (Abildgren et al. 2010). Krippner's (2011) unexpected results were beginning to emerge, as the financial crisis, rather than limiting the role of finance, was producing a more concentrated, powerful type of bank in Denmark.

In 1990 six of the largest Danish banks merged to form two banks. Den Danske Bank, Handelsbanken and Orivinsbanken merged and formed what is now known as Danske Bank. Sparekassen SDS, Privatbanken and Andels Banken merged under the name UNIbank (Abildgren et al., 2010). This development led to a significant concentration of the banking sector, and the two largest banks accounted for 55-60 % of total lending in the sector. The five largest commercial banks accounted for 70-75 % of total lending; giving Denmark one of the most concentrated banking sectors in the EU (Abildgren et al., 2010).

During the period of consolidation, there was a significant reduction in the number of banks and an increase in the size of existing banks. The Danish commercial banking sector had for a long time been dominated by small and medium-sized banks which provided capital to both households and SME (Abildgren et al., 2010). The dominant model of Danish banking was relational, where banks would have long established relationships with the firms to whom they provided credit (Ornston, 2012). This system of commercial credit was kept separate from the mortgage system which consisted of specialist mortgage banks, which excluded commercial banks from issuing mortgage loans. This system is very different from the German system where banks had ownership and control stakes in large firms (Deeg, 1999). Regulation and the unique corporate governance prohibited this kind of practice in Denmark, and large corporates were kept separate from banks through legislation (Thomsen, 2016). A period of consolidation and erosion of sectoral barriers was about to change the landscape of the Danish financial sector (Abildgren et al., 2010).

After a period of consolidation, Danish commercial banks were large enough and well placed enough to begin forging new relationships with the mortgage banking sector. A senior figure in the Danish mortgage sector reflected on this change and how it altered the structure of Danish mortgage banks from foundations to limited liability companies.

> Today some of them have been merged with banks, taken over by banks, acquired, like Realkredit Denmark which was one of the large mortgage banks, it came from a foundation concept but is now part of Danske Bank. So it is a limited liability company.
>
> (Finsec 6/DK: Senior Employee Danish Mortgage Sector, 02/12/2015)

This change in structure marks a transition away from the original building societies which had defined the mortgage industry up until this point.

Relations between the mortgage and commercial banking sector came in the form of cooperation agreements and capital contributions between large commercial and mortgage banks (Abildgren et al., 2010). This erosion of the boundaries between banks allowed the mortgage banks direct access to the vast customer base which the commercial banks, such as Danske, had built up during the period of consolidation. A senior economist in Danish mortgage banking reflected on how the previous financial crisis created conditions conducive to the formation of new affiliations between commercial and mortgage banks, highlighting how these new affiliations allowed mortgage banks access to new customers.

> Yes, and the previous bank crisis, the late 1980 bank crisis, was more a mortgage banking crisis than a universal banking crisis for different reasons. So for that reason, the traditional mortgage credit associations at that time had more or less played out their role as secure providers of funding and that role was to be taken over by

commercial banks because they owned this relationship to the borrower. The reply was to seek this affiliation and become a member of a larger banking group.

(Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

During the 1990s mortgage giants such as Realkredit and Nykredit formed direct links with the commercial banking sector, Realkredit with Danske and Nykredit with Unibank (Abildgren et al., 2010). The central bank argues that this newfound cooperation allowed banks and mortgage banks new opportunities for growth, mainly through product innovation: 'This opened up the potential for increased competition on fees, lending terms and in particular, product development' (Abildgren et al., 2010:115). The process of consolidation was vital to the process of liberalisation in the Danish mortgage sector, enabling product innovation, access to their vast customer base and also by providing a new source of capital funding. Product innovation was now set to form the new growth strategy for mortgage banks as economic conditions improved and interest rates continued to fall (Figure 5.1).

The capacity to negotiate at a sector-wide level in the Danish financial system was a central feature of the emergence of a large, inter-connected banking sector in Denmark (Albæk et al., 2008). The response to the previous crisis was to consolidate the banking sector and develop new links between mortgage and commercial banks. The financial sector responded to the crisis of 1987 in a coordinated way and commenced a process of consolidation of troubled banks with larger solvent banks. During the 1990s these banks formed cooperative agreements and took ownership of the giant mortgage banks, with Danske bank merging with Realkredit in 2001. Financialisation was transforming the landscape of Danish finance, eroding its coordinated characteristics; interestingly the erosion

was happening through the use of coordinated strategies. The very institutions which were being eroded were the driving force behind the erosion. Rather than acting as a barrier to financialisation, coordinated capitalism was producing a nationally unique form of the processes which harnessed the coordinated characteristics of the system and utilised them in their own demise.

What remains to be seen is how these increasingly powerful banks would behave in the next period, given the limitations for growth within their borders and the increasingly inter-connected financial system emerging across Europe what would be the strategy of these financial giants (Schoenmaker and Wagner, 2013)?

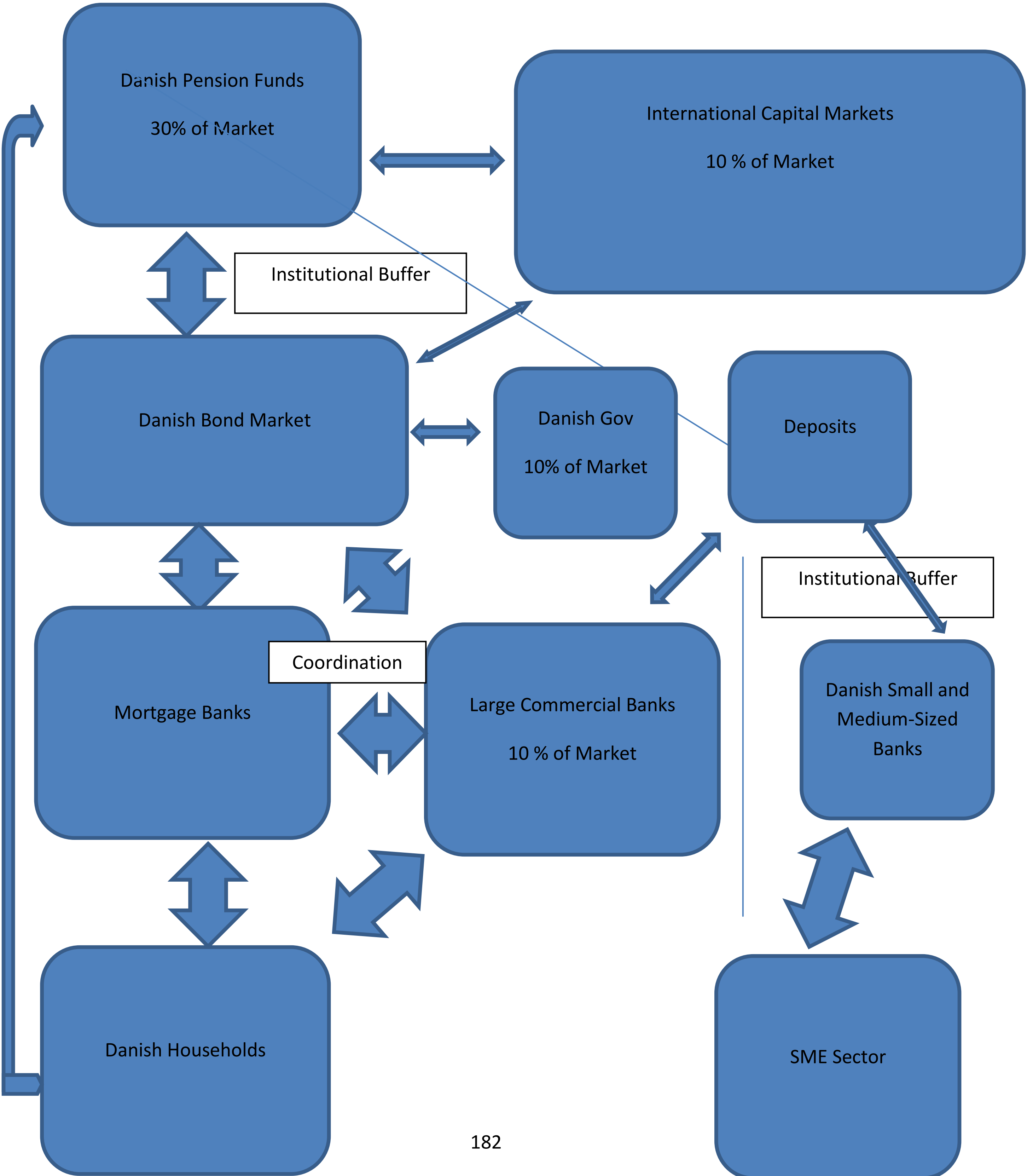


Diagram 5.0 Danish Financial Sector Funding 1992-2000
Danish Pension Funds
30% of Market
International Capital Markets
10 % of Market
Institutional Buffer
Danish Bond Market
Danish Gov
10% of Market
Deposits
Institutional Buffer
Coordination
Mortgage Banks
Large Commercial Banks
10 % of Market
Danish Small and Medium-Sized Banks
Danish Households
SME Sector

Varieties of Residential Capitalism

Turning to the intersection of housing and housing finance the model suggests that linking the developments in finance to the corporatist housing regime will grant insight into the process of financialisation. Developing a fuller picture of how the existing housing system shaped the dynamics with the financial system and the resulting build-up of household debt. This analysis will grant insight into the characteristics of the financialisation which emerged regarding its location, its stability, its meaning, and its purpose.

Schwartz and Seabrooke (2008) classify systems regarding their ease of access to mortgage credit which they suggest are defined by the level of securitisation within the banking sector. However, an in-depth look at the growth of mortgage credit between 1992 and 2000 in the Danish economy reveals that the critical driver of mortgage debt was not the practice of securitisation. Instead, it was the liberalisation of mortgage lending which included the introduction of new market-based products. The liberalisation changed the meaning of debt by allowing home-owners to access wealth in their housing and the products lowered the price of credit and drove demand. This process was made possible by the new affiliations between mortgage and commercial banks and the provision of stable market-based funding by the pension funds (Diagram 5.0).

While Schwartz and Seabrooke's (2008) theory points towards liberal financial systems as explanatory of high household debt, the story revealed by the current model is that the direction of change within contemporary capitalism was more complicated and variegated. During the 1990s, there were both liberal and coordinated changes made within the Danish financial system, and these changes worked to balance the effects of risk and insurance. Furthermore, the process of liberalisation within the system was made possible by the ability to coordinate action across the system. The presence of coordinated capitalism was

a central enabling factor within Danish financial liberalisation. Therefore, the process and direction of change were more nuanced, and variegated than the simple presence of securitisation suggested by the theory of varieties of residential capitalism (Schwartz & Seabrooke, 2008). Further complexities were contained in the dynamics between the housing system and the financial system.

During the 1990s, the corporatist housing system provided an ample supply of social and affordable housing to those who did not engage with mortgage borrowing. This combination produced a tenure which consisted of a low to medium owner occupation, which was concentrated in the upper-income deciles. The lower and middle deciles were therefore de-commodified from mortgage markets by the presence of the welfare state. Between 1981 and 2002, there was little change in Danish tenure patterns; owner occupation reduced from 54 % to 53 %, cooperatives expanded from 2% to 7%, and non-profit had grown from 15% to 19%. During the 1990s, the real mover in Danish tenure was the expansion of the welfare state.

However, while it was just the wealthy that were exposed to the market, it was also just the wealthy that stood to gain from the market. The level of house price increases produced by the new market-based products, the low price of credit and the build-up of wealth within the pension funds seemed likely to attract middle-income families who up to now had chosen to rent in cooperative and not for profit housing. The very success of the system initiated by the Social Democrats may spell trouble for the de-commodifying effects of the welfare state as a more significant portion of the population seeks to access the new levels of wealth being made available through rising asset values. Financialisation in its ascending phases was an attractive proposition to Danish households.

Furthermore, the social and not for profit sectors was uniquely structured in so far as they were private entities that accessed their finance through the mortgage banks. While this meant that even in times of fiscal restraint the construction of social and affordable housing has continued to meet the demands of the population, the private nature of the system may leave it open to market forces. Despite the positive and de-commodifying effects of this unique welfare structure, it was intrinsically connected to the market and therefore may be subject to unexpected outcomes in times of market activity. Therefore the future of critical sections of the housing regime was uncertain as rising asset values and cheap readily available credit during this period make owning a home a far more attractive proposition.

Ireland: (1992-2000)

The Politics of Growth: FDI Growth and Asset Based Lending

By 1992, the project of fiscal consolidation commenced in 1987 had stabilised the Irish economy, wages had stabilised, and inflation had been brought under control and in par with public finances which were much improved (Ó Riain, 2014). However, an international recession meant that a small open economy like Ireland did not seem likely to produce the rapid convergence with their European counterparts which was about to take place. Indeed the currency crisis of 1993 pointed to continued weakness and vulnerability of a macro economy which was so dependent upon international trade and foreign direct investment. Despite these challenges, Ireland was one of a number of small European economies which grew particularly vigorously during the mid-1990's with growth in Gross National Product (GNP) running at over 10% per annum and unemployment falling by 15% in 1994 to 4 % by 2000.

The reasons for Ireland's economic success is debated within the literature, with some authors suggesting that the period of consolidation produced conditions conducive to investor confidence, while others say this view is overstated and point to more complex dynamics (Honohan and Walsh 2002, Ó Riain, 2014). However, a range of authors agrees on the role of foreign direct investment in producing the Celtic tiger growth period. Ó Riain (2014) points to many factors which were central to the success of the FDI growth model, corporate tax rates at 12.5 %, young well-educated labour force, a supportive state and improved technological and innovative capacities. While the exact dynamics of the Irish success story remain debated, what it is clear is that FDI investment was crucial to success.

Given the dominance of foreign direct investment and the lack of strong growth in the national industrial sector, one would expect very little to change within the conservative, underdeveloped Irish financial system. Indeed, given that it took direct intervention in the

Danish financial system to stimulate growth, it seemed unlikely that growth would occur in Ireland. However, Ó Riain (2014) notes that despite their isolation from productive investment Irish banks emerged as being relatively profitable during the 1990s, a fact he finds somewhat puzzling but fails to embellish upon. The reasons for the growth of Irish finance, which underpinned the profitability to which Ó Riain (2014) refers, were contained within the effects of the FDI growth model on the Irish banking model.

Unlike the planned mortgage priced Keynesianism implemented by the Social Democrats, growth in the Irish financial sector during the 1990s required no further liberalisation and emerged as the unintended consequence of the earlier period of liberalisation (Kelly & Evertte, 2004). However, while finance did not require direct intervention, the FDI focused growth strategy altered the trajectory of growth in the Irish financial sector in three crucial ways. Firstly, it starved banks of opportunity for involvement with large corporates. Secondly, it created opportunities to engage in financial lending. Thirdly, it created a boom in demand for housing and mortgage credit (Kelly, 2009). Irish banks, starved of connection to the Celtic Tiger, focused on the new opportunities which financial globalisation, integration, and economic convergence created for a recently liberalised and de-mutualised banking sector. The earlier period of liberalisation meant that once these opportunities presented themselves, Irish banks were well placed and required no further liberalisation to meet the increased demand for credit.

During the 1990s, Irish banks grew in size, they expanded their credit operations, and by 1997 there was a boom in mortgage finance. Competition emerged between commercial and mortgage banks with the removal of sectoral boundaries, and foreign banks began to enter the Irish market as domestic lenders. Finally, having exhausted national deposits, Irish banks turned towards new forms of market-based funding and by 2001 Irish banks teetered on the edge of an entirely market-based system.

Taking a historical approach, it becomes clear that it was efforts by the Fianna Fáil Progressive Democrat coalition in the late 1980s which enabled the growth of banking during the 1990s. Their intention was not to drive consumption but rather to limit state spending. Therefore, the growth of the financial-sector which occurred in the 1990s was an *unintended consequence* of efforts to resolve the previous crisis of financialisation; the financialisation of state finances (Krippner, 2011). In comparing Ireland and Denmark in this respect, the critical difference between these two cases of housing based financialisation is the level of intent which underpins the growth of finance in the 1990s. The Danes had an intentional model which they managed through the phases of growth, while the Irish had an unintended boom during which they pursued pro-cyclical policies which further escalated the demand for credit.

Of far greater importance in shaping the actions of the financial sector were the limiting effects of a model of growth which depended primarily on foreign investment. The foreign character of the investment combined with a lack of national industry, which was slow to develop, left a relatively large banking sector, which had recently been liberalised with little else to do. The FDI model created opportunities for the banking sector in both finance and housing which were too good to resist.

Product: From Shadow Banking to Asset Based Lending

During the 1990s, Irish banks went through two distinct growth phases which can be explained by the effects of the foreign direct investment growth model in crucial ways. Firstly the establishment of the IFSC (Irish Financial Service Center), a vital part of the FDI

growth model, created an opportunity for the domestic banking sector and formed a key strand of their growth strategy in the early part of the period. Subsequently, in the mid-1990s, the economic growth produced by the FDI model created a boom in demand for mortgage finance and housing. In response to this Irish banks embarked upon a new model of asset-based lending.

Unlike the balanced, coordinated approach to financial growth in Denmark, the liberal, underdeveloped Irish system had no capacity to direct national savings toward housing markets and contained *no buffers* against foreign capital. Indeed, by 1997, Ireland teetered on the edge of an entirely market-based banking system, and competition within the sector was attracting the attention of foreign banks. These banks, enabled by the second banking directive of 1993, sought to capitalise on the growing profits within the Irish financial sector. Ireland's underdeveloped financial history, competitive dynamics and liberal characteristics during a period of economic convergence made it a prime location for internationalising foreign banks.

Bohle (2017) in her study of peripheral housing market financialisation, describes the penetration of foreign banks as a distinct process of financialisation. The roots of this process were established early in the Irish economy with foreign bank entry commencing in the mid-1990s. Furthermore, the growth of Irish finance became connected to a set of conditions conducive to financialisation which formed the backdrop to EMU. Of particular importance was the consistently falling interest rate which lowered the price of credit and created confidence in future conditions.

Figure 5.3 below demonstrates that up until 1994, bank assets in Ireland lagged behind a range of European nations. The low credit levels reflect the underdeveloped economic history and the structure of the banking sector. The stabilisation period of the

1980s, financial liberalisation and the Celtic Tiger growth created a new level of demand for credit in the Irish economy. By 2000, banks assets in Ireland had converged significantly on their European neighbours.

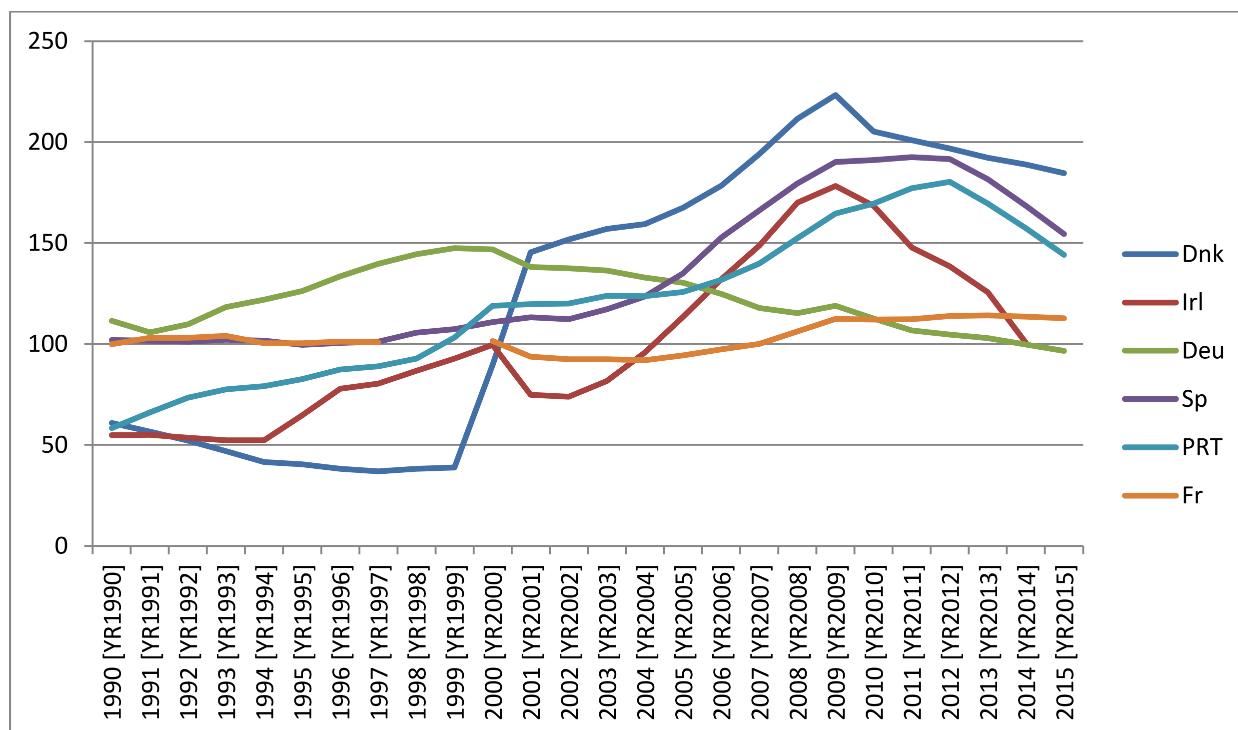


Figure 5.3, Bank Assets as % of GDP

Source: World Bank Financial Development Database

Data on the sectoral distribution of credit reveal that the largest growth area for Irish banks at this time was lending to the financial sector (Kelly and Everett, 2004). During the early part of the 1990s lending to the financial sector increased by almost 10% (Kelly and Everett, 2004). In 1994 lending to IFSC accounted for 42% of all financial sectors lending, by 1998 this had increased to 60%. Based on Kelly & Evertt's (2004) calculations lending into the total financial sector accounted for 27% of total lending. Therefore, lending to IFSC accounted for roughly 16 % of total lending. The other two growth sectors were building and construction, and hotel and catering. Both of these sectors maintained a stable share despite

the increase in financial lending. Given that lending to the construction sector at this time accounted for just 6% of total lending and personal lending to households accounted for roughly 40%, the relative importance of lending to the shadow banking sector is evident.

The FDI growth model created opportunities for Irish banks to grow despite their isolation from the productive miracle. While the impact of this regarding the financial bubble which emerged in the 2000s was limited, it does demonstrate the willingness of Irish banks to engage in market-based activity (all be it arm's length). Furthermore, it makes clear that Irish banks intended to take full advantage of any opportunities for growth which the period of convergence offered them.

Growth & Diversification

In response to the changes in economic output and the new opportunities this created, Irish banks turned to a liberal inspired model of asset-based lending. They introduced variable rate mortgage products and aggressive lending strategies which typified the US and UK systems to which they had strong links (Doyle, 2009).

While the Danes were also becoming more aggressive in their mortgage lending, they balanced the credit growth with stable funding in the pension funds. In Ireland, there was no capacity within the system for this type of coordinated investment and Irish banks turned to international markets.

In 1997, the dynamics of the mortgage market shifted, and a boom began to emerge (Kelly, 2009). The process of financial liberalisation, in particular, the building societies act of 1989, had pitted commercial banks and building societies in direct competition with one another. The level of competition was evident in the figures for the number of product innovation and loan originations during this early phase of growth. At this point, there were a total of 181 different types of mortgage product available on the Irish market. By 2009 this had spiralled to 254 (Doyle, 2009). Alongside the growth in the number of products available, there was strong growth in the number of loans originated, increasing from less than 50,000 before 1995 to over 70,000 by 1999 (Bardhan et al., 2012). In 1996, less than 3 billion in new loans were originated; by 2000 this figure had risen to over 7.5 billion (Bardhan et al., 2012). Figure 5.4 below charts the growth of total mortgage lending in the Irish economy, highlighting the shift which occurred in 1997 when total lending began its upward trajectory.

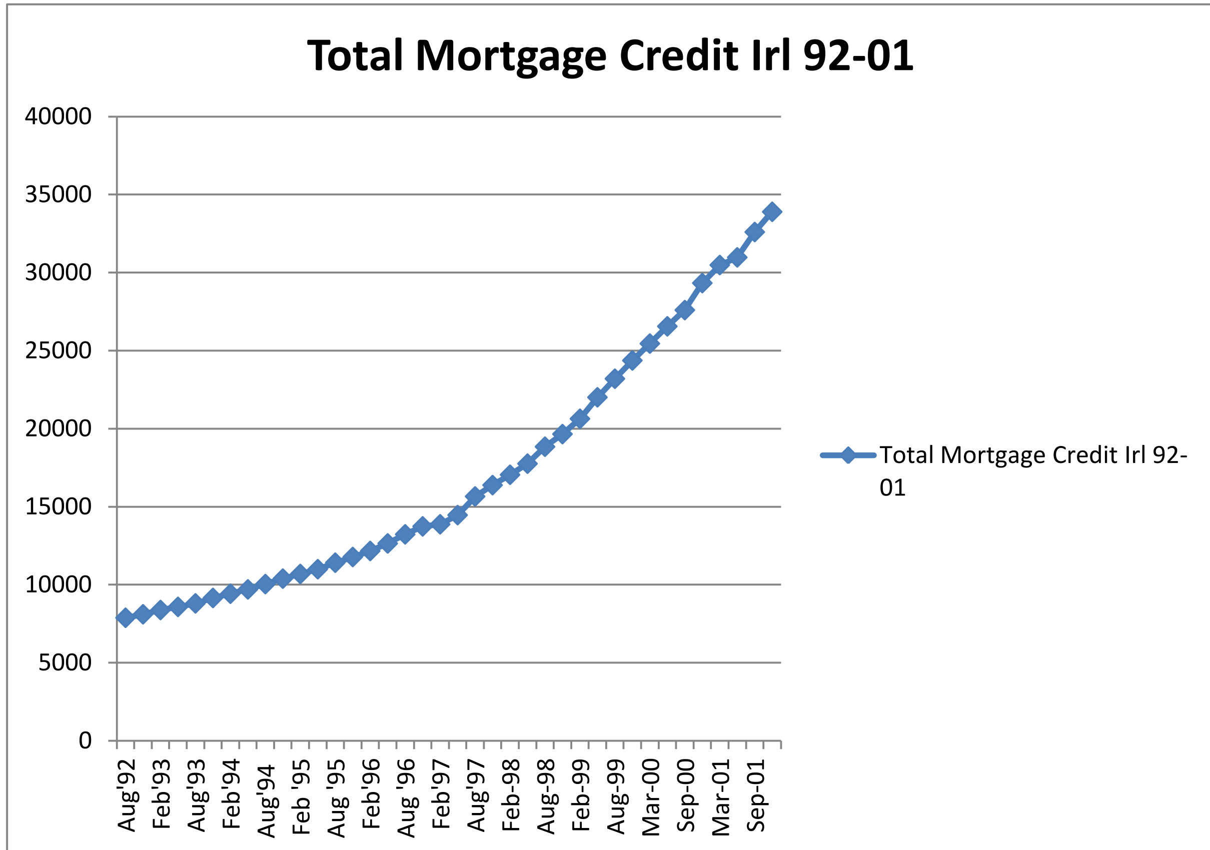


Figure 5.4 Total Mortgage Credit Irl 1992-2001

Source Central Bank of Ireland

The growth in size and profitability of Irish banks during the 1990s corresponded to the growth in the levels of PSC. Between 1993 and 1999, PSC in the Irish economy expanded from a little over 50 %, to 100% of GDP. Mortgage lending made up roughly 40% of all lending by Irish banks and was a very profitable endeavour (Kelly and Everett, 2004). Figure 5.5 below shows that the growth in the profits of Irish banks began to escalate in 1998 at the same time that mortgage lending expanded in the economy. Between 1998 and 2001, in just three short years, the Irish banks share of total profits in the economy increased by 2%, rising from 6.8% to 8.7%.

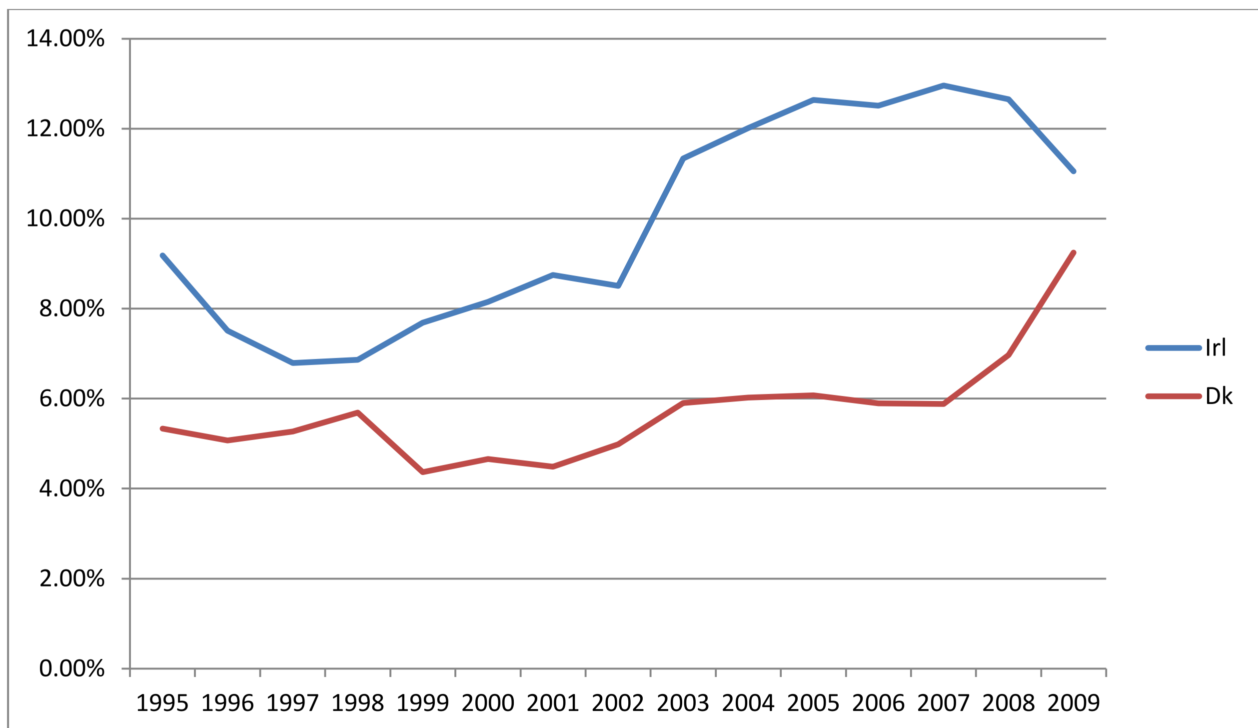


Figure 5.5, Profits Going to Financial Intermediation Irl & Dk 1995-2009

Source OECD Stan data set

The Impact of Changing Monetary Conditions (EMU)

While competition within the mortgage sector was driving the market, it is also vital to note that at this time Ireland was benefitting enormously from entry into the EMU, causing the price of credit to reach an all-time low. By 1998 the interest rate stood at 5.65% compared to 11.2 % in 1990 (Bardhan et al., 2012). Furthermore, confident expectations about the future effects of EMU meant it was believed that rates would stay down. Therefore, the economic growth and convergence which accompanied the Celtic Tiger period were further stimulated by the importation of monetary policy which aimed to keep inflation low in the core economies (Krippner, 2011). The mismatch that this policy produced reduced the price of credit on booming Irish markets at a time when they should have slowed activity.

Links between falling interest rates and increased demand for credit are well established in the literature which outlines that the primary concern for mortgage borrowers when assessing their loan is the monthly repayment (Doyle, 2009). Figure 5.4 outlines that in 1997 credit began to expand at a faster rate and this coincided with the first real drop in the interest rate. The new monetary regime created by EMU increased the need for tight fiscal policy to avoid credit bubbles.

Analysis of developments during this period makes it clear that the state did not comprehend the structural implications of interest rate harmonisation and how it could affect the flow of credit. The introduction of pro-cyclical fiscal policy in 1999, with the removal of capital gains tax to address shortages in the supply of housing, clearly shows that the state was not concerned with slowing credit markets. Instead, the Fianna Fáil / Progressive Democrat coalition sought to release pent-up capital for investment in housing (O Riain, 2014). The interaction between interest rate harmonisation, loss of monetary policy and pro-cyclical fiscal policy would play a key role in producing the property bonanza of the 2000s when all of these developments became connected to a competitive liberal model of mortgage lending.

The process of financial integration was linked to the liberalisation of Irish banking as Ireland sought to adhere to the conditions of financial market integration. Part of this project entailed dismantling the credit guidelines and allowing banks to compete on interest rates creating a more competitive sector. This sector then became connected to the process of interest rate harmonisation which saw rates in the European periphery converge on the core. The ultimate motivation for this was the creation of the single market, where inflation would be kept low. The outcome for peripheral countries was that the process of EMU entailed a significant reduction in the real price of credit which was coupled with a significant increase in the availability of capital.

The effect of decreasing interest rates at this time, however, was not just purely structural; instead, they also shaped investors ideas of the future. Ó Riain (2014) conducted a study of how 'social structures of liquidity' emerged which shaped Irish financialisation by guiding the investment decisions of the various actors. In 1997 the countries that would participate in the EMU had been announced, and interest rates across the periphery began to converge on German rates. The belief at the time was that rates would fall when Ireland joined EMU and would remain low into the foreseeable future. Given Doyle's (2009) findings on the centrality of price in the decision-making process for Irish mortgage borrowers, it seems very likely that EMU made up a cornerstone of a new 'social structure of liquidity' in Irish mortgage credit. In support of this Kelly and Everette (2004) suggest that increased confidence and expected lower rates underpinned the growth in demand for Irish mortgage credit at this time.

Similarly to Denmark, mortgage lending was playing an increasingly important role in the everyday functioning of the Irish financial system. While Ireland was not driven by the intentional financial expansion, which produced growth in the Danish system, the principal mechanism which underpinned the growth was the same in both cases, namely, price. Furthermore, the fall in the price of credit in both cases was directly linked to the project of EMU and the creation of a single market. While the structure of the Danish system combined with tight regulation from the previous period of austerity meant that they had to alter the rules which governed finance to allow homeowners to access the gains, Irish Banks suffered from no such constraints and were free to pass falling rates onto to customers at will. In both cases, therefore, an essential condition of financialisation was the alteration of monetary policy; in this case, falling interest rates produced credit growth focused on housing. So while Krippner's (2011) story is one of high-interest rates causing a change in the behaviour of

large American firms, the European story is one of the low rates producing a change in the behaviour of European households.

Regarding financialisation, a critical difference between Denmark and Ireland was the level of intent which underpinned the growth of mortgage debt. The Danes intended to grow and manage their mortgage markets on both the demand side and supply side of the market. On the other hand, in Ireland growth in the financial sector emerged as an unintended consequence of an earlier period of liberalisation becoming connected to the FDI growth model and the set of conditions created by the formation of a single currency. It is clear that the Irish state did not fully understand the dynamics which could emerge when the price of credit fell in a climate of economic growth. Therefore rather than try to manage overheating housing markets on the demand side, like their Social Democratic counterparts, they implemented policy aimed at increasing the supply of housing which subsequently stimulated investment.

Funding: Transition to a Market Based System, Funding Gaps, and Liberal Pension Funds

By 1997 the banking sector had reached the limit of its capacity to supply credit funded by national deposits. This required Irish banks to begin to look for new sources of funding.

Interestingly what emerges is that Irish banks were too small to fund the aggressive expansion in credit which took place during the 1990s. Their small size and aggressive growth spelt the end for the classic bank-based model of lending which was primarily covered by deposit funding. Furthermore, the structure of the Irish financial system, in particular, the liberal characteristics of the pension funds meant that there were no alternative sources of capital within Irish borders to which the banks could turn. A long history of cross-border market activity with UK money markets made them the most likely candidate to fund any increased use of market-based funding. These developments meant that by the end of the 1990s the Irish system looked far less balanced than their Danish counterparts. There was not enough capital contained within the banking sector to fund any further credit growth, and the broader financial system was not structured in such a way that enabled coordinated action. In response, Irish banks enabled by financial liberalisation, turned to market-based banking.

The project of financial liberalisation of the 1980s which had focused primarily on relaxing credit conditions and increasing competition in the sector was deepened in the 1990s with a set of policies aimed at increasing the liquidity of the Irish banking sector and allowing them access to new funding sources (Kelly and Everett, 2004). This less well-documented process had a fundamental impact on the Irish banking sector as it allowed them to extend lending far beyond the capacity dictated by their deposit base. Developments on the liability side of Irish banks follow a very similar pattern to the developments on the asset side with a marked shift in the funding structure in 1997 in the run-up to EMU.

Throughout the 1990s there was a significant liberalisation of the funding side of Irish banks. In 1991 the primary liquidity ratio was reduced from 10% to 8%, with a further reduction in 1992 to 6%, then in 1993 this was reduced to 4%, and finally, in 1999, the reduction was brought down to 2% (Kelly and Everett, 2004). Alongside this process was a change in regulation of the secondary liquidity requirement which saw the gradual reduction

in the requirements for banks to hold government bonds. The secondary liquidity ratio was entirely abolished in 1994 and gave banks the freedom to decide how many government bonds they would hold. This set of structural changes increased the bank's ability to access international capital made available by the process of EMU and the removal of capital restrictions (Lane, 2014). A growing Irish banking sector was now located in the Euro area where capital could flow between banking sectors, and their deposit base no longer constrained national models.

By 1997 Ireland stood at the edge of becoming an entirely market-based system, a fact which is captured by figure 5.6 which shows that it was at this point that loans and deposits became separated in the Irish banking sector. The Irish system was already at a delicate juncture; it did not contain enough capital to fund the level of activity that was taking place in Irish credit markets.

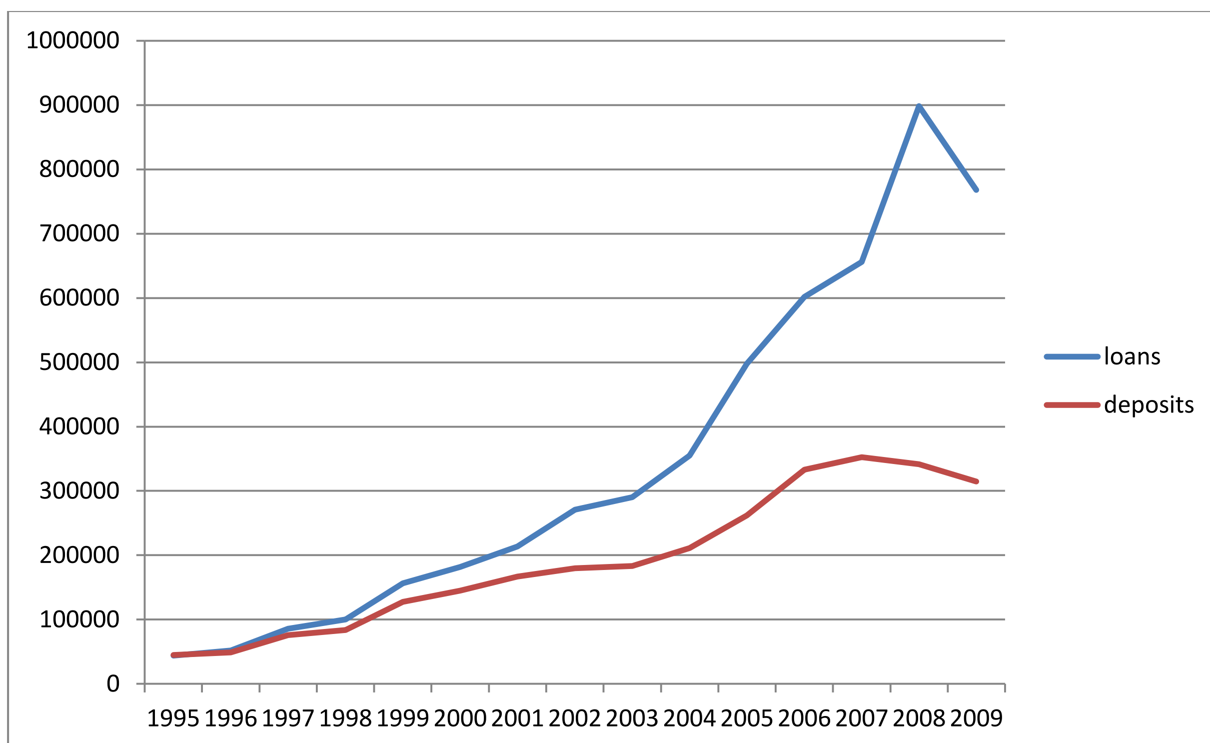


Figure 5.6 Deposit Deficit in the Irish Banking Sector 1995-2009

Source OECD Stan Data Set

In response, the Irish banking sector turned to the long-established practice of utilising UK money markets. Figure 5.6 outlines the funding gap which emerged in 1997. It is important to note that the running of funding gaps was not a new practice in the Irish banking sectors (CB 1/Irl). Strong ties to the liberal UK model of finance meant that for a long time Irish banks had engaged with UK money markets on a regular basis (Ornston, 2012). A senior figure from the Irish Central Bank drew attention to the long-established practice of running funding gaps within the Irish Commercial banks:

> And in fact if you go through some of the data, it is worth looking at the balance sheet, the Central Bank always published data, and you can get the consolidated balance sheet of the banking system in old bulletins, I am sure you have them in the library where you are. And if you just flick through them and look at the bottom line,

> the net external liabilities, and the net external liability was always quite significant. It wasn't a net external asset, it was a net external liability of the commercial banks, therefore they always borrowed money from abroad.
>
> (CB 1/IRL: Senior Figure Irish Central Bank, 05/12/2017)

From this point on growth in lending by Irish banks would be covered through market-based capitalisation (Hardie et al., 2013). The dynamics of this funding shifted significantly over time as the process of EMU created new opportunities for the Irish banking sector.

The dynamics of the shift in funding practices are outlined by Kelly & Everette (2004) who point out that in the early part of the period banks primarily turned to the central bank to meet the shortfall in their deposit base. However, in 1998, there was a critical change, and banks turned almost exclusively to foreign markets. In that year alone a 4 billion increase in Net External Liability (NEL) was used to cover the gap between deposits and loans. From this point on using external liabilities dwarfed other funding sources. Between 1994 and 1998 the NEL of Irish banks increased from 234 million Euro to 3,899 million Euro (Kelly and Everett, 2004).

The market-based typology of banking developed by Hardie et al. (2013) poses a range of puzzle's which the model itself is ill-equipped to address. This lack of ability is not due to any inherent flaw with the model rather it originates from the orientation of the research. Hardie et al. (2013) were not interested in why or how new types of market-based banking models had emerged; their focus was solely on what this model meant for theory and financial stability. However, looking at the Irish case and accounting for the range of dimensions which the current model proposes, grants insight into how and why market-based banking emerged during the subsequent period in Ireland.

Somewhat ironically, given what transpires during the next period, it is clear that the Irish banking sector was too small to fund the period of rapid convergence which took place during the 1990s. While it seems illogical to argue that a banking sector which was about to topple the nation was not large enough, the data outlined make clear that the Irish banking sector did not contain sufficient funding to cover the growth in mortgage and property related lending during the 1990s. Therefore, it was Ireland's underdeveloped financial history during a period of economic convergence that orientated its banking sector towards market-based financing in UK money markets, to which it had strong historical ties.

Comparison to the Danish case highlights both the underdeveloped and the liberal nature of the Irish pension system and how this limited the capacity for the type of coordinated investment negotiated between Danish mortgage banks and pension funds. While the Danes were actively employing national savings built up in their pension funds to cover growth in national mortgage markets, no such capacity existed within the Irish system. The structures of Irish pension funds meant that the capabilities to coordinate which were apparent in the Danish system did not exist in Ireland. This fact was highlighted in an interview with an Irish pension regulator:

> The biggest problem we have in this country about the quality of pension provision is we have 160,000 pension schemes. Now of those, I don't know the exact number, but certainly, 120,000 have only one member but you can see from my point of view that makes it quite difficult to supervise.
>
> (Finsec 4/IRL: Senior Pensions Regulator, 28/02/2017)

Later in the interview the pension regulator returned to a similar point and reflected on the missed opportunities and costly nature of having a system which contains such a large number of pension funds:

> But to go back to what you were saying, because it is important, if you have all those micro entities going on there is extra governance cost, transaction costs, frictional costs, there is just so much waste in the system and inefficiency. And it is not about being as it were directive, telling people what to do, it is just, although as a regulator I am not necessarily adverse to that but clearly if you have 100 medium-sized entities, and they would still only be medium sized in European terms, if that, if you have 100 medium sized entities you can subject them to closer scrutiny. You can ultimately question them and oblige them to justify why they are doing what they are doing. You force them into a coherent approach about what they are at, force them to think about it and that is the way we have more chance of achieving quality.
>
> (Finsec 4/IRL: Senior Pensions Regulator, 28/02/2017)

So while the national banking sector had run out of deposits to fund credit growth, the pension sector, which contained a large portion of national savings, was investing these savings into foreign equities markets. An Irish pension regulator offered their opinion on the investment decisions being offered to members of Irish pension funds, highlighting their tendency towards equities markets:

> We would have concerns, to put it at its politest, about the appropriateness of the investments. Sometimes equities might be the right thing to do but while you with your pension scheme might be comfortable with that level of risk, assuming you understood it, I may be the same age, same background, same income but I am a different person and may be much more interested in what I have got I keep and I am not looking to win the investment lottery. I am looking not to lose it. So we would have serious reservations about whether the investment choices put in front of people

are appropriate. And reservations is polite bureaucratic speak for actually we think they suck.

(Finsec 4/IRL: Senior Pensions Regulator, 28/02/2017)

Therefore while the Danes balanced the introduction of liberal mortgage products with a socially democratic patient funding system; the Irish could not balance their liberal model of credit growth and had to fill the gap between deposits and loans with foreign capital. A senior figure at the Irish Central Bank pointed to the difference between the Irish and Danish pension system, and how this affects the capacity to manage national capital:

I think if you have a scenario, if you look at how the German or the Dutch or possibly the Danish housing market works, it is underpinned by insurance incorporations and pension funds who are recycling money within their own border area. And what they do is they act as real estate investment trusts and they manage that out and it is well regulated etc. And we have never done that here because Irish pension funds seem very heavily weighted towards the bond market I guess, not so much in the property market.

(CB 2/IRL: Senior Figure Irish Central Bank, 28/022017)

While at the time increased access to European markets was seen as a new opportunity for Irish banks, the subsequent period would reveal the inherent dangers of extending national lending far beyond the deposit base of the national banking sector.

By 1997 Ireland teetered on the edge of a market-based banking system. Strong historical ties to the UK and a long history of running funding gaps meant that the shift to market-based funding was nothing new to Irish bankers. What was new was rapid economic

growth, booming national housing markets and access to European capital. These would prove to be a potent mix for an underdeveloped, inexperienced financial sector.

Structure: Underdevelopment Creates Opportunities for Foreign Banks

The other crucial development enabled by the process of financial integration which accompanied EMU was the entrance of foreign lenders into the Domestic Irish mortgage market. The second banking directive in 1993 enabled this process and allowed EU banks to set up branches and provide cross-border financial services (Decressin et al., 2007). While EMU enabled the entry of these foreign banks, their influx was primarily driven by conditions in the Irish market. Furthermore, this process was viewed favourably by the state.

A principal concern during the process of liberalisation of Irish banking during the 1980s and early 1990s was the lack of competition within the sector. The process itself was structured to create competition between the commercial and the mortgage banks. As a result of the building societies act 1989, during the early 1990s, commercial and mortgage banks began to get involved in each other business model and compete for the various strands. This development saw commercial banks become more involved in mortgage lending while the building societies diversified into high street banking activities and started to offer development loans. It was this competition combined with the underdeveloped nature of the Irish system which proved so attractive to foreign banks.

There was a clear distinction between the two types of bank based models in Denmark and Ireland. The Danes functioned in a coordinated way across commercial and mortgage banking through the establishment of cooperative agreements and ownership stakes. The Irish sector was liberal in characteristics and with greater levels of competition between commercial and mortgage banks, with both strands of banking getting involved in the others business model.

The very success of the domestic banking sector, its underdeveloped history, and lack of competition posed a perfect opportunity for European financial giants to grow by entering the Irish market. Foreign banks were attracted into Irish domestic markets by the increased profits being generated by Irish domestic banks and also by the lack of competition within the sector. Therefore the level of development comes to the fore once again as the critical factor in the changing face of Irish finance. Furthermore, this process was viewed in a favourable light by Irish authorities given the history of overcharging and interest rate cartels. The entrance of these foreign lenders is connected to the broader process of financialisation which was taking place in global banking, with European banks going through a period of rapid catch up with their, UK, American and Asian counterparts (Everett, 2015).

Figures from the European Central Bank (ECB) reveal that in 1998 no foreign bank branches were operating in Domestic Irish markets, by 1999 there were 25 new domestically focused banks (Ononugbo, 2015). The most famous of these was Royal Bank of Scotland who's entry into Irish mortgage markets caused a severe reduction in mortgages lending rates, bringing them down by as much as a full percentage point. Bank of Scotland purchased ICC bank, and ACC bank was subsequently purchased by purchased by Rabobank in 2002. The state it seems was determined to follow the neo-liberal ideology of privatisation and market provision. Foreign banks would go on to account for 26% of the lending onto the domestic economy and provide a significant amount of capital through their parent banks (Everett, 2015). The size of these foreign banks, such as RBS and KBC, is an essential factor as they were connected to vast pools of global liquidity through their parent operations.

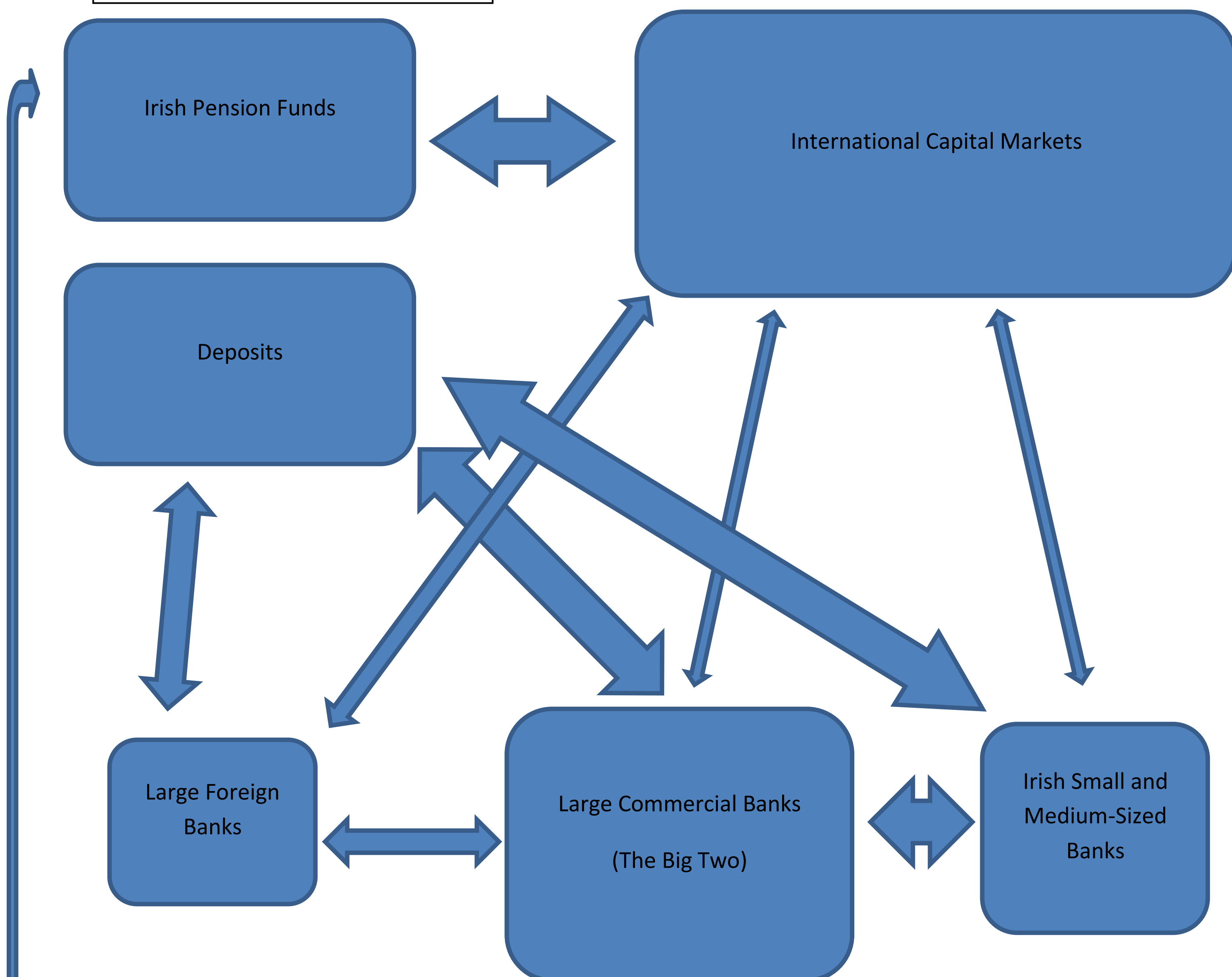
The process of Financial integration of Irish mortgage markets was more profound than the Danish case who did not experience the same influx of foreign lenders into their mortgage markets. While they changed legislation in 1977 and allowed foreign lenders to issue mortgage loans in Denmark, this included a 12-year veto by the ministry of housing based on the needs of the market (Abildgren et al., 2010). Even after the veto had expired the system remained a national one, dominated by a small number of large, national mortgage banks. The national characteristic of the system is directly related to barriers to entry within the Danish mortgage system, which requires banks to have economies of scale to profit. Furthermore, given the loyalty of Danish borrowers to their nationally unique model, it is unlikely that foreign lenders would penetrate the market to any great extent.

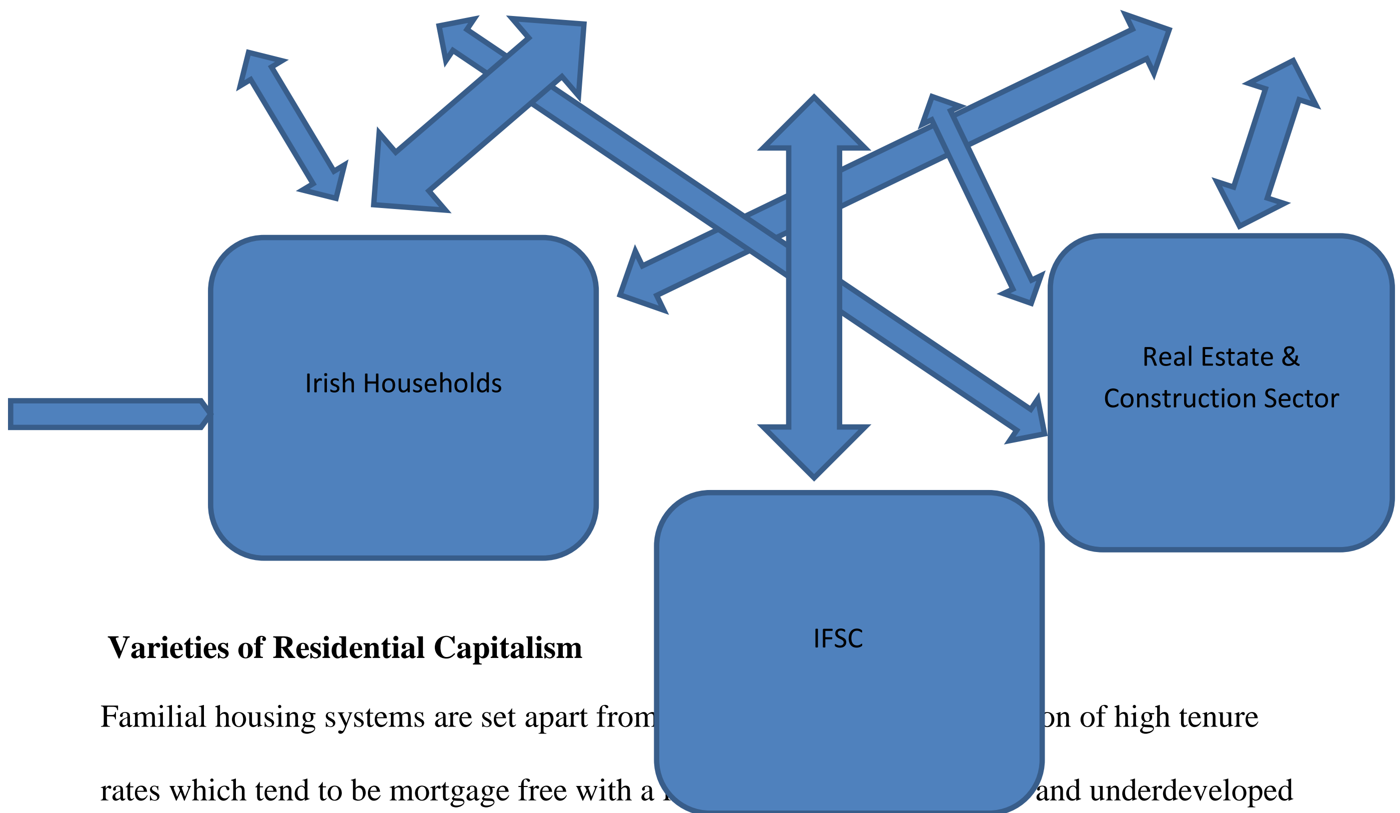
Similarly, on the commercial banking front, there are critical differences in the process of financial integration. Ireland saw a large number of foreign banks establish independent operations, while Denmark's foreign bank market was dominated by Nordic groups who had social ties to the Danish system (Abildgren et al., 2010). The structure and

level of development within the national system of banking have affected the process of financial integration, which gained real momentum in the mid-1990s. A liberal, underdeveloped, financial system in Ireland attracted a significant proportion of new foreign competitors while a more developed, coordinated, Danish system forged cooperative agreements across its Nordic borders (Abildgren, 2009).

Bohle (2017) describes two distinct but not mutually exclusive forms of financialisation, one where banks increasingly use wholesale funding and the other where foreign banks directly penetrate domestic markets. While the effects were still limited both of these forms were underway in Ireland as early as 1997.

Diagram 5.1 Irish Financial Sector Funding 1992-2000





Varieties of Residential Capitalism

Familial housing systems are set apart from on of high tenure rates which tend to be mortgage free with a r and underdeveloped mortgage finance (Schwartz and Seabrooke, 2008). Looking across Europe, the worst housing bubbles to emerge were located within countries which had familial housing regimes (Bohle, 2017). Therefore, a puzzle exits about why these systems were so susceptible to financialisation? Schawrtz & Seabrooke's (2008) theory of residential capitalism is unable to address this puzzle because of its dependence upon securitisation as being the key driver of change in mortgage finance. Securitisation only played a minimal role in the growth of Irish finance and yet mortgage markets were booming, suggesting that the intersection of familial housing system with growing finance is more complicated than the dynamics outlined by the theory of residential capitalism.

Indeed, dependence upon securitisation as the principal mechanism for the growth of mortgage lending implies that underdeveloped financial system, typical of the familial variety, should have experienced very little change. The current chapter, which precedes the housing bubble, demonstrates that the underdeveloped Irish system, with very little securitisation, was more susceptible to financial flows than their well-developed Danish

counterparts, that had extensive securitisation. It was the underdeveloped nature of the system, which made it susceptible to foreign capital, in particular, the entrance of foreign banks (Bohle, 2017).

By 1997 a new model of banking emerged in Ireland which was dominated by lending to households and the property sector. This new model arose as a result of Irish banks isolation from foreign industry, the underdeveloped nature of Irish industry and the opportunities created in housing markets by economic convergence. However, due to under development, Irish banks were still not large enough to fund the mortgage boom which emerged in the 1990s. This lack of development had two crucial effects; firstly it meant Irish banks had to turn to foreign capital and secondly it attracted the attention of foreign banks. These two sources provided ample capital to fund the mortgage boom. Therefore, contrary to what Schwartz and Seabrooke (2008) suggest, the familial system did not require securitisation to grow their mortgage markets; instead they relied upon, funding gaps and foreign bank entry to provide the necessary capital (Bohle, 2017).

On the housing side of the typology, the theory of residential capitalism is also ill-equipped to deal with the rapid change produced by Ireland's period of economic convergence. In order to do so, the theory needs to be extended to include a more in-depth look at the structure of the housing system, in particular, the housing stock and the critical pressure points. The growth in mortgage lending which occurred in the 1990s can be explained by the effects of a combination of a new model of banking and the effects of the Celtic Tiger. Economic growth drove change in population, wages and subsequently house prices and was connected to an underdeveloped familial housing system which was ill-equipped to deal with the economic growth.

There is widespread agreement that economic fundamentals can explain the dynamics of the Irish mortgage market during the 1990s (Bardhan et al., 2012; Kelly, 2009). That strong economic growth, coupled with net immigration and liberalisation of housing finance all contributed to the growing levels of mortgage demand. However, less attention has been paid to how these fundamental's became connected to an underdeveloped, familial housing regime, which was going through a process of welfare retrenchment (Norris, 2016; Somerville 2007).

Schwartz and Seabrooke (2008) used housing tenure to describe the structure of the housing regime. Familial housing systems typically have low social, low social rental and low private rental sectors and therefore will experience economic growth which includes free labour movement and population expansion as an exogenous shock to their housing system. Ireland did not have an adequate amount of private or rental housing to absorb the new labour market growth. Ireland in the 1990s experienced a rapid expansion in the size of the labour market to facilitate the growth of the Celtic tiger economy. The housing regime as it then stood was ill-equipped to deal with the increased demand this created for rental housing. Furthermore, the process of welfare retrenchment initiated in the 1980s placed pressure on the rental market to provide social housing. So just how much pressure was the Irish housing system put under during the 1990s?

Two processes, net immigration and welfare retrenchment, intersected with an underdeveloped housing stock and put increased pressure on both housing and rental markets during this period. The existing stock of Irish housing was ill-equipped to provide for the needs of a growing number of first-time buyers or the increased pressure from the social housing sector. This double pincer movement of market forces would go on to make up some of the dynamics which shaped the subsequent period.

The figures on net immigration reveal just how profound this process was. In the 1990s the population increased by 7.68 % to reach a level of 3.77 million, a total increase of over 222,000. Much of the growth was concentrated in the 25-44 age brackets, making up 60% of the total increase. This age bracket is the first time buyer segment of the market. Therefore this market had expanded to include an added 142,000 prospective buyers. From 1991 onwards over 40% of the immigrants into Ireland fell into the first time buyer segment of the market. (Bardhan et al., 2012) This process of population growth met with a housing system that had the lowest level of dwelling provision in the EU-15 (Somerville, 2007).

In 1980 Ireland had the smallest number of dwellings relative to its population in all of the EU-15. It was not until the mid-1990s that investment in building new dwellings reached slightly above the EU average (Figure 5.7). This period was a catching up phase for Ireland from an incredibly low starting point. Data outlined by Somerville (2007) demonstrates that in 2003, after a period of strong growth in housing investment, Ireland still had the lowest level of dwellings per capita, combined with the highest tenure rates.

Figure 5.7 outlines that as early as 1995 increased housing demand in Ireland caused a spike in investment in the production of new dwellings. The Figure charts the growth of gross fixed capital formation for dwellings and total construction in both Ireland and Denmark. The comparison reveals the difference in the level of development between the two systems. While economic growth combined with low housing stock was causing a spike in investment in Ireland, no such dynamic existed in Denmark which contained adequate stock.

At this point, Ireland contained less than 400 units per 1000 residents, while Denmark contained 450 units per 1000. The tenure rate in Ireland, however, stood at 83% while Denmark was a far more modest 53% (Schwartz and Seabrooke, 2008). Therefore the growth in housing investment during the 1990s is not just a case of population growth outflanking

housing construction; instead, it is a case of both population growth, in particular in the first time buyer segment of the market, but also an underdeveloped housing stock which was starting from the lowest base in Europe.

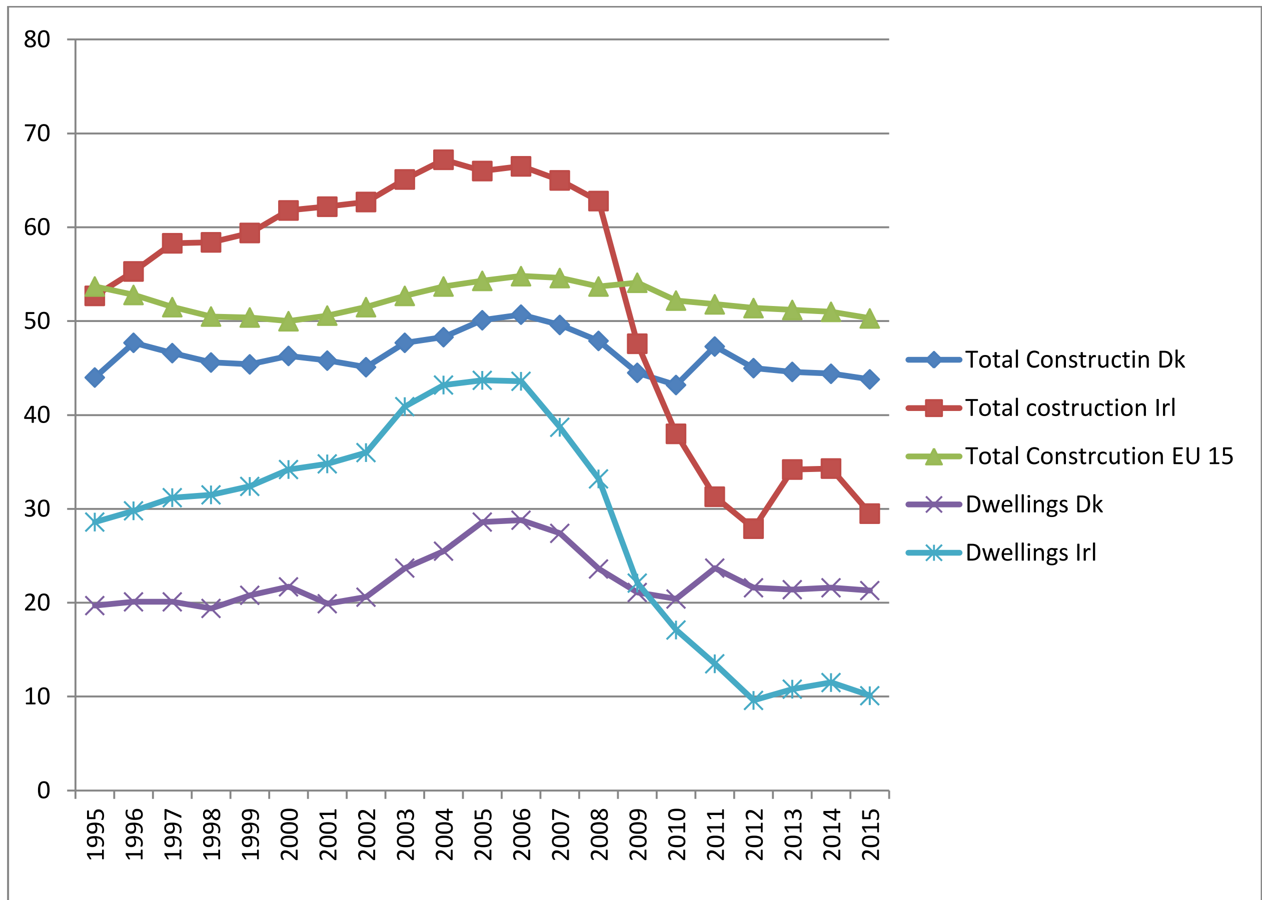


Figure 5.7 Gross Fixed Capital Formation, Total Construction and Dwellings, (Irl, Dk, & Eu 15) 1995-2015.

Source: Eurostat

In the late 1990s increased investment led to what seemed a significant increase in housing supply with levels doubling to 30,000 new homes in 1996 and reaching 40,000 by 1998. However, these figures need to be taken in context, while total housing output increased by 218,866 new units, the housing stock only expanded by 145,000 due to a reduction in the stock caused by urban regeneration. Given that population increases in the

25-44 yr bracket during this period were 93,500, it is clear that construction was not keeping pace with demand and that Ireland has had a housing regime that was under severe pressure (Bardhan et al., 2012).

Comparative Summary

During the 1990s, in efforts to move beyond very different constraints to growth, both Denmark and Ireland placed themselves on a shared trajectory of growing finance and booming housing markets. A critical difference between the two cases is the level of intent which underpinned the two housing based growth models. The Danes intentionally unleashed finance to stimulate demand and actively managed the effects of this expansion through tax policy, and the creation of substantial pension funds. The Irish on the other hand had unleashed finance in the previous period to facilitate a process of welfare retrenchment due to a crisis of state finances. No financial expansion occurred until the FDI growth model of the 1990s produced the necessary economic growth to stimulate demand and *unintentionally* unleashed a boom in mortgage finance. The primary concern of the state throughout growth in housing finance was on the supply of housing, and they paid little attention to the demand side dynamics or the financial sector in general (Norris 2016).

Comparative Summary 1992-2000		
	Denmark	Ireland
Politics of growth	*Intentiona*l use of housing to kick-start growth in the economy enabled by earlier change to currency policy. Managed markets on the demand & supply side.	*Unintentional* turn towards finance as a consequence of earlier process of liberalisation. Attempts to manage supply of housing through private investment and tax incentives.
Banking	Growth from a well-developed starting point, moving from a passive towards a market-based system. Liberalisation of mortgage banking required for product innovations and new asset-based lending model. Erosion of the separation between mortgage and commercial banks through coordination. Primarily nationally funded mortgage boom, pensions supply buffer against foreign capital.	Growth from an underdeveloped starting point, moving from a passive towards a market-based system. No further liberalisation required for product innovations and new asset-based lending model. Mortgage and commercial banks became connected through competition. Exhaustion of national funds (deposits), increased use of market-based capital and entrance of foreign lenders. No buffers against foreign capital.
Housing	Well stocked corporatist housing system. Medium housing tenure. Debt in upper-income deciles. Housing system stability.	Poorly stocked familial housing system. High housing tenure, with large capital gains. Debt spread widely through the deciles. Housing system transformation through process of welfare retrenchment and financial liberalisation.

Varieties of bank based capitalism	Developed, coordinated, passive bank-based model shifting towards market-based banking. Coordination was the key dynamic within the system. Allowing both the growth of finance and the balancing of risk.	Underdeveloped, liberal, passive bank-based model, with presence of foreign banks shifting towards market-based banking. Under-development and competition drove the entrance of foreign banks and the need for international capital. Enabled by long-established connections to Uk markets.

Table 5.1 Comparative Summary

Turning back to theories of financialisation the current chapter has begun the task of untangling both the general and specific characteristics of growing finance and the build-up of household debt in both cases. Whether intentional or unintentional it is clear that the emergence of new growth models had shaped the growth of finance in both cases. The specific dynamics of growth within finance were shaped by the growth models but also by the capabilities for coordinated action contained within each system and by the variety of residential capitalism to which the system was connected. In Denmark the capacity to negotiate has been central to crisis resolution and the funding of the current expansion; active management has further supported this on the part of the state. In Ireland, the state took a 'hands off' approach to finance which became increasingly competitive and turned to market-based funding relying on their strong ties to their liberal UK neighbours.

The general process of financialisation in both countries was characterised by growth in the financial sector, driven by a new asset-based lending model, which included mortgage and commercial banking becoming more connected. These connections, however, were driven by very different dynamics, from different starting points, and produced different results. In Denmark growth of a well-developed system through coordinated dynamics, produced a more balanced form of financialisation. While in Ireland the growth of an underdeveloped system through competition produced a less balanced form of

financialisation. The differences in the two models are explained by the different varieties of market-based banking being practised at the outset of the period. These core differences in the structure of Danish and Irish banking shaped the dynamics and the funding patterns in the two models in essential ways and produced different outcomes regarding stability, in particular, the presence of foreign banks and the need for foreign capital.

Finally, turning to how the varieties of residential capitalism have shaped the process of financialisation. The structure of the housing regime shaped the build-up of household debt by locating the debt in different income deciles. In Denmark, the presence of a well-stocked corporatist system located the debt in the upper-income deciles. While in Ireland; an understocked familial housing regime led to a squeeze in supply and spread the debt more broadly across the deciles. However, while the corporatist housing model in Denmark shielded large portions of the population from credit growth, it also created an inequality of access to the market as affluent households became increasingly wealthy through rising asset values and cheap debt. In Ireland, the high tenure rates of mortgage-free property meant that more significant portions of the population made capital gains through rising asset values. However, new entrants found market conditions increasingly tricky. Therefore, housing regimes both commodified and de-commodified sections of the housing tenure.

Chapter 6: (2001-2007)

Housing Driven Growth, Market-Based Banking & the Wall of Money

Introduction

Chapter 6 will take Denmark and Ireland from the bursting of the dot.com bubble in 2001, through the rise of the global housing bubble to the start of its demise with the emergence of a national housing crisis in 2007. In Denmark, a shift to the right with the election of the new coalition between Venstre and the Conservative People's Party with the support of the Danish People's Party spelt the end for the balanced approach to financial growth initiated by the Social Democrats in the 1990s. The newly elected centre-right coalition quickly implemented changes to housing and finance which proved immensely pro-cyclical. In Ireland, a Fianna Fáil / Progressive Democrat coalition which had been instrumental in unleashing finance during the 1980s and early 1990s needed to make no institutional changes to facilitate the growth of the financial sector. The politics which enabled the financialisation were located in the 1980s and early 1990s. However, Fianna Fáil / Progressive Democrat coalition supported the housing bubble through its progression because Ireland's volatile FDI driven growth model suffered severely with the bursting of the dot.com bubble and housing offered an alternative source of growth. Therefore, after re-election in 2002 the Fianna Fáil / Progressive Democrat coalition, which had strong political ties to both construction and the financial sector, guided by neo-liberal ideology supported the bubble through tax cuts, incentives and privatisation. This set of policies made the coalition increasingly dependent on revenues and employment generated by the bubble (Norris, 2016; Ó Riain, 2014).

In the early 2000s, both national models of market-based banking became increasingly connected to the ‘global wall of money.' Within the literature, the ‘wall of money' is a somewhat abstract macro-level phenomenon, the current chapter reveals that

large pan European and Global banks were the principal transmission mechanism for the flow of capital across Europe. It was the changes within these banks which supplied Krippner's (2011) final condition of financialisation capital flow. These changes produced two distinct forms of financialisation; One in which banks crossed borders and entered domestic mortgage markets and another in which banks practised inter-bank lending and invested in national banking sectors (Bohle, 2017). Type 1 financialisation connects the two cases, as large Danish banks sought to move beyond the constraints of coordinated capitalism through entry into the Irish and Baltic markets. Type 2 emerged as increasingly low-interest rates spurred national housing bubbles to new heights, and the rising asset values created opportunities for global banks in inter-bank lending markets. A change of accounting standards introduced as part of the Basel 11 accord meant that these banks could leverage to a far greater degree and capital was an abundant resource. National banking sectors took advantage of these changes and filled the gaps between deposits and loans with wholesale funding accessed through these global banks.

Transnational Context

The period began with the bursting of the dot.com bubble in 2001 when international equities markets plummeted producing a global recession 2001-2003. It seemed as if the 1990s had run their course and a new period of slower growth was about to emerge in the global

economy. This development would pose real challenges for two small, open, economies, like Denmark and Ireland whom both relied extensively on International trade. The ECB and the FED responded quickly to the international situation and lowered the interest rate by a full point in order to stimulate growth (Blyth, 2008). Unwittingly they released a wave of mortgage activity across the globe and housing began to replace high tech equities as the new source of profit for the 'global wall of money.' In housing, global financialisation had found its latest driver of growth. The proliferation of housing, its depth, breath and centrality to daily life made it the perfect receptacle for international capital and produced a global housing bubble of epic proportions.

In Europe, the project of financial integration commenced in the 1990s continued to take shape, and the European banking sector became far more connected. The project, in essence, created a single financial system; however it lacked a governing body in the form of a banking union, and ultimate responsibility for national systems still lay with the sovereign. . EMU allowed capital to flow free from exchange rate risk and the traditional warning bell of balance of payments had been silenced. Peripheral economies previously seen as backwaters were taking centre stage as the growth of the 1990s produced investor confidence, and rising asset prices created new opportunities for profit (Ó Riain, 2014).

Central to the new connection between European banks was the emergence of a new type of bank, with a far more international outlook than any of the previous European banks (Schoenmaker and Wagner, 2013). These banks were true financial giants and merged traditional commercial banking with a more investment style banking. These large banks invested heavily in both America and the European periphery (Claessens and van Horen, 2014). German banks were heavily invested in American housing and bought large quantities of securitised American debt. Alongside this, was a process of cross-border banking in which these massive banks that had exhausted the capacity to grow within their borders sought out

new profitable market opportunities in the periphery and emerging CEE economies (Bohle, 2017). This wave of activity in European banking involved two types of financialisation; In Type 1 large European (Including the UK) banks began setting up operations in other domestic markets and Type 2 involved the new inter-bank lending of Hardie et al. 's (2013) typology. This second type was characterised by national banking sectors use of wholesale funding based on their connections to global banks which provided capital to wholesale markets.

Denmark: (2001-2007)

The Politics of Growth: Mortgage Market liberalisation and Neo-liberal housing policy

During the 1990s the project of stimulating consumption through mortgage debt initiated by the Social Democrats was a success. This model stimulated demand while maintaining international competitiveness. Between 1992 and 2001, this combination produced a period of profound growth in the Danish economy that was primarily driven by exports with a role

for private consumption. However, by the end of the 1990s, it was clear that the combination of mortgage market liberalisation and new monetary policy, employed to kick start consumption, were overheating the housing market. Therefore, in 1998, the Social Democrats stepped in to manage the market and introduced a series of tax hikes on property aimed at slowing the growth in house prices. These changes took effect in 2001 causing Danish housing markets to experience a mini-crash (Schwartz and Seabrooke, 2008).

In 2001, after seven years of economic growth and consistently rising house prices, there were sharp slowdowns in both house prices and the demand for credit. Furthermore, the bursting of the dot.com bubble produced a slowdown in global growth and as a result growth in Danish exports declined. Denmark looked set to return to more normal growth levels. However, rather than slow down, between 2001 and 2008, growth in the Danish economy reached bubble proportions. The critical components of the previously balanced growth model shifted to a model which was driven by housing markets, in particular, mortgage debt. Houses no longer just supplied the ‘kick start'; they were now a principal driver of growth.

Andersen (2011) notes the changing role of housing and suggests that it resulted from short-term economic policy mistakes; however, he does not delve into why these mistakes were made. Therefore, there remains a puzzle; why did Denmark turn towards housing based growth to such an extent, particularly after successfully resolving the long-term structural problems which had hampered economic growth since the oil crisis. Why did a financial bonanza suddenly replace the carefully planned, balanced financial expansion of the Danish economy in the previous periods? The answer to this riddle lies in the complex intersection between national politics and financialisation.

In 2001 there was a significant shift to the right in Danish politics, and for the first time since 1924, the Social Democrats did not win the majority of seats in parliament. Anders Fogh Rasmussen of centre-right Venstre Party became prime minister and formed a Liberal-Conservative coalition with the Conservative People's Party, which relied on the support of right-wing Danish People's Party. For the first time since the beginning of democratic politics, in 1901, the Danish right held an outright majority which did not include power-sharing with the left.

The new Liberal-Conservative government implemented three fundamental changes to both finance and housing which renewed activity on credit markets and enabled the growing financial sector to begin a new phase of financialisation. Firstly, they immediately reversed the tax hikes introduced by the Social Democrats and activity on housing markets resumed its upward trend. A senior economist from the National Bank of Denmark outlined the destabilising effect of the property tax freeze:

> And another factor that has also, in our view, contributed to this build-up of risk before the crisis was in 2000 or with effect from 2001, the run for housing taxation was changed, it was frozen in a way. You can also read something about that there. So it means now that if prices go up then your effective tax rates actually go down. And if they go down, then your effective tax rate goes up. So it is the exact opposite of stabilising the system.
>
> (CB 2/DK: Senior Economist Denmark's National Bank, 27/01/2017)

This highly pro-cyclical fiscal policy in the form of a housing tax freeze (on most property) led to capital gains for a significant portion of the upper-income deciles, and a new wave of housing investment began to emerge.

Secondly, guided by neo-liberal housing policy, the Liberal-Conservatives altered the rules governing the housing regime. The new rules allowed cooperative housing members to raise a loan against their property, effectively privatising a vital strand of the welfare state. Thirdly, in 2003, the new government conceded to the financial sector, which lobbied for the ability to grant new interest-only loans (IO) to stimulate slowing credit markets.

The introduction of IO loans was an attempt by the newly elected Liberal-Conservative government to win political favour by allowing the elite unlimited access to debt. The product's, when combined with the property tax freeze produced a highly pro-cyclical macro climate. A senior economist from the Danish mortgage sector highlighted the liberal politics which drove the introduction of IO loans suggesting that they were was no real slow down in house prices to justify their introduction:

> The exceptional thing about 2003 when this regulation was liberalised on interest-only loans, one of the arguments was that at that time we saw a stagnation in house prices so part of the political explanation or reasoning for introducing interest only was that it would be good to see a renewed growth in house prices. If you look... perhaps we have them in here. It is almost impossible to see that house prices stagnated back in 2003 or 2002, but it was a part of the political reasoning. It was also a fundamentally liberal point of view that the regulators, well the parliament shouldn't decide for borrowers whether it would be best to amortise or not so quite a fundamental liberal view drove this discussion.
>
> (Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/01/2016)

During an interview with a senior economist from the Danish Mortgage Sector, it emerged that while the mortgage banks had asked for the capacity to grant the new loans up to a certain point, the state allowed them a far higher margin than they had requested. (Finsec

8/Dk) Therefore, it seems this was a case of unconstrained financial liberalisation, favoured by both the banking sector and the new right-wing majority government. The political motivation for liberalising mortgage rules and allowing the upper-income deciles to use their houses as a cash machine, drawing on future income and capital gains to fund ever-rising consumption levels is apparent. Rising house prices, a favourable tax climate and new financialised mortgage products had extended the spending power of the upper-income deciles.

However, while the politics of liberalisation were central to the Danes turn towards housing markets, so too was the transformation of the financial system over time. In seeking the answer to why the Danes turned towards housing, what emerges is a story of how in the 1990s the Social Democrats by turning towards finance as a source of growth had unwittingly created the conditions for financialisation.

During the 1990s, in seeking to stimulate growth through relaxing access to credit, the Social Democrats had unwittingly created the conditions for the next crisis. The success of their project linked housing and consumption in the Danish economy in a new way. During the 1990s, Danish households got used to easy access to cash through capital gains and cheap credit and were not ready to relinquish these gains for the sake of a balanced economy in 2003. Attempts to slow the housing based cash machine spelt the end for the Social Democrats and they were replaced by a Liberal-Conservative government who immediately reversed their housing policy. Furthermore, the mandatory pension contributions which balanced the earlier expansion of debt with wealth may have pushed households further towards credit markets as a means of recouping the 12 % of wages which they were forced to save within the funds and use it to fund current consumption (CB 2/Dk). The effects of these changes on Danish consumption levels are well documented within the empirical literature; highlighting that the financialisation of household debt was accompanied by a boom in

current consumption as Danish households used their houses as cash machines (Anderesn, 2011).

In the 2000s, a more powerful financial sector, enabled by the Liberal-Conservative coalition, broke the shackles of the Social Democrats balanced approach and took financialisation to the next level. Finance undid the balance by replacing variable rate mortgage products (ARM Loans) with financialised Interest only loans (IO-Loans) and a balanced funding model with a new form of financialised inter-bank lending. In doing so, the financial sector unleashed a vast housing bubble into the Danish economy, and the liberal politics of the new coalition provided the final pieces of liberalisation and de-regulation which Danish financialisation required.

The process of financial liberalisation commenced in 2003 combined with an increasingly inter-connected and powerful financial sector proved a potent mix for Danish finance in the 2000s. The boom in mortgage credit produced spiralling house prices and a boom in the construction of single-family homes and apartments. Mortgage banks and commercial banks extended credit to new and dizzying heights as the mortgage boom progressed.

This turn towards housing was also part of a broader global trend where a whole host of nations responded to the slowdown in global growth by unleashing their housing markets. In the US the subprime lending and securitisation took off, In Ireland funding gaps and a mortgage and building boom emerged, Spain employed securitisation to fund its mortgage and building bonanza, and in Iceland, a mortgage and credit boom of epic proportions escalated out of control.

However, like all bubbles, the Danish bubble contained the seeds of its own destruction. As early as 2007 the cracks began to show in the bubble economy. House prices faltered, and talk of a soft landing in housing markets began to circulate. In mid-2007 the first Danish bank to show signs of real trouble emerged as Roskilde bank turned to the Danish state for help. A fund which had been established earlier by the financial industry to deal with troubled banks was used to try and rescue Roskilde, but the funding situation in the bank was so dependent on international capital that nothing could be done. The state and the financial industry then turned to their tried and tested method, and a sought a buyer for Roskilde; however, no private investor could be found. Roskilde was eventually wound down and taken over by the state. The GFC loomed.

Structure: Denmark Carries Type 1 & Receives Type 2 Financialisation

While the politics of financial liberalisation were central to the Danish experience of financialisation, behind the politics was the growth of a large and powerful financial sector. The process of bank consolidation commenced in 1987 as a response to the financial crisis, had led to the creation of financial conglomerates in which mortgage and commercial banks became tied through cooperative agreements and ownership stakes (Abildgren et al. 2010). These newly formed financial supermarkets began playing an increasingly important role in shaping the trajectory of change in Danish finance.

The new ties between the commercial and mortgage banks produced a nationally specific form of Type 2 financialisation. The mortgage banks, under the influence of the commercial banks, introduced a new range of IO product innovations which altered the functioning of credit markets. These innovations represented a distinct change in direction for the traditionally risk-averse mortgage sector. In order to fund the credit growth which the

products produced, the commercial banks altered their funding model and began practising a nationally *specific form of inter-bank lending*. This new funding model saw banks replace pension funds as the principal investors in Danish mortgage debt. While Bohle (2017) points to the role of international capital in this type of financialisation, in the Danish case much of the capital to fund the mortgage market was national in characteristic, located within large, affiliated, Danish banks.

The increased activity on Danish mortgage markets caused a boom in demand for credit in the real estate and development sector. The coordinated structure of the Danish financial system meant that Type 2 financialisation was split between the small and medium banks and the mortgage banks. The small and medium-sized banks, with strong relational ties to construction and real-estate, turned to international capital markets to fund the increased demand for credit and a new model of market-based banking emerged. The presence of these banks created an *institutional buffer* which firewalled the international capital and ensured that large banks remained outside of speculative real-estate lending. The research revealed that In Denmark, Type 2 financialisation, can be broken down into two subtypes of inter-bank lending, one specific to the mortgage bond markets and another isolated within the small and medium-sized banks. Coordinated capitalism had *refracted* the financialisation process and shaped its emergence into nationally specific forms.

Products: Interest Only Loans

In 2003, the mortgage banks began offering a new type of IO loan which allowed borrowers to defer payment of the principle (Amortise) for a period of up to ten years (Lunde and Whitehead, 2016). Figures contained in work by the Nationalbank show that between 2003 and 2008 amortised loans dominated the market for mortgage finance, accounting for over 70% of all new loans. Amortisation could be combined with a range of other loan characteristics; banks offered both fixed and variable rate loans with amortisation, over a range of time periods from one to five years.

The IO loans had a far more significant effect on the growth of credit than their predecessors the ARM loans and combined with the tax freeze and the drop in interest rates the effect on credit markets was extraordinary. During the 2000s, only Icelandic and Irish credit markets grew faster than Danish markets. Figure 6.0, below, outlines the total growth in mortgage credit between 1997 and 2015. In 2004 there was a rapid increase in the level of loan activity which coincides with the introduction of the IO loans. The national bank carried out an in-depth assessment of the effect of the loans on house prices and found that it was a

combination of the loans and the tax freeze which were the primary explanatory variables in the emergence of the housing bubble (Niels Arne Dam et al., 2011).

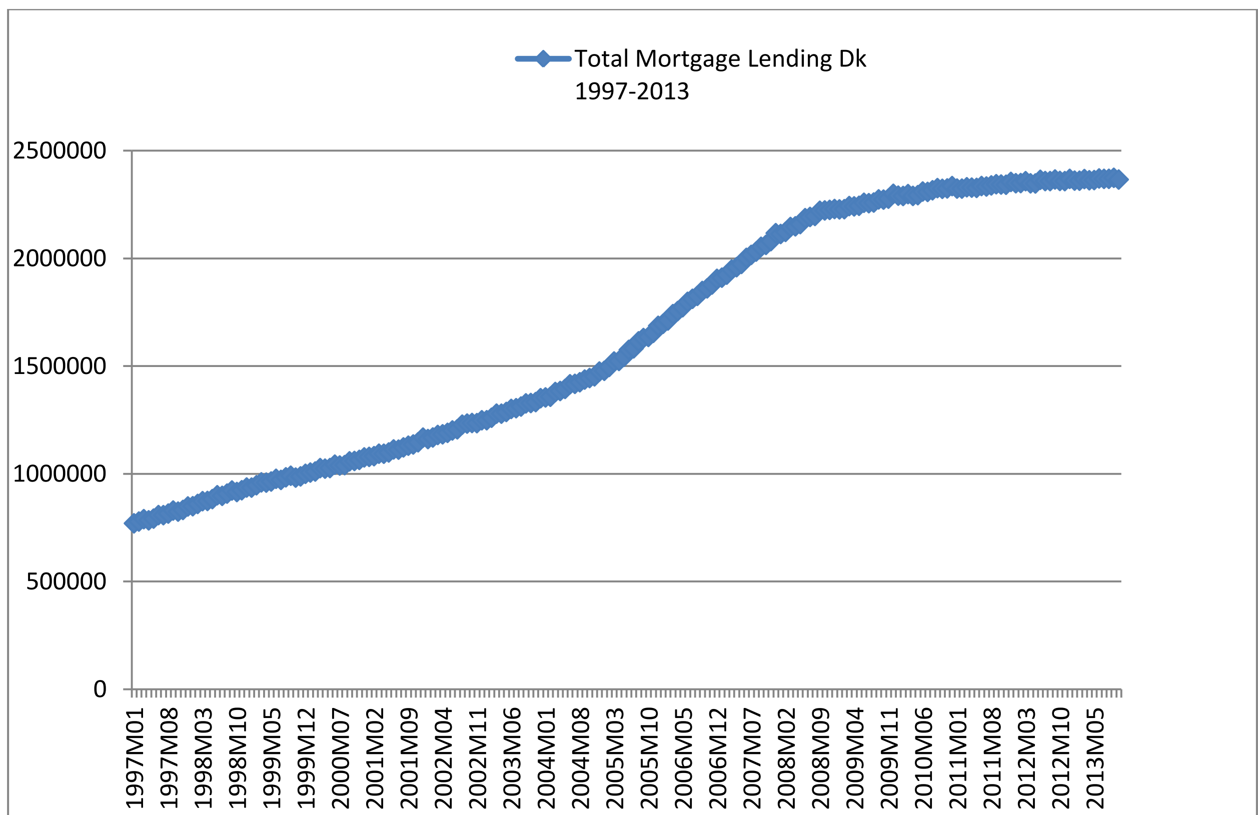


Figure 6.0 Total Mortgage Lending Dk 1997-2013.

Source National Bank of Denmark

The products proved enormously popular with two particular groups of borrowers, the very young and the very old (Lunde and Whitehead, 2016). For the wealthy (older) investors the products allowed them to achieve two things; firstly they could take out much larger loans and buy large, ostentatious properties and secondly they could re-mortgage existing loans and

use their current property as a cash machine to fund current expenditure (Hous 1/Dk). Therefore, a boom in consumption in the upper-income deciles accompanied the housing boom in Demark. A senior economist from the Danish mortgage sector outlined how the loans granted access to incredibly cheap credit and produced a new type of psychology about mortgage debt which drove the bubble:

> Loans to value ratios weren't substantially lower back in the old days until interest only was introduced; basically, because you knew as a borrower, you would just top up your mortgage once every two or three years or something like that. But it was driven by psychology, all of a sudden it became really inexpensive to own a piece of property in Denmark if you were not getting your monthly payments and even these days if you take out, one some products we almost have negative interest rates, and we have a margin on top of that but it means that at best you could borrow money at a yearly rate of 1% all-inclusive and do not amortize then just on average income you can really afford to have a large mortgage.
>
> (Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

However, it was not only the wealthy who sought to benefit from these loans but also the most excluded market players, the first time buyers. The loans allowed first-time buyers to access to the market, which had become increasingly difficult due to a decade of consistently rising prices, combined with tax cuts which had favoured the older established owner-occupiers (Lunde and Whitehead, 2016). Mortensen and Seabrooke (2008) note this trend in Danish housing and say it is akin to ‘the old feeding on their young.' However, they suggest that the Danes are risk-averse when it comes to housing finance; the take-up of interest only loans seems to indicate that risk aversion was not the order of the day in 2003.

The IO loans when coupled with regulation that requires no down payment and a top-up loan from a commercial bank of 20% of the LTV, which meant that first-time buyers were starting out insolvent (Lunde and Whitehead, 2016). The loans offered first-time buyers the opportunity to get on a housing ladder which had been getting further and further out of their reach.

The introduction of IO loans by a mortgage banking sector which had traditionally been risk-averse was driven by their new connections to the commercial banking sector. In 2001, Realkredit, Denmark's largest mortgage lender merged with Danske Bank, Denmark's largest commercial bank. At this time, Danske was engaged in aggressive international expansion and favoured increasingly risky lending practices as a part of their growth strategy. A fact made abundantly clear by their strategy in the Irish market. The influence of this new lending model by large Danish banks is evident in the introduction of IO loans. Furthermore, the large Danish banks became the principal investor in Danish amortised debt which suggests that they were instrumental in the introduction of the new loans. The formation of the new affiliation between mortgage and commercial banks, transformed the Danish mortgage model from a socially democratic model based upon a ‘balance principle' aimed at providing cheap, stable credit for the purchase of a home, to a far riskier model, where debt was cheap, and housing was a cash machine which drove consumption.

Therefore, the loans represented a shift in the orientation and values of the mortgage banking sector which had classically focused on providing affordable, stable credit to Danish households (Ornston, 2012). These loans had increased affordability through the introduction of new levels of risk for borrowers, who now became tied to future conditions and increased debt burdens. They look very different from the 1990s when ARM loans were introduced to revitalise an ailing mortgage market and allow customers to reduce their interest payments and expand current consumption through the release of equity. The IO loans allowed

borrowers to harness the future in a whole new way, by merely deferring payment. Astonishingly the structure of the loans meant that some 20-25% of Danish households have been technically insolvent over the last 25 years. (Lunde and Whitehead, 2016). A representative of the Danish construction sector outlined how the new loan types affected investment in the market, highlighting the role of future conditions in the investor's decision making process:

> Yeah, I think generally it was just an overall economic optimism in Denmark that we felt things were going really well and people wanted to fulfil the dreams and live better and have more things, more commodities. And in 2003 interest only loans were implemented in Denmark so you could have the first ten years or you could choose ten years of your loan where you only had to pay your interest and then everything was just set. And that gave people a lot more money and they really had the possibility to buy something that perhaps was a little bit more expensive than they actually could afford. The expectation of that the prices would increase during the next ten years or their salary would increase so that they could actually pay back the loan whenever the time was. And that just fuelled the sector even more.
>
> (Hous 1/Dk: Senior Representative Danish Construction Sector, 01/12/2016)

By 2007, when house prices began to drop, it was clear that the mortgage system was radically different from its building society predecessor (Ornston, 2012). The process of financial liberalisation and the erosion of sectoral barriers between the mortgage and commercial sector had shifted the orientation of the Danish mortgage model from the provision of cheap, stable, credit towards a far more speculative model that harnessed ever falling interest rates and future conditions to drive credit growth (Abildgren et al., 2010). While the previous period was a planned financial liberalisation to stimulate mortgage

markets; the current period shows that once finance was unleashed it was tricky to control. The mortgage banks, now owned by the commercial banks, introduce increasingly liberal, risky, mortgage products, while the commercial sector supplied the funding for these new loans. The previous period's financial liberalisation had enabled the growth of a more powerful banking sector which increasingly dictated the trajectory of growth on Danish credit markets through the use of financialised mortgage products and market-based funding.

Funding: Inter-Bank lending and Institutional Buffers to the 'Wall of Money'

The new allegiances between mortgage and commercial banks which were transforming Danish credit markets were also transforming the funding model of Danish banks (Diagram 6.0). During the bubble in mortgage credit, there was a notable change in the composition of investors into Danish mortgage products. While pension funds retained a significant portion of the market, the majority of the increase in mortgage debt was acquired by the commercial banks. The new role for banks was achieved by the development of a *nationally specific form of inter-bank lending* (Type 2 financialisation). This new model was introduced by large commercial banks and acted as an *institutional buffer against international capital*. The process of bank consolidation commenced in 1987 was producing Krippner's (2011) unexpected outcomes, and Type 2 financialisation was being *refracted* through the *coordinated* institutions of the Danish financial system.

In 2001 the monetary financial institutions (MFI) held 14 % of the total market by 2004 this figure had expanded to 26.1 %, and by 2008 they accounted for 40% of the market (Figure 6.1). During the same period, the Danish pension sector had reduced its share of the market from 33% to 26% (Figure 6.1). The MFI sector was buying the bulk of the new bonds being offered to cover IO loans. It is important to point out that the MFI sector is primarily composed of commercial banks which had strong ties to the mortgage sector and who would directly profit from the growth in mortgage lending which was occurring. This expansion was a considerable sum when one considers that total foreign investment in Danish mortgage bonds averages roughly 14 % of the total market (Figure 6.1). This development points to the effect of the new links between mortgage and commercial banks as being crucial to the emergence of financialisation.

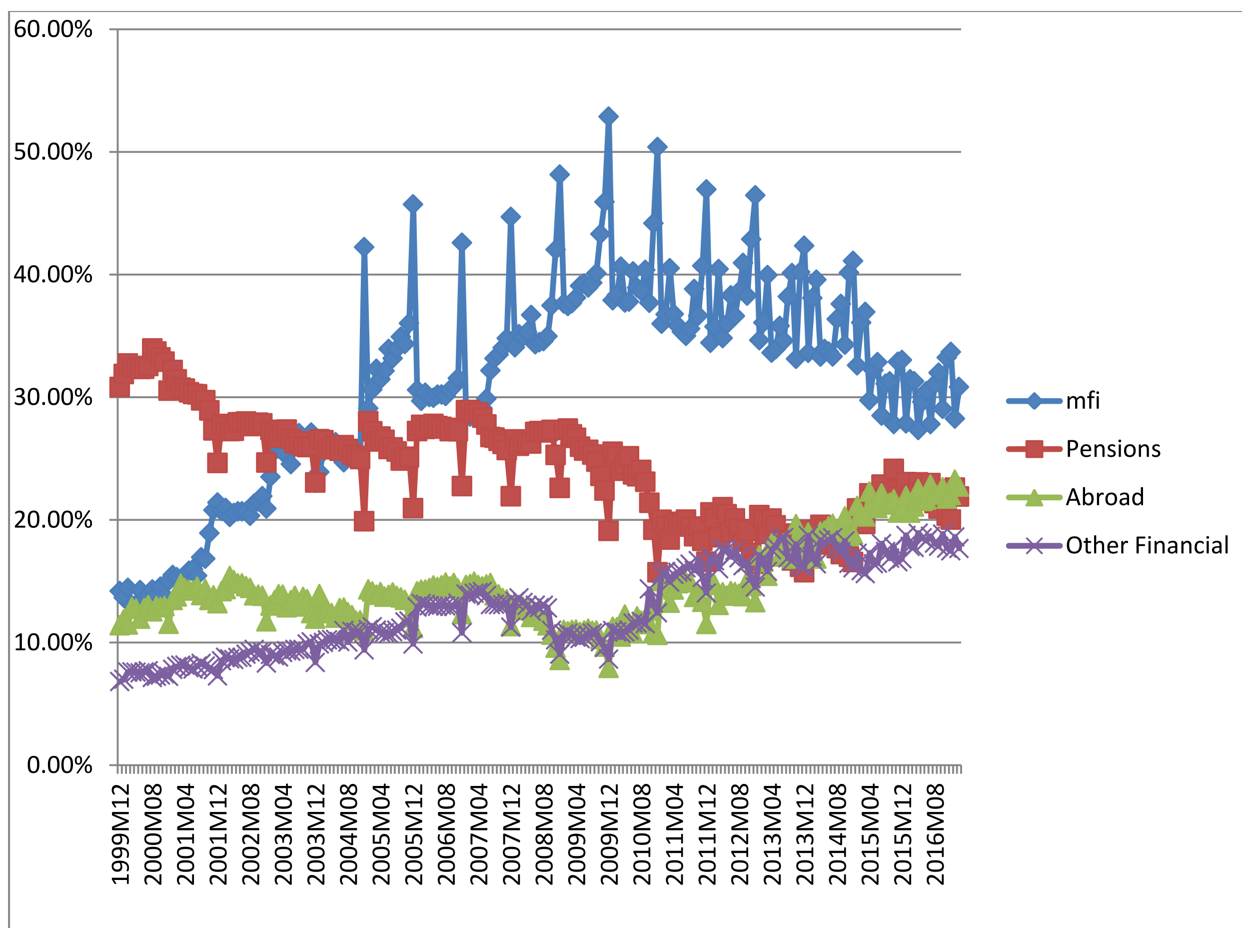


Figure 6.1 Investors in Danish Mortgage Bonds % of Total 1999-2016.

Source National Bank of Denmark

The newly connected MFI and mortgage sectors, now comprised of financial supermarkets where all consumers financial needs could be met. The sector invested its profits into its own financialised products and produced further considerable profits in the growing mortgage sector, which they now owned. While the Danish banks had traditionally been kept separate through regulation, the 1980s, and 1990s had seen a considerable change in the structure of the financial sector which now comprised of large, sophisticated financial conglomerates that had ownership stakes in the mortgage banks (Abildgren et al., 2010). Therefore the emergence of large banks in Denmark as the solution to the previous crisis had created the conditions for the growth of a larger, more powerful, commercial banking sector

and in doing so enabled the current period of financialisation. The capacity for coordinated action within an increasingly powerful financial sector meant the financial liberalisation was a tricky beast to control.

Coordination in the dynamics between the mortgage and commercial banks were central to the introduction of a new inter-bank funding model. There was a significant increase in banks presence on bond markets which coincided with the introduction of the new, riskier loans. The ability of banks and mortgage banks to act in this coordinated way across the bond market was underpinned by the cooperative agreements which were negotiated in the 1990s. During the 2000s commercial banks mirrored other European banks and got involved in mortgage lending; however, they did so in a nationally specific way based upon the structure of the existing financial system. This produced a national variant of type 2 financialisation in which the market-based capital which funded growth in mortgage debt was located in national, affiliated banks.

Mortgage banks had traditionally been restrained by the ability to sell their bonds in the market. Kim Abildgren (2010) of the National Bank of Denmark notes in his study of Danish finance at this time that the new affiliations between banks and mortgage banks meant that issuances of bonds where effectively agreed under one roof within the framework of a cooperative agreement. The mortgage banks, therefore, had access to a new source of capital and a new degree of certainty about the issuances of their bonds. This new level of confidence was evident in the strong take up of mortgage bonds by the banking sector from 2001 onwards.

Furthermore, this new interbank lending model posed a direct threat to the functioning of the ‘balance principle' as mortgage banks become both the lender and the investor in Danish bond markets. This new funding source meant that risk which should be transferred to the

investor was merely shifted across the financial conglomerate. Combined with the variable rate and amortised loans this new model eroded the stabilising characteristic of the Danish mortgage model. Therefore it is clear that the new links between mortgage and commercial banks have not only been central to the emergence of financialisation but have done so by eroding the Social Democratic nature of the system based on the capacity within the system for coordinated action. Without a doubt, the ability to coordinate across the financial system has been a critical factor in the emergence of Danish financialisation enabling a national form of *inter-bank* lending which acted while it as a *buffer* against international capital also eroded the Social Democratic characteristics of the system.

Interestingly, looking at Hardie et al.s' (2013) typology, it seems clear that Danish commercial banks had mirrored the interbank lending practices of other large European banks and used them to move beyond the limitations of coordinated capitalism. The structure of the Danish mortgage system meant that inter-bank lending of the type employed in other nations was not feasible; however, the commercial banks mirrored the trend by becoming the principal investor in Danish mortgage bonds. Given that interbank funding proved to be a crucial source of instability with the unfolding of the financial crisis what remains to be seen is how this new funding mix would affect the stability of Danish mortgage markets?

While this model of funding shielded Denmark from international capital, it also reduced stability by introducing a similar risk to the funding gaps being run in commercial banks across Europe (Andersen, 2011, Hardie & Howath, 2013). The funding model was less stable than the previous model due to the use of short-term capital to fund long-term loans. Furthermore, the funding was located in commercial banks which engaged in far riskier activity than the pension funds, and therefore, were more likely to run into liquidity difficult and have less capacity to absorb shocks in the market (Finsec 5/DK). If these problems emerged then banks would be forced to withdraw from mortgage bond markets, and a re-

financing crisis would emerge where buyers cannot be found for Danish mortgage bonds, thus exposing, banks, mortgage banks and households to increased risk.

However, despite the increase in risk, the funding model also limited risk by acting as a *buffer* against international capital. The importance of this was revealed by comparison to other European forms of financialisation such as Ireland, or Spain where international capital played a far stronger role. Across Europe, inter-bank lending was a principal source of connection between national forms of financialisation and the 'global wall of money.' In Denmark, these connections were formed across a national banking sector, which contained sufficient capital to fund a large portion of the mortgage boom. Furthermore, the connections were formed across affiliated banks which had direct ties to the mortgage bank. Therefore, in comparison to other European nations, the model looks relatively stable. In this respect, it is important to note that while the commercial banks expanded their investment in mortgage bonds, the pension funds retained a significant share of the market. Underneath the new mortgage and commercial bank alliance, was the original funding structure of the more balanced Social Democratic approach to funding which would prove to be a vital source of stability with the outbreak of the GFC.

Structure: Small & Medium Banks, Institutional Buffers and Funding Gaps

The presence of the small and medium banks acted as a buffer, protecting large banks from the worst of the speculative lending and the international capital which funded it. This buffer

had a profound effect on how the Danes experienced and responded to the financial crisis in 2008, leaving large banks available to come to the rescue of the troubled small and medium-sized banks.

In Denmark, small and medium-sized banks were traditionally connected to SME's and provided patient capital as a part of a relational banking system (Ornston, 2012). These banks have their roots in the presence of a powerful cooperative sector which developed financial units to fund its operations. The relational banking ties practised by the small and medium banks connected these banks to an investment bubble in residential property which was driven by the financialisation of the mortgage industry. The small and medium-sized banks saw a significant increase in their lending in the pre-crisis period and a corresponding shift in the composition of their liabilities which became increasingly market-based (Abildgren and Thomsen, 2011). Lending increased to two particular sectors during the pre-crisis period, commercial real estate and construction, to which these banks had strong relational ties (Rigsrevisionen, 2009). Therefore relational banking was a key enabling factor in the financialisation of Danish commercial banks. A senior figure in the Danish pension sector highlighted the risk of running funding gaps in small and medium-sized banks:

> Yes, I think the problem in Denmark compared to other countries, we have a special bank sector, before the financial crisis we had a lot of small banks, local banks, which lent an extremely high amount of money to developers. I think that some of the reports on the financial crisis say that it was a relatively small group of people, making high-risk investments, buying property and selling to each other, and the small local banks didn't have the ability to control the risk
>
> (Finsec 7/DK: Senior Figure Danish Pension Sector, 25/012016)

In the wake of the financial crisis, the Danish state established an inquiry which comprised of a range of financial experts. The inquiry noted that unusually large exposures characterised the lending for the purchase and building of residential units and was primarily contained in the small and medium-sized banks (Rigsrevisionen, 2009). Furthermore, this lending practice was connected to a small group of real estate investors, as few as 25 people, who had strong ties to these banks. Interestingly this is the very same phenomenon which had caused difficulty in the late 1980s, and the inquiry was 'at a loss' as to why the banking sector had not learned its lesson the last time (Rigsrevisionen, 2009).

Funding Gaps

The funding gap in the Danish economy was primarily located within this group of small and medium-sized banks and one large bank, while the other large banks remained more conservative in their lending and funding practices. Comparisons between the level of exposure in the Irish and Danish system reveal fundamental differences which are explained by the buffer provided by the presence of small and medium-sized banks. There is a body of

literature which suggests that these two systems had comparable exposure to the GFC based upon macro-level data (Campbell and Hall, 2015, Grossman and Woll, 2014). However, this thesis will later argue when looking at the funding of Irish banks during the GFC in chapter 7, that the Irish case was more severe across a range of dimensions

The expansion of lending both at home and abroad meant that very quickly the deposit base of Danish commercial banks was eroded and a deficit emerged which they subsequnetlyfilled with market-based capital. Figure 6.2, below, demonstrates that by 2004 the Danish commercial sector had reached the limit of its deposit base to provide funding to credit markets. From this point on the Danish commercial sector would increasingly rely on European capital markets to provide market-based funding (Abildgren, 2009).

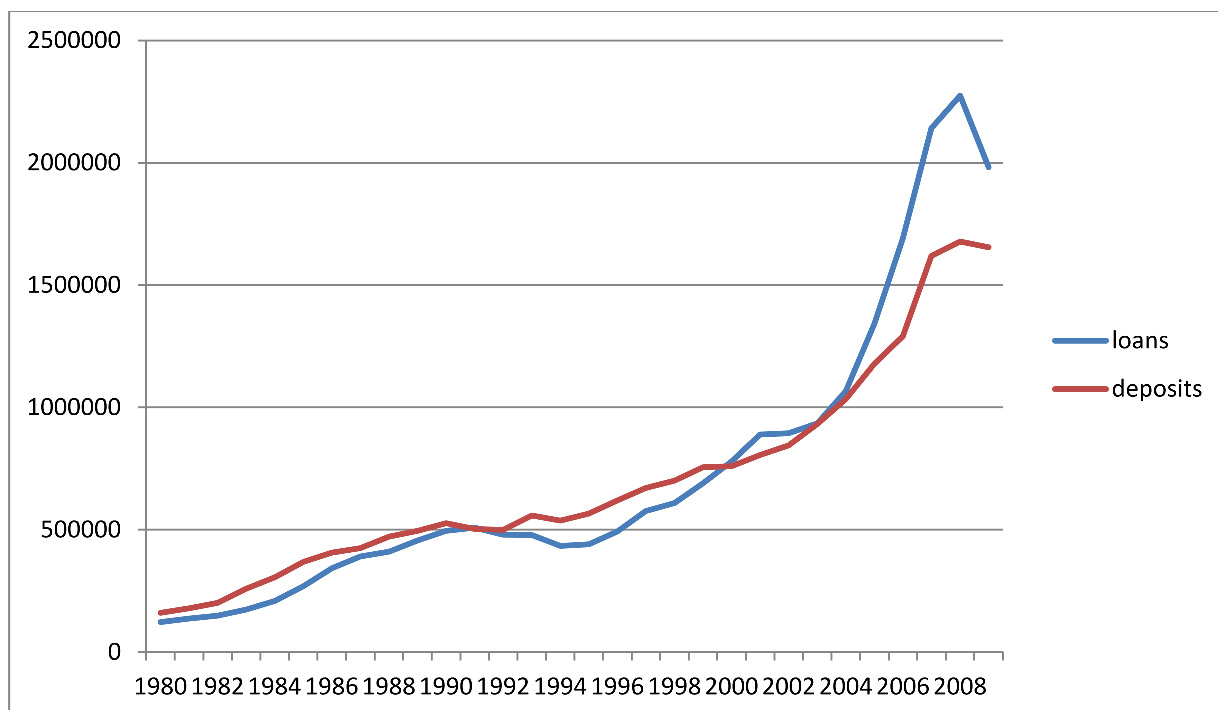


Figure 6.2: Ratio of Loans to Deposit Denmark 1980-2008.

Source OECD STAN Data Set

While the tipping point where loans exceed deposit occurs in 2004, figure 6.3 reveals that the process was gradual with banks replacing deposits with market finance over time. Deposits as a share of total liabilities decreased from roughly 55 % in 1995 to reach a low of 35 % in 2008. Total market-based liabilities combined in 1995 made up 10% of the overall funding; this share had more than tripled by 2008 reaching a high of 35 %. Therefore market-based funding was increasing in line with the expansion of PSC through the 1990s and into the 2000s.

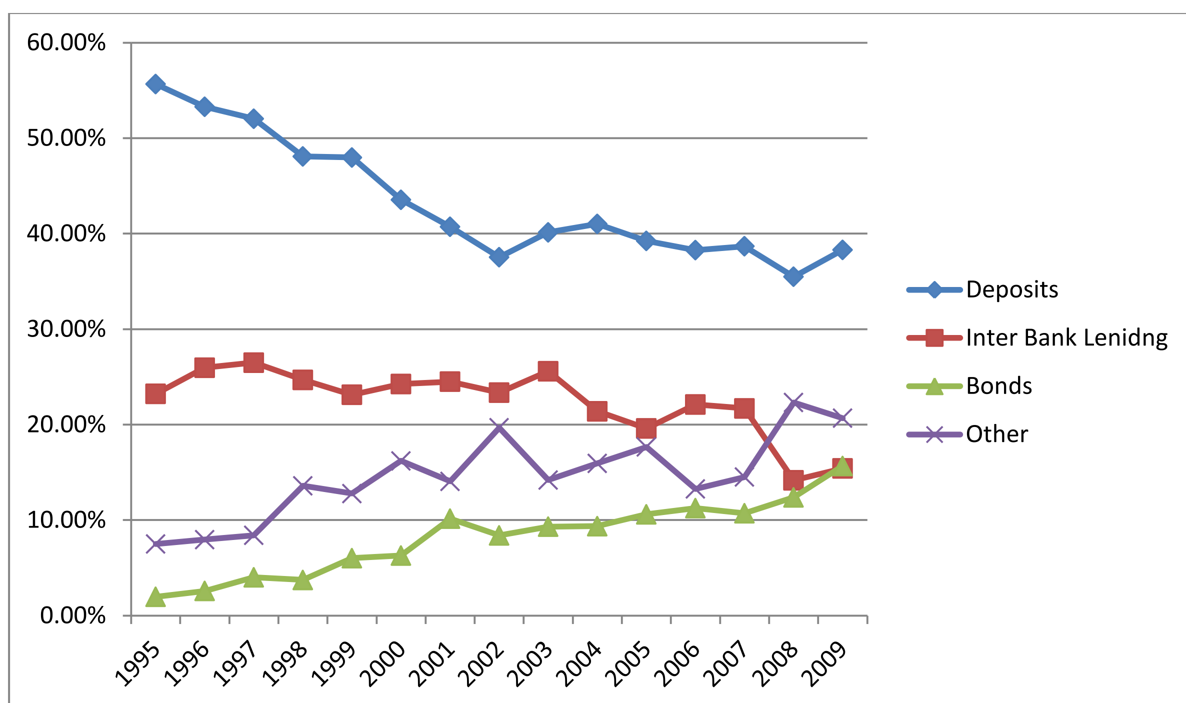


Figure 6.3 Liabilities of Danish Banking Sector 1995-2009.

Source OECD Stan Data Set

Danske Bank contained no deposit deficit before it embarked on its international expansion. By 2008, Danske Bank accumulated a deposit deficit that had reached a level of about DKK 350bn, thus making up more than half the total deposit deficit in the Danish banking sector (Rigsrevisionen, 2009). A large part of Danske Bank's deposit deficit was located in its foreign units, in particular, Ireland. This high level of capital market financing left Danske Bank in a precarious position in the autumn of 2008 when the liquidity crisis swept the globe.

There is no data available on the source of the International funding of Danish commercial banks during the current period. However, data from 2013 contained in figure 6.4, below, offered some insight into the likely patterns which prevailed at the time.

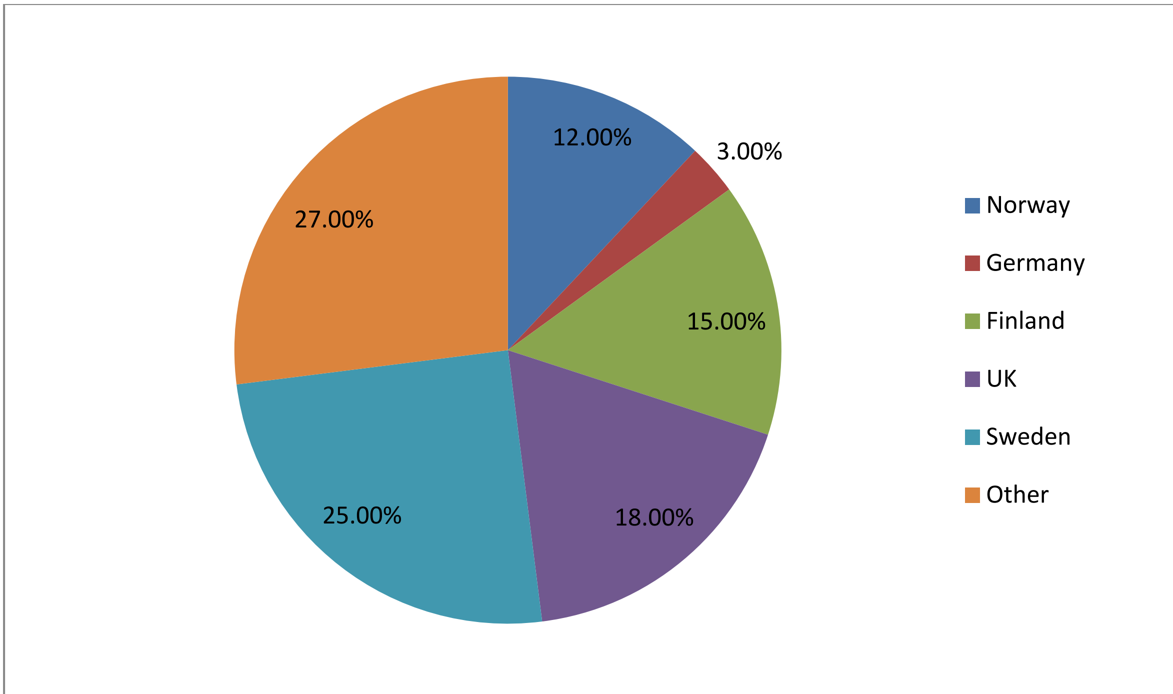


Figure 6.4: The Location of Danish Inter-Bank Liabilities.

Source: IMF 2013

Financial integration was heavily concentrated across the Nordic region. In total the Nordic region accounts for 52 % of the total foreign funding of Danish banks. Sweden accounts for 25% of total foreign funding, which links to the presence of Nordea, a Swedish bank and the second largest bank in Denmark. The UK accounts for 18 % of the funding of Danish banks, and while there is no way to determine with certainty this strongly suggests that Danske Banks Irish operation had access to the same banks that were funding Irish banks (Rigsrevisionen, 2009). Interestingly Germany accounts for a mere 3 % of the total funding of Danish banks despite the strong ties to the German economy and geographical proximity.

Coordinated capitalism was something of a double-edged sword. The strong relational ties between small and medium-sized banks and developers exposed them both to international capital. However, these banks, also acted as a buffer for large banks, concentrating the funding gaps within the sector and protecting large banks from speculative

markets. This description flies in the face of the stereotypical social Nordics, rather than shield Denmark from financialisation, the patient capital system enabled the process, while firewalling it within a specific section of the financial system.

Danske Bank

Having examined the trajectory and political determinants of the dynamics of Type 2 financialisation in Denmark, this chapter now focuses on the actions of a critical actor, Danske bank, to gain insight into the transmission of Type 1 financialisation. Danske Bank

was a carrier of Type 1 financialisation into the Irish market and therefore offers the opportunity to connect the two cases studies. Danske bank's strategy during the 2000s marks it as separate from the other large banks in Denmark and suggests that Danske represented the emergence of a new type of liberal, risk-taking, Danish bank. Looking at the behaviour of Danske bank grants insight into how coordinated capitalism shaped the process of Type 1 financialisation by limiting the capacity for growth of large banks within their own borders. Danske responded to these constraints and, enabled by the 1993 banking directive, began an aggressive strategy of international expansion becoming a carrier of Type 1 financialisation into the Irish and Baltic market. Danske's presence in the Irish market connects the two case studies and offers insight into the process of transnational banking highlighted by Bohle (2017) in her study of peripheral housing markets.

From the late 1990s onwards, Danske bank launched a significant international expansion, into the Nordic region, the CEE economies and Ireland. In 1997 Danske acquired Ostgota Enskilda Bank in Sweden, and then Focus bank in Norway in 1999 (Abildgren et al., 2010). In the 2000s Danske shifted its focus from the Nordics towards the booming Irish market obtaining both National Irish Bank and Northern Bank in 2004 (Danske). In its Irish operations, Danske became heavily involved in speculative property lending, running a significant funding gap, which accounted for 50% of the total market-based liabilities in the Danish system. The behaviour of Danske bank poses something of a puzzle, why would a large bank within a coordinated system, surrounded by other conservative large banks suddenly begin an aggressive international expansion and turn towards market-based banking to fund the expansion?

While the other large banks avoided getting involved in the property bubble Danske engaged upon a path of aggressive expansion into foreign markets, in particular economies that had growing housing markets. A senior Danish financial regulator highlighted the

conservative culture within large Danish banks, pointing out how they turned down property developers seeking loans; pointing to how Danske followed suit in Denmark but behaved very differently in Ireland:

> One of the good things in Denmark was that these people were turned down by the large banks, with one exception, which is Danske Bank, which is the largest bank, they turned them down in Denmark as well, but they took some of them on board in Ireland. So they had, you could say, not anything similar to the small and medium-sized banks but they were under more pressure than some of the others.
>
> (Finsec 3/DK: Senior Financial Regulator, 27/03/2014)

The behaviour of Danske is all the more puzzling when one considers how foreign banks typically behave within the Nordic region. Most of the foreign banks operating in Denmark, including Nordea the country's second-largest banks, had a parent organisation in a Nordic region (Abildgren et al., 2010). These banks tended to favour mergers and acquisition of national banks as the means of entry into foreign markets and furthermore had strong ties across Nordic borders. In 2005, Nordic banks accounted for 84% of the foreign banks which operated in the Danish market which accounted for roughly 30% of the total market (Niels Arne Dam et al., 2011). The process of foreign bank entry was linked to the formation of financial conglomerates during the 1980s and 1990s. In the latter half of the 1990s, these financial groups became increasingly focused on globalisation and began to forge connections across the Nordic region (Abildgren et al., 2010). Nordic banks tended to behave more like national banks when operating across Nordic borders. There was a high degree of homogeneity in the financial systems of the Nordic regions. Therefore, the move by Danske into the Irish and CEE markets in the 2000s is out of character for a Nordic bank.

The behaviour of Danske banks at this time very much mirrors the behaviour of other large European banks in the core nations that also focused on growth through mergers and acquisitions in order to benefit from economies of scale (Kotarski and Brkic, 2017). These systemically important financial institutions (SIFI) dominated market-based banking in the 2000s as the providers of capital to periphery nations through both Type 1, and, Type 2 financialisation. The process of EMU provided a unique opportunity for large banks to cross borders and set up new operations in emerging market economies. Danske bank took advantage of this and internationalised their lending, mainly focusing on small peripheral economies that were converging on EU standards. Therefore Danske represents part of a broader trend in European finance which saw large banks play a more significant role in the flow of transnational capital (Bohle, 2017).

Abilgren et al. (2010) from the National Bank of Denmark suggested that the reason why the Danish banks internationalised their growth strategy was that they had exhausted the capacity to grow through economies of scale within national markets. Large banks in Denmark were constrained at a number of levels; firstly the existence of large, powerful co-operative and foundation based corporate governance system meant large firms were mostly self-financing. Furthermore, the previous section on small and medium-sized banks showed their connections to a small group of property developers and made it clear that Danske was limited by the presence of these banks which had strong ties to the sector that was demanding the credit. To move beyond these constraints, Danske turned to markets which lacked the competition and constraints which they faced in the Danish market, *making Ireland and the CEE economies a perfect target*.

Danske Bank's annual report for 2002, made it clear that growing markets in the Irish economy allowed it to move beyond the limits which coordinated capitalism placed on large banks operating in Denmark. Furthermore, their large size meant they would enjoy a

significant advantage in new markets through economies of scale, Danske bank ranks 25th on the list of the largest banks in Europe classifying it as a real financial giant. Currently, Danske holds 548.795 in assets, nearly three times the assets of Bank of Ireland, which was the largest bank in Ireland which is ranked, 58th on the same chart.

Coordination was central to shaping the trajectory of Type 1 financialisation in Denmark. Firstly, Danske bank has its roots in the coordinated response to the Danish financial crisis of 1987 when merger and acquisition of small and medium-sized banks were the critical mechanisms in the creation of internationalised financial giants. Furthermore, the coordinated structure of the Danish financial system, the proliferation of foundations, cooperatives, and relational banking in the small and medium-sized banks, all played a part in limiting the capacity of large banks such as Danske to grow within their own borders. The underdeveloped, CEE and Irish Economies proved ripe for speculation. Enabled by the EU banking directive, Danske crossed borders as a means of moving beyond the limits of coordinated capitalism. Rather than limit financialisation, coordination produced complex and somewhat surprising results by limiting the capacity of banks to profit within their home economy. Rather than protect Danish banks coordination refracted the financialisation process and shifted it across space urging large banks to seek profits beyond the constraints it placed upon them.

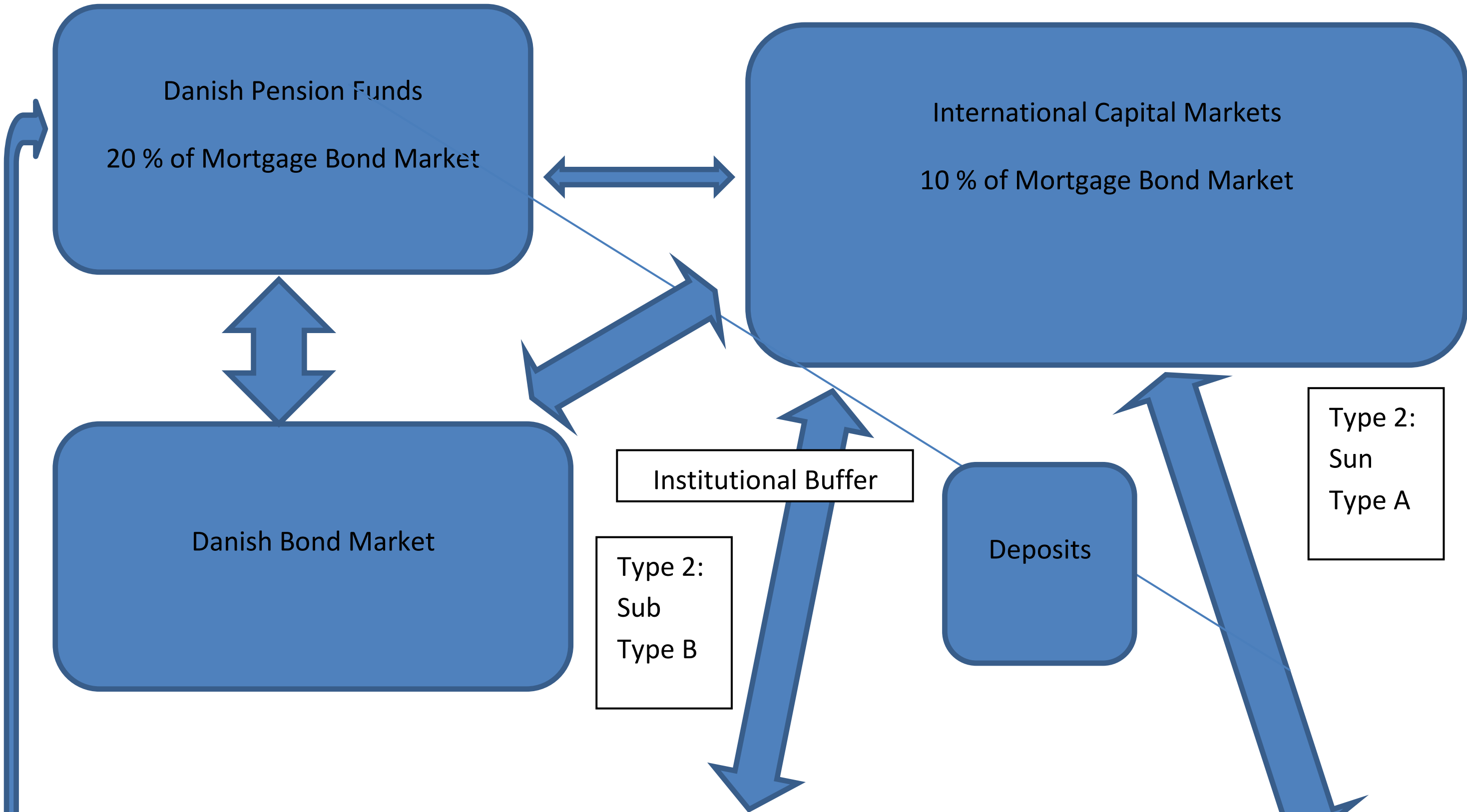
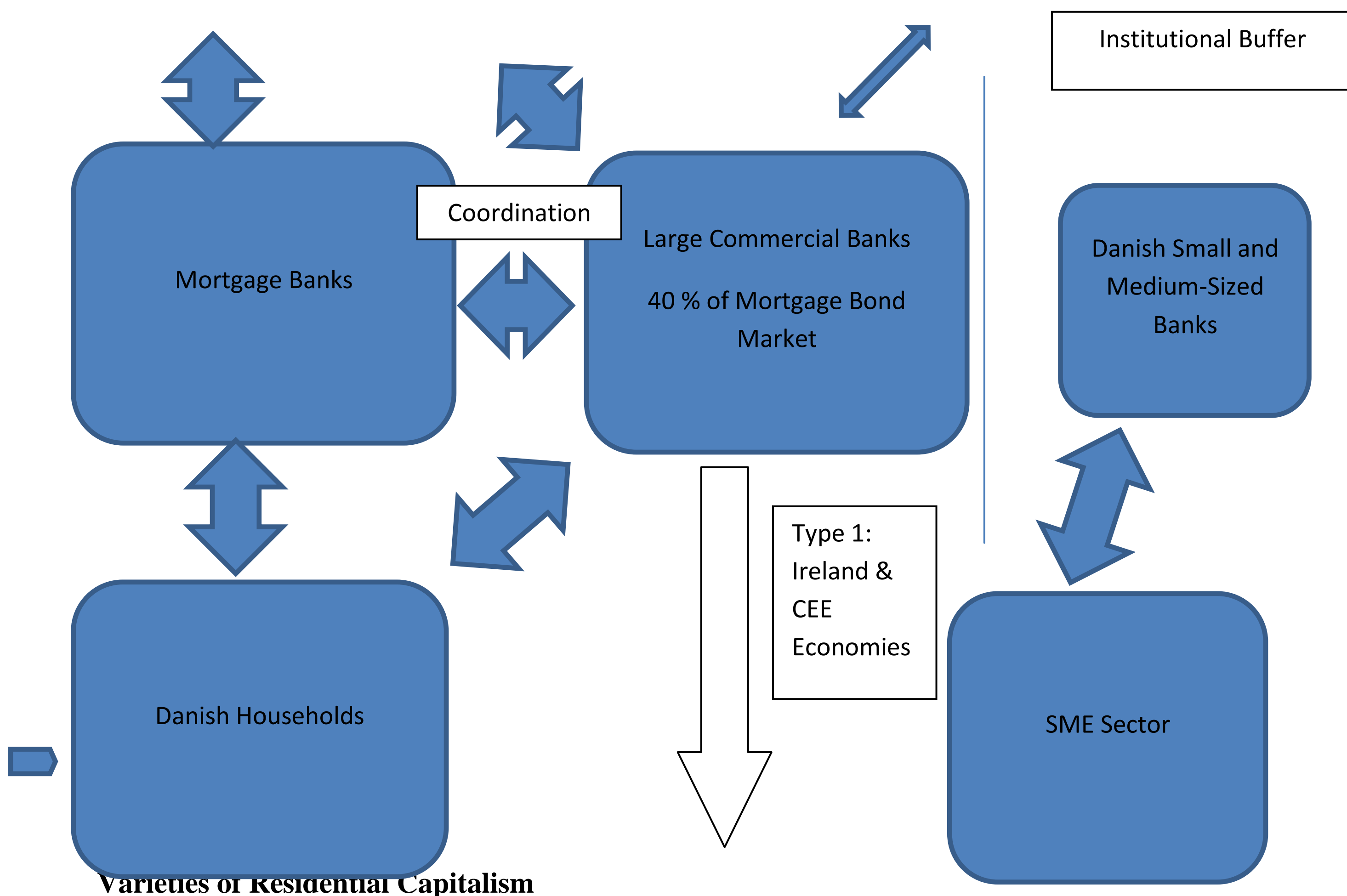


Diagram 6.0: Danish Financial Sector Funding 2001-2007
Financialisation Type 1 & 2
Danish Pension Funds
20 % of Mortgage Bond Market
International Capital Markets
10 % of Mortgage Bond Market
Danish Bond Market
Institutional Buffer
Type 2:
Sub
Type B
Deposits
Type 2:
Sun
Type A



Varieties of Residential Capitalism

The new form of market-based banking, in particular, the nationally specific forms of Type 2 financialisation outlined above enabled the transformation of the Danish cooperative housing tenure. Changes to the regulation of the cooperative housing finance rules allowed cooperative members to take out a mortgage loan against their share in the cooperative which effectively privatised this housing structure, which remains cooperative in name only. This change fundamentally altered a pillar of the Danish welfare state.

Neither, Schwartz and Seabrooke's (2008) dependence on securitisation or Fernandez and Albers (2016) financial globalisation, capture what was taking place in the Danish financial system at this time. The previous section outlined that it was the combination of *new IO loans* with a *nationally specific form of interbank lending (Type 2 financialisation)* which were the key drivers of growth in mortgage credit. It was this new form of market-based

banking which intersected with the corporatist housing regime to shape the financialisation process. Therefore, the current chapter has updated the theory of varieties of residential capitalism by bringing banks into the political economy of housing, a task which outlined within the literature review.

Furthermore, it is clear that politics matter, it was the combination of the liberal mortgage products and a neoliberal housing agenda of the newly elected Conservative-Liberal coalition which produced the transformation of the Danish housing cooperatives outlined in Seabrooke's (2008) work.

Finally, a key effect of the housing regime was the location of debt in the upper-income deciles. Analysis of the products revealed that they were ideally suited to allow wealthy homeowners to take on debt as a type of luxury good. Very wealthy households used the new IO products, during a period of financial exuberance which accompanies all financial bubbles, in order to extend their private consumption of both housing and other luxury goods (Hous 1/Dk). Therefore, a bubble in consumption accompanied the Danish housing bubble. Wealthy households accessed the capital gains created by rising house prices in their existing property and were further enabled by tax cuts which favoured existing owners; in essence, they have used their homes as a new type of cash machine. This process was made possible by the 1992 legislation, for EU compliance with mortgage finance, which allowed homeowners to take out loans against their property for any purpose (CB 2/Dk). While the Social Democrats introduced this change to stimulate growth in the economy it ultimately led to a situation in which the very wealthy had access to vast amounts of debt which they used to fund current consumption.

Ireland: (2001-2007)

The Politics of Growth: State Support for the Housing Driven Growth Machine

Having experienced profound economic growth during the Celtic tiger, which was primarily based on employment gains and productive investment, something shifted in the Irish political economy during the late 1990s, and early 2000s and a property based growth machine emerged (Ó Riain, 2014). After the bursting of the dot.com bubble which shook Ireland's FDI export-led model, growth quickly returned to Ireland. However, the components of growth had shifted as domestic demand replaced exports. Exports declined from an average of 17.6 % between 1995 and 2000 to an average of 4.9 % between 2001 and 2006 (Begg, 2014). Alongside this decline in exports, industrial employment also began to decline while employment in construction began to sore ahead reaching a peak of 286,000 at the height of the boom. A combination of construction and services were the core of Ireland's new property based growth machine (Begg, 2014).

The causes of this shift in growth and investment have been the source of much debate within the literature. Ó Riain (2014) links the new property-based 'growth machine' to the emergence of a 'social structure of liquidity' which favoured property over productive investment, highlighting the tight-knit network of property developers, bankers and political elites which formed a powerful property coalition in Ireland. Furthermore, O'Riain (2014) demonstrates how this social structure of liquidity became connected to vast pools of European capital as Ireland became an investment opportunity for the European core through the actions of the rating agencies. However, Kelly (2009) demonstrates that at the root of this social structure of liquidity was an enormous bubble in mortgage credit which drove house prices, which in turn drove activity in the construction sector. Therefore while O Riain (2014) captures the social and political dynamics of the bubble economy and the shifting logic of investment, he fails to incorporate the growth of mortgage lending and the rising house prices which were a central feature of the new logic of investment providing further impetus towards the buildup of household debt.

Unlike Denmark, the property bubble that emerged in Ireland did not require any change to the regulation of finance. The politics of liberalisation which underpinned the bubble were located in the fiscal crisis of 1987 and the efforts of a then-bankrupt state to achieve macroeconomic stability through austerity. The mid-1990s completed the liberalisation of the banking sector which in the 2000s became connected to a light touch regulatory framework and the 'global wall of money'.

However, while finance required no further liberalization, the state supported the bubble through its progression and became increasingly dependent on bubble generated tax and employment. An Irish academic expert in finance and corporate governance reflected on how and why the state became dependant on housing as a source of growth:

> So you find it goes into the easiest place to make a quick buck, and we see that in other countries too, but it was more damaging because relatively speaking construction loomed much larger on every dimension. In terms of employment obviously, in terms of the volume of revenue that came to be dependent on construction-related activities, stamp duty and the development to tax and all the other things that were property related and as we know long-term public spending, especially current spending, was undertaken on the basis of a frothy revenue flow, even as they were hollowing out the more robust aspects of revenue like income tax.
>
> (Uni 2/IRL: Academic Expert in Finance and Corporate Governance)

Further support for the bubble economy was provided by the neo-liberal agenda of privatisation favoured by this coalition, in particular, the Progressive Democrats. The sale of the two state banks, the Irish Credit Corporation (ICC) and the Agricultural Credit Corporation (ACC), to foreign competitors would go on to have a profound impact on Irish credit markets. ACC was sold to Rabo Bank, and ICC was sold to Bank of Scotland a member of the Lloyds group. Bank of Scotland became a key driver of the hyper-competition which defined Irish credit markets during the bubble period, and this process is described in detail in the products section of this chapter (Norris, 2016). By inviting foreign banks into the Irish market, Fianna Fáil and the Progressive Democrats enabled the transmission of Type 1 financialisation.

In 1999 the Fianna Fáil / Progressive Democrat coalition attempted to increase the supply of housing by introducing a capital gains tax reduction (Norris, 2016, O Riain, 2014). This coalition government had a strong neo-liberal housing agenda and choose to ignore the advice of the expert committee on housing that suggested measures aimed at increasing investment should be balanced by measures to limit second home purchase (Norris, 2016). Undoubtedly, the tax incentives introduced in 1999, such as reduction of capital gains and section 23 housing, to release pent-up capital and increase housing supply had a profound

effect on the level of investment and building activity during the 2000s. Norris and Coates (2014) note the impact of these tax incentives, in particular, drawing attention to the changing effect of section 23 housing. While it initially achieved its stated goal of urban regeneration, continued extension of the project can be linked to the separation of supply and demand in the Irish housing market as the mortgage boom progressed. The separation of supply and demand is crucial in producing ghost estates which were located not to meet demand but merely due to cost considerations. Ó Riain (2014) also draws attention to the separation of supply and demand as being a key indicator that a bubble had emerged in the building of residential property.

A new type of investor emerged in the Irish market and *buy to let* mortgages drove developments on Irish credit markets. A senior figure in Irish commercial banking noted the shift towards speculative investment by Irish households pointing out how product innovations enabled this process:

> And you had a huge number of interest only mortgages. So effectively people were speculating on their private residences, the rate of increase, the total capital, would be significantly greater than the rate of increase in the debt. It worked beautifully for a while from the perspective of the borrower but then bang.
>
> (Finsec 1/IRL: Senior Figure Irish Commercial Banking, 23/05/2017)

The dynamics of demand were very similar to the Danish case; however, what was notable about Ireland was the absolute scale of the activity that these bubbles produced and speculative nature of the investment. Credit expanded at a rapid pace during this period, with overall levels climbing from 73 % of GDP in 2002 to reach a peak of 178 % of GDP in 2008 (Kelly, 2009). House prices followed a similar path of growth, rising from 235 in 2001 to reach a peak of 438 in 2008. Construction activity in the Irish economy displayed similarly

astounding figures, as house climbed from 36% of total investment to reach a high of 43% of total investment in 2006. The funding for all of this activity was sourced in foreign banks, and the net external position of Irish banks soared ahead of any other European nation.

Looking back at the Celtic Tiger period in Irish banking it is clear that the changes which occurred in the 2000s did not require any significant shift within the banks logic. Banks during the 2000s continued on the path they had set out during the 1990s and grew their lending to two critical areas, housing and construction. This asset-based lending model was a well-established pattern since the liberalisation of Irish banking in the 1980s. Furthermore, these same banks had already displayed that they were more than willing to engage with the shadow banking sector, lending to the IFSC had become a key strand of their business model in the previous period as had a liberal mortgage model. Therefore the business model which was central to the boom about to take place was already established within the large Irish banks and connected to strong social and political ties within the Irish elite. This leaves us with the question: If it was not a shift in logic, what did shift?

The real shift which drove developments in Irish banking and the Irish economy happened in foreign banks. The earlier processes of financial liberalisation and integration meant these banks were free to cross borders, and capital was an abundant resource (Bohle, 2017). The underdeveloped Irish banking sector was a perfect conduit for abundant capital; rising asset values ensured a steady stream of demand from a boom in speculative housing investment, by a familial housing tenure which had amassed capital gains. The remainder of the chapter looks at why Ireland proved so susceptible to foreign capital and banks. What emerges is a story of an underdeveloped banking sector, unable to provide national capital to a booming familial housing system, with strong existing ties to Global banking in the UK. It was shifts within these global banks, in both their growth strategies and accounting practices, which drove developments on Irish markets.

Structure: Ireland Receives Type 1 & 2 Financialisation

The process of financialisation underpins all of the political and social explanations of what took place in Ireland during the 2000s. While there was little need for any significant shift in the business model of Irish banks, their underdeveloped history and strong ties to UK markets, coupled with a booming familial housing system, made them ripe for speculation by foreign capital. This speculation took two forms, Type 1, and Type 2, financialisation. Both of these processes of financialisation had already commenced during the 1990s with the entry of foreign banks and increased use of market-based funding.

The shift included the deep penetration of both types of financialisation; Type 1; foreign bank entry into Irish domestic markets, drove a form of 'hyper-competition' within the Irish mortgage market. Type 2; investment by global banks into the Irish banking sector funded the conditions created by 'hyper-competition' (Bohle 2017, Norris 2016). An alteration to accounting standards contained in Basel 11enabled increased investment by global banks, which when filtered through Ireland's long-established institutional connections to the UK market proved to be a perfect mechanism over which financialisation could flow across space.

In comparison to the Danish system, these two processes of financialisation produced a more profound and broader connection to the 'global wall of money' within the Irish system. Unlike Denmark, Irish finance contained no institutional buffers against foreign capital; nor did they have the capacity to fund their own mortgage boom. Rather than firewall international capital, small and medium banks in Ireland drove conditions in the market and

caused crowding in by the large banks. A senior banker from commercial and state banks pointed to what he felt shifted in the Irish banking model and how the smaller banks had driven this shift towards residential investment:

> The banking that I left, I got out of banking in '89 and went to a financial services company; I came back into banking in '98. And the banking that I re-entered compared to the banking I left was chalk and bloody cheese, big emphasis on security, cash lending, there wasn't this massive... The residential investment sector was tiny and it was being funded half by cash. It became a huge part of the overall Irish economy. How that happened*? I think it was driven by the smaller banks.*
>
> (Finsec 3/IRL: Senior Figure Irish Commercial & State Banks, 12/06/2017)

Furthermore, there was no separation between mortgage and commercial banking and both employed foreign capital to fund increased lending. Finally, Ireland had institutional filters which connected it to an epicenter of global banking the UK and a long established practice of running funding gaps based upon access to this market. It was the depth of the penetration of foreign banks, their high degree of influence over an underdeveloped market and the strength and breadth of the connections to 'the global wall of money' which supplied the impetus and capital for a national investment boom in housing.

Products: Hyper Competition and Foreign Banks

The asset-based lending model established in Irish banks in the mid-1990s was a vital driver of the financialisation process which reached its peak in the 2000s.During the 2000sthe entry of foreign banks and the abundance of foreign capital drove this model into a state of 'hyper-competition' (Norris, 2016).

Kelly (2009) outlines the growth of credit and demonstrates just how profound the relative growth was during this period. In 1997 Irish banks were lending €20 bn to mortgages and €10 bn to developers, by 2008 mortgage lending had increased seven times and developer lending 11 times. Figure 6.5 outlines the total growth in mortgage lending demonstrating that the worst of the bubble was contained in the brief period between 2003 and 2007. Between 1997 and 2007 Ireland experienced the highest average rate of growth in mortgage debt in the entire EU at a staggering 23% per annum. Growth in mortgage lending caused a boom in the construction sector which led to an increase in real GNP of 75%. Ireland shifted from getting 4-6 per cent of its national income from building houses in the 1990s to 15 per cent in 2006, combined with this was a further 6 per cent from other construction activity. Both of these developments caused a massive spike in employment related to construction further driving the demand for mortgage credit (Kelly 2009).

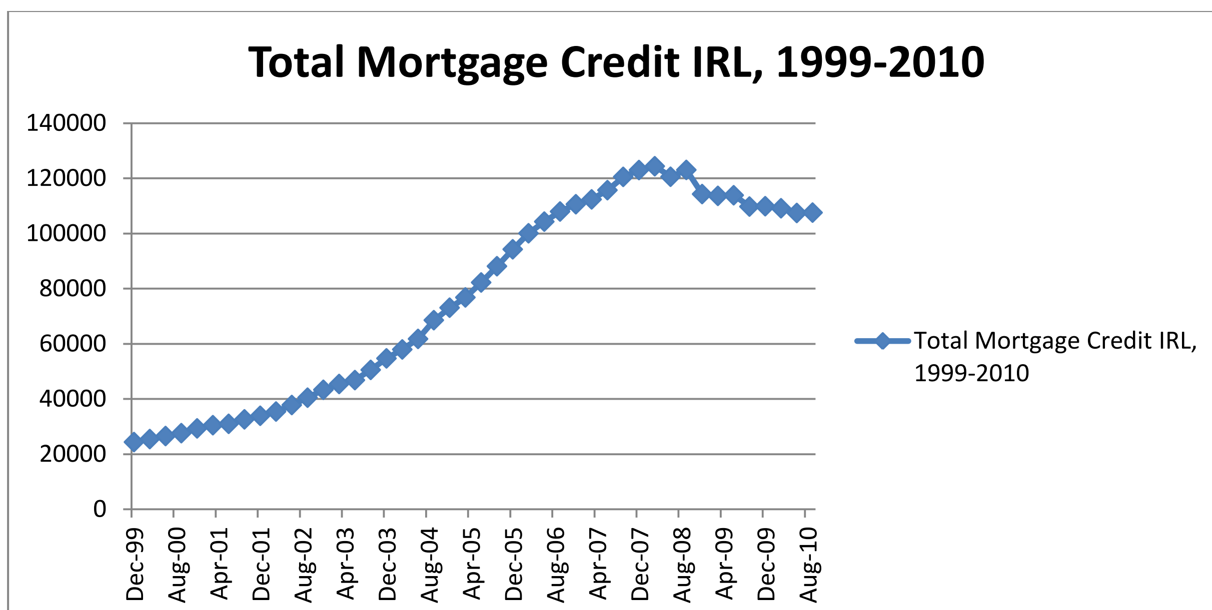


Figure 6.5 Total Mortgage Credit IRL, 1999-2010.

Calculated using Central Bank of Ireland data various years.

The lending to residential property consisted of two inter-connected credit bubbles, one in mortgage lending the other in real estate and construction lending. Much attention has been paid to the real estate and construction sector, less to the mortgage sector. Kelly (2009) points out that at the root of all the lending was the mortgage boom; it was mortgage lending which drove house prices, which in turn drove the construction and real estate boom. The boom in construction and real estate, in turn, fed back into the mortgage boom as employment and wages rose in the construction sector, and the demand for credit and housing increased. The fact remains that at the base of all lending was lending to Irish households for mortgages. Figure 6.6 below compares house prices in Denmark and Ireland, and it reveals that the process commenced earlier and was deeper in the Irish economy. In 2001 Irish house prices had begun to rise, while it was not until 2003/2004 in Denmark when the new IO loans took effect that house prices showed a significant increase.

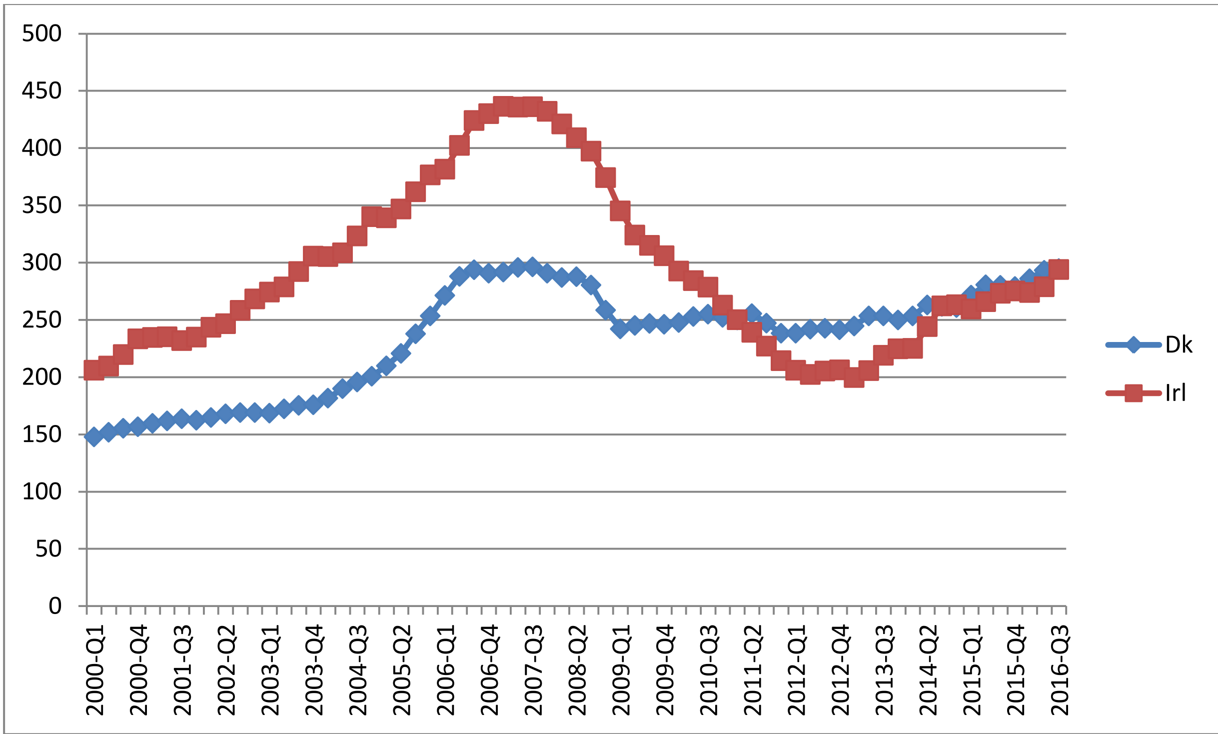


Figure 6.6 House Price Dk & Irl 2000-2017.

Source: Bank of International Settlements.

Structure: Foreign Banks Type 1 Financialisation

While there was no significant shift in logic within the Irish banking sector, there was a significant shift in the presence and influence of foreign banks on Irish mortgage markets. Foreign banks, enabled by the banking directive of 1993, entered the Irish market and

embarked upon an aggressive growth strategy which included the introduction of a range of product innovations such as tracker mortgages and IO loans. These banks were parented in a host of European nations, including the UK, Denmark and the Netherlands and included such financial giants as Bank of Scotland, Royal Bank of Scotland, Rabo Bank and Danske Bank.

The entry of these banks into the Irish market poses something of a puzzle as international banks have traditionally shied away from entering domestic mortgage markets given the risks for banks attached to national variation in property rights (Norris 2016, Stephens 2003). While the entry of these banks is puzzling, so too was the effect they had on the Irish market, which to date remains under-documented and under-investigated. Recent work by Norris (2016) acknowledges the role of foreign banks as a driver of 'hyper-competition' in Irish mortgage markets and links their entry to the existence of a common law system in Ireland. While the common law system may in part explain the entry of UK banks, it offers little in the way of explaining the entry or indeed the effect of the Nordic or Dutch banks.

The Irish market proved a perfect conduit for Type 1 financialisation for a number of inter-related reasons. Some of these lay in market conditions while others were located within the foreign banks. The underdeveloped and inexperienced Irish market posed an opportunity for foreign banks which had much longer histories of mortgage lending than their Irish counterparts. In 2014 under the houses of Oireachtas (inquiries, privileges and procedures) Act 2013 a formal inquiry into why Ireland experienced a systemic banking crisis was established. The inquiry sought to examine the political, economic, social, cultural, financial and behavioral factors and policies which impacted and contributed to the Irish financial crisis. In the banking inquiry, Irish bankers cited their lack of experience in crucial areas of mortgage lending as being problematic during the bubble period.

The data on the presence and lending behaviour of foreign banks during the mortgage boom reveals the profound influence they had on Irish markets. While foreign banks accounted for a lesser market share than their Irish counterparts, they were more aggressive in their lending strategy. This aggression ultimately drove 'hyper-competition' in the market in particular through the introduction of product innovations. Frost et al. (2015) worked with a new data set from BIS which enabled them to untangle the distinct categories of banks which were operating in the Irish system in the run-up to the financial crisis. Their findings are essential for untangling the national and transnational dynamics of the financialisation of Irish mortgage banking. They found that the domestic market for credit tripled in size in a brief period between 2002 and 2008. The bulk of this increase was driven by domestic banks that increased their market share by 9% and foreign banks increased by a more modest 2%. This fits with descriptions of the banking crisis as a predominantly national phenomenon. However, the story is more complicated when one accounts for relative growth in market share which was dominated by the foreign banks. Foreign banks expand their credit levels to the non-financial sector by 222% during this period, while Irish banks increased by 176 %. A good example of this profound growth is contained in the data on NIB which was owned by Danske which reveals that it increased its market share by 55% in just one year. A senior figure from Irish commercial and state banks pointed out the highly competitive environment which characterised Irish credit markets at this time and how foreign capital was driving this competition:

> The institutions were going to AIB, this is a well-known fact, and Bank of Ireland saying, look at your shares compared to Anglos, Anglos have trebled, yours have gone up by 25 or 30%. So all banks were under pressure to follow the Anglo model. We certainly did in Rabo Bank, in ACC Bank, we wanted to be like Anglo. It was blind belief, quick service, not huge interrogation and basically putting massive

> values in the value of security, of bricks and mortar. But you see that also came from, if you look at the Anglo balance sheet, the Anglo balance sheet, I think it was about €100 billion in its last published balance sheet. And a massive amount of that was inter-bank debt, basically foreign debt.
>
> (Finsec 3/IRL: Senior Figure Irish Commercial and State Banks, 12/06/2017)

A publication by Danske Bank (2006) which maps how and why it intended to be successful in the Irish market through the acquisition of NIB lends vital insight into how the foreign banks viewed the Irish market and indeed to how successful they were in their penetration. Danske (2006) openly proclaims that they intend to take on and transform an underperforming bank and outline their basic strategy of technological up-grade, product innovation and aggressive lending. The publication makes it clear that it was the underdeveloped nature of NIB which Danske identified as being one of the key opportunities for growth. Furthermore, the figures which they outline for market penetration would suggest that they were correct in their estimations, as NIB proved to be a profitable endeavour before the financial collapse. At this point, Danske owned Realkredit, the largest mortgage lender in Denmark, and therefore contained a vast pool of financial expertise in mortgage finance making it more experienced than its Irish competitors. A recent publication by the Irish Times outlined that during the bubble period Danske lent 3 bn into the Irish economy highlighting the depth of the penetration of foreign banks. (The Irish Times, Friday, September 28, 2018).

A vital part of the aggressive lending strategy of foreign banks was product innovation. Tracker mortgages and IO loans were introduced to Ireland by Bank of Scotland in 2001, although it seems likely that a version of the tracker mortgage was available as early as 1999 through a mortgage broker operating on behalf of Bank of Scotland (The Irish

Independent, 2018). In 2005, Ulster Bank owned by Royal Bank of Scotland introduced another critical product innovation, 100% loans. Foreign banks were driving competition in the market. The difference between tracker mortgages and other variable rate mortgages is that the tracker was pegged directly to the ECB interest rate. The popularity of these loans on the Irish market was phenomenal, and Doyle (2009) points out that most of the variable rate products within the Irish market were some version of a tracker mortgage.

Variable rate products accounted for 70% of the total market in Ireland during this period. The growth in popularity of variable rate products is outlined in Cronin and Monks (2006) study of Irish mortgage market developments. In 1997, 34 standard variable rate products were available in Ireland. By 2006 this had reduced to 19, while there were 57 versions of the tracker mortgage. Kelly (2009) estimates that between 2004-2008 tracker mortgages account for 60% of the total market for mortgages. During an interview with an expert in Irish and global banking, he suggested that the Irish banks had followed the foreign banks through a process of demonstration (Finsec 5/IRL). The prevalence of so many types of variable rate and tracker products is a crucial indicator of the level of hyper-competition which was emerging in the Irish mortgage credit markets and shows the degree of influence of foreign banks. Type 1 financialisation was shaping the lending behaviour of Irish banks:

> So I think there was a demonstration effect on the bankers' behaviour, they looked at what was happening in Britain, what was happening in the USA, this huge growth in widening the scope of the mortgage market. We could lend to people who would never have bought houses before. Why not? We have our risk models, we have low-interest rates, do the calculations, it is okay.
>
> (Finsec 5/IRL: Senior Figure Irish & Global Banking, 02/11/2017)

Irish bankers did not have to look far for their inspiration - UK, Nordic and Dutch financial giants were operating on their doorstep. Indeed the very same demonstration effect was happening in Danske Bank, and Ireland proved the perfect market for their new model of asset-based lending.

Comparison of Ireland and Denmark reveals that the financialisation of Irish credit markets was a far more *transnational* and *competitive* process than the *national/coordinated* process in Denmark. In Ireland, the introduction of a vast array of product innovations drove hyper-competition between national and foreign banks. In Denmark, coordination between commercial and mortgage banks allowed the mortgage banks to offer a smaller range of products to a new audience. These differences related directly to the degree of coordination and level of development within each system in the period before the financial bubble. A Senior figure in Irish commercial banking pointed out how the availability of capital combined with competitive pressure affected credit standards in Irish banks. In effect what he described were the dynamic between Type 1 and Type 2 financialisation;

> If you go back to the mid to late '90s, you went into your bank manager, you put on your best bib and tucker and the approach was the bank manager is going to tell me what he is going to give me, I am going to try and get as much as possible but the bank manager is effectively minding me and minding the bank in the sense that he or she is not going to put capital at risk that is going to damage the bank's balance sheet, nor is he going to give me capital that I can't afford to pay. So you were relying on that to some extent. And that all changed then due to the *availability of capital*, due to *competitive pressures within the system* and due to, let's be honest about it, the naive view that the economy was travelling along a straight line trajectory.
>
> (Finsec 1/IRL: Senior Figure Irish Commercial Banking, 23/05/2017)

Furthermore the Nyberg report found that Ireland's underdeveloped financial history meant that trends towards increased competition were viewed in a favourable light and seen as positive market developments.

> A fundamental preoccupation of Irish policymakers before the boom of the 1990s, following 'vocal criticism from consumer groups', was the danger of too little competition in the domestic banking market leading to too little credit (Nyberg, 2011: 28).

During the 1980s Irish banking operated on a cartel-style arrangement where price fixing and credit rationing was a regular feature (Clarke and Hardiman, 2012). A key motivation for the liberalisation of banking was to create sufficient competition in the sector to ensure that customers would get better access to cheaper credit. Therefore, foreign banks that were entering the Irish market encountered a state which favoured privatisation, welcomed a new source of competition and consequently assisted them in their endeavours. The sale of both of the state-owned banks ICC and ACC to foreign competitors support this view.

The process of financial liberalisation during the 1980s had put Irish commercial and mortgage banks in competition with one another for the mortgage market, and EMU had led to a drastic reduction in the price of credit. At this time an inexperienced national banking sector, which was too small to provide credit to a booming mortgage market during the 1990s came into competition with aggressive foreign entrants. In the 2000s, this sector experienced demand for credit which was located in a familial housing system, where significant portions of the population had made capital gains and sought to invest this money in housing. An underdeveloped, inexperienced banking sector connected to a bubble in housing posed a perfect opportunity for large foreign banks to enter and compete for sections of the mortgage

market by undercutting Irish banks on price and lending terms through product innovations thus driving ‘hyper-competition' (Norris 2016).

Funding: Type 2 Financialisation, Funding Gaps and Institutional Filters to Global Banks

The funding for the ‘hyper-competitive' conditions in Irish credit markets was sourced on international money markets and enabled by running funding gaps within both Irish and foreign banks operating in the Irish market. Type 2 financialisation was deeper and had a broader reach in Ireland than it did in Denmark. While Denmark contained intuitional buffers which limited the need for, and reach of, transnational capital, in Ireland under development extend the need, while institutional filters provided the connections. Furthermore, the dynamics between type 1 and type 2 financialisation in the Irish market provided further impetus for foreign capital. The behaviour of foreign banks in Irish mortgage markets was driving hyper-competition which was enabled by easy access to foreign capital supplied by Type 2 financialisation.

Figure 6.7 shows that from 2001 onwards the ratio of loans to deposits in the Irish banking sector began to decrease rapidly. The overall degeneration of the funding situation in banks was profound, in 1995 deposits made up 102% of total loans; by 2008 this had decreased to 41%. In a little, over ten years Ireland had transformed into a fully market-based system. In real money terms, the excess grew from 29 billion Euro in 2002 to over 129 billion Euro in 2008. (Nyberg, 2011) This development allowed a national property bubble to expand well beyond the bounds of what previously would have been possible.

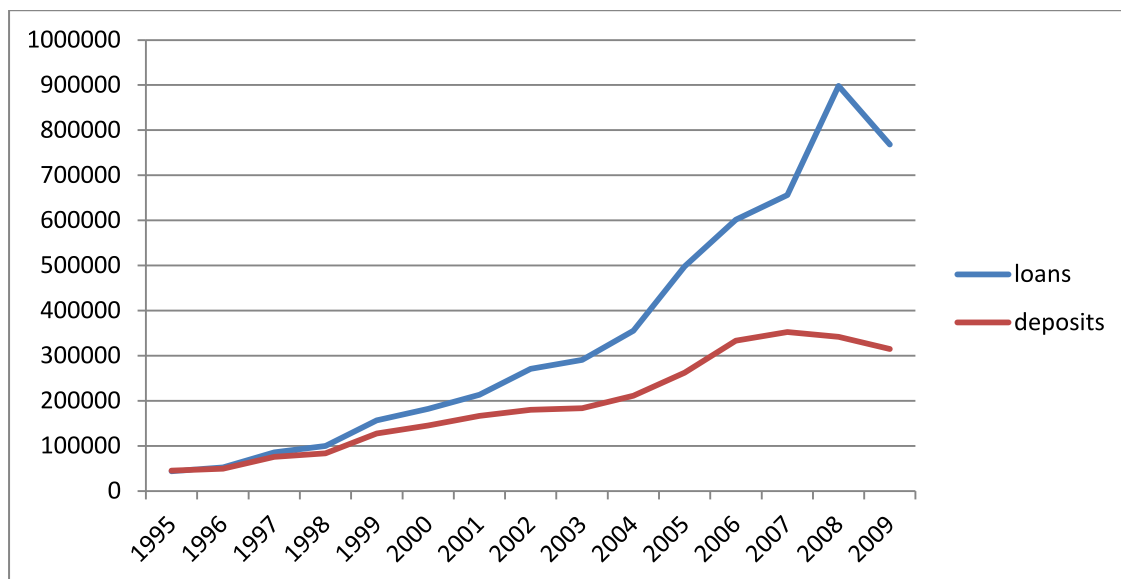


Figure 6.7 Ratio of Loans to Deposits in the Irish Banking Sector 1995-2009

Source: OECD Stan Data Set

Kelly (2009) stated that access to foreign capital was the crucial driver of the credit bubble which emerged in the 2000s. All the banking inquiries reported a similar finding, highlighting the central role of market-based capitalisation of Irish banks in the growth of credit markets. However, none of these publications tells how or why Ireland was so susceptible to Type 2 financialisation. A senior figure from the Irish Central Bank pointed to

the need to understand where the money had come from and how banks accessed the money as being central features in understanding the funding of Irish banks.

> I think you need to look more beyond simply saying, well they got a lot more leverage and their balance sheets got a lot bigger. The big issue is where is the money coming from and how were they able to do it?
>
> (CB 2/IRL: Senior Figure Irish Central Bank, 28/02/2017)

Indeed the source of funding for Irish bank based financialisation has been a point of contention within both the media and the academic literature. The outbreak of the banking crisis engendered a common perception of evil German bondholders who flooded Ireland with cheap money seeking to profit from the housing boom. The real picture of what took place was more complex, and while the process was a transnational one, it was also shaped by the Irish financial system in a number of critical ways, suggesting that the process was less hierarchical between the core and periphery than outlined by the current literature (Lapavitsas & Kouvelakis, 2012, Stockhammer, 2012).

Recent empirical work by Coates & Everett (2013) demonstrates that it was strong ties to UK markets which enabled the emergence of the Irish funding gap. The authors outline that throughout the 2000s the UK was the predominant source of foreign funding for the Irish banking system, representing 77 % of foreign funding by mid-2008 (Coates & Everett, 2013). After the UK, creditors in the US and offshore centers accounted for the most substantial shares of foreign funding at 13 and 5 %, respectively by mid- 2008. Of this 77 % of funding located in UK banks, 40 % was located in un-affiliated banks, leaving 37% being accounted for by banks affiliated to Irish Domestic banks and foreign banks operating in the Irish domestic market (Coates & Everett, 2013). This suggests two critical things about the Irish funding gap; firstly Irish banks sought out funding in their long-established ties in the UK

market within a network of affiliated banks. Irish banks have long-established businesses in the UK with the big two, Allied Irish and Bank of Ireland both running substantial UK businesses. Secondly, it suggests that foreign banks operating in domestic markets have been the other critical source of market-based funding. Lane (2015) agrees with this argument and adds that foreign banks operating in the Irish domestic markets have played a key role in funding the Irish credit boom.

The story, however, is even more complex and global than these figures suggest as the large English banks which funded the Irish credit boom were in turn funded in US money markets. Everett (2015) conducted an empirical analysis of the effects of pan-European global banks on the flow of credit onto the Irish economy and found that by leveraging in US money markets, these banks became a transmission mechanism for global liquidity onto Irish credit markets. Central to this transmission was the value at risk accounting practices introduced by the Basel 11 accord which accompanied the formation of the single market. Global banks were able to leverage internationally by raising funds in wholesale money markets, and subsequently lend it into domestic markets. Everett's (2015) empirical findings show a direct correlation between the leverage of pan-European Global Banks in the US money markets and the flow of capital into Irish banks. This confirms the findings of Adrian and Shin (2008), who found that global banks were crucial to the transmission of global liquidity into national credit markets and that this process was enabled by the active management of their balance sheet following *value at risk* accounting.

New connections between European banking sectors were the transmission mechanism over which financialization flowed across space. Bohle (2017) suggests that peripheral countries such as Ireland, Iceland and Hungary experienced a dual financialisation, in which both banks and capital crossed borders and points to imbalances created by the Euro as explanatory. Ó Riain (2014) also points to the role of banks as the conduit for

financialisation and along with a range of other authors such as Lapavitsas (2012) suggests that core banks played a crucial role in funding Irish financialisation. In this respect, Ó Riain (2014) highlights the role of the rating agencies in transforming peripheral economies into a 'solid investment' for European banks. However, the current thesis, while acknowledging the role of European banks, particularly in the early phase of the bubble, finds that many of the connections necessary for the flow of capital were long established between the Irish and the UK banking sectors.

The real shift in these global banks operating in the UK was the alteration of accounting standards contained within Basel 11. While Hardie et al. (2013) outline the transformation of banking caused by this shift; pointing to *marked to market pricing*, they fail to capture the central role played by housing within the flow of capital which the new accounting standards produced.

In summary, the foreign funding of Irish banks was a complex intersection of national and transnational processes which linked Irish banks to the UK and European banks which in turn, were linked to US banks. The processes of EMU, in particualr financial integration, was central to this in two fundamental ways; firstly by facilitating the free movement of capital and financial services and secondly by altering accounting standards which allowed giant banks to leverage in global markets. The primary conduit for connection to this global process was the UK to whom Ireland had long established ties, with both large Irish banks operating in the UK market and a long history of Irish banks using UK money markets.

It was this change in the behaviour of global banks which enabled Krippner's (2011) final condition for financialisation, capital flow. Unlike the American story where high-interest rates attracted foreign capital, enabled by America's status as a global currency, the Irish story is one of the low-interest rates causing rising asset values, which attracted the

attention of global banks. These global banks enabled by the process of financial integration initiated two forms of financialisation; the first was to cross borders physically, and, the second was to invest heavily in the Irish banking sector through interbank lending.

The UK was at the forefront of European bank based financialisation and contained some of the largest, most internationalised banks in global banking. Indeed, recent work by Cullpepper and Reinke (2014) flies in the face of standard explanations of financial power and suggests that UK banks were comparatively more powerful than their US counterparts and this power emanated from the international character of their business model. Looking at the financial times list of the Global Banks reveals that in 2008 8 of the top 50 and 3 of top 5, largest banks in the world were located in the UK. The largest of these, RBS was a major player in the Irish market. Ireland, therefore, was connected to the nation that was at the forefront of bank based financialisation. These connections came into effect during a period when rising asset values posed a perfect opportunity for these large banks to benefit from economies of scale through market-based activity.

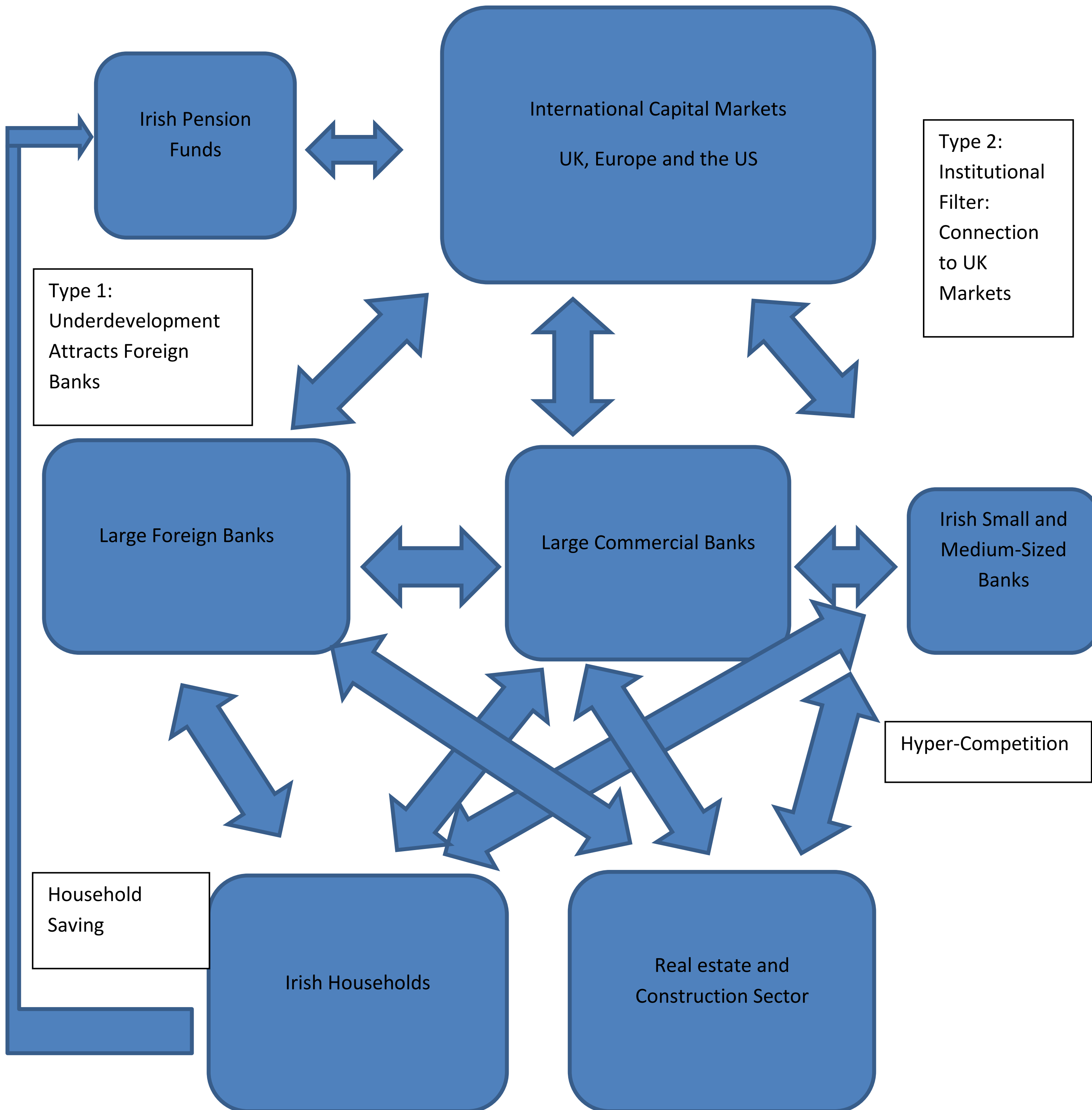


Diagram 6.1 Irish Financial Sector Funding 2001-2007
Financialisation Type 1 & 2
Irish Pension Funds
International Capital Markets
UK, Europe and the US
Type 2: Institutional Filter: Connection to UK Markets
Type 1: Underdevelopment Attracts Foreign Banks
Large Foreign Banks
Large Commercial Banks
Irish Small and Medium-Sized Banks
Hyper-Competition
Household Saving
Irish Households
Real estate and Construction Sector

Varieties of Residential Capitalism

The theory of varieties of residential capitalism is unable to explain why familial housing systems experienced such profound growth during the 2000s (Bohle, 2017). The intersection of Type 1 and Type 2 financialisation with a transforming familial housing system explains the rise of Irish mortgage markets. Type 1 provided increasingly cheap and risky debt through product innovation and Type 2 provided an abundant source of capital to fund the credit growth. In this respect, the influence of foreign banks is clear driving developments on Irish credit markets with a series of new loan types aimed at specific tenure groups. By capturing change in the Irish financial sector, these two types of financialisation update the theory of varieties of residential capitalism (Bohle, 2017).

During the 2000s BTL investors became the critical driver of Irish mortgage markets. The intersection of financialisation and the transformation of the Irish familial housing regime from a socialised to marketised system explains the emergence of the BTL phenomenon in Irish mortgage markets in a number of crucial ways. The Irish familial system contained a high proportion of mortgage-free properties, which experienced significant capital gains during the 1990s through the marketisation of Irish housing and mortgage markets. Combined with the shortage of housing, this produced a dynamic where the current housing tenure had an advantage in the market and turned to speculative investment in a climate of spiralling house prices.

The BTL sector in Ireland showed the most significant growth during the boom period of 2002 -2008, rising from 18.8 % in 2004 to 26.9% in 2008 (Norris, 2016). Figures for 2013 reveal that at that time there were 145,530 outstanding BTL mortgages with a combined value of 29.7 bn, making up a total of 22% of all residential mortgage loans (Lunde and Whitehead, 2016). Figures for the composition of the rental market give further insight

into this process, at present, the market is dominated by private landlords, of which 65% own one property, and 17 % own two properties (Lunde and Whitehead, 2016). During the boom period over a quarter of all mortgages taken out were to buy a second or third home. An Irish housing expert reflected on the crucial role played by BTL investment in the Irish housing bubble:

> The significance of it is not understood. I mean the buy to let was the main driver of the mortgage boom, and people don't understand that.
>
> (Uni 1/IRL: Academic Expert in Housing & Housing Finance, 25/01/2017)

Investing in a property at this time merely made good economic sense. Interest rates were incredibly low, and therefore the yield on a property was better than the yield on other investments, and there was also capital gain on a property through rising asset values. Furthermore, BTL investors were already homeowners who had experienced significant capital gain on their primary residence and therefore their experience of property investment was a positive one. An Irish banking expert pointed out how capital gains shifted private individuals towards property investment:

> But of course, it wasn't because we were just completely over value. I always think it was better for, let's say the guy who bought a house in Terenure or Templeogue even, he bought a house in the '90s for 100K or 110K. When I came back that kind of house was about 110K or 120K. He did that in '95 or '96. In 2003 he sold that for 400K, he had made 300K and he thought he was a fucking genius. All of a sudden he is an investor; he is not just a guy who lucked out because of the madness.
>
> (Finsec 3/IRL: Senior Employee in Commercial & State Banks, 10/062017)

Existing owners had an advantage over first-time buyers during the housing boom, as they were able to use their property as collateral and tap the capital gains which rising house prices had produced. Furthermore, the banking sector enabled the rise of BTL investment by allowing borrowers to take out both increasingly large and risky loans, with deferred amortisation. Doyle (2009) outlines that BTL investors dominated the interest only segment of the market. BTL investors were also facilitated by a range of equity withdrawal loans which enabled them to raise the vast deposits necessary for home purchase. This advantage in the market crowded out the FTB's a development which the BTLs subsequently profited from as those crowded out turned to rental markets. The influence of foreign banks in this dynamic is clear as they were the key product innovators on Irish credit markets.

The dynamics of the ever rising demand created by the BTL sector combined with the limited supply housing in Irish markets caused escalation in house prices far beyond its EU counterparts. These developments led to a crowding out of FTBs. In the period between 1996 and 2006, the ratio of average industrial earnings to house prices increased from 6.0 to 9.9 (Norris & Coates, 2014). This meant that by 2008, 29% of the average wage was required to service a mortgage on an average loan. The rise in house prices at such an extraordinary rate pushed owner occupation beyond the grasp of many households in Ireland. This explains the drop in the level of mortgages granted to buy a primary residence. During the period 2002 – 2008 mortgages for principle home purchase decreased from 80% of the total amount of loans to 71.9 % of all loans as FTBs were being crowded out of the market by the BTL segment. Figures on the size of new loans add further support to this view, in 2002 only 2.3 % of mortgage loans exceeded 250,000 euro, by 2008 this figure had increased to 41% of all loans. Given that the mean industrial and construction sector earnings in 2008 where 33,000 and 42,000 euro per annum respectively, homeownership was outside the grasp of a significant portion of the population.

Banks, however, did not just responded to the needs of the BTL sector; they also sought to capitalise on the increasingly pressurised FTB sector and indeed their parents. Furthermore, banks sought to capitalise on an increasingly difficult market by allowing parents to access the wealth they had built up through capital gains and gift loans to their children to get them on the property ladder through a range of equity release loans. In 2005 Ulster bank (RBS Owned Bank) introduced the first 100% mortgage to the Irish market and the other banks soon followed suit. Similarly to the tracker and other variable rate products, the introduction of these products was driven by competition between banks in a climate of ever increasing house prices. The justification offered to the banking inquiry (2015b) by Ulster Banks executives was that first-time buyers were using other modes of finance to access the deposit for a house and it was thought that the 100% mortgage would increase access to this section of the market. The regulatory imprudence which enabled this practice was contained in Basel II which placed no limits on the percentage of a mortgage that a bank can grant to the borrower; instead, it stipulates higher capital requirements for banks who grant mortgages with a loan to value ratio (LTV) over 75%..

These loans were attractive to banks as they typically charged a higher interest premium on loans with an LTV above 80% sometimes as much as 20 basis points. Doyle (2009) finds that despite the higher premium the loans were popular, particularly with the first time buyer segment of the market. Her works draw on data from the department of the environment, and while it does not give details on what percentage of the market was accounted for by these loans, she points out that between 2004 and 2008 they became increasingly popular. Looking at figures for the overall LTV ratios for first-time buyers in Ireland outlines that it sits at 83% which is above the Euro area average of 79%. The figures point to the impact of 100% LTV loans on the shape of the overall market for first-time buyers and make clear that there was a marked deterioration in lending standards,

furthermore, it is clear that this deterioration was profitable to banks as they gained a higher premium (Doyle 2009).

Alongside this crowding out of first time buyers, the social sector was also under increasing pressure at this time. In the 1990s there was a massive increase in the demand for rent assistance as those on the waiting list for social housing accessed alternative accommodation in the private sector. This process continued unabated in the 2000s, as evidenced by both the figures for rent assistance and waiting lists for social housing both of which had reached record levels.

The effect of the crowding out of first-time buyers and the increased demand for social rental housing caused by the lack of supply in social housing put increased pressure on rental markets. This pressure emerged in two key developments, firstly in produced a rapid increase in rental prices and secondly in produced a highly polarised rental market between the private and social rental sectors. During the 1990s Private rental markets in Ireland grew for the first time since their inception, in 1991 private rental accounted for just 8 % of the total market by 2011 this had risen to 20%.

The growth of both of these groups of housing tenure in Ireland has proved to be an investment opportunity for the current familial housing tenure that have used their existing housing wealth as a means to access credit and enter the market as a new breed of small landlords. The failure of the housing system to adequately provide for two particular groups of housing tenure has provided the dominant tenure, facilitated by the banks, with the opportunity for housing speculation.

The Danish case offers the opportunity for comparison with a system where low and medium income families have a feasible, affordable housing tenure available. While it has included similar trends of intergenerational re-distribution of wealth, it has kept the weakest

members of society primarily outside of the vagrancies of financialisation in two crucial ways. Firstly, it has protected the most vulnerable tenure by providing an adequate supply of social housing and maintaining the production of the social housing stock. Secondly, by regulating the capacity to speculate on rental markets, through tax policies, the Danes ensured that BTL speculation did not emerged in the Danish economy.

Furthermore while undoubtedly the FTB sector in Denmark has come under increased pressure and indeed similarly to Ireland many have turned to their parents as a means of access to the market, there has not been the same crowding out effect as occurred in Ireland. Despite all the flaws that one can find with IO loans in Denmark, they have allowed FTBs to continue to enter the market all be it in a disadvantaged position from their older counterparts. Furthermore, those who have been crowded out were able to access the well-developed, high quality, affordable and not for profit housing sector which provided for their housing needs.

Comparative Summary

In Denmark and Ireland, the politics which shaped developments in the 2000s had occurred somewhere between the 1980s and the 1990s when institutional change aimed at overcoming economic crises altered the functioning of both financial systems. In hindsight, the decision by the Danish Social Democrats to use mortgage markets to stimulate demand was a huge risk. By changing the meaning of debt in Denmark through alteration of the original ‘balance

principle' and subsequently introducing ARM loans the Social Democrats had changed Danish homes into cash machines which provided easy access to cheap credit for the upper-income deciles. These cash machines drove growth in the financial sector, which having become increasingly powerful used political clout and began to influence the trajectory of change within the sector towards more market-based activity. Changes introduced in Ireland in 1989 had radically altered the Irish mortgage model. What little there was of a coordinated or alternative banking sector, was transformed into a highly marketised system overnight. It is striking that the Irish system required no further institutional change within the sector to produce a bubble of epic proportions. However, the housing bubble offered an alternative source of growth and the Fianna Fáil / Progressive Democrat coalition supported it through its progression with pro-cyclical tax and housing policies.

Comparative Summary 2001-2007		
	Denmark	Ireland
Politics	Intentional use of housing to drive growth in the economy. Enabled by earlier process of liberalisation combined with a final phase. The politics of financialisation were enabled by earlier changes made by the Social Democrats to kick-start growth in the 1990s.	Intentional use of housing to drive growth in the economy which required no further liberalisation. The politics which enabled the bubble were located in the late 1980s and 1990s
Banking	Growth from a well-developed starting point, moving from a passive towards a market-based system with institutional buffers	Growth from an underdeveloped starting point, moving from a passive towards a market-based system with no institutional buffers.

	Further liberalisation of mortgage banking required for product innovations. Interest only loans drove the market. Mortgage and commercial banks connected through coordination, which produced a nationally unique form of inter-bank lending limiting connections to the wall of money. Primarily nationally funded mortgage boom, commercial banks, pension funds and small and medium banks supply buffer against 'the wall of money.' Funding gaps limited to small and medium-sized banks.	No further liberalisation required. The entry of foreign banks drove market conditions. Mortgage and commercial banks connected through hyper-competition which deepened the connections to the 'wall of money.' Extensive use of market-based capital and deep penetration of foreign banks. No buffers against foreign capital. Strong ties to the Uk system. Funding gaps spread broadly across the system.
housing	Well, stocked corporatist housing system. Medium housing tenure. Debt in upper-income deciles. Growth in tenure rates. Housing system transformation. neo-liberal housing policy led to erosion of the welfare state	Poorly stocked familial housing system. High housing tenure, with large capital gains. Debt spread widely through the deciles. Contraction of tenure rates. Housing system transformation. Neo-liberal tax policy led to an investment boom in housing.

Varieties of Bank Based Capitalism	Developed, coordinated, market-based banking model with institutional buffers. Coordination was the key dynamic within the system. Enabling the growth of finance while providing institutional buffers against the wall of money. Development and coordination combined to provide a buffer against foreign banks and capital	Underdeveloped, liberal, market-based banking model, increased presence of foreign banks with institutional filters. Competition was the key dynamic within the system, driving product innovations, and the entrance of foreign lenders. Under-development and competition drove the entrance of foreign banks and the need for international capital. Enabled by long-established connections to UK markets.

Table 6.0 Comparative Summary

The general trend of financialisation has included a turn towards market-based funding and interbank lending. This process is evident in both cases, however once again the process has distinct national characteristics. *Institutional buffers* in the Danish cases limited the role of foreign capital and the *capacity to coordinate* led to the development of a nationally distinct form of *inter-bank lending*. Ireland contained no such buffers. Indeed, strong ties to the UK system and underdevelopment made Ireland ripe ground for speculative investment by global banks. The penetration and reach of both types of financialisation were deeper and broader in the Irish system as the competitive dynamics driven by Type 1 financialisation linked to Type 2 which provided the capital.

	Denmark	Ireland
Financialisation 1	Danish banks are *carriers* of this type of financialisation into Irish and Baltic markets.	Irish markets are *receivers* of this type of financialisation. Uk, Nordic & Dutch banks.
Financialisation 2	Type 2 (A) Small and medium-sized banks act as a *buffer* containing worst of problem, insulating large banks. Type 2 (B) Mortgage bond markets act as *buffer*. Nationally specific form of inter-bank lending. Pension funds act as a *buffer*.	Foreign capital spread broadly and deeply throughout all of the banks. No institutional *buffers*. Strong historical ties to UK money markets *filter* capital towards Irish banks.

Table 6.1 Financialisation Type 1 & 2 in Denmark & Ireland

Global banks were the principal transmission mechanism for Type 2 financialisation. It was changes within these global banks accounting standards which enabled them to leverage in short-term money markets and become the key transmission mechanism for capital flow across Europe. It was these changes which explain why neither country saw significant financialisation until the 2000s when investment strategies with these banks made capital an abundant resource in the periphery.

Chapter 7: (2008-2015)

Globalised Financial Power & Varieties of Market Based Banking during the GFC and into Recovery

Introduction

Chapter 7 takes Denmark and Ireland from the outbreak of the GFC, through the unfolding crisis to the start of economic recovery in 2015. The previous chapters untangled the political dimensions of the ascending phase of financialisation. The current chapter represents a break in this analysis, as the crisis period marked a turning point. Therefore, rather than ask how politics has shaped the financialisation process, the current chapter employs the concept of financial power to explain the sidelining of national politics in the wake of the global financial crisis. Despite the very different effect of the GFC on national banking sectors, finance has remained powerful in both economies, and efforts to protect the sector have ultimately led to periods of austerity. In seeking to explain this turn of events Chapter 7 outlines two different types of globalised financial power. In Denmark, a new type of structural financial power was created by the limiting effects of a heavily indebted middle class which is highly exposed to international markets. A second type existed in Ireland, created by the almost total collapse of the banking sector, combined with deep financial integration, forcing the hand of the ECB to provide extraordinary funding. In both cases, financial power was linked to the use of market-based funding and despite the empirical differences has ultimately limited the capacity for state action through the increased dependence of national economies on market finance.

The chapter returns to the crucial empirical puzzle: Why is Ireland's collapse so much worse than Denmark's? Looking at the varieties of market-based banking, and the various

institutional *buffers* and *filters* which characterised the two cases reveals a story of the stabilising effect of coordinated capitalism versus the volatility of the liberal mode. Greater stability was produced in Denmark by the firewalling of international capital within the small and medium-sized banks and the capacity for action contained in a nationally funded model of interbank lending within the mortgage banks. While Denmark was able to intervene in its mortgage model, the foreign banks and foreign capital which had flooded into Ireland during the 1990s and 2000s, withdrew just as quickly as they had entered and effectively paralysed the Irish banking system. Ireland had been a receiver of Type 1 financialisation, and Type 2 had been broader and deeper than their Danish counterparts.

In closing, the chapter reflects on where these two systems are now and paints a picture of gradual institutional transformation in Danish finance versus rapid upheaval and return to the previous model of finance in Ireland (Streeck and Thelen, 2005). Denmark has shifted over time towards a model where large banks play an increasingly important role, and mortgage markets are more and more exposed to market forces. Ireland, on the other hand, has retreated from market-based banking and returned to a passive bank-based model, where a small number of relatively powerful banks practice credit rationing. However, new financialisation processes are underway in the Irish economy, and transnational capital has begun investing directly into the built environment.

Denmark: 2008-2015

The Politics of Growth: Globalised Financial Power

The Danish financial sector managed to make it through the financial crisis without experiencing the kind of widespread collapse witnessed in other small European economies, such as Ireland, Iceland, and Greece. While a large number of small and medium-sized banks went to the wall, the largest banks survived as did the mortgage banks. Furthermore, the financial sector established a fund and paid for its own bailout. The Danes, it seemed, were not as subjugated by financial power as other European nations such as Ireland (Grossman and Woll, 2014). Indeed the standard explanation of the various bailout programs, argues that coordination was a central feature of the financial sectors response to the financial crisis, suggesting that it limited financial power and allowed the state to impose losses on both the financial sector and senior debtors (Grossman and Woll, 2014).

These developments meant that Denmark emerged from the financial crisis with comparatively healthy state finances (Kristensen, 2015). Given the drop in both consumption and exports experienced during the global recession, it seemed likely that the Danes would revert to classic Keynesian demand stimulus to support the economy through its downslope. In 2008 with the outbreak of the GFC growth cycles reversed in the Danish economy as both exports and consumption went into decline. Exports dropped by as much as 20 %, which caused a significant spike in the unemployment rate, rising from 2 % to 7%. Given the structure of the Danish welfare state, this put increased pressure on state finances. The fall in consumption rates due to both rising unemployment and uncertainty within the financial system exacerbated this situation. This uncertainty was reflected in the behaviour of households who in the period 2009 to 2011, increased their saving rate to 14.2 % from an average of 5.7 % in 2008 (Andersen, 2011).

Given these challenging national conditions counter-cyclical policies seemed even more likely when the Liberal-Conservative coalition which remained in power during the GFC, was replaced by a new Social Democratic government in 2010. However, somewhat surprisingly, rather than replace the drop in private demand caused by the housing bust with a boost to public spending the newly elected Social Democrats reduced state spending and used the EU financial pact as the justification for this approach (Kristensen, 2015). Finance, it seemed, had a type of power that was not captured by the institutional descriptions of the limiting role of coordinated capitalism (Grossman and Woll, 2014).

Something had shifted in Denmark between 2008-2010 which pushed the Social Democrats towards increasing consideration of the financial sector within their fiscal policy and the form of austerity which they implemented favoured the financial sector (Kristensen, 2015). This shift suggested that standard explanations of financial power did not capture what was taking place within Danish politics at this time and that new forms of financial power, which go beyond standard institutional explanations, would be needed to explain the turn to austerity despite the healthy state finances (Grossman and Woll, 2014). Grossman and Woll (2014:574) argue that;

> ‘countries with close one-on-one relationships between policymakers and bank management tended to develop unbalanced bailout packages, while countries where banks negotiated collectively developed solutions with a greater burden-sharing from private institutions.'

Looking at what happened in Denmark and Ireland during the financial crisis and its immediate aftermath poses a puzzle about what types of financial power explains events in the crisis and post-crisis period. The puzzle is contained in what happened in these two countries between the initial response to the financial crisis, which looked very different, and

their subsequent adherence to periods of austerity in line with the EU financial pact which looked strikingly similar (Table 7.0).

Institutional vs. Globalised Financial Power				
	Bail Out	Sectors Performance	Accepts/Rejects Financialisation	Fiscal Position
Denmark	Bank Funded (Coordination limits financial power)	Crisis/Return to Profit	Accepts with Further Process.	No Crisis (Fiscal Consolidation Global Financial Power)
Ireland	State Funded (The power of inaction)	Crisis/Creeping Nationalisation.	Accepts but without Credit.	Crisis (Fiscal Consolidation Global Financial Power)

Table 7.0 Institutional vs. Globalised Financial Power

Part of the motivation for implementing austerity in Denmark was a desire to ensure the safety of middle and upper-income deciles households through the maintenance of low-interest rates. While the GFC forced other European nations to de-leverage, the survival of Danish banks through a deepening of the financialisation process tied the state to a set of policies aimed at keeping interest rates low, and therefore, necessitated a period of austerity. While during the 2000s the Liberal-Conservatives were guided by the politics of financial excess, by 2010 the Social Democrats hands were increasingly tied to the politics of financial survival. Portraying fiscal responsibility became crucial to the survival of the Danish mortgage model as new forms of globalised financial power increasingly dominated state politics (Culpepper and Reinke, 2016). A Senior figure from the Danish Pension Sector highlighted the pressure created by consistently low-interest rates and the difficulties in managing the risk:

> It is worrying as an economist for sure; it is not the healthiest system in my eyes to have such low-interest rates for a long period of time. You have to put a lot of pressure on the financial resources to control risk all the way around.
>
> (Finsec 7/DK: Senior Figure Danish Pension Sector, 25/012016)

Austerity focused primarily on the public sector and the Social Democratic party which had historically supported, both the welfare state and full employment policies, reduced Public sector employment by 25,000 jobs (Kristensen, 2015). Furthermore, the Social Democrats implemented a series of spending cuts on the municipalities which carried substantial penalties if not adhered to. Kristensen (2015) takes stock of these changes and links them to the rise of neo-liberal ideas within the Danish elite. The author (2015) points out that since the crisis the state has focused on three key areas, the financial system, (in particular, interest rates and protecting mortgage holders), increasing productivity through labour market and benefit reform, and finally limiting government expenditure which was under pressure due to increases in unemployment levels. The core of his argument is that the situation in Denmark is far more stable and balanced than the Danish state would have people believe. He suggests that the state is actively constructing 'ideas' through selective use of data which he believes paints a skewed picture. He questions much of the data being used to justify the turn to austerity and the defense of the financial sector, suggesting that alternate data paint a very different picture of state finances and the financial situation. Therefore he is puzzled by the state's response and links it to the rise of neo-liberal thinking.

> It is no enigma that the Leftist constituency behind the Social Democratic-led government is confused. Austerity for the unemployed, welfare-dependent and pensioners, while at the same time generous liquidity for banks, tacit subsidies to

> home-owners and globally offensive state-owned enterprises. What kind of policy is that? (Kristensen, 2015: 380)

Kristensen (2015) argues that the figures on debt are misleading, that Denmark has a substantial net international investment position which balances the private debt. However, his approach of comparing assets contained in the financial sector with liabilities contained in households is misleading. The assets of the financial sector do little to balance the increased market risk which underpins the vast levels of household debt in Denmark.

While Kristensen (2015) recognises that 'safe haven' status was important to the Danes during the financial crisis, he understates just how important it was and continues to be. Safe haven status was crucial to the survival of the financial sector during the GFC. Had it not emerged Danish mortgage banks would have been faced with a very different crisis as would Danish households. The phenomenon supplied 20% of the total funding for Danish mortgage bonds during the crisis period and has not reduced since that time (figure 7.0). So while Kristensen (2015) acknowledges its role in keeping interest rates low for Danish households he misses its centrality to the funding of the Danish mortgage model. It is the dependence of Danish financial markets on safe-haven status for funding alongside the need for low-interest rates which has tied the hands of the Social Democrats and limited their options for fiscal stimulus. A senior financial regulator pointed out the benefits and risks of being a small open economy, highlighting the uncertainty of consistently low-interest rates:

> I mean as a small open economy we are very exposed to the rest of the world and of course when looking at the financial sector you could say that there are also some positive impacts from abroad, mainly the low-interest rates and this safe haven effect was good for a number of things. Then of course you could then worry about what

happens if interest rates stay very low for a long time? Do people forget that money has a price? But that is also a global worry you could say.

(Finsec 3/DK: Senior Financial Regulator, 27/03/2014)

While Kristensen (2015) looks for the neo-liberalisation of Social Democratic politics, the structural power that financialisation has granted the Danish financial sector is clear. Cullpepper & Reinke (2014) argue that the leading accounts of variety in the bank bailouts misinterpret the true nature of financial power. They argue that rather than stem from lobbying and political ties, financial power was structural. The power of banks for Cullpepper and Reinke (2014) emanated from the international characteristic of their business model and the threat of market exit. The real indicator of financial power for Cullpepper and Reinke (2014) was the capacity of healthy banks to avoid the wishes of the state. Healthy Banks they argue do not want to take part in bailout programs as they damage their future business opportunities. This perspective paints a very different picture of the American and UK bailout programs, suggesting that UK banks were more powerful than their US counterparts based on the internationalised nature of their business model.

While during the initial crisis the limited role of international capital and the institutional buffers contained within the Danish system limited the power of finance, in the post-crisis period Denmark's increased dependence on international capital and sensitivity to interest rate fluctuations have granted Danish finance a new type of structural power over the state. While Danish financial power did not emanate from the threat of market exit, it did share some characteristics with Culpepper and Reinke's (2014) more international focus. Similar to Culpepper and Reinke (2014) the power that Danish finance holds is structural, however rather than stem from the international character of their business model, the power

emanated from the increasingly international character of their funding model and a further process of financialisation of Danish mortgage markets.

The build-up of household debt through the emergence of mortgage price Keynesianism has tied the interest of an increasingly powerful financial sector to the interests of a heavily indebted middle and upper class. Surviving the financial crisis meant the debt became increasingly funded by international and speculative capital (Diagram 7.0). Were Danish households to find themselves in a position where they could no longer afford to pay the debt, the ripple effects across the Danish financial sector and the real economy would be immense (Andersen, 2011). Danish mortgage and commercial banks, mutual and pension funds are all heavily invested in the Danish mortgage market. The task of ensuring stability within the middle and upper-income deciles is the task of ensuring Danish stability. The collapse of the Danish mortgage market could bring the whole system to its knees. Gone are the days of the potato diet, when allowing the mortgage market to collapse meant people were taking a hair-cut, letting it collapse today could unravel the whole financial system and have severe implications for the real economy.

Therefore the state, no matter what colour their politics, was left with little option but to protect homeowners through neo-liberal reforms. The maintenance of safe-haven status through fiscal responsibility was essential to both the credit and funding side of the Danish mortgage market. This is not to defend the actions of the Danish state instead it serves to highlight the structural power of finance which has emerged in the Danish political economy and how it continues to shape the politics of growth. The fact that the Danish state has used the loss of productivity as a justification for welfare retrenchment seems unsurprising. One thing is clear, given the nature of mortgage markets, or indeed financial markets more generally it is not possible for the state to admit or even suggest that there may be something rotten in the state of Denmark. Financial markets are whimsical and at the first sign of

trouble, investors, mainly foreign investor will take flight. A senior Danish Central Banker drew attention to the sensitivity of financial markets:

> As soon as you become a central banker you have to be much more careful, financial markets react to everything you say.
>
> (CB 1/DK: Senior Employee Denmark's National Bank, 08/11/2013)

During the series of interviews, it was apparent that the interviewees were very reluctant to speak about the level of debt in the Danish economy and when it was mentioned the level of wealth was consistently asserted as being a critical balance for this debt. The reluctance to speak openly about the risk was linked to market confidence and the need for the Danes to continue to show the world that their model is sustainable because the day the world believes that it is not sustainable will be the day that it will become unsustainable. A senior economist in the Danish pension sector reluctantly outlined what they felt was a mismatch between a fixed exchange rate policy and a proliferation of variable rate mortgage debt:

> And in normal times that is very good because when you change the interest rates, you get a quick response in the real economy. But if the interest rates change really quickly you will have a huge increase in the debt of the household owners. And one of my concerns is that, and I have to say this very carefully, to what extent is that consistent with having a fixed exchange rate we have seen when you need to defend the Danish Krone? Will you on the day that things are happening be able to, well you have to, you have to rise the interest rate, the leading monetary interest rate to defend the Danish Krone.
>
> (Finsec 5/DK: Senior Economist Danish Pension Sector, 25/01/2016)

Schwartz and Seabrooke (2008) argued that the rise of Danish mortgage markets and homeownership rates could erode support for the welfare state within the middle classes. However, what has transpired is that financialisation has limited the capacity of the state to stimulate demand through Keynesian policy. Both the funding and the price of credit hinge on ensuring Denmark's reputation as a 'responsible state'(Kristensen, 2015). Rather than reduce support for the welfare state in the middle classes, financialisation has structurally limited the capacity for state action.

In hindsight linking credit and consumption in the 1990s was a huge risk and it is apparent that in doing so the Social Democrats unwittingly unleashed a new market force onto the Danish economy. The outcome of these changes remains uncertain as the Danes are left sitting on a mountain of debt, the sustainability of which is highly questionable. Whatever the outcome of the debt burden, its capacity to shape the politics of growth is clear as Denmark's falls in line with European wide austerity and finance rules the day.

Structure: Type 2 Financialisation and Institutional Buffers

Chapter 7 now returns to the empirical puzzle, why was Ireland's collapse so much worse than Denmark's? The institutional *buffers* contained within the Danish financial system ensured its survival during the global financial crisis (Diagram 6.0). Type 2 financialisation was refracted through the coordinated institutions of Danish finance and produced two subtypes of the process one in small and medium-sized banks which shielded large banks and one in the mortgage model which both shielded other banks and allowed a greater capacity for action than standard wholesale funding models. The worst of the crisis (Type 2 Financialisation) was contained within the small and medium-size banks, which left large banks to assist in the rescue packages for smaller banks.

Furthermore, the mortgage model was primarily funded through national, affiliated capital, much of it in the large Danish banks, meaning it was more stable than other European models which relied extensively on international capital. However, survival was achieved at a cost and included an element of luck. Denmark benefitted from the comparative instability of other nations and achieved safe-haven status during the period of financial turmoil. This status caused the inflow of foreign capital into the Danish mortgage system which has fundamentally altered the Danish funding model and eroded its coordinated characteristics (Diagram 7.0).

In order to ensure the survival of Danish households, there was a deepening of the financialisation process on Danish credit markets and IO loans have assumed an even more significant portion of the market, leading to increased risk from rising interest rates (Andersen, 2011). While the products have increased risk, they have also ensured the credit remained cheap in the wake of the crisis and assisted Danish households in shouldering the debt. In the post-crisis period, 2010-2015, the market exerted a far more significant influence on both sides of Danish mortgage markets. Ultimately, surviving the financial crisis was achieved at the expense of an erosion of the coordinated characteristics of the Danish financial system through the increased presence of foreign capital and financialised loans (Diagram 7.0). While the Danes survived the most recent financial crisis, their ability to survive the next one through coordinated response has been severely eroded through the increased influence of markets.

Small and Medium Banks, Large Banks & Institutional Buffers

The small and medium-sized banks provided an institutional buffer which contained the worst of the crisis shielding large banks from speculative lending in the 2000s. This institutional structure allowed the Danish financial system to survive the initial liquidity crisis

and display a degree of stability that was not evident in the Irish case. This stability is attributable to the continued separation which existed across the various types of banks in the Danish economy, in particular, their dependence on different funding sources. Varieties of market-based banking mattered during the GFC. The stability of large banks meant that Denmark could weather the storm, as large banks provided support for the highly exposed small and medium-sized banks. While this unique structure provided stability during the crisis a further phase of bank failures and consolidation have led to the erosion of the coordinated characteristics of the Danish system and a higher concentration of power within the large Danish banks. Somewhat ironically the ability for collective action and negotiation during the financial crisis has transformed the Danish system away from its traditional structure of small and medium banks towards large banks.

Even before the outbreak of the GFC problems in Danish small and medium-sized banks were apparent as they struggled to raise liquidity in international markets (Cartensen, 2012). In July 2008 problems in the commercial banking sector came to a head when the eighth largest bank in Denmark, Roskilde bank, ran into severe difficulty. Roskilde had been one of the most aggressive banks during the financial boom and had significant exposures to the construction and real estate sectors and had a massive deposit deficit (Ostrup, 2010). The problems in the bank caused a traditional run on the bank as customers withdrew their deposits and Moody's reacted downgrading the bank status (Rigsrevisionen, 2009). The bank sought a merger with another bank as a solution, but no bank could be found and in August 2008 the assets and liabilities of Roskilde where transferred to a new company jointly owned by the state and the Danish financial sector.

After the collapse of Roskilde international funding became increasingly difficult to source for Danish banks and with the collapse of Lehman Brothers on the 15th September international funding collapsed (Ostrup 2010). The increasingly tricky international situation

and the issuing of a blanket guarantee in Ireland which did not cover Danske bank prompted the Danish state to issue a blanket guarantee of all liabilities within the Danish banks (Finsec 1/DK). However, the state insisted that the Danish financial sector should pay for its own bailout. Following the collapse of Roskilde bank, Forstaedernes bank, Fionia bank, and Amagerbanken also ran into difficulty and eventually ceased to exist; in total 4 of the largest 15 banks in Denmark went to the wall (Abildgren and Thomsen, 2011).

The banking enquiry found that all of these banks shared a set of characteristics (Vækstministeriet, 2013). They all had massive deposits deficits, funded through international money markets, particularly aggressive credit growth during the boom period, and finally, they all had significant exposures to the rapidly declining construction and real estate sectors (Vækstministeriet, 2013). A Danish pension expert pointed to the centrality of small and medium-sized banks in Type 2 financialisation:

> Yes, I think the problem in Denmark compared to other countries, we have a special bank sector, before the financial crisis we had a lot of small banks, local banks, which lent an extremely high amount of money to developers. I think that some of the reports on the financial crisis say that it was a relatively small group of people with high-risk investments, buying property and selling to each other, and the small local banks didn't have the ability to control the risk
>
> (Finsec 7/DK: Senior Employee Danish Pension Sector, 25/01/2016)

In bank package 1 the Danish financial sector raised a fund to cover failing banks. The fund established by the financial sector amounted to 35 billion Danish kroner (4.7 billion Euro), of this 10 billion kroner (1.34 billion Euro) was a blanket guarantee. Alongside this, it was decided that the banks would pay the state for the two years Government guarantee and 15 billion (2 billion Euro) kroner was set aside for this purpose.

Furthermore, all dividend payments would cease for two years. Once the banking sector had agreed to these terms, the state agreed to issue a blanket guarantee of all deposits that were not covered by the insurance scheme. In total eight banks were wound down during bank package 1; Capinordic Bank, EBH Bank, EIK Bank Danmark, EIK Banki Føroya P/F, Fionia Bank, Gudme Raaschou Bank, Løkken Sparekasse and Straumur Burdaras Investment Bank hf. The total cost of the bank collapse was less than the contribution of the banking sector.

In February 2009 the second bank package, a recapitalisation scheme, was introduced and 50 banks took part in this scheme including some of the mortgage banks. The scheme involved the state buying bonds from the banks which would be repaid at a later date. If they were not repaid, the state would be free to sell shares. The total amount of the bonds purchased by the state under this scheme amounted to 8.2 billion euro (Campbell and Hall, 2015).

In 2010, the third bank package was introduced to replace the guarantee, and this was the first package that include haircuts for private investors. Under this scheme it was proposed that insolvent banks would be shut down for a period, and losses would be imposed on both creditors and depositors. During this period two Danish banks failed, Amagerbanken and Fjordbank Mors and losses were imposed on senior creditors (Campbell and Hall, 2015). These developments were received very poorly by international markets, and the Danish state responded by introducing a fourth bank package which aimed to return to the previous strategy of bank merger and acquisitions as the mainstay of bank resolution. A total of twelve banks were taken over or wound down during 2012. Finally, in March of 2012, the final bank

package was introduced and provided a bad bank facility to Danish banks, whereby they could transfer commercial real estate to the financial stability company.

The ability of the Danish financial sector to mobilise a coorodinated response to the GFC is well documented within the literature (Campbell & Hall, 2015, Grossman and Woll, 2014) However, while all of these authors have highlighted the ability to negotiate in one way or another, they all too have missed a dynamic central to the Danish financial system. The dominance of small and medium-sized banks in Denmark with strong relational ties to the construction sector provided an *institutional buffer* that protected the large banks by containing the worst of the crisis. A senior Danish financial regulator reflected on the containment effect of small and medium-sized banks and how it has led to greater concentration in the post-crisis period which favours the large banks.

> But apart from that, it is mainly a difference between the large and the rest. And if you see the write-downs throughout the period, the sort of relative size of the write-downs are up here for the small and medium-sized and down here for the large banks. And since we have quite a concentrated banking sector with 80 something % in the five largest. I mean it was mainly the small banks that wanted to be big, fast.
>
> (Finsec 3/DK: Senior Financial Regulator, 27/03/2014)

Therefore, while the initial liquidity crisis affected all banks both large and small, it was worst felt in the later, as was the subsequent asset crisis.

The improved situation in the large Danish banks and the containment effect of the small and medium-sized banks allowed the Danes greater capacity for action than their Irish counterparts. By 2012 all the large Danish banks had returned to profitability, although they struggled due to de-leveraging (Nationalbank, 2013). Had problems been spread broadly

across the sector, it is unlikely that the Danes would have had the capacity to impose losses on senior bondholders. So while Campbell and Hall (2014) suggest it was the presence of financial expertise within the thick institutions of Danish finance which enabled the coordinated response, it is clear that there was a structural capacity provided by the containment effect which underpinned any institutional action. It is also important to point out that bank package three was introduced at a time when the state and the financial sector had useful information about the situation in the small and medium-sized banks and therefore where aware of which banks would most likely fold during the process.

The survival of the Danish banking system was achieved at a cost of the reduction of its coordinated characteristics and a concentration of power within its large banks. In total Denmark lost 60 of its small and medium-sized banks and many others were merged with large banks. A senior Danish financial regulator highlighted the consolidation effect of the GFC, pointing out that the impetus towards the process shifted from necessity to choice on the part of the small and medium-sized banks:

> We went into the crisis with about 150 banks, and now we have 90 something. Of course, some of them failed, and others are taken over by the State-owned company, but we have seen a large number of merges also now. In the beginning, it was banks failed, but the last few years we have seen banks, where it is a more voluntary decision.
>
> (Finsec 3/DK: Senior Financial Regulator, 27/03/2014)

Over time financialisation as a process has produced an increasingly concentrated banking sector in Denmark and in doing so has eroded the coordinated characteristics of the system. Interestingly, the capacity for coordinated action and negotiation across the various types of banking was a central enabling factor in the concentration of power within the financial

sector. The process commenced in response to the financial crisis of 1987, gained ground in the 1990s, led to the merging of mortgages and commercial banking in the 2000s and has come full circle in the wake of the GFC with a further round of mergers. Financialisation has transformed the Danish financial system, reducing the number of small and medium-sized banks and increasing the size and power of the large banks. While these large banks, with one exception, remained outside of the speculative bubble, how they will behave during the next bubble remains to be seen. Recent scandals in the Danske banks Baltic operation suggest that these banks have moved a long way from their coordinated roots. One thing is sure the institutional buffer which protected them from the last period of mania have been reduced.

Funding (Mortgage Banks) Coordinated Bond Market & Institutional Buffers

While the Danish mortgage model survived the GFC without the need for state intervention, the changes in the funding model which ensured its survival have shifted the post-crisis model to a far riskier form of market-based banking. In this new form of market-based banking, the *inter-bank funding model* of the previous period was replaced by a model in which international capital and investment funds played a far more significant role. This model bears more resemblance to Hardie and Howarth's (2013) skittish financial investors than the affiliated, inter-bank model of the pre-crisis period. While during the crisis period, the ‘wall of money' came to the rescue of the Danish system in doing so it has eroded its coordinated characteristics, limiting the capacity for future intervention in the market.

The national form of Type 2 financialisation contained in the mortgage model allowed the financial sector the institutional and structural capacity for action during the global liquidity crisis. Furthermore, while a range of authors have argued that Ireland and Denmark had similar exposure to the financial crisis, the separation of commercial and mortgage bank funding meant the exposures were not comparable (Campbell and Hall, 2014, Grossman and

Woll, 2014). The Danes actively managed the funding of their mortgage model since its inception, keeping it separate from commercial funding thus ensuring that the vast bulk of the capital to fund the model was national in characteristic (Diagram 6.0). Alongside this, the funding model was connected to a group of large relatively stable banks that stayed outside of the speculative activity which was firewalled within the small and medium-sized banks.

The emerging global liquidity crisis had a visible impact on the Danish mortgage bond market. This development was further complicated by volatility in Danish currency markets which entailed the raising of interest rates to avert a currency collapse. Despite all of this, the mortgage sector opted not to be covered by the guarantee (Vækstministeriet, 2013). The ability for coordinated action within the mortgage bond market enabled the financial sector to negotiate the crisis, and the market continued to function.

In 2007, the drop in house prices caused foreign investors to take flight from Danish bond markets. This development was exacerbated by currency unrest which broke out in 2008. Denmark's failure to join the final stage of EMU meant that during the GFC their currency came under increased pressure from speculators. This prompted the national bank to raise the interest rate on the 7th of October 2008, the next day the ECB lowered the rate for all participating countries. The high proportion of variable rate loans, tied to the short-term interest rate contained in Danish bond markets had suddenly and unexpectedly become unstable. This was further exacerbated by the likelihood of a currency devaluation in the face of external pressure, and as a result foreign capital took flight from Danish mortgage bond markets. Between 2007 and 2010 foreign investors decreased their holdings of Danish mortgage bonds from 14% of the total market to just 9%, falling by 3% in 2008 alone (Figure 7.0). The flight of foreign investors posed a real threat to the stability of the Danish bond market.

The pension funds, a principal investor in Danish mortgage bonds also came under pressure during the GFC. The financial crisis produced a situation where the pension funds were unable to use their stock of long-term mortgage bonds to hedge against interest rate risk. Figure 7.0 reveals that between 2007 and 2010 the pension industry decreased their holdings of mortgage bonds from 27% of the market to 20% of the market. This meant there was a genuine possibility that Danish pension funds would dis-invest in the mortgage bond market and create a severe liquidity crisis for the mortgage banks.

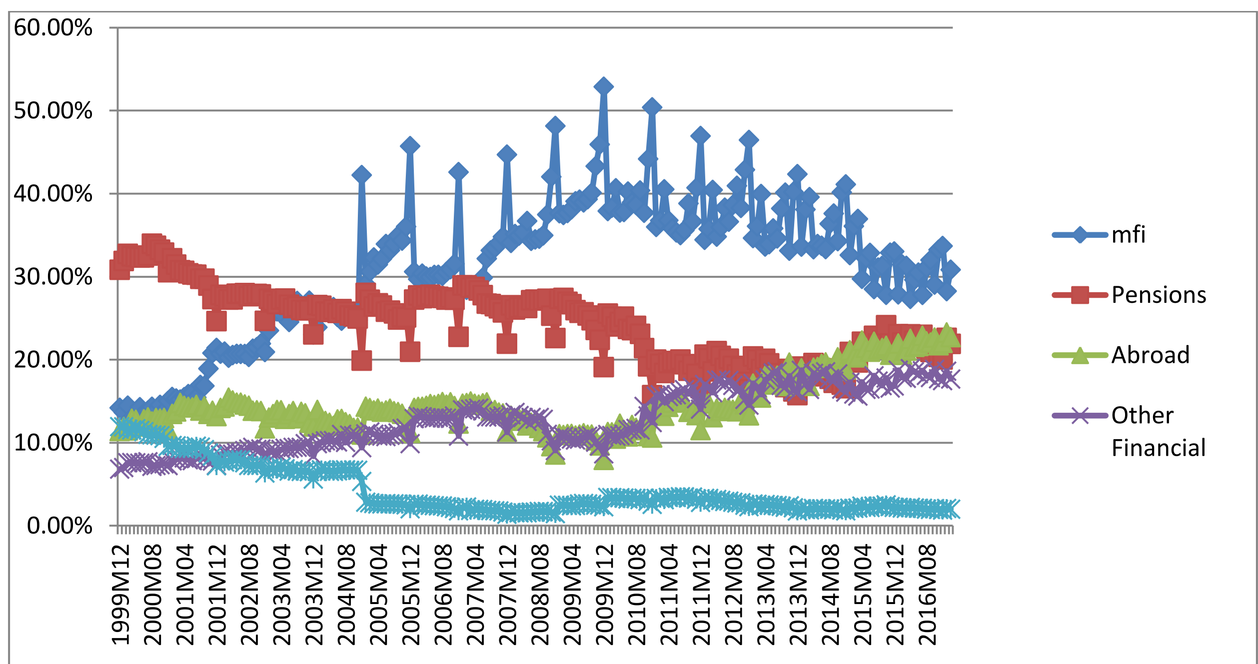


Figure 7.0 Institutional Investors in Mortgage Bonds 1999-2016: % of Total

Source: National Bank of Denmark

This crisis in the pension sector occurred because there was a widening in the yields between mortgage bonds and government bonds, which decoupled mortgage bonds from interest rates. Danish pension funds use government bond rates to calculate the value of their liabilities, therefore at the same time that they saw a decrease in the value of their assets, due to marked to market pricing of Danish mortgage bonds, their liabilities showed no decrease. The Danish government was forced to intervene and introduce a pension reform package

which was concluded in October 2008. This packaged allowed pension funds to alter their accounting practice and calculates their liabilities to include mortgage bond yields and address the mismatch between assets and liabilities. The Danes could intervene in their pension funds in two fundamental ways. Firstly they altered the accounting standards and allowed pension funds to reassess their liabilities, and secondly, they ensured that state pension funds would provide funding to mortgage markets, while this investment may not have filled the emerging hole; it undoubtedly boosted confidence in the market.

Furthermore, the introduction of the first deposit guarantee by the Danish government affected confidence in Danish mortgage markets, and yields began to fall as early as 2009. The mortgage banks decided not to opt into the guarantee and instead issued long-term bonds, which proved more popular than their previously short-term counterparts. The decision to opt out of the guarantee points to the confidence they had in the survival of the bond market.

Despite the difficulties which arose in large Danish banks, particularly in their Irish and Baltic operations, they managed to expand their share of the Danish mortgage market during the crisis period. The large Danish banks now had ownership of the mortgage banks and practiced a type of coordinated interbank funding model. This allowed them to protect part of their business by providing further funding which ensured market stability. The confidence of the Danish mortgage sector in the face of the financial crisis, therefore, will have been based on both their physical separation from the commercial sector but also their strong links to the sector. The funding source of Danish mortgage markets was more manageable than the highly volatile international funding used in the commercial banks in both Ireland and Denmark (Hardie and Howarth, 2013). The system had grown through a process of cooperation and intervention on the part of the financial sector and the same dynamics which enabled growth provided stability during the crisis.

The real risk for Danish mortgage markets lay in the exposure of the MFI sector to the GFC and how this might limit the capacity of the sector to invest in mortgage bonds. A senior economist from the Danish mortgage sector outlined how tighter regulation in the wake of the crisis was limiting the role of commercial bank funding:

> To some extent we say we have survived the disease, it is a question of whether we will survive the cure. Right now, with the liquidity regulations and with the increased capital requirements for banks what we are actually seeing is that banks has reduced the involvement in the market.
>
> (Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

Andersen (2011) suggests that developments in the Danish mortgage market have left the economy sitting on a volcano of debt, which could erupt. He points out that while the Danes pulled through the mini eruption in 2008, the refinancing needs of the mortgage banks for short-term loans have created a situation that is similar to the deposit deficits which emerged in the commercial banks. While the situation in the mortgage banks looked similar to commercial sector funding gaps, the national and affiliated characteristics of the capital created a capacity to negotiate and coordinate across the market. During the crisis period commercial banks extended their purchase of mortgage bonds, meaning that during the GFC, Danish mortgage market funding gaps functioned very differently to Hardie and Howarth's (2013) funding gaps. Danish Type 2 financialisation was nationally unique and allowed greater scope for action than its European counterparts. However in the post-crisis period, outlined below, mortgage markets have begun to look far more internationalised and risky, and funding conditions bear more resemblance to Hardie and Howarth's (2013) skittish international investors.

Foreign Capital: Safe Haven Status & the Erosion of Institutional Buffers

The comparative stability provided by the coordinated funding model which underpinned Type 2 financialisation in Denmark granted the Danes safe-haven status during the immediate post-crisis period. While initially, this phenomenon ensured the survival of the Danish bond market, the influx of foreign and speculative capital, have eroded the capacity for coordinated action within the model. In the post-crisis period the Danish mortgage model bears far more resemblance to Hardie and Howarth's (2013) market-based banking typology of skittish, arm's length, international investors.

Safe-haven status emerges in bond markets when national bonds display a higher degree of liquidity than their international counterparts. Figure 7.0 outlines that the Danish mortgage market benefitted enormously from this phenomenon after the financial crisis. In particular, once yields had returned to more normal levels, international confidence in Danish bonds soared, and foreign investors increased their share of the market from 8% in 2008 to 22% in 2015. A similar process also occurred with investment and mutual funds that increased their share from 10% to 17% in the same time frame. Denmark benefited from the turmoil which had erupted in European bond markets and presented investors with a safe bet during this turmoil. A senior economist from the Danish mortgage sector pointed out that it was safe-haven status which maintained the stability of the market during the peak of the crisis:

> That model remained accessible also in the peak hour of the crisis in 2008. So it was probably for us to fund ourselves. We probably saw intermediaries or banks closing a little bit down on their liquidity lines, but the end investors were still in demand for cover bonds because it was recognised as a safe haven instrument.

(Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

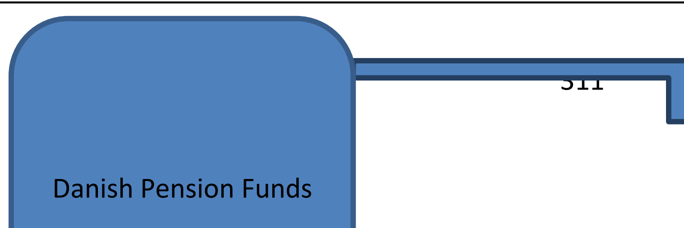
The dynamics of foreign investment in Danish mortgage markets shifted significantly during the crisis and post-crisis period. Initially, there was a flight from the market as uncertainty caused investors to sell any products which remained liquid. However once the market began to stabilise and the bank packages took effect, investors flooded into the Danish mortgage market. A senior economist for the Danish mortgage sector reflected on the different stability implications of foreign and domestically funded systems:

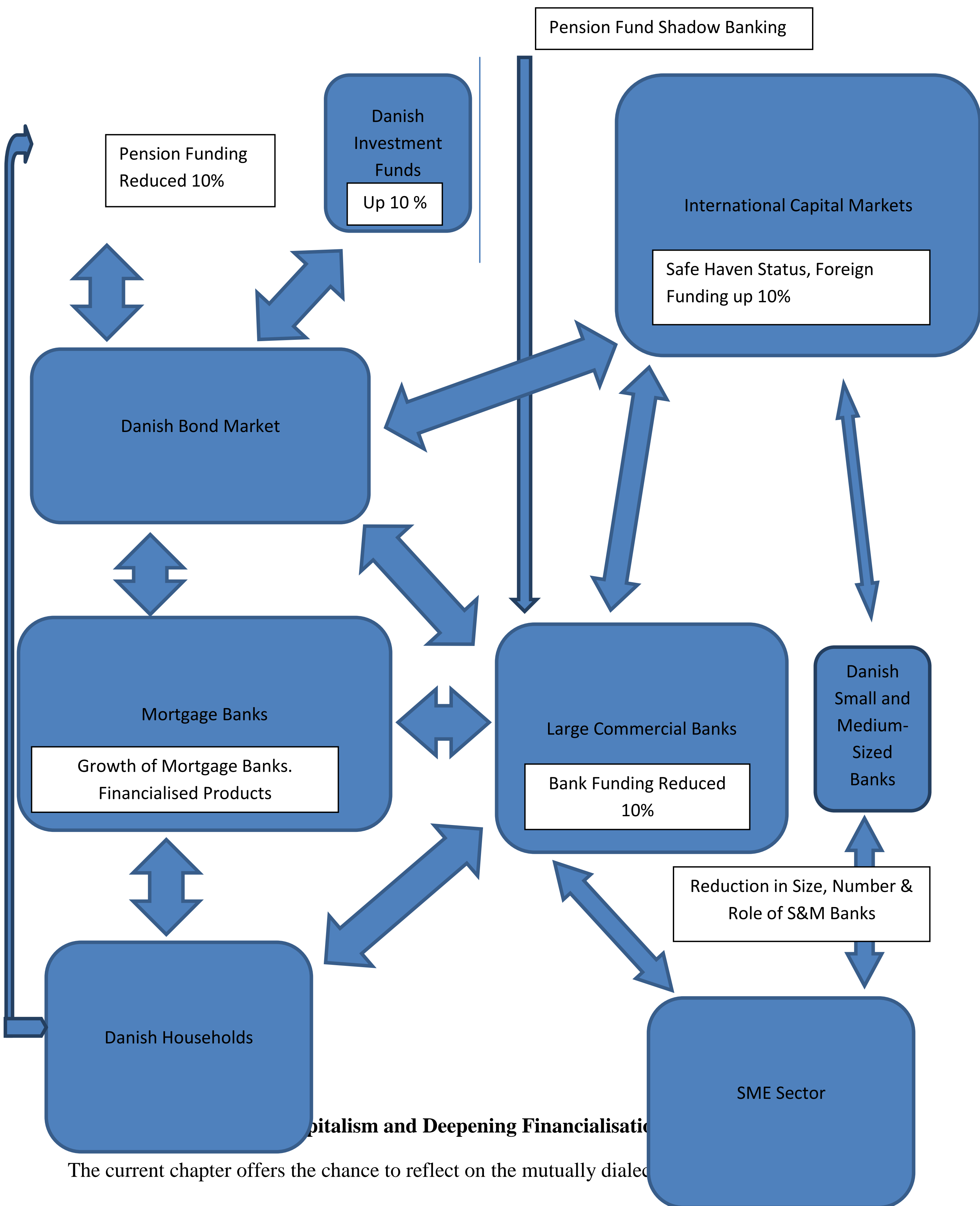
> International shouldn't go too high. Of course, we like to see new investors coming on board, but that was also one of the lessons learned back in 2008, first to free the market when you have problems that would be foreign investors. I think it was the main reason for the Spanish crisis, that they basically didn't have a domestic investor.
>
> (Finsec 8/DK: Senior Economist Danish Mortgage Sector, 26/012016)

The stability which drove the influx of foreign capital was directly related to the capacity of the Danish financial system to respond to market volatility in a coordinated way. While it was unlikely that the Danish financial sector could have known that foreign capital would flood in, their confidence in the system was not unfounded. This confidence was based upon the expert financial knowledge contained within the system, the strong ties and yet continued separation between the various strands of the banking sector, and the strong ties to the pension sector, all of which allowed them to intervene in the market. Furthermore, the households to which banks were connected were able to pay the debt. The continued ability to pay was based upon a deepening of the financialisation process, including issuing more significant numbers of IO and ARM loan products to harness the low-interest rate environment.

While the *institutional buffers* contained within the Danish financial system ensured its survival during the financial crisis, survival came with a cost and led to the erosion of the *coordinated characteristics* of the Danish financial system. Diagram 7.0 below outlines the main shifts within the model and the reduction of the *institutional buffers* which were outlined in Diagram 6.0. The collapse of a large number of small and medium-sized banks has increased the power of large banks. The funding model of the mortgage banks has shifted in two crucial ways, firstly it now depends on foreign capital to a far higher degree, and secondly, it now includes a new type of unaffiliated institutional investor. These developments have led to a decrease in the role of both commercial banks and pension funds which both provided national and affiliated capital during the boom period. Therefore, while safe-haven status saved the system during the crisis, it has ultimately produced a more market-based system, which bears far more resemblance to Hardies (2013) typology of market-based banking than any of its predecessors. The increased role of foreign and unaffiliated capital has ultimately decreased the capacity for coordinated action within Danish mortgage markets, meaning the future of the Danish mortgage model is highly uncertain.

Diagram 7.0 Erosion of Institutional Buffers in Danish Financial Sector Funding Model 2008-2015





pitalism and Deepening Financialisati

The current chapter offers the chance to reflect on the mutually dialec

the varieties of residential capitalism and financialisation. These dynamics were revealed by

looking at how the model performed during the GFC, where the model was in the post-crisis period and how it got there?

The rapid recovery of the Danish mortgage model and the low incidence of mortgage arrears and foreclosures meant that in comparison to its European counterparts the Danish system appeared to be well functioning. However, while the financialisation of Danish households displayed greater stability during and after the financial crisis this stability was achieved at a cost. The cost was contained in the increased use of market-based, international capital on funding markets and a deepening of the financialisation of Danish credit markets through the increased use of IO and ARM loans. Both of these developments have extended the influence of markets on the Danish model and increased the risk contained within Danish households.

Household debt in Denmark shows no signs of decreasing in the post-crisis period, on the contrary, the crisis response necessitated more debt being taken on by Danish households with still more to come. The continued functioning of the Danish mortgage system masked a slow crisis process of ever-increasing household debt and deepening financialisation. Over time the crucial structural effect of the housing regime was the channeling of financialisation towards wealthy households. In this respect, while the process of has involved incremental alteration to the rules which governed mortgage finance, the most fundamental change was in 1992 when the Social Democrats altered the balance principle and allowed homeowners to take out a loan against their property for any purpose. Up to that point mortgage loans could only be used for the building, purchase or renovation of housing. In effect, this change altered the meaning of housing from a home to a cash machine. While subsequent legislative change tweaked how the cash machine worked, and what it cost to withdraw funds, it was this change in the meaning of housing which linked housing and consumption in the Danish economy.

The structure of the corporatist housing regime has meant that while it has shielded the lower deciles, it has funneled financialisation towards the very wealthy and linked current consumption in these households to their property wealth. Ultimately surviving the GFC has left the upper deciles sitting on a mountain of volatile debt. The Danes claim this is how their system works, high debt and high savings. However, their dependence on market confidence requires that markets believe all is well in Denmark. While Fernandez & Albers (2017) suggest that the Danish system has reached a saturation point, I would argue that financial system by their nature do not saturate; instead, they cyclically shift from one crisis to the next (Reinhart et al., 2009). The real question for Danish mortgage markets is how and when the next crisis will occur?

Arrears have been relatively low in the Danish mortgage market, total arrears at their peak in 2010 accounted for just 0.41 % of the market (Andersen and Duus, 2013). Comparing this to Ireland where one in six loans was in default paints an unambiguous picture of the comparative story of continued stability versus collapse. Danish households have managed to sustain their mortgage payments; however, there has been a significant increase in risk attached to the financialised solution. While the international environment has been conducive to the use of variable rate and amortised products which have enabled Danish households to maintain their payments these conditions may not last into the future.

Since 2008, the use of IO loans has expanded in the Danish economy and allowed Danish households to gamble on future conditions being better than current conditions to service their loans (Kuchler, 2015). IO loans expanded from 600 billion kroner to 800 billion between 2008 and 2012. The total mortgage market stood at roughly 2500 billion kroner in 2011, meaning that deferred amortisations account for roughly 32 % of the total credit market (Kuchler, 2015). This figure, however, masks the prevalence of the loans somewhat, as, by 2010, 54% of all mortgage loans contained amortisation (Andersen, 2011). The loans are

concentrated in two age groups, households with members below 40 and households with members above 60. Furthermore, gross debt levels are higher in families with deferred amortisation loans as is the incidence of net debt.

Mortensen & Seabrooke (2008:140) predicted that the crisis would lead to a reversal of the ‘policy framing' back to stability and less innovative lending strategies. However, what emerged in the wake of the crisis was almost the polar opposite of this prediction, as riskier products proved an essential survival mechanism for Danish households.

Financialisation has introduced a range of risks to Danish households and consequently the macro economy, leaving them sitting on a mountain of volatile debt. Andersen (2011:127) points to this ‘volcano' and maps out what an eruption would be like. He focuses on interest rate volatility and points out that if rates rise, the future of Danish mortgage markets is uncertain. He points out that the housing market has become more sensitive to fluctuations in short-term interest rates, and rising rates would lead to a double movement for mortgage holders, not only would they have to contend with rising debt service, but also with falling house prices. This increase in the price of credit could lead to widespread insolvency (Andersen, 2011).

However, he may be underestimating the situation in Denmark as the dynamics on the funding side of Danish mortgage markets since the crisis complicates the story even further. The financial crisis has led to an increase in foreign investors in Danish mortgage markets (Diagram 7.0). The tendency for these investors to take flight when things turn sour was evident all across Europe during the financial turmoil. Therefore should interest rates rise, or unemployment rates rise, and mortgage defaults become more common the Danes will face trouble on both sides of their market. The sudden influx of foreign investors into the Danish

bond market and their increased dependence on financialised products has reduced the capacity of the financial sector to manage the risk at a macro-level.

Denmark has one of the highest tax breaks in Europe for housing which creates strong links between house prices and consumption. So while the Danes have managed to continue to pay their debt, the price has been reduced economic activity (Andersen, 2011). Economic recovery, therefore, may prove just as challenging for Danish households as the crisis did. Consumption in Denmark has been very slow to recover in the wake of the crisis and part of the reason for this has been the high prevalence of household debt.

Furthermore, Denmark status as a small open, highly globalised economy means that employment in Demark is heavily dependent on Global conditions. The figures for mortgage default in the 1990s reveal that a rise in unemployment had a significant effect on the household ability to service their mortgage debt. While unemployment in the wake of the previous crisis has remained low, and there is no doubt that amortised and variable rate debt has tied the Danish economy to future conditions and increased risk at a macro level.

The differing levels of wealth in the two groups who accessed IO loans means that these loans are likely to mean very different things to both of these groups. The younger segment, who was most likely to be FTBs, gambled on the future and took out massive loans which stretched their finance and combined with the fall in house prices pushed them further and further towards having LTV values above 80%. The older, wealthier group was using these loans as a means of expanding current consumption by pushing debt off into the future, and this group has a higher wealth to balance the debt. Therefore, the debt for this group was a type of luxury good.

The figures for the maturity of the amortised debt reveal another interesting story; many families will attempt to prolong the amortisation period and seek to benefit from

economic recovery and rising house prices. To do this these families will have to meet the LTV requirements of 80 %. However, figures from the national banks reveal that due to falling house prices, nearly half of the total number of families who have at least one amortised loan will have an LTV value which is higher than 80%. Therefore, to access a new amortised loan, these families will have to source an alternative form of finance to meet the requirements. This pushing of debt into the future is likely to cause an ever increasing spiral of debt in the Danish economy.

Ireland: 2008-2015

The Politics of Growth: Financial Globalisation and the Survival of Irish Banks

Unlike their Danish counterparts, Irish banks contained *no institutional buffers* against speculative lending and international capital. The large Irish banks, while perhaps slower to get involved in real estate lending than their small and medium counterparts, had followed their competitors into risky markets (Brennan, 2018). Small and medium-sized Irish banks, the mortgage banks and the foreign banks were the worst offenders and had escalated national markets based on the importation of easy money. Therefore, funding gaps were spread broadly throughout the sector. The mortgage and commercial banks had become entwined in each other's business model, and aggressive foreign lenders drove the mortgage

market. During the GFC, these foreign lenders turned to home market support and added a further layer of instability to the Irish funding model.

The lack of *institutional buffers* against foreign capital led to widespread collapse and a slow process of nationalisation within the Irish banking sector. Indeed, in the post-crisis period Ireland has reverted to a model of banking very similar to the model with which they commenced the current phase of financialisation; a small number of relatively powerful banks that practice credit rationing. What is most puzzling about this is how Irish banks managed to survive and maintain their position given the level of exposure within the sector. The answer to this puzzle is located in the complex interaction between national and European politics and the deep penetration of global banks within the Irish market. It was their small size and the depth and breadth of their connection to the global banking system which ultimately rescued Irish banks.

Much of the comparative political economy literature has focused on how institutional differences within the Danish and Irish financial system explain the very different responses to the financial crisis (Campbell and Hall 2015, Grossman and Woll 2014). In brief, these authors suggest that the core difference between these two systems is the capacity for collective action within the financial sector. It was Denmark ability to coordinate and negotiate across the sector which enabled their response and allowed Danish banks to pay for their own bailout and for the burning of bondholders. Therefore, for these authors, coordinated capitalism had limited financial power and produced a better outcome for the state and taxpayers. Liberal Ireland, however, used taxpayer money to bail out the banks and continued to protect the bondholders.

A number of points need to be made about Ireland in this respect, firstly all of the authors who focus on institutional diversity as a key explanatory variable, miss one very

important fact, all of the Irish banks were in trouble. So while Denmark still contained large banks which had healthy finances, Ireland had no such leeway. Furthermore, while the situation improved within Danish banks, it continued to worsen in Irish banks. The real puzzle is contained not in the initial guarantee, but in the survival of Irish banks despite their worsening situation. While these authors suggest that financial power (the power of in-action) was generated by Ireland's liberal approach to finance, the real generator of the structural power of Irish finance was located in its central position in an increasingly globalised and Europeanised banking system and driven by European rather than national politics (Grossman and Woll, 2014).

In 2009, the IMF approached the Irish state and offered them an early intervention in their banking sector, as based upon their figures it was clear the sector could not survive. Ashoka Mody (2018: 6) the head of the IMF program described the dynamics created by the banking guarantee between the sovereign and the Irish banks as a 'vicious doom loop.' He believed in 2009 that as the economic situation continued to worsen in Ireland, banks would continue to take more losses and fearful investors would continue to dump banks stocks. He suggested that there were two options to break the downward spiral created between the sovereign and the banks. The first option was to recapitalise the banks heavily, and the second was to close some banks down and require their creditors to bear losses. Both of these policy responses were applied in the American case. Mody (2018) made it clear that the precautionary program which the IMF offered to Ireland at this time would have 'provided the cover to execute these complex transactions.' (The Irish Times, 2018:6)

However, the Irish finance minister continued to proclaim that 'we are getting to the bottom of the problem, we are dealing with it.' Ireland refused the early intervention program and continued to protect the banks and the bondholders.

This kind of financial power is not explained by the lack of institutional capacity for collective action. Something deeper and more profound was propping up the Irish financial system. The then head of the Irish IMF operation has gone on the record saying that he is mystified as to why the Irish state refused their offer and continued to proclaim that the guarantee was efficient. While there is no way of knowing what was in the minds of Irish politicians at this time, what is clear is the level of dependence of the Irish banking sector and hence the state on ECB funding (Schoenmacker, 2015).

In 2009, a paralysed Irish banking system turned to the ECB for support and over the next twelve months accessed up to 140 billion Euros in funding. Between April and September of 2010, alone, Irish banks accessed 38 billion in Borrowing. In January 2010, the euro system was providing approximately 90 Billion Euro to Irish banks, in the later part of the year this position began to accelerate rapidly and funding expanded to 140 billion Euros. Letters between the ECB and the Department of Finance reveal that this amount constituted roughly a quarter of total ECB lending to the Eurozone at the time, genuinely extraordinary measures were taken to rescue the Irish financial system, given that Ireland represented less than 1% of the total capital in the Eurozone (ECB, 2014). By November, the ECB, having seen no improvement in the situation in Irish Banks, made clear that to access continued support, the Irish state would have to seek the assistance of the EU and the IMF (Whelan, 2013).

Ó Riain (2014) points out that between 2010 and 2012 fiscal constraints produced by the crisis in Ireland meant that European politics played a greater role in shaping the Irish political response.. Whilst his focus is broader than the current thesis, analysing the trilemma of a fiscal, growth and legitimisation crises which emerged in the wake of the financial crisis, he highlights developments which are central to understanding the unfolding dynamics within the Irish financial system. Ó Riain (2014) argues that the first response of Europe to the crisis

was to firewall the financial system, by implementing two key strands of policy; firstly to insulate the system from debt by placing this firmly in the lap of the sovereign, and secondly to recapitalise and boost ailing banking sectors. However, these policies were not applied evenly to troubled banking sectors.

This poses a puzzle as to why the ECB pumped so much money into Ireland to save its banking system, and why where they so opposed to burning the bondholders? By January 2009 the Irish banks contained 90 Billion in Euro system funding, expanding to 140 billion by 2010, representing almost a quarter of all ECB lending at that time. While the ECB has insisted that it did not influence the decision of the Irish government to issue the guarantee, and was critical of its effect and the lack of consultation, their stance on both burning the bondholders and the risk of contagion in the European system are clear (ECB, 2014). They viewed both as a direct threat to the financial stability of the Eurozone. Furthermore, Ó Riain draws our attention to the phone call between then minister for finance Brian Lenihan and the head of the ECB Jean Claude Trichet in which Lenihan was told to save the banks at all costs (Ó Riain, 2014:246). Ó Riain (2014) makes it clear that the call has never been confirmed or denied.

Furthermore, the willingness of the ECB to provide such a high degree of funding to national banking sector points to the level of concern which they had about the capacity for Irish banks to cause a wider crisis in the Euro system. In a series of letters between the ECB and the Minister for Finance, the ECB made it clear that they felt the decision to honour the debt to senior bondholders was the right choice (ECB, 2014). In this respect a primary concern of the ECB was the effect that Irish default would have on the broader European financial systems. There was genuine concern about the risk that crisis could spread further if countries reneged on their debt and that this would threatened the legitimacy of the Euro. During the implementation of the TROIKA deal with Ireland, the IMF favoured a bail-in for

senior bondholders, but the ECB insisted that senior bondholders be paid. The ECB was highly critical of Denmark's insistence that senior bondholders should share in the responsibility and take a loss upon the winding up of two of its banks. Therefore it was not the exposure of European banks to the Irish market which drove the ECB's response; instead, it was the fear of a domino effect that would result from Ireland defaulting on their debt causing other countries to follow suit and act as catalyst for a wider systemic collapse..

Somewhat ironically the depth of the integration of the Irish banking system proved to be its saving grace. Despite the almost total collapse in the banking system, the funding it received from the ECB has ensured its survival. In a strange twist of fate financial globalisation on a grand scale placed Irish banks at the centre of the project to firewall the European financial system, when no such favour was shown to other small European economies such as Greece. It was Ireland's position within the new interconnected financial system which motivated the ECB to go to such extreme lengths to keep Irish banks afloat. The uncertainty about what would happen should Ireland default on its debts has enabled Irish banks to survive a financial crisis that should have destroyed them.

Culpepper and Reinke (2014) employ the concept of structural power to explain the difference in the American and UK bank bailout programs. For these authors, banks can intentionally exercise structural power to affect the outcome of bank bailout programs. They suggest that American banks dependence on national markets meant that even the healthy banks had to comply with the state bailout programs, while the international position of large, healthy UK banks gave them greater negotiating power. Their analysis argues that the American bailout program was more favourable to both the state and the taxpayer than the UK program and that is explained by the varying degree of structural power in American and UK banks.

The structural power in the Irish banking sector was located in their perceived capacity to cause a system-wide crisis in the Euro area. It was this fear of contagion which led the ECB to ensure the survival of Irish banks while allowing other small European nations to freeze their financial systems. Irish banks were the receivers of the internationalised banking model practised by large UK banks outlined by Culpepper and Reinke (2014). However, unlike the strategic structural power outlined in UK banks, Ireland represents a case of globalised structural power. It was the interconnection of the Irish banking sector, rather than its international position which ensured its survival. It was strategic action on the part of the ECB which rescued the Irish banks, rather than their capacity to apply strategic action themselves. The disastrous business model of the Irish sector and its deep connections to the global banking system left the ECB with little option but to support the most globalised banking sector in Europe.

Structure: Banking Collapse and the Retreat of Type 1 and Type 2 Financialisation

The GFC revealed the instability and vulnerability of the dynamics between the funding model and the structure of the Irish banking sector in 2008. Comparison with the unfolding financial crisis in Denmark reveals that it was the depth and breadth of the connection to the 'global wall of money' in Ireland which produced such a profound national banking crisis.

The lack of institutional buffers, like those which characterised the Danish system, meant that the Irish system was more connected to international capital than their Danish counterparts and these connections were spread broadly across the whole banking sector. Type 2 financialisation was deeper, broader and more international in Ireland than in Denmark. The penetration and subsequent reversal of this form of financialisation have ultimately led to the retreat of Irish banks from market-based banking, the exit of foreign banks from Irish markets and a general credit squeeze with severe implications for the real

economy. Irelands approach to financial liberalisation and financial integration made little progress in developing a financial system which was adequately equipped to provide credit to the real economy. Capital, contained in foreign banks, has flowed out of Ireland just as quickly as it flowed in and left Ireland back where it started in the mid-1980s; a small number of relatively large powerful banks, with a chequered history, failing to provide adequate credit on equitable terms. (Diagram 8.1)

However, while Irish banks have retreated from market-based banking, international capital has found new points of entry into the Irish market and bought up distressed property from the ‘bad bank' (Byrne, 2016). Financialisation has continued unabated and taken on its latest form. International capital has circumvented the collapsing Irish financial system and begun investing directly into the built environment. The GFC and the creation of a ‘bad bank' have created opportunities for new forms of investment vehicles which a bankrupt state invited into Ireland in the hope of stimulating property prices and recouping some of their losses on huge property portfolios contained in the National Assets Management Agency (NAMA).

Comparing Financialisation Type 1 & Type 2 Financialisation in Denmark & Ireland

The GFC revealed that there were fundamental differences in the national forms of both types of financialisation in Denmark and Ireland. The institutional *buffers* contained within the Danish system had firewalled the worst of the crisis within the small and medium banks, and a nationally specific form of *inter-bank lending* allowed mortgage banks greater capacity for action than their Irish counterparts. In Ireland institutional filters had connected Ireland to global banks in the UK.

Grossman and Woll (2014) argue that the different institutional capability for coordinated action explains the variation in the type of bank bailouts in Denmark and Ireland.

While there may well be a lack of institutional capacity within the Irish sector, even had the Irish banks had the institutional capability for action, it is hard to imagine what that action would have looked like. The scale of the problems in Irish banks was of the nature that there were no banks left to bail in. A highly concentrated banking sector, where all the big banks were in difficulty, funded through international capital markets, coupled with a large presence of foreign banks left little scope for action. All of Ireland's banks were in trouble, they all contained bad asset which subsequently had to be transferred to NAMA, Irish dependence on foreign funding was the highest in Europe and this funding covered all bank lending, both commercial and mortgage. By 2010 Irish banks contained 140 billion euro worth of ECB support. Given that a process of creeping nationalisation took place as the ‘big banks' required more and more capital injections it is hard to see how the banks could have paid for a bail-in or assisted other banks that were in difficulty.

In this respect comparing the Irish and Danish system because they had similar exposure to the financial crisis is a not an accurate comparison. The crisis in the Danish system was concentrated in its small and medium-sized banks, there was a separation in the funding of the Danish mortgage market, and the funding gap in the commercial banks was not as deep. Furthermore, the Danish system contained large banks, such as a Jyske Bank, which was not insignificant difficulty and therefore was in a position to buy out much smaller banks that were in trouble. The initial liquidity crisis was quickly resolved in Denmark and large banks such as Danske, got busy raising funds to assist the smaller banks that were heavily exposed to property lending and still in liquidity difficulty.

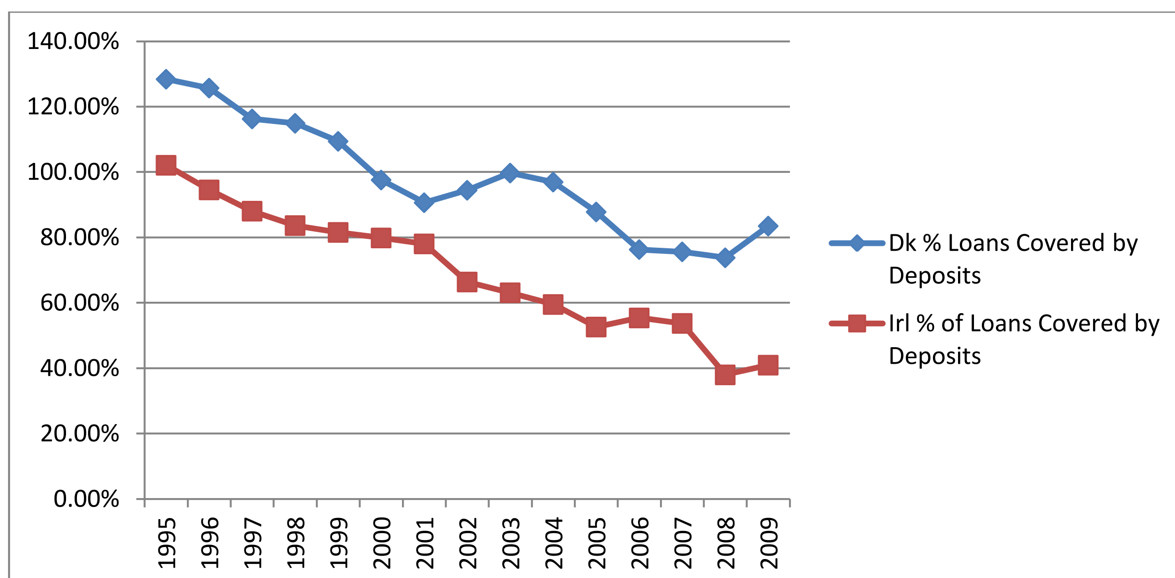


Figure 7.1 Percentage of Loan Book Covered by Deposits Dk & Irl 1995-2009

Calculated using data from OECD Stan data set.

Looking at Figure 7.1 reveals how much deeper the process of financialisation was in Irish banks in comparison with Danish banks. The figure outlines what percentage of the loan book of the two banking sectors was covered by their deposit base. The practice was more pronounced and emerged earlier in the Irish system. Danish loans remained covered by deposits up until 2004 when the ratio began to decline to reach a low of 73% in 2007 meaning the Irish gap was nearly twice as big as the Danish gap. By 1997, Ireland already had a funding gap which consistently expanded throughout the boom, reaching a low of 38% in 2007. In 2004, when the Danish gap was only emerging, Ireland could only cover 60% of their loan book with deposits. Therefore it is possible to say that the impact of global funding was deeper and broader in the Irish banking sector.

Funding: Foreign Capital Takes Flight

The national form of the two types of financialisation outlined in chapter 6 explains the very different outcomes experienced in Denmark and Ireland during and after the GFC. Turning first to Type 2 financialisation, the deeper penetration of foreign capital in the Irish system severely curtailed the capacity for action in the Irish banking sector. Unlike Denmark who could respond to funding constraints produced by the GFC, Ireland was effectively paralysed.

	Denmark	Ireland
Financialisation 1	Danish banks are *carriers* of this type of financialisation into Irish and Baltic markets.	Irish markets are *receivers* of this type of financialisation. UK, Nordic & Dutch banks.
Financialisation 2	Type 2 (A) Small and medium-sized banks act as a *buffer* containing worst of problem, insulating large banks. Type 2 (B) Mortgage bond markets act as *buffer*. Nationally specific form of inter-bank lending. Pension funds act as a *buffer*.	Foreign capital spread broadly and deeply throughout all of the banks. No institutional *buffers*. Strong historical ties to UK money markets *filter* capital towards Irish banks.

Table 7.1 (Reproduced from Chapter 6)

Ireland was exposed to the GFC in two ways, through market-based banking within their national retail banks and also through foreign retail banks operating in the Irish market. Denmark, on the other hand, was primarily exposed to foreign capital within the small and medium banks, and a nationally specific form of inter-bank lending on their mortgage bond market which allowed them the capacity for intervention in the market. Financial integration was deeper in Ireland, and the impact of the reversals in market-based funding was most severe, in countries like Ireland, with high levels of integration.

On the 28th of September 2008, just two weeks after the collapse of Lehman Brothers in the US, a group of senior management from Ireland's largest banks turned to the state for help (Whelan, 2013). Ireland's rouge bank, Anglo Irish, no longer had eligible collateral to turn to the ECB for funding and stood on the edge of the Abyss. The other big banks were worried about the contagion effect of Anglo and the possibility of outright panic causing a general run on the banks. At this time it was still believed that the main problem with Anglo and indeed the other banks was a lack of liquidity due to the international crisis; therefore the main concern was to stabilise the Irish banking sector (Beblavý et al., 2014).

On the 29th of September, the state initiated a blanket guarantee of the banks. While initially, the guarantee had the desired effect and Irish banks were able to sell bonds on international money markets, by 2010 this was no longer possible, and the guarantee became ineffective. Problems which had subsequently emerged with the quality of assets in the Irish banks, coupled with a loss of confidence in the ability of the sovereign to cover the debt produced a further crisis. Irish banks faced a second liquidity crisis as funding once again dried up, and an international bank run emerged. During this run, between August and November of 2010, deposits by foreign investors in Irish banks decreased by 46 billion euro (Whelan, 2013). A blanket guarantee is of no use if the guarantor cannot honour the debt.

The geographical profile of Irish bank funding outlined in the previous chapter remained broadly the same during the crisis period however the sectoral profile of this shifted significantly. After the introduction of the bank guarantee foreign funding became available again; however, this funding was primarily located in affiliated banks in the UK market and some foreign deposits. In the three months after the banking guarantee foreign wholesale funding declined by 8 billion euro, a decline of 7%. The main withdrawal during this period was from the non-affiliated banks located in the UK (Coates and Everett, 2013). Between

2008 and 2010 the outstanding stock of foreign funding increased from 109 billion to 132 billion, three-quarters of this was inflows from UK affiliated banks.

Unlike Denmark, where the liquidity problems were largely contained within the small and medium-sized banks, global funding was spread broadly through the Irish banking system. The retreat of this funding on a massive scale caused severe liquidity problems, which had it not been for the actions of the ECB, would have collapsed the Irish banking system. The Joint Committee of Inquiry into the Banking Crisis report (2015a:26) outlines the spread of funding gaps through the banking sector, and while the smaller banks were the worst offenders, the larger banks had also used international capital to fund their lending activity. The two largest banks AIB and BOI had loan to deposit ratios in excess of 150%, as did EBS and INBS, the biggest offender IL&P stood at a staggering 275%. Hyper-competition had driven Irish banks to incredible heights.

Furthermore, while in Denmark small and medium banks acted as a buffer protecting large banks from speculative lending by containing the largest share of international capital, no such buffer existed in Ireland. In Ireland, small and medium banks had driven market activity through competition and caused a crowding into the market for speculative lending. Funding gaps were used to cover the increased lending, and the flight of international capital left no large Irish banks to assist in any bailout programs. Therefore, unlike the Danish system, where most of the large banks had behaved quite conservatively (at least in Denmark) and stayed outside of speculative asset-based lending, this practice was spread throughout the Irish system. While the large banks, particularly the big two, were slower to get involved in the speculative mania, the forces of competition which characterised the Irish system eventually caused the big banks to follow the small and medium banks into the market. A senior figure from Irish commercial banking outlined why large Irish banks had followed their smaller competitors into increasingly risky lending:

> And competitive pressure in the marketplace, yeah. There was a time when people used to, including very prominent people in society, used to attack the Bank of Ireland for its conservative approach to lending. Why couldn't they be more like Anglo Irish? And to be honest there was a need for increased capital deployment in the Irish economy, this was a country which had a Third World infrastructure. It had a very significant shortage of quality capital, in terms of actual physical capital, it had a shortage of housing. There was a need for significant improvement in the quality of our core infrastructure because your physical infrastructure and the quality of your labour market, they will determine the long-term economic success. As a country we just drove it off a cliff though

(Finsec 1/IRL: Senior Figure in Commercial Banking, 23/05/2017)

The eventual cost of recapitalising the Irish banks came to 80 billion Euros; Anglo alone had cost the state 30 billion. The initial bank package in Denmark had cost the banks less than the 25 billion Kroner (2.58 billion euro), the subsequent re capitalisations amounted to 100 billion Krone of hybrid capital and 180 billion kroner of state-guaranteed funding, totalling 280 billion (37 billion euro) less than half the cost of the Irish banks. Across these measures and outcomes, it is clear that Ireland was far more exposed to the first and unfolding crisis than Denmark and therefore had far less capacity for action.

Structure: Foreign Banks: Support for Home Markets & Market Exit

The effect of Type 2 financialisation on the stability of the Irish banking sector was further complicated by the depth of the penetration of foreign banks into the Irish market (Type 1

financialisation). Danish banks had been carriers of Type 1 financialisation while Irish banks had been receivers (Table 6.0). This difference led to further complications for the Irish sector during the GFC as foreign banks operating in the Irish market turned to support their home market leading to further funding constraints. Furthermore, foreign banks had shored up Irish finance during the credit expansion of the 1990s and 2000s and limited the need to develop a national financial system. Rather than grow a sustainable financial sector Ireland had simply imported financial services. The subsequent exit from the Irish market in the post-crisis period contributed to returning Ireland to its starting position as an under-developed, passive, bank-based model.

Foreign banks that were operating in the Irish market turned to support home group liquidity during the crisis. They achieved this by using the deposits in their Irish banks to provide funding to their home markets. This development flies in the face of contemporary banking models, which suggest that banks who have higher deposit ratios should see a smaller contraction in the lending during a crisis. In the Irish case foreign banks, however, used Irish deposits to fund lending in their home country. Furthermore, these banks saw a profound reversal in their loan book to Irish mortgage markets. Frost (2017) found that foreign banks which received support from their home government showed greater retrenchment than those that did not. This retrenchment from Irish markets clearly outlines the destabilising impact of foreign banks, in a financial crisis as they display home country bias. Furthermore, in the post-crisis period foreign banks have exited to the Irish market and contributed to the general credit squeeze which emerged in the period 2008-2015.

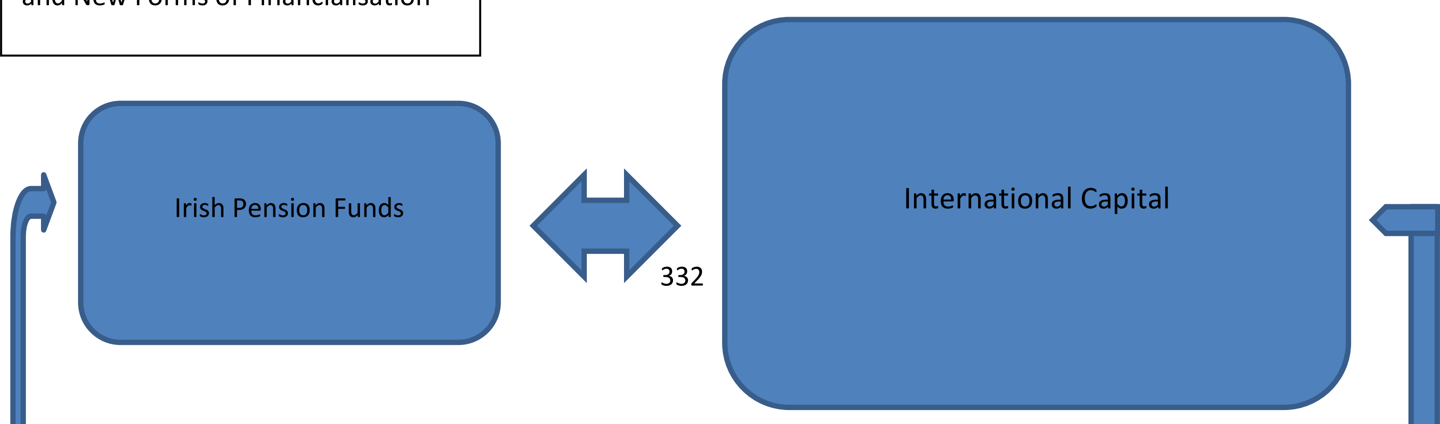
Return to Passive Banking

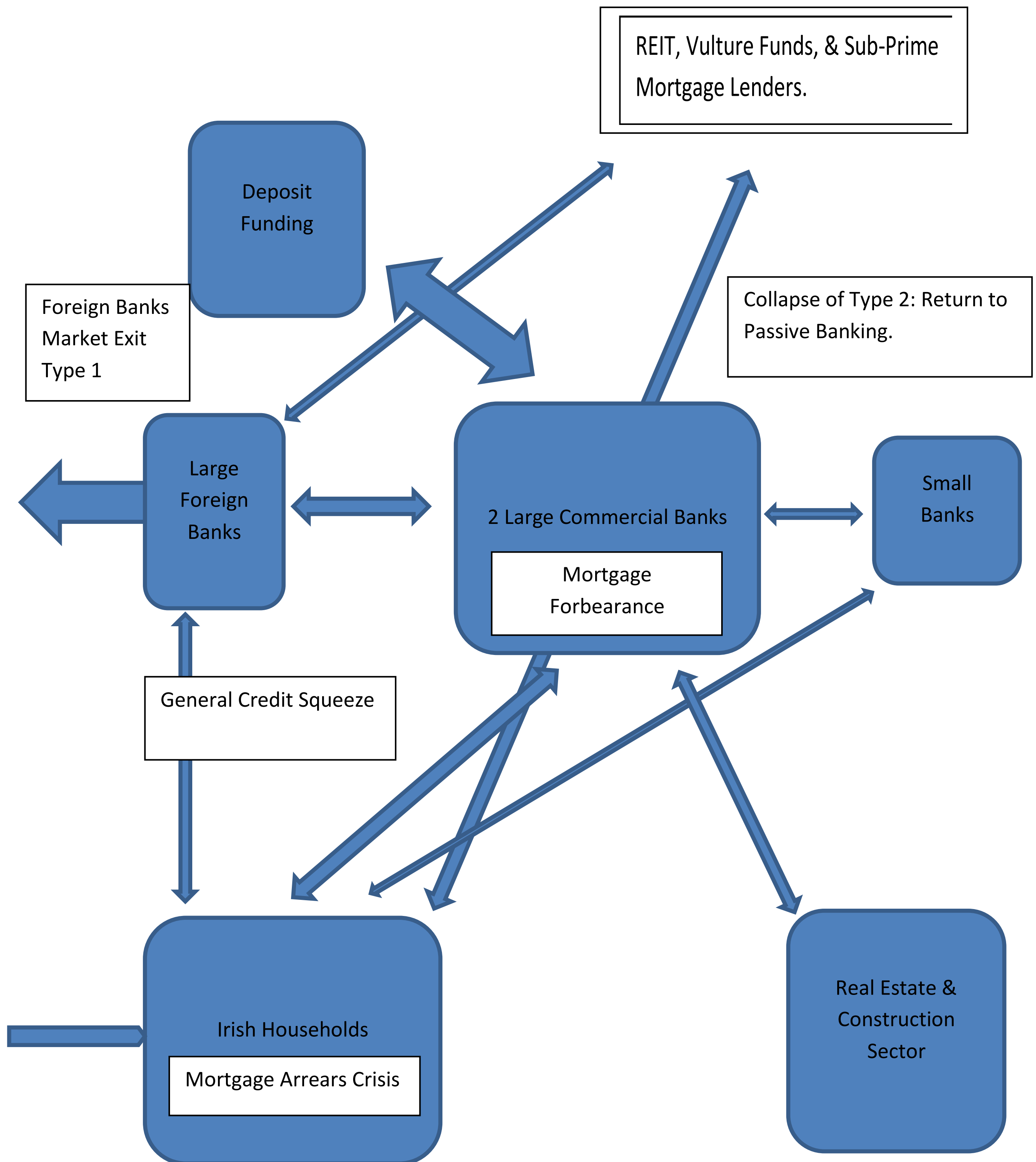
The real cause of what transpired in Ireland in 2008 was located in the rapid liberalisation of Irish banking during the 1980s and 1990s and the importation of financial services on a grand

scale during the 2000s. While institutional change in Denmark was slow and incremental, there was rapid upheaval in the Irish system. The process of liberalisation in the 1980s and early 1990s was profound and deep. Once this process became connected to Krippner's (2011) core conditions of financialisation, it produced change in the Irish banking system that was largely imported and lacked any real development. The foreign model, banks and capital which rushed into booming Ireland in the 1990s and 2000s, just as quickly took flight from collapsing Ireland in 2008-2010. Leaving Ireland in a very similar position to which it had started the process.

In the post-crisis period and into recovery Ireland banking system bears striking resemblances to the model with which it embarked upon the process of financialisation (Diagram 7.1). The Irish system is currently characterised by a small number of relatively, large and powerful banks which operate a system of credit rationing. The highly transnational character of both the capital and the banks which flooded into Ireland during the boom and the instability of this model, have returned Ireland to a passive bank-based model of capitalism (Diagram 7.1).

Diagram 7.1 Irish Financial Sector Funding 2008-2015 Passive Banking and New Forms of Financialisation





Varieties of Residential Capitalism

The crisis and recovery period offers the opportunity to reflect on the important effects of the varieties of residential capitalism. This section also offers the opportunity for a comparison of how the varieties have shaped and been shaped by the financialisation process in Denmark and Ireland and what this means for the varieties into the recovery period.

The Irish housing system was comparatively more susceptible to housing based financialisation and the speculative investment which defined the process, than their Danish counterparts. During the crisis and into recovery the effects of financialisation on the built environment have been far more profound in the Irish economy. There is a lot to be learned from looking at how the Danish corporatist housing regime shielded large portions of the population from the vagrancies of financialisation.

In the wake of the financial crisis, the effects of Ireland's national form of housing based financialisation continue to ripple through Irish households and the Irish housing regime. The response to the crisis has produced a new form of financialisation, with low growth, high debt, limited credit, limited housing supply and rising rental markets (Bohle, 2017). This new form of financialisation is linked to a deepening of inequality in Irish mortgage markets.

While the corporatist housing regime in Denmark located the debt in the upper middle and upper-income deciles, the transformation of a familial housing system in Ireland spread the debt far more broadly through the income deciles (Norris, 2016). During the crisis and into recovery this has had two key effects on the Irish housing system. Firstly, Ireland had a widespread mortgage arrears crisis, as the decline in economic growth has hit the lower income deciles harder. Secondly, into the recovery period, the BTL investors of the boom period have begun to exit the market and put added pressure on the rental sector contributing to a national housing supply crisis.

Financialisation has produced a deepening inequality within the mortgage market as middle and lower income buyers have been trapped in their homes through negative equity while upper deciles buyers have had the financial resources to continue to operate in the market. There has been a widespread collapse in the second and subsequent buyer (SSB)

mortgage market, which is the market for trading up the property ladder. During the period between 1994 and 2007, the share of third income deciles in mortgage originations grew from 13 to 29 % of the market, while those in the bottom 40 % rose from 2 to 11 %. (Lydon and Mcann, 2017) In the wake of the crisis, the 3rd income deciles have contracted to 8 % while the 4th quintile has dropped to 25 %. In the same period, the upper-income deciles share of the market during the boom period had reduced from 57 % to 27 %, however, since the crash their share of the market has increased to 65 % (Lydon and Mcann, 2017). Furthermore, by 2014, the upper incomes deciles have increased their share of the BTL market from 55 % to 65 %, while the bottom 60 % of the income distribution has decreased from 20 % to 12 % of the market (Lydon and Mcann, 2017).

McCarthy (2014) carried out a technical assessment of the mortgage arrears crisis and her findings highlight that the crisis has had a different impact across the income deciles. Firstly she found that mortgage arrears were correlated with both negative equity and employment conditions (McCarthy, 2014). These findings outline that the mortgage arrears crisis was concentrated amongst those who experienced difficulty in the labour market. Both unemployment and change in employment conditions were highly correlated with mortgage arrears. Furthermore, she found that the largest portion of the arrears was concentrated in groups who had a history of unemployment and temporary contracts. (McCarthy, 2014) The income distribution of this was further supported by the evidence on the educational attainment of the head of the household, 48 % of non-arrears cases had a head of household with a third level qualification compared to only 28 % of arrears cases (McCarthy, 2014). Given that none of these attributes can be assigned to those in the upper-income deciles, it is fair to say that the mortgage arrears crisis has been worst felt by the lower income deciles that saw the most significant expansion in their mortgage share during the boom period.

In the post-crisis period, there have been two significant shifts in investment patterns within the Irish mortgage market both of which point to deepening inequality in the structure of homeownership. Firstly, the proportion of mortgage originations going to the upper-income deciles has expanded significantly in both the FTB and BTL segments of the market, and secondly, there has been a considerable increase in cash only buyers in the market. While some of these cash-only buyers are institutional investors and professional landlords, others undoubtedly are wealthy Irish households assisting their children in the FTB market. These developments are linked to the crisis through both the build-up of mortgage arrears and the effect of trapping people in their homes (particularly the middle classes), and the decrease in the availability of credit caused by both the banks lack the willingness to lend and the inability of households to make the necessary down payments.

A crucial driver during the bubble period was the emergence of a new type of property investor on the Irish market, the BTL investors. While not dismissing the historical, cultural and societal impetus towards property investment within the Irish case the structural effect of the intersection of financialisation with a familial housing system was crucial to shaping the dynamics of private investment during the boom period.

Financialisation caused rising asset values which led to significant capital gains for large portions of the high housing tenure, mortgage free familial housing system. It seems apparent given the proliferation of one and two property landlords which emerged during the boom period that the housing tenure re-invested their capital gains and back into property, based on the easy access to cheap debt made available by market-based banking. The principal effect of the familial housing regime was this shaping the of investment decisions of individual households. Comparison with the Danish case revealed that this type of investment is not possible within the corporatist system as the tax system penalises small landlords extensively and limits the yield from rental income. Furthermore, the availability of

affordable alternative in the not for profit sector limits the reach of rental markets in the Danish model, which tend to be focused around apartments in central urban locations.

Into the recovery period, in response to rising asset values, Irish BTL investors have begun to exit the market. The mortgage arrears crisis, the proliferation of negative equity and strong regulation of rental markets which followed the crisis have all contributed to a phase of market exit by the BTL sector. In the post-crisis period government regulation has focused on ensuring that the type of BTL property investment which drove the bubble is no longer feasible. However, while the measures introduced to protect generation rent, are laudable their implementation may be somewhat short sited. There has been a reduction of tax deductibility on interest payments and income tax on rental incomes has been increased. These measures were introduced to target what was seen to be a landlord class of investors. However, while these measures may placate the public perception of evil landlords, the reality of the Irish housing tenure is that much rental accommodation was supplied by the small landlord class which invested during the boom period. The new regulation and tax treatment of these investors are contributing to a phase of market exit. This market exit has contributed to a general housing supply crisis and spiralling rental values. The state it seems is unwilling to take responsibility for the fact that it withdrew from housing provision and encouraged the private sector to fill the gap and now wishes to demonise and regulate a sector which it initially stimulated.

Despite the failure of the Irish banking system, caused by reckless lending and a flawed mortgage model, in the wake of the crisis and into the Irish recovery banks remain powerful. They are still the primary providers of mortgage finance, although the product innovations introduced during the period of excess have been withdrawn. While there have been extensive efforts to rescue the banks; there has been less effort to assist heavily indebted homeowners. Irish housing finance and the Irish housing system are in disarray, a limited

supply of both credit and housing are distorting market conditions, and prices are once again spirally up.

A mountain of bad mortgage debt was linked to a general credit squeeze which saw mortgage credit dry up and an increase in the proportion of cash only buyers in the market (Coates et al. 2014). The banks responded to this bad debt by practising a policy of forbearance on mortgage debt, which amounted to a game of wait and see if and when assets values would begin rising again and the banks could recoup some of their losses (Waldron and Redmond, 2016). These debts have severely limited the banks' ability to make new loans, due to uncertainty about the future and the poor underlying capital structure and contributed to a general credit squeeze (Schoenmaker, 2015).

Housing Regime in Crisis

The collapse and subsequent recapitalisation of Ireland's banking system was achieved at the expense of their housing system. Housing has been put under increased pressure in four key areas, the collapse of state finances, the lack of housing investment both public and private, the lack of mortgage credit and market exit by BTL investors.

Given the collapse of both state finances and the construction sector there has been a lack of supply in both social and private housing. The collapse of government revenues as a direct result of the actions of the Irish banks has led to extensive reductions in social housing budgets and the freezing of supply of new social housing. This has contributed to a contraction in the homeownership tenure, which has reduced from 80% to 70% during the

post-crisis period (Norris 2016). These developments have increased the pressure on Irish rental markets where rents are now some of the highest recorded in Europe (Byrne 2016). This, in turn, has created new opportunities for institutional investors in the BTL market, which enabled by NAMA (the bad bank) have become key players on Irish real estate markets (Diagram 7.1). During the post-crisis period transnational capital has found ways to circumvent the Irish banks and has invested directly into the built environment.

The Irish state felt it was left with little choice but to encourage transnational capital back into Ireland as they required a capital injection to stimulate asset values and recoup losses on portfolios of property portfolios held in the bad bank. Into recovery, as economic growth returns to Ireland particularly in the knowledge economy, the squeeze on housing supply with rising demand from the professional classes has made Ireland a premier destination for a new breed of BTL institutional investor. The 'wall of money' has found a new entry point circumventing the national banking sector to invest directly into the built environment. Large real estate investments trust from the US, Canada and Germany are now key players in the Irish rental sector. This new type of professional investor is viewed favourably by the state, who has granted them tax advantages and incentives for market entry.

The lack of housing supply has been further compounded on the demand side by a lack of available credit which combined with post-crisis employment conditions has produced a deepening inequality in the structure of Irish mortgage markets. As a result of the banking crisis and subsequent restructuring and deleveraging new lending has been severely restricted on the Irish economy. This process has been further exacerbated by the withdrawal of foreign lenders from the Irish market. Of the banks previously operating during the boom period only Ulster Bank has committed to remaining active in Ireland, Lloyds, Rabobank and Danske bank are all running off their Irish operations.

In the post-crisis period the upper-income deciles dominated activity in both the FTB and BTL segments of the market, and there has been a prevalence of cash only buyers. These developments make it clear that in the post-crisis Ireland the less well-off are being squeezed out of homeownership and into rental markets.

Comparing housing based financialisation in Denmark and Ireland, it is clear that while the Danish system is far from perfect the structure of the Danish housing system has protected key strands of the welfare state and provided a layer of stability which is not evident in the Irish case. Into recovery, the Danish not for profit sector continues to resist marketisation and remains a private pillar of housing stability in Denmark. It seems as though the crisis in Ireland should offer the Irish an opportunity to look to their small, open, European counterparts for inspiration to develop a housing system which is sustainable and capable of resisting the vagrancies of transnational capital. While the Danes had a profound phase of housing based financialisation, it was a housing bubble of the rich, and its effects were felt by the rich. In Ireland, housing-based financialisation has been worst felt by the most vulnerable in society with current figures suggesting that up to 20,000 people are without a home.

Comparative Summary

While the initial response to the GFC seemed to indicate that finance in Denmark was less powerful than their Irish counterparts, the post-crisis period revealed new forms of globalised financial power in both economies. While the reason for this power and the outcomes it produced differed, ultimately it emanated from the interconnected nature of contemporary financial systems and their dependence upon market confidence. In Denmark, globalised financial power can be traced to a highly indebted middle and upper class that depends on the maintenance of low-interest rates and access to foreign capital to keep the mortgage market afloat. This dependence on markets has tied the hands of the Social Democrats and necessitated a period of austerity in line with the EU financial pact. In Ireland, a very different type of globalised financial power can be traced to the deep penetration of foreign banks and capital in the Irish economy, forcing the ECB to supply extraordinary levels of funding which ensured the survival of the banking sector.

The very different consequences which flowed from the GFC were explained by the effect of the various institutional *buffers* and *filters* contained in both financial systems. Analysis across the dimensions of the model revealed that Ireland was comparatively more exposed to both international banks and capital than their Danish counterparts. Therefore, the reversal of capital flow which accompanied the GFC had a far greater impact on Irish banks. Furthermore, the institutional *buffers* in the Danish financial system allowed them greater capacity for market intervention and left large banks to assist small and medium-sized banks. No such capacity existed in Ireland.

Comparative Summary 2008-2015		
	Denmark	Ireland
Politics of growth	Finance is structurally powerful because of increased foreign funding and the proliferation of middle-class debt. Politics of austerity, despite healthy state finances. Globalised Financial Power: Deep connections between banks, upper-income deciles and transnational markets.	Finance is structurally powerful because of deep integration in the European model and fear of contagion. Survival of Irish Banks despite severe liquidity crisis. Globalised Financial Power. Deep connections to global banking.
Banking	Institutional buffers ensure the survival of the system. Crisis contained to small & medium-sized banks. Foreign capital props up the market. safe haven status Large banks insulated from worst of the crisis had the capacity to assist other banks. Credit continues to flow on mortgage markets.	Depth and breadth of financial globalisation cause a general banking collapse. Crisis spread across all the banks. Foreign capital and foreign banks take flight. All banks effectively paralysed. General credit squeeze.
Housing	Well stocked corporatist housing system. Key effect of the varieties of residential capitalism was the location of the debt in the upper-income deciles and the linking of debt and consumption. Macroeconomic instability.	Poorly stocked familial housing system. Key effect of the varieties of residential capitalism was the creation of a speculative investment boom in housing. Links to crisis in Irish housing supply.

Varieties of Bank Based Capitalism	Developed, coordinated, market-based banking model with reduced institutional buffers. Financialisation has eroded the coordinated characteristics of the Danish financial system.	Underdeveloped, liberal, passive bank-based model, with a decreased presence of foreign banks and capital. Financialisation has returned Ireland to an underdeveloped bank-based model of capitalism.

Table 7.0 Comparative Summary

Looking at the varieties of bank based capitalism in the post-crisis and recovery period reveals that financialisation has involved two different type of institutional change in Denmark and Ireland (Streeck and Thelen, 2005). In Denmark, a process of slow incremental change on a path to liberalisation has produced gradual transformation by reducing the institutional buffers of the coordinated banks based model. In Ireland, a process of abrupt transformation has produced no change, and Ireland has returned to an underdeveloped passive bank-based model with a large presence of foreign banks (Streeck and Thelen, 2005).

Chapter 8: Conclusion

Introduction

Chapter 8 returns to the twin research questions on how and why financialisation worked as both a general and specific process in Denmark and Ireland 1982-2015. The chapter opens with Table 8.0 which outlines the critical institutional changes within the two cases. The table reveals that the general process was characterised by the emergence of national forms of market-based banking, which involved commercial banks getting more involved in mortgage lending and a build-up of household debt.

The current chapter revisits Type 1 and Type 2 financialisation and shows that these processes were shaped by the institutions of banking within both economies, making it clear that institutions matter. Financialisation flowed over two very different varieties of bank based capitalism, at different levels of development and these differences shaped both types of the process toproduce nationally specific forms of financialisation from which flowed different sets of consequences for the real economy. Turning to the second research question, the chapter outlines that the reach of the general trend beyond national borders is explained by the politics of financialisation, the financialisation of housing and the power of global banks. It was the solutions that financialisation offered to the crucial actors, in particular states and households, which ensured that over time it gathered the political support that the process required. While this produced two mortgage booms in the 1990s, it was not until the 2000s when shifts within global banks provided the necessary capital flow that significant financialisation effects occurred in Denmark and Ireland. It was global banks and their connections to national banking sectors that were the principal transmission mechanism for financialisation across space.

Comparative Table 8.0: Politics, Banking & Housing 1982-2015		
1982-1991		
	Denmark	Ireland
Politics	Unintended consequence of exchange rate policy	Unintended consequence of fiscal consolidation
Banking	Well developed system No liberalisation of banking. Separation between mortgage and commercial banks. Financial crisis causing bank consolidation.	Underdeveloped system Profound liberalisation of banking. Removal of the distinction between mortgage & commercial banks. Financial stability despite deep liberalisation.
Housing	Well stocked corporatist system	Poorly stocked familial system
1992-2000		
	Denmark	Ireland
Politics	Intentional managed process	Unintentional un-managed process
Banking	Moving from a passive towards a market-based system with institutional buffers. Liberalisation required for product innovations. Mortgage and commercial banks connected through coordination. Primarily nationally funded mortgage boom. Pension funds supply buffer against foreign capital.	Moving from a passive towards a market-based system with no institutional buffers and increased presence of foreign banks. No further liberalisation required for product innovations. Mortgage and commercial banks became connected through competition. Exhaustion of national funds (deposits), increased use of market-based capital and entrance of foreign lenders. No buffers against foreign capital.
Housing	Housing system stability Continued support for the welfare state.	Transformation of the housing system Welfare retrenchment

2001-2007		
	Denmark	Ireland
Politics	Further liberalisation required	No further liberalisation required
Banking	Emergence of a market-based system with institutional buffers and banks become exporters of financial services. Mortgage and commercial banks connected through coordination, which produced a nationally unique form of inter-bank lending. Primarily nationally funded mortgage boom, commercial banks, pension funds and small and medium banks supply buffer against 'the wall of money.' Funding gaps limited to small and medium-sized banks.	Emergence of a fully market-based system with no institutional buffers and sudden influx of foreign banks. . Mortgage and commercial banks connected through hyper-competition which deepened the connections to the 'wall of money.' Foreign banks drove market conditions. Use of market-based capital and entrance of foreign lenders. No buffers against foreign capital. Strong ties to the UK system. Funding gaps spread broadly across the system.
Housing	Transformation of Cooperative Housing	BTL Investment
2008-2015		
	Denmark	Ireland
Politics	Globalised financial power	Globalised financial power
Banking	Institutional buffers which refracted type 1 & 2 financialisation explain the survival of the system. Crisis contained to small & medium-sized banks. Foreign capital props up the market. Safe haven status large banks insulated from worst of the crisis could assist other banks. Credit continues to flow on mortgage markets.	Deep penetration of type 1 & 2 financialisation explains the general banking collapse Crisis spread across all the banks. Foreign capital and foreign banks take flight all banks effectively paralysed General credit squeeze
Housing	Housing system stability with macroeconomic risk	Housing crisis with new forms of financialisation

Summary of Comparative Table 8.0

Table 8.0 outlines the critical changes that occurred across the dimensions of the model in both the cases during the four periods. These changes capture how financialisation has worked in both cases mapping two distinct national forms of a single general process. The general process included characteristics which were shared across both the cases; banks grew larger and more powerful through diversification of their business model towards asset-based lending forging new connections between commercial and mortgage banking. Households, rather than NFC's, became the crucial source of bank business and product innovations formed a crucial strand of this diversification. Facilitating all of these changes was the increased use of market-based funding which in turn increased the connection between national models of banking across the globe and allowed banks to access the 'global wall of money.' (Fernandez and Aalbers, 2016) However, across this entire set of common characteristic, there was diversity shaped by the institutional *buffers* and *filters* of banking which refracted the financialisation process and produced nationally specific models.

1982-1991:

The 1980s was a period of crisis for both economies; Denmark faced macroeconomic instability and balance of payments problems which were linked to low growth and high unemployment. Ireland faced a fiscal crisis caused by failed Keynesian stimulus and underdevelopment also linked to high unemployment. Both of these crises resulted in institutional change which affected the financial sector; In Denmark, attempts to promote competitiveness led to the introduction of fixed exchange rates, which lowered the price of credit and caused a financial boom and bust and a subsequent process of bank consolidation. In Ireland, welfare retrenchment and the transformation of the housing system from a socialised to a marketised system necessitated the liberalisation of banking. Despite the deep

liberalisation very little happened in the Irish financial system. In both cases, these changes *unintentionally* put in place the critical building blocks for the subsequent periods of financialisation. However, both processes would require further political support, arguably more so in Denmark.

1992-2000:

In the 1990s, both Danish and Irish banks turned towards households as a new source of profit. In Denmark, this was a state-driven process as the Social Democrats sought to stimulate demand in the economy through financial liberalisation. However, in Ireland, it was a bank-driven process. The state took a 'hands off' approach to finance and banks, which were isolated from the Celtic tiger through the presence of FDI and sought out new profit opportunities through asset-based lending.

In both Denmark and Ireland, banks grew in size, and this growth was facilitated by turning to households as a new source of profit. In both cases, this led to an increased connection between commercial and mortgage banks. However, the dynamics of these connections were very different across the cases and produced national forms of financialisation, coordinated in Denmark and competitive in Ireland. In Denmark, coordinated dynamics enabled a large mortgage sector to become connected to a growing commercial sector through cooperative agreements. However, mergers did not result in the combining of mortgage and commercial banking which remained separate in both their business models and funding source. The funding model included elements of coordination across a national bond market which incorporated the presence of sizeable stable pension funds. The pension funds provided an *institutional buffer* against foreign capital which was already becoming increasingly important in Ireland.

In Ireland, mortgage and commercial banking became connected through competitive dynamics, and both vied for strands of each other's business model. This produced a system

in which it was hard to distinguish between commercial and mortgage banks. The competitive dynamics established in Ireland caused a further structural change in the financial system by attracting the attention of foreign banks which sought to profit in an emerging market and increased the competitive dynamics within the system even further. Furthermore, the underdeveloped and liberal characteristics of Irish finance left them with no alternative source of capital and led to the increased use of foreign funding through the running of funding gaps, a practice which was long established in the big Irish banks.

Therefore in both cases, the increased presence of commercial banking within mortgage lending was a central feature of the early phase of financialisation, and the existing variety of banking shaped the dynamics of this process. By the end of the period, both systems were in very different places. Denmark had built up both debt and wealth, and there was adequate capital contained within the system to provide mortgage finance. In Ireland, banks had exhausted the capacity to make loans based on national deposits, and there was no alternative source of national capital available to them.

2001-2007:

During the years 2001-2007, both systems witnessed significant financialisation producing a bubble economy which included further product innovations, increased market-based funding and the internationalisation of banking. In Denmark, this included further legislative changes, a pro-finance, pro-privatisation Liberal-Conservative coalition introduced a tax freeze on most property and allowed IO loans and deregulated the cooperative housing rules. In Ireland, Fianna Fáil and the Progressive Democrats took a light touch approach to the regulation of finance and introduced capital gains tax cuts to release pent-up capital into the economy. The product innovations which drove the bubble economy were introduced by foreign banks and produced a hyper-competitive mortgage market. Both economies produced

housing bubbles and related building booms, however, in Ireland the house price boom and building boom were far stronger than the booms in Denmark.

Furthermore, the mortgage booms which underpinned the building booms in both cases were different in characteristic. In Denmark, there was a bubble of the wealthy that used to IO loans to access wealth and trade in expensive standalone properties. In Ireland, the primary drivers of the bubble were the BTL investors who sought to buy a property as an investment opportunity.

During the 2000s, the turn towards households by banks included the introduction of product innovations which reduced the price of credit. Across this dimension the two cases are strikingly similar; product innovation was a central strand of the liberalisation of mortgage lending. Product innovations linked both the national banking sectors to the process of interest rates harmonisation which accompanied EMU. In both cases, the product innovations became increasingly liberal in characteristic across the time periods. In the 1990s both countries introduced variable rate mortgage products, and then in the 2000s, both countries introduced interest-only mortgage products. However, the dynamics which shaped the introduction of these products differed in crucial ways, coordination in the Danish system allowed mortgage and commercial banks to work together and introduce a single new loan type. In Ireland, competitive dynamics driven by foreign banks saw a whole range of product innovation on the Irish market, which included both interest-only loans but also 100% LTV loans. The competitive dynamics in Ireland were producing a more unstable deeper form of financial liberalisation.

Reasons for the difference in the depth of these booms were contained within the structure of banking; in Denmark, the credit bubble attached to the building boom was isolated to the small and medium-sized banks that employed international capital, running substantial funding gaps, while for the most part large banks remained outside of the bubble

economy. In Ireland, the bubble was spread across all the banks and driven by the actions of one rogue bank Anglo Irish and a significant presence of foreign banks. These bubbles connected to very different mortgage banking sectors. In Denmark, a nationally unique form of inter-bank lending emerged as large banks funded the boom in mortgage lending by purchasing massive blocks of the bond market. In Ireland international capital flooded in primarily from the UK as global banks invested in Irish banks producing a massive funding gap which spread across the entire banking sector. While Ireland imported capital, Denmark through its largest bank, Danske Bank, became an exporter of capital. During this period Danske Bank internationalised its operation through the purchase of banks in Ireland and the Baltic Region.

2008-2015:

Standard explanations of the bank bailout programs in Denmark and Ireland outline the limiting effect of coordinated capitalism and its tendency to produce better outcomes for both states and taxpayers. While during the immediate response to the GFC Denmark and Ireland appeared to have very different levels of financial power in the post-crisis period it became clear that these were cases of a new type of financial power not captured by the standard institutional explanations. The use of markets, in particular, international capital had granted both financial sectors a new type of globalised financial power which worked by tying the needs of the state (or regulator) to the needs of the finance. In Denmark, a heavily indebted middle class combined with the increased presence of international and speculative capital tied the hands of the Social Democrats and necessitated a fiscally conservative stance. In Ireland, the deep penetration of foreign banks and capital and high levels of integration provided the impetus for unprecedented levels of funding from the ECB. While this may not have allowed Irish banks much scope for strategic action it did ensure their survival.

During the GFC the unevenness of the connections between the general and specific features of these two cases of financialisation was revealed. It was the more in-depth and broader penetration of both forms of financialisation in Ireland which explain the difference in outcome during the financial crisis. Furthermore, the structure of the Danish banking sector and the capacity for coordinated action provided *institutional buffers* in the Danish model, which limited the role of international capital, protecting the large banks and allowing greater capacity to respond to the crisis. In Ireland, no such buffers existed, on the contrary, *institutional filters* had connected Ireland to one of the most financialised banking systems in the world the UK. Banks and capital had flowed in unrestricted. Furthermore, the presence of foreign banks in the Irish market contributed to a form of 'hyper-competition', and all the banks crowded into speculative lending, employing wholesale funding. The massive reversal in funding which followed the GFC effectively paralysed the Irish banking sector.

The structure of the Danish financial and housing system proved to be vital stabilising factors during the GFC. While they did not protect the Danes from financialisation, they did limit its effects isolating foreign capital within the small and medium-sized banks, ensuring a primarily nationally funded mortgage sector and producing a housing bubble of the rich who could afford to pay. In Ireland, the exact opposite of this occurred the structure the banking system encouraged the flow of capital into the country, both through foreign bank entry and inter-bank lending and the housing system produced a bubble in speculative investment driven by BTL borrowers purchasing a second home. Irish banks experienced the worst of both worlds in the wake of the crisis, being heavily exposed across the whole sector to international capital which was taking flight and connected to households that were in severe economic difficulty as the crisis in Ireland morphed from a financial crisis to a general economic crisis.

In Denmark, there was no mortgage arrears crisis as the wealthy households, assisted by a further process of financialisation, continued to pay their mortgage debt. The low-interest rate environment assisted this process in the wake of the crisis as the ECB sought to stimulate economic activity across Europe. In Ireland, a significant mortgage arrears crisis emerged, banks withdrew the product innovations introduced during the bubble and mortgage holders faced rising interest rates, falling house prices and falling economic activity. The debt was spread across the Irish economy as the familial housing system had encouraged investment across the classes.

Research Question 1:

Given the general international trend towards financialisation, how much difference was there between different national forms of financialisation, and why?

- *Why is Ireland's collapse so much worse than Denmark's?*

The answer to *how* and *why* national forms of financialisation differed in Denmark and Ireland is located in the complex dynamics between national politics, the national varieties of banking and housing and how these connected to the general international trend.

Banking was the primary transmission mechanism for the general process within both national economies. Institutional differences across the financial system explain the differences in the national forms of the process which emerged and the different sets of economic consequences which flowed from these national processes.

National models of banking contained institutional *buffers* and *filters* which shaped the financialisation process and its connections to the general process. Furthermore, the *buffers* and *filters* in each system related directly to the variety of capitalism in which the financial system was embedded, and it was these institutions over which financialisation flowed. Therefore, it was the *buffers and filters*, and the institutional changes within them, which ultimately produced two nationally distinct forms of financialisation with very different sets of consequences for the real economy.

National Forms of Financialisation

Table 8.1 (reproduced from chapter 7) outlines the two dominant forms of financialisation which had their roots in their roots in 1980s, progressed through the 1990s and peaked in 2000s in Denmark and Ireland. These two forms were distinct and yet inter-connected. In Type 1 banks crossed borders and set up new operations within foreign markets. Type 2 captures the influx of foreign capital into domestic markets through Hardie et al's (2013) model of market-based banking (in its national form). The institutional *buffers* and *filters* contained within national banking models shaped these two forms of financialisation in different ways in the two cases. Looking across the emergence and subsequent collapse of these two forms revealed *how* and *why* the two cases differed and why very different sets of consequences flowed from these differences.

	Denmark	Ireland
Financialisation 1	Danish Banks are *Carriers* of this type of financialisation into Irish and Baltic Markets.	Irish Markets are *Receivers* of this type of Financialisation. UK, Nordic & Dutch Banks.
Financialisation 2	Small and Medium-sized Banks act as a *Buffer* Containing the worst of the problem, thus insulating Large Banks. Mortgage Bond Market act as a *Buffer*. Pension Funds act as a *Buffer*.	Foreign Capital was spread broadly and deeply throughout all of the Banks. No Institutional *Buffers* Strong Historical Ties to UK Money Markets *Filter* Capital towards Irish Banks.

Table 8.1

Type 1 Financialisation Denmark

Type 1 financialisation emerged in Denmark as a direct result of the banking sectors coordinated response to the financial crisis in 1987 (Table 8.2). The consolidation of small and medium-sized banks with larger solvent banks produced a new type of large, powerful bank in Denmark. During the 1990s, a period of profound economic growth, these banks were limited by their presence in a coordinated economy. Large firms remained separate from bank finance through self-finance, housing markets were dominated by mortgage banks and SME finance was provided by the small and medium-sized banks. The newly created large banks, enabled by the process of European financial integration sought to move beyond the constraints of coordinated capitalism by entering developing market economies.

From the late 1990s onwards a new type of bank was emerging in Europe, a larger, more powerful bank with a far more international outlook. The process of financial integration, in particular, the banking directive in 1993 enabled these banks to cross borders. The largest of the Danish banks, Danske, *mirrored* these other large European banks and became a *carrier of type 1 financialisation into peripheral housing markets in Ireland and the CEE economies.*

Dynamics of Type 1 Financialisation Denmark 1982-2015	
1982-1991	Banking Crisis: Consolidation of Small and Medium Banks
1992-2000	Growing Consolidation: New Type of Large Powerful Banks. Limited by Coordinated Capitalism.
2001-2007	New Large Banks Seek to Move Beyond the Limitations of Coordinated Capitalism
2008-2015	Large Banks Survive the Crisis and Continue to Diversify their Business Model

Coordination was central to the emergence of this type of financialisation: Firstly it was the *capacity to negotiate* across the sector which led to the growth in the size of Danish banks. Secondly, the coordinated characteristics of finance *limited* these larger banks in what they could achieve within their borders, urging them to turn toward the export of financial services and benefit from economies of scale.

This description flies in the face of the stereotypical picture of the de-commodifying effect of Social Nordic economies. Rather than limit financialisation, the coordinated characteristics of the Danish financial system refracted the process and produced a nationally specific model. In seeking to overcome the limits that coordination placed upon them large Danish banks shifted the process across space. Danish banks mirrored other large European banks and sought to imitate their growth strategies. The Financialisation of banking has included not just the movement of banks and capital, but also the movement of *ideas about how banks work*, this fact which was highlighted by an expert in global and European banking, who suggested that ideas flowed through a *demonstration process* (Finsec 5/IRL).

Type 1 Financialisation Ireland

Comparing how Type 1 financialisation emerged in the Irish economy lends essential insight into how and why Ireland was a *receiver* of financialisation while Denmark was a *carrier* of the process. Banks were attracted to *underdeveloped* markets because they stood to profit from their higher level of experience and economies of scale. Comparing Denmark and Ireland across this type of financialisation linked the two cases as Danske bank was a crucial player in the Irish market.

Dynamics of Type 1 Financialisation Ireland 1982-2015	
1982-1991	Fiscal Crisis: Liberalisation of an Underdeveloped Banking System: Increased Connection Between Commercial and Mortgage Banking.
1992-2000	Boom in Mortgage Finance: Inexperienced and Under Sized Irish Banks, Lack of National Capital, Strong Ties to UK Markets, Foreign Banks Begin Entry to Irish Market.
2001-2007	Foreign Banks Drive Developments in Irish Markets through Product Innovation and Aggressive Lending.
2008-2015	Foreign Banks Withdraw from Irish Market.

This type of financialisation was linked to very different approaches to financial integration within the two case countries. During the 1990s, the Danes favoured the creation of large, powerful banks which would be able to compete on the global stage (Abildgren, 2010). The Danes have always been acutely aware of the forces of globalisation and have consistently made efforts to balance the forces of the risk of global markets with an element of national insurance. To this end, the creation of a financial export sector ensured they would be carriers

of Type 1 financialisation. Ireland on the other hand, guided by the neo-liberal ideology of privatisation took a very different approach to the forces of globalisation and actively invited global capital into the political economy. The sale of the national banking units to foreign banks demonstrates that much like in its industrial sector, Ireland favoured the importation of foreign capital through direct investment in the financial sector.

However, in the Irish case structural limitations on the financial sector, its long history of underdevelopment and strong ties to the UK market, played a more significant role in enabling Type 1 financialisation than political manoeuvring or ideology. In the 1990s, during a period of profound economic growth and rising asset values an underdeveloped Irish banking sector, with strong ties to UK markets, attracted the attention of foreign banks. The key players attracted to the Irish market were large UK banks with longer histories of mortgage lending and large parent companies. Already, in the 1990s it was clear that Irish banks could not supply enough credit to the boom in mortgage and construction markets. By 1997, Irish banks contained the start of a funding gap and international capital was already playing an increasingly important role. Underdeveloped Ireland with booming credit markets and high bank profits posed a perfect opportunity for more experienced, well capitalised large foreign banks.

Danske Bank connected the two cases across Type 1 financialisation and offered unique insight into why foreign banks were attracted to the Irish market. Publications released by Danske made it clear that it was the underperforming nature of NIB which attracted Danske Bank. By taking on a bank with a chequered history, Danske felt they could turn this bank around trough product innovation, improved customer service and an aggressive lending strategy. Their penetration of the Irish market suggests that in one respect they were correct, underdeveloped banks did offer a real opportunity to large, well capitalised, highly experienced foreign banks. Figures from the Danish banking inquiry

revealed that over half of the funding gap in the Danish banking sector was located in Danske banks Irish operation, and recent publications in the Irish times revealed that Danske had loaned over three bn Euro into the Irish market in just a few short years. Underdeveloped markets offered large European banks the opportunity for rapid expansion and their higher level of experience offered them an edge in the market.

The effect of foreign banks on the Irish market was profound. Foreign banks drove market conditions through product innovation and created a highly competitive environment. All of the products which became so famous in the wake of the GFC, the tracker, the IO and the 100% mortgage were introduced through foreign banks. This led to the diminution of lending standards in Ireland and credit levels reached unprecedented heights. In order to meet the demand for credit, under-developed Irish banks had little option but to turn toward international markets to fill the gap between deposits and savings in the national economy. There was a clear dynamic between Type 1 and Type 2 financialisation in the Irish economy, the ease with which banks could access capital through Type 2 gave the hyper-competitive conditions driven by Type 1 further impetus and support.

The deep penetration of foreign banks into the Irish market added a layer of instability to the Irish sector that was not present in Denmark. Work by the Irish Central Bank revealed that in the wake of the GFC foreign banks turned to support their home markets and caused further constraint on funding conditions in the Irish domestic market. Furthermore, many of the foreign lenders who entered the Irish market during the boom period have subsequently wound down their operations and contributed to the general credit squeeze in the post-crisis period. The exit of foreign lenders has contributed to returning to Ireland to a model of finance very similar to that with which they commenced the process of financialisation in the early 1990s, a small number of relatively large banks, which practice a type of credit rationing. Ultimately the entry of foreign lenders only served to further slow down the

development of an adequate national financial system as Ireland simply filled the gaps in its national model through importation of financial services.

Across Type 1 financialisation the crucial difference between Ireland and Denmark was the level of economic and financial system development. A well developed, coordinated Danish system limited the opportunities for foreign bank entry but also limited large national banks, and in response, they internationalised their banking model. While an underdeveloped Irish system engaged in the process of convergence on EU standards, with strong ties to an epicentre of Global banking in the UK, proved ripe for speculation by foreign banks. While the Banking Directive enabled the movement of these banks in 1993, it was these distinctly national characteristics which shaped the investment decision of the foreign banks which carried this form of financialisation into Ireland.

Type 2 Financialisation Denmark

The coordinated institutions of Danish finance also shaped Type 2 financialisation.
The Danish model of finance refracted Type 2 financialisation and produced two subtypes of the phenomenon. The first subtype emerged in the mortgage model, which in turn drove development within the small and medium-sized banks where a second subtype emerged. Within both sectors, coordination played a central role in the emergence and shaping of the national form of Type 2 financialisation. Within the subtype which emerged in the mortgage model, there was also a demonstration effect as large Danish banks mirrored the interbank funding models of global banks and fitted them to the Danish model.

During the 1990s, the Social Democrats laid the foundations for the national form of Type 2 financialisation which subsequently emerged in the 2000s. By harnessing household debt as a kick start for economic activity, the Social Democrats unwittingly put in place a set of dynamic which enabled an increasingly powerful financial sector to dictate the course of institutional change. While during the 1990s, ARM loans were funded and balanced by the presence of the newly created pension funds, by the 2000s, an increasingly powerful commercial banking sector drove the introduction of IO loans funded by a *new model of interbank lending*. The commercial sector replaced the pension sector as the principal funder of Danish mortgage debt and drove credit growth to new heights. Financialisation allowed the Danish commercial sector greater capacity for action over time and required less political intervention in the system for growth to emerge.

Coordination within the Danish financial system was central to the emergence of this type of financialisation. In the 1990s, coordination between mortgage banks, commercial banks and pension funds produced a balanced form of privatized fiscal expansion. However, in the 2000s, the same capacity produced a national form of inter-bank lending between the commercial and mortgage banks. Again, there was a process of demonstration happening

within Danish finance as the developments within a nationally specific mortgage market mirrored the general trend of the increased use of wholesale funding within large European banks. The Danish inter-bank funding model was a national variant of and inter-bank lending defined within Hardie's (2013) model of market-based banking. The same process of banks turning towards markets was being refracted through the Danish model of finance and coordination was employed as its central dynamic. This nationally distinct subtype of financialisation provided an institutional *buffer* against foreign capital, meaning that unlike the international capital which flooded into Ireland Danish 'finding gaps' were covered by capital contained in affiliated national banks.

Similarly, in Type 2 financialisation which emerged in small and medium-sized banks, coordinated banking was central to shaping this national variant of the use of wholesale funding. Rather than shield banks from financialisation, in this case, coordination exposed the small and medium-sized banks because of their strong relation ties to the bubble-prone property sector. It was the strong relational ties and their small size which were the ultimate undoing of these banks. In a bid to proliferate these banks turned to international capital and in so doing acted as an institutional buffer within the Danish system protecting the large banks. While this buffer shielded large banks, it did so at the expense of the small and medium-sized banks and the GFC has led to a real decrease in the number and role of these banks in the Danish system.

Interestingly, the capacity to coordinate over time has ultimately put the Danish financial system on a trajectory of liberalisation and internationalisation which have reduced the capacity to coordinate across the system. Therefore, somewhat ironically this was a case of coordinated capitalism eating itself, coordination enabled the growth of a large, powerful banking sector, the GFC revealed that this growth has ultimately reduced the coordinated characteristics of the Danish model. The increased presence of foreign capital on Danish

bond markets and the decreased number and role of small and medium-sized banks have both eroded the coordinated structures of the system. Rather than shield Danish finance, coordination was central to the emergence of the nationally specific forms of both types of financialisation. Indeed, the very roots of Type 1 & Type 2 financialisation can be traced to the coordinated response to the financial crisis of 1987. Given that the 2008 crisis has unleashed another wave of bank consolidation and mergers it seems likely that large Danish banks will continue to transform the Danish model.

Type 2 Financialisation Ireland

While a well developed, coordinated financial system in Denmark provided *buffers* against international capital, an underdeveloped, liberal system in Ireland contained *filters* which hastened and deepened its flow. Furthermore, the deep penetration of Type 1 financialisation in the Irish economy and the profound market influence that these more experienced banks exerted on the market provided a further impetus for wholesale funding. The literature review outlined that the general process of financialisation is made up all the national forms of the process, but also of their connections to the general process. In the Irish cases, the connections to the general process were spread broadly through the banking sector, and rather than shield large banks, small and medium-sized banks were a source of instability as large banks followed them into risky markets.

In 1987-1992, the foundations for Type 2 financialisation were laid by the Fianna Fáil / Progressive Democrat Coalition. During this brief period, profound change to the structure and regulation of finance and housing put in place the dynamics between these two critical institutional regimes which went on to shape the size, source and trajectory of both Type 1 and Type 2 financialisation. In 1989 the Building Societies Act effectively removed the

distinction between mortgage and commercial banks and in 1992 a further set of changes extended both of these sectors ability to use wholesale funding.

By 1997, the banking sector had exhausted deposits as a source of funding and turned to market-based funding as an alternative. Funding gaps became standard practice across the Irish banking sector as a means of accessing the ‘global wall of money.' The UK was a central hub for this global wall of money containing many of the largest banks operating in European money markets. Ireland had long-established ties to these UK money markets, and running funding gaps was also a long-established practice within Irish banks. Chapter 6 revealed that contrary to much of the current literature the location of the bulk of the funding for the Irish credit bubble was in UK rather than European banks.

Institutional *filters* which connected Ireland to global banking combined with the market dynamics created by Type 1 financialisation pushed Ireland further and further into wholesale funding markets. Type 2 financialisation was spread broadly across the Irish banking sector; both national and foreign banks ran substantial funding gaps. Furthermore, the gaps covered all lending, both commercial and mortgage.

The deep penetration of foreign banks and capital within the Irish sector explained the very different consequences which flowed from the financial crisis. Denmark contained two institutional buffers which limited the role and subsequent effect of foreign capital. The first was in their small and medium-sized banks, which effectively firewalled the worst of the liquidity crisis leaving large banks to assist during the crisis period. The second was in their mortgage model, where a national variant of interbank lending, meant that much of the funding was contained in affiliated, large, national commercial banks. Ireland contained no such buffers, and foreign capital was spread broadly across the Irish banking sector.

The flow of Type 2 financialisation over two nationally distinct types of bank based capitalism which were at different stages of development explains the differences across the two cases. The processes themselves involved the flow of banks, capital and ideas about how banks work. In particular, Type 2 financialisation involved not just change within national banking sectors but also change within the global banks to which national sectors were connected. The Irish case revealed that the depth and breadth of these connections were crucial to understanding the different consequences which flowed from financialisation in the two cases. Having looked in depth at the national forms of the process, the chapter now turns to untangling how these national forms and the connections between them made up a general trend.

Research Question 2: *If there are different national forms, then why does financialisation exist as a social process with a reach far beyond national economies?*

- *Why do institutional and regulatory changes in the 1990s only have significant financialisation effects in the 2000s?*
- *Why do Ireland and Denmark, liberal and coordinated political economies respectively, both end up with high household debt ratios and processes of financialisation in the 2000s?*

The Politics of Financialisation and the Financialisation of Housing

When financialisation met housing, it had found the perfect vehicle to propel itself to new and dizzying heights. All the principal actors stood to gain from the financial innovation and manipulation of time which lay at the root of the global housing bubble. Financialisation as a social process has characteristics which produce effects in its ascendance that are hard for all the key players to resist.

Ireland and Denmark both ended up with high household debt ratios and processes of financialisation in the 2000s because in seeking to overcome national economic crisis during the 1980s and 1990s both states unwittingly put in place the basic institutional building blocks upon which the process of financialisation depends, financial liberalisation and changing monetary policy. For states, the growth cycle implications of housing based financialisation in Europe, offered a solution to kick-starting stagnant and underdeveloped economies out of crises, into an age of employment miracles. These changes did not produce significant financialisation effects until the 2000s because the final piece of Krippner's (2011) puzzle, capital flow, only became available in the early part of the decade when global banks became active investors in peripheral debt.

Moreover, while the process emerged as an unintended consequence of earlier sets of policies, once it established itself, states supported it through its progression. The political favour which was garnered from the growth cycle implications of rising asset values and cheap debt was just, too good, and, too easy, to resist for the sake of stability and balance. Likewise, for households, financialisation exponentially increased household wealth and consumption levels, and while there were winners and losers in volatile asset markets the rush to investment was on. Rising asset values turned homeowners into investors, and the financialisation of daily life progressed unabated.

Housing is the most significant asset in most people's lives; and therefore the most significant investment decision they are going to make and their mortgage accounts for a large portion of their monthly take-home pay. Financialisation promised homeowners that it could reduce their monthly payments while raising the value of their home and continue to allow them to maintain their current consumption. Indeed, interest only loans extended this promise into the future as rising wages eroded current debt levels.

While the structure of the housing regime produced diversity within the general trend of rising household debt, there were also essential similarities which can be traced back to the actions of banks. Crucial to driving demand on credit markets across a whole range of nations was the introduction of variable rate, adjustable rate and amortised mortgage products. These products harnessed the shifting monetary policy which accompanied the great moderation and allowed homeowners access to the cheaper credit made available by the ‘wall of money.' Debt had not just become cheap; it had become incredibly cheap, falling to a level that the previous generation of homeowners would find hard to believe. In its ascendency financialisation fulfils its promise, debt remains cheap, capital gains through rising asset values continue to eat into the debt and financial innovation creates new ways to access an even more significant portion of the pie. Before the problems emerge, the question was why

you would not invest in property, after all for the average person it was their one chance to make a significant capital gain during your lifetime.

Before significant financialisation effects emerged in either economy, both countries had turned towards housing as a new source of growth. While the process was more intentional and managed in the Danish case, the implications regarding enabling a process of financialisation in both countries were much the same. In Denmark in 1992-1996, the Social Democrats developed a form of mortgage price Keynesian to provide economic stimulus to a stable but stagnant economy. The new role for housing as a driver of growth involved significant liberalisation of the banking sector, including changes to regulation which allowed mortgage banks to offer new loan types. The new loans were explicitly aimed at taking advantage of the changing monetary conditions which accompanied EMU, allowing homeowners to access the cheaper credit which falling interest rates produced. In Ireland in 1987, a Fianna Fáil / Progressive Democrat coalition faced into a crisis of state finances and sought to withdraw from its role as the provider of mortgage finance and social housing. In order to achieve this goal, Fianna Fáil and the Progressive Democrats introduced a profound process of liberalisation of Irish banking which fundamentally altered how finance worked in the Irish economy. This in-depth process of liberalisation became connected to Celtic tiger growth during the 1990s and Irish banks starved of other opportunities diversified into asset-based lending. Similarly to the Danish case, the process of interest rate harmonisation altered the monetary conditions in Ireland and drastically reduced the price of credit and was linked to a mortgage boom during the 1990s. By the end of the1990s two of Krippners (2011) core conditions were in place financial liberalisation and changing monetary policy, and while mortgage booms emerged in both cases, there were still no significant financialisation effects.

While national politics and the process of financial integration and the corresponding interest rate harmonisation provided two of Krippner's (2011) core conditions, financial deregulation and changing monetary policy, it was global banks that provided the final piece of the puzzle, capital flow.

Global Banks & Market Based Banking

While politics and the financialisation of housing help us to understand why financialisation was so attractive to a range of nations, both of these were enabled by the rise of global banks and their new connections to national banking sectors. It was a shift in the investment strategies of global banks which ensured that financialisation had a reach that transcended borders no matter what their variety of capitalism. Indeed, while global and national banks initially required political intervention, to alter the rules and create the connections, by the mid-1990s, once these changes were in place, it was the banks who stepped into the driving seat. Global banks funnelled the 'wall of money' towards peripheral housing markets. It was the 'wall of money' which carried with it the political favour and capital gains which proved so attractive to national economies.

The two types of financialisation outlined in chapter 6, and 7, capture how global banks transmitted the process of financialisation across borders. These two processes have harnessed both space and time as the key transmission mechanism for financialisation. Type 1, perhaps the more direct type, involved the movement of banks across borders. Type 2, involved the movement of capital. While national banking sectors turned towards market-based banking, the more fundamental and essential shift was within the global banks which provided the capital. It was the diversification of their business model to include investment in national banking sectors which enabled national processes of financialisation to emerge through the practice of market-based banking within these national banking sectors. Indeed, looking at Type 1 financialisation all of the banks which entered the Irish economy fit within the description of global banks.

Therefore, global banks actively invested the 'wall of money' into national banking sectors which in turn invested the money into rising asset values. This development was made possible by new accounting standards introduced by Basel 11 which allowed global

banks to generate enormous profits from increased leveraging in short-term money markets through the use of marked to market pricing of loans.

The rise of this new type of bank in Europe was intrinsically linked to the project of financial integration. It provided the critical pieces of legislation and changing monetary conditions which enabled the rise of these banks. The process began in the mid-1990s when the banking directive of 1993 allowed banks to cross borders and set up operations in foreign markets. This caused a wave of activity in European banking as large banks diversified their business strategy and sought out new markets. In Ireland the impact of these global banks was profound, not only did they enter the market but they brought with them a highly competitive market strategy which included a range of product innovations. These innovations were also linked to the process of EMU, as interest rate harmonisation reduced the price of credit and banks developed products to take advantage of the new regime. Then in 2000 Basel 11, altered the accounting standards within banks, and global banks found themselves awash with capital. The new accounting standards which allowed the marked to market pricing of assets allowed global banks far more leverage in international money markets, and they took advantage of this, lending vast sums of capital into inter-bank markets.

Without a doubt, time was a central feature of the financialisation process, extending its reach across the globe. The process was not all that complex; global banks borrowed short to lend short, national banks borrowed short to lend long and then borrowed short again to fill the gap. The constant recycling of debt in a temporal loop seemed like a win-win situation, for all the banks while global liquidity was abundant. However, underneath the rising asset values which kept the temporal loop in place, were a host of problems in the national economies which contained them and as surely as the bubbles rose they began to fall. The GFC revealed just how profound the reach of global banks had become as panic spread

through global markets and felled national banking sectors in its wake. The very same temporal loops which had brought the world to such dizzying financial heights were now hastening its demise.

If one accounts for the international dynamics of what took place in European banking what Hardie and Howarth (2013) outline are two distinct forms of market-based banking. One which was predominantly, but not exclusively found in the small emerging or peripheral economies, where banks have increased their funding of non-market based assets (mainly housing and property) through market-based liabilities, and the other in which larger, more powerful banks in the UK, European Core and US have increased both the asset and liability side of their market portfolio. These larger banks have been involved in a broader range of market-based activity mainly the trading of loans and securitised products; their focus has been far more international than their smaller neighbours. A part of this international strategy has been both expanding into peripheral markets directly and also increasing their purchases of peripheral bank debt. Which they subsequently rolled up into securitised products and resold into the market. It was these global banks and the new practices within them which enabled the reach of financialisation far beyond the bounds of national borders.

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