# HOUSEHOLD FINANCE IN FRANCE AND THE NETHERLANDS 1960-2000

#### AN EVOLUTIONARY APPROACH

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## HOUSEHOLD FINANCE IN FRANCE AND THE NETHERLANDS 1960-2000

#### AN EVOLUTIONARY APPROACH

Huishoudfinanciën in Frankrijk en Nederland 1960-2000 Een evolutionaire aanpak. (met een samenvatting in het Nederlands)

#### Proefschrift

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Prof. dr. J.P.B. Jonker

Voor Christ

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Tim van der Valk Utrecht, September 2019

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## Chapter 1

### Introduction

#### 1.1 Motivation

Household financial behaviour experienced a considerable evolution since the late 1960s. In the 1950s, the majority of households were left without any formal forms of financial intermediation, which would change with the rise of retail banking in the 1960s. In the 1980s and 1980s a more sophisticated set of financial services became more widely available, including life-insurance and investment products, mortgages, and combinations thereof. What can account for this evolution in the financial service provision to households is the subject of this dissertation.

The literature has thus far offered a number of partial answers on what can explain the evolution of the financial service provision to households. Potential explanatory models include culture, legal origin, pension systems and historical experiences. How these factors relate to each other has not been brought forward, however, despite a growing interest in the field of household finance over the past decade.

Moreover, for a lack of understanding the evolution of the financial service provision to households, cross-country differences in the provision of financial services to households are also poorly understood to this day. Indeed, the presence of adjustment costs for households and the generally slow adjustment of the institutional setting hint at a considerable degree of persistence in household financial choices. An understanding of today's household financial choices thus necessitates an understanding of its historical evolution.

Our lack of understanding of how household financial service provision evolves is surprising given the relevance of household financial choices for a range of topical policy issues. First, the stock of household financial holdings is currently at par with those of non-financial corporations in the Euro-zone (24,000 billion Euro), implying a considerable connection between household financial holdings and the way in which the real economy is financed.

Second, household indebtedness, which today amounts to 58 percent of GDP in the Euro-area, is increasingly considered to be a determinant of business cycles and economic crises, something to which the 2008 Great Financial Crisis attests.

Third, European financial integration has been on the policy agenda since the 1986 Single European Act, while the integration of systems of retail finance across the European Union remains limited to this day. The current dissertation contributes to our understanding of the determinants of the considerable degree of persistence in the financial service provision to households.

The relevance of this study extends beyond the financial service provision to households. In particular, the insights from this study are expected to elicit insights into the evolution of financial systems as a whole. This is because the provision of financial services to households make up an important share of the activities of the financial system. Moreover, many of the conditioning factors of the financial service provision to households – including regulation and market conditions – are also of relevance to the general business model of financial institutions. In other words, the current study can also be regarded as a study of the evolution of financial systems through a household perspective.

In the remainder of this introduction, I first discuss the approach to my main research question at hand in section 1.2: what can account for the evolution of the financial service provision to households? This approach is consecutively placed in the broader narrative of the literature on cross-country differences between, and the evolution of, financial systems in section 1.3. In turn, section 1.4 relates the outline of my dissertation to the current state of the literature, after which section 1.5 concludes.

#### 1.2 Approach

This dissertation executes a comparative case study of France and the Netherlands in order to study the evolution of the financial service provision to households over time. The focus on France and the Netherlands is motivated as follows. First, there are considerable differences between France and the Netherlands in terms of household financial choices and the composition of household financial wealth today. Where the French household portfolio is dominated by housing wealth and life-insurance holdings, the Dutch household portfolio is instead characterized by a high share of housing assets, housing debt and claims on pension funds.

Second, both nations are founding members of the European Union and the Eurozone, meaning they have had to incorporate many of the same European legislative innovations into their national institutional framework. The case of France and the Netherlands therefore allows for a study of the tensions that arise due to a conflict between local practices and European legislation. Of related interest is the relatively mild impact of the 2008 Great Financial Crisis on household financial holdings in France as opposed to the Netherlands – particularly in housing markets.

Third, the French and Dutch (historical) regulatory and supervisory approach is often regarded as quite different. In particular, French government intervention is frequently portrayed as dirigiste, whereas in the Netherlands, policies tend to be more laissez-faire. Although these characterizations are arguably one-dimensional and do not reflect the greater complexity of both societies, the current case study

1.3. LITERATURE 3

provides an opportunity to study the role of the state in perpetuating household financial choices. The interaction between local regulatory and supervisory approaches and European legislative innovations are also of interest in this regard.

The starting period of my study – the 1960s – is motivated by the rise of a formal system of financial intermediation for the household sector in that period. Whereas the largest share of the financial system in the early 1960s served non-financial corporations and the wealthy, this would change over the course of the 1960s: commercial banks increasingly turned to the household sector to offer their financial services.<sup>1</sup>

A second breaking point in the financial service provision to households and the organization of financial systems more generally lies in the mid-1980s. It was in the mid-1980s that most financial systems across the European continent were liberalized in one way or another, in part inspired by the deregulatory wave of Thatcher in the United-Kingdom. Much of this dissertation revolves around an analysis of this process of institutional change between the 1960s and 1970s, on the one hand, and the period beyond, on the other hand. The period beyond 2000 is discussed more sparsely, except for the impact of some key European policy initiatives and the role of the 2008 financial crisis.

In addition to the usual data collection from a variety of (archival) sources, I build on a range of interviews with high-level (past) policy makers, supervisors and market participants. 15 interviews in total were taken between October 2016 and July 2018 in both France and the Netherlands.<sup>2</sup> The interviews served two main purposes. First, they aided me in identifying the most relevant institutional and financial dynamics at different points in time. Second, and more limitedly so, they brought to the fore deliberations that would otherwise have been difficult to unearth. In the latter case, a reference to an interviewee is made in a footnote.

In what follows, I discuss two of the main methodological approaches that are frequently applied in the literature. I argue that the literature often-times takes the perspective from a single financial product or intermediary whereas a functional household perspective is warranted due to the presence of substitution effects between different types of financial intermediaries and their services. Moreover, I highlight the need for a framework that brings together the various explanatory models that the literature has brought to the fore.

#### 1.3 Literature

Broadly speaking, the literature on the evolution of financial systems and the origin of cross-country differences in the composition of the household portfolio follows one of the following two approaches. First, there is a literature that seeks to explain cross-country differences in holdings of specific types of assets. Whereas the literature initially mainly employed macroeconomic data to explain cross-country

<sup>&</sup>lt;sup>1</sup>Savings banks, who originate in the early 19th century for France and the Netherlands, form an important exception in this regard.

<sup>&</sup>lt;sup>2</sup>A full list of interviews can be found in table B.1.

differences in stock market capitalization (La Porta et al., 1997, 1998; Stulz and Williamson, 2003; Rajan and Zingales, 2003; Pagano and Volpin, 2005; Degryse et al., 2018), more recent years have seen the rising importance of microeconomic studies – also due to the growing availability of high quality survey data such as the Eurosystem Household Financial and Consumption Survey (e.g. Bover et al., 2016; Arrondel et al., 2016; Guiso et al., 2018). The advantage of household level data is that one can control for household level characteristics.

Unfortunately, this literature largely focusses on explaining cross-country differences, rather than considering the origin of system dynamics.<sup>3</sup> This is particularly the case for studies working with household level data, as such surveys are mostly a recent phenomenon. This renders difficult any meaningful claims about the evolution of financial systems (and their financial service provision to households) over time. Moreover, it remains unclear whether these cross-country differences are grounded in a path dependent evolution of the national institutional setting.

A second approach in the literature is more dynamic in nature and considers the historical evolution of the supply side of a financial system or the evolution of specific financial products through time. Consider, for example, studies on the operations of individual banks (de Vries et al., 1999; Butzbach, 2015; Sluyterman et al., 1998) or a specific type of intermediaries such as savings banks (Maixé-Altés, 2010; Butzbach, 2016; Eizenga, 1985; Bátiz-Lazo and Maixé-Altés, 2010; Ayadi et al., 2009) mortgage banks (Voûte, 1989; Kingma, 2016) or commercial banks (Grossman, 2010). Alternatively, the evolution of particular product types are traced through time, such as life-insurance (van Gerwen, 1998; Slot, 2004), mortgages (Green and Wachter, 2007; Elsinga et al., 2016; Heugas-Darraspen, 1994) or consumer credit (Trumbull, 2014; Jonker et al., 2017).

Although many of these studies have led to important insights for a variety of sub-markets, they (mostly) disregard the fact that households have the opportunity to employ different types of financial products and intermediaries for similar purposes. Smoothing life-time consumption, for example, may be achieved through a (public) capital-based pension system, housing wealth, or life-insurance and equity holdings (e.g. Alessie et al., 2013; Lehmann-Hasemeyer and Streb, 2018). The decline of one particular financial asset or intermediary may thus be the result of the rise of an alternative financial asset or intermediary, something which a study with a focus on a financial product or intermediary may fail to observe.

The substitutability of financial intermediaries and products is consistent with a functional perspective on financial intermediation after Merton and Bodie (1995). According to this functional perspective, a financial system provides a number of financial functions to the real economy, including payments systems, pooling, smoothing life-time consumption, managing risk, generating information, and dealing with asymmetric information problems. Following Merton (1995), "the most efficient institutional structure for fulfilling the functions of the financial system generally changes over time and differs across geopolitical subdivision." Thus, depending on the institutional setting, different implementations of a financial

<sup>&</sup>lt;sup>3</sup>There are a number of notable exceptions, however, including Rajan and Zingales (2003); Degryse et al. (2018); Hoffman et al. (2007).

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function may prevail.

The implication of this functional perspective for the current study is that it prescribes an analysis in which all potential providers of a particular financial function are taken into account. In this way, shifts of financial functions from one financial product or intermediary to another can effectively be taken into account, which is of particular importance for an analysis of system change. Moreover, a functional perspective also has the potential to account for cross-country differences in the organization of the financial service provision to households. In particular, the implementation of a financial function may differ across borders due to the presence of institutional differences.

A second way of considering the literature is by identifying three main explanatory models: the cultural, legal and political school.<sup>4</sup> The cultural school emphasizes the relevance of informal institutions for the organization of a financial system (e.g. Stulz and Williamson, 2003; Guiso et al., 2008; Osili and Paulson, 2008). The central idea emphasized in this literature is that informal institutions structure economic exchange by defining what can be reasonably expected from a trading partner. Because norms and values are also generally upheld in court, they play a central role in the organization of financial exchange in society.

The law and finance school instead argues that the organization of a financial system is largely dependent on the legal origin of a nation (La Porta et al., 1997, 1998). Common law is associated with greater independence of the judicial system from the state, contributing to better enforcement of property rights. Civil law, on the other hand, is associated with a more central position for the state in organizing economic exchange (Beck, 2012).<sup>5</sup>

The political economy of finance literature, on the other hand, explains the evolution of the organization and operations of a financial system as the outcome of a bargaining process over the proceeds of economic and financial exchange by a variety of interest groups (e.g. Hoffman et al., 2007; Calomiris and Haber, 2014; Haber et al., 2008a; Perotti, 2014). The redistributive effects of legislative (and institutional) change thus take a central position in this literature since interest groups will oppose change that runs against their interest.

Although there is merit in each of these explanatory models, an analysis of the evolution of the financial service provision to households is hampered because each of these strands remains heavily entrenched: it's either culture, legal origin, or political economy. The current dissertation addresses this issue and seeks to incorporate these various approaches in the literature in a single overarching framework of analysis.

The following section provides the outline for the dissertation. The discussion below pays particular attention to the identified need for a functional approach and the incorporation of the various explanatory models that prevail in the literature.

<sup>&</sup>lt;sup>4</sup>Note that chapter 4 contains a more complete discussion of these three strands of literature.

<sup>&</sup>lt;sup>5</sup>Note that the law and finance school is largely discredited by now (Rajan and Zingales, 2003; Lamoreaux and Rosenthal, 2005). See the discussion in chapter 4.

#### 1.4 Outline

The dissertation consists of two main building blocks. The first block provides a more traditional analysis of household financial holdings and the (economic) factors that may have affected its evolution through time. Chapter 2 first discusses the main dataset, after which chapter 3 employs this dataset for an empirical analysis. The second block builds on the first and takes a more institutional perspective. This institutional perspective is motivated by the fact that it remains difficult to effectively incorporate cultural and political factors in the analysis, even though both appear key to our understanding of the evolution of the financial service provision to households over time. Chapter 4 presents an analytical framework whereby the evolution of the financial service provision to households can be analysed. The analytical framework is subsequentially employed in chapter 5 and 6 to study the evolution of the French and Dutch 1) system of housing finance and 2) market for household savings, equity and life-insurance products. In what follows, I present the individual chapters in greater detail.

#### 1.4.1 The household balance sheet

Chapter 2 sets the stage and introduces the main dataset which describes the historical evolution of the French and Dutch household balance sheet between 1960 and today. Moreover, the relevant returns on individual assets are presented.

The chapter pays particular attention to the implementation of the financial function of smoothing life-time consumption; this is because life-time consumption smoothing appears to play a central role in explaining cross-country differences in the composition of the French and Dutch household portfolio – both today and historically.

#### 1.4.2 A portfolio model

Chapter 3 builds on the analysis of chapter 2 and provides an econometric analysis of the French and Dutch household portfolio by estimating a Financial Almost Ideal Demand System (FAIDS). A FAIDS allows one to estimate wealth and interest rate elasticities for the various components of the household portfolio.

The estimation of a FAIDS holds two advantages over the existing literature. First, the model allows for substitution effects between the different asset classes which is of importance given the fact that different assets can perform similar functions from a household perspective. The interrelatedness between different financial assets is furthermore underlined by simultaneous estimation of the regressions for the various asset classes through seemingly unrelated regression techniques.

A second advantage – which derives from the long-term nature of the data employed – is that dynamics in wealth and interest rate elasticities can be investigated. In contrast to much of the literature, this allows for an investigation of changing household sensitivities to interest rate and wealth changes. This is of

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particular interest in the context of a changing institutional setting in both France and the Netherlands.

While a FAIDS is well-fitted to capture the relevance of returns and wealth in the allocation of household wealth, it is more difficult to capture the relevance of other (institutional) factors, such as culture, regulation, taxation and supervisory attitudes. To incorporate such factors in the analysis, the following chapter develops a more historical and analytical approach to the evolution of the financial service provision to households.

#### 1.4.3 An analytical framework

The literature on the evolution of the financial systems can be divided in a cultural, political economy and legal school. Unfortunately, these different strands of literature remain heavily entrenched, rendering a historical analysis of the evolution of the financial service provision to households difficult. Moreover, it is difficult to assess in what circumstances these cultural, legal and political considerations matter. Chapter 4 therefore develops an analytical framework that incorporates the insights from these three strands of literature.

The analytical framework of chapter 4 places the three strands of literature in a hierarchy of institutions after Williamson (2000). My framework offers three main advantages. First, it introduces structure to the prevailing explanatory models in the literature, and allows for an assessment of the relative importance of these explanatory models in different situations throughout the history of France and the Netherlands.

Second, the varying rates of change for the different institutional levels generate a path dependent evolution of financial systems and their service provision, which is consistent with reality. This path dependent evolution originates in the fact that higher-level institutions – including culture and formal rules – tend to change relatively slow and impose limitations on lower-level institutions – including market-based processes and the institutional level of governance. Only in times of crisis, feedback effects from lower institutional levels can generate more abrupt institutional change.

Third, the framework explicitly allows for substitution effects between different types of financial services that are functionally equivalent. In particular, household demand for financial services is dependent on the composition of the household balance sheet.

A first demonstration of the utility of the framework is provided by means of a case-study of the introduction of the 1989 Second Banking Directive and its impact on financial structure and the financial service provision to households in France and the Netherlands.

The analytical framework provides the basis for the two final chapters of the dissertation. The analytical framework functions as the main tool of analysis in both chapters.

#### 1.4.4 Housing finance

Chapter 5 studies the evolution of the French and Dutch system of housing finance from the 1960s until today. A study of the evolution of both systems of housing finance is of interest for a variety of reasons. First, housing assets and liabilities dominate the household balance sheet, implying a considerable connection between household financial well-being and the state of housing and mortgage markets.

Second, housing loans also make up a considerable part of the financial system's balance sheet. For both latter reasons, the state of housing and mortgage markets are found to be intimately connected to financial and macroeconomic stability – something to which the 2008 great financial crisis attests (see Mian and Sufi, 2015; Jordà et al., 2016).

Third, the organization of French and Dutch housing finance differs considerably today. French housing finance is relatively conservative in nature and most mortgage innovations originate in the French state. The Dutch system of housing finance is instead characterized by a considerable degree of risk-taking and financial innovation originating in the financial industry itself.

The analytical framework places the evolution of the system of housing finance in its broader institutional context. Three main factors stand out in this regard. First, there is the organization of the French and Dutch pension system from which French and Dutch households derive radically different incentives. This observation is also closely related to the functional approach as advocated above and the observed substitution effects in chapter 2 and 3. Second, the chapter emphasizes the relevance of norms on government intervention in France and the Netherlands for conditioning the legislative process. Third, the bargaining position of the financial industry left its mark on the historical evolution of both systems of housing finance.

#### 1.4.5 Household financial assets

Next, chapter 6 proceeds with a study of the market for household savings, equity and life-insurance products. Where the previous chapter focussed on the main financial liability and non-financial asset on the household balance sheet, the current chapter instead considers the evolution of the main categories of financial assets through time. A study of the evolution of household financial assets through time is of interest for a variety of reasons. First, the composition of the household balance sheet holds important implications for household welfare – also in light of the need for a household to smooth life-time consumption and to deal with adverse (financial) shocks.

Second, the range of products that is available to households itself affects the economic cycle. Consider the degree to which households are allowed to take on risk within the legislative framework or the way in which disputes between households and the financial sector are resolved.

Finally, the form in which households retain wealth holds important ramifications for the way in which the real economy is financed.

Due to the fact that chapter 5 already contains an in-depth discussion of the French and Dutch institutional constellation, this chapter can be considered an extension of the previous one: it sketches the main differences and similarities

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between the evolution of the system of housing finance and the various financial asset holdings.

Much like the chapter on housing finance, the type of financial assets held by Dutch and French households is to an important extent conditioned by norms on the degree of government intervention as well as the relative bargaining position of the financial industry. In contrast to the previous chapter, the role of the pension system appears more limited, however.

#### 1.5 Conclusion

In this dissertation I study the evolution of the financial service provision to French and Dutch households from the 1960s onwards. It is furthermore expected that an understanding of the evolution of the financial service provision to households will provide insight into the origin of cross-country differences that we observe today, as well as financial sector dynamics more generally.

The dissertation is built around two central themes. A first theme is a functional perspective on financial intermediation, whereby the motivation for households to hold on to particular (financial) assets and liabilities are taken into account. This functional perspective is of particular importance because it can account for both within country shifts and across country differences in the type of financial services and products households include in their portfolio.

A second theme revolves around the various explanatory models that the literature has thus far brought forward: the cultural, legal and political school. In this dissertation I seek to to incorporate all three explanatory models into the analysis, which is expected to result in an improved understanding of their relative merit in explaining the evolution of the financial service provision to households.

The following chapter presents the main dataset on the French and Dutch household balance sheet. This presentation provides a first intuition on the main differences and similarities in the French and Dutch household portfolio, both comparatively and across time.

## Chapter 2

# Function and form: the household balance sheet in historical perspective

#### 2.1 Introduction

One of the difficulties of effectively analysing the evolution of the financial service provision to households over time is measuring household financial choices. Two possible data sources are potentially of interest in this regard. First, household surveys provide an interesting source as they typically allow one to assess the extent to which particular financial assets are held widely. At the same time, household surveys also face a number of issues. First, surveys typically include a binary variable on ownership of particular assets but fail to report monetary value. Second, surveys are more often than not only consistently available for more recent years. The Dutch Household Survey, for example, was first conducted in 1993.

A second possible data source, which is employed in this dissertation, is that of national accounts data on the household balance sheet. The advantage of this data source is twofold. First, there is the greater availability of historical data running back to the 1960s. Second, the data explicitly values holdings of households in a particular country. The main downside of this data source is that it does not allow for an assessment of the within-country distribution of these assets over the population. Notions of inequality and inclusivity can therefore not be investigated.

A second relevant dimension to households assets (and liabilities) are the relevant returns (and costs) on these various holdings. Total return indexes on bonds and equity holdings which incorporate reinvestment of dividends generally have good availability. Returns on households savings, life-insurance assets and claims on pension funds are more difficult to come by, however.

The current chapter presents the main dataset employed in this dissertation. Section 2.2 first discusses the main data sources, after which section 2.3 discusses the evolution of and the differences between the French and Dutch household balance sheet. Section 2.4 then proceeds with an analysis of the way in which French and Dutch household smooth their life-time consumption. The chapter concludes that the observed differences in the composition of the French and Dutch households portfolio can – to a considerable extent – be traced back to a different implementation of the financial function of smoothing life-time consumption.

#### 2.2 Data sources and methodology

The current section provides a brief discussion of the main data sources and the methodology applied to merge series of different sources. Section 2.2.1 discusses the household balance sheet data, whereas section 2.2.2 addresses the returns data.<sup>1</sup>

#### 2.2.1 The household balance sheet

Eurostat data following the ESA 2010 standard forms the basis for the Dutch and French household balance sheet data. Earlier data on the composition of the household balance sheet for France comes from the Banque de France (1977-), whereas the Dutch data comes from the Netherlands Bureau for Economic Policy Analysis (1970-). For both the earlier French and Dutch data a transformation from the ESA 1995 to the ESA 2010 standard had to be made (see Banque de France, 2009, 2014; Eurostat, 2013). To avoid any breaks in the data, growth rates of individual household assets were calculated and matched with the Eurostat data that starts in 1995. A similar approach was taken with regards to data for France before 1977; the main data sources for individual assets were various editions of the Annuaire Statistique de la France and annual reports of the Conseil National du Crédit. No data for life-insurance holdings in France were found.<sup>2</sup> Because bond holdings are limited in both nations these were merged with life-insurance assets.<sup>3</sup>

Claims on the (public) pension system deserve special attention here. With regard to claims on the pension system, a distinction between two components can be made: a capital funded component whereby households make regular payments to a (public) pension plan and a PAYG component whereby today's working population funds the pension of the retired population. Capital funded pension provisions only exist in the Dutch setting and not in France. Following the ESA 2010 definition, the "[pension fund's] liability of a defined benefit pension scheme is equal to the present value of the promised benefits" (Eurostat, 2013). Problematic in this regard is that pension assets on the household balance sheet are thereby – in part – dependent on the evolution of the discount rate. The recent fall in interest rates has thus contributed to a considerable rise in household claims on pension funds as the future value of pension claims is inflated.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup>A full description of all the sources can be found in appendix A.

<sup>&</sup>lt;sup>2</sup>According to a 1966 survey among 3000 French households, 18 percent of household financial assets were kept in life-insurance assets. Some 28 percent of all households owned life-insurance assets (l'Hardy, 1973).

<sup>&</sup>lt;sup>3</sup>Returns on bonds and life-insurance assets are highly similar; see the discussion on returns below. Moreover, both are long-term assets.

<sup>&</sup>lt;sup>4</sup>In this dissertation, claims on pension funds are treated as an asset on the household balance sheet. Others, such as van Bavel (2014), regard these claims as delayed income instead.

Claims on the PAYG pension component, which are present in both France and the Netherlands, are more difficult to value effectively. Because such claims are still relevant for household financial behaviour, I present the replacement rate for both nations below, which is defined as the ratio of pre-retirement to retirement income.

The calculation of housing assets follows a methodology inspired by the work by Slacalek (2009). In short, housing assets are calculated by taking the product of housing prices, the housing stock and the share of owner-occupied housing. Housing prices are calculated using a housing price index by the BIS. See appendix A.3 for more details and sources.

With regards to the liabilities side of the household balance sheet, I do not employ Eurostat data, as mortgage debt cannot be identified separately. Instead, mortgage debt is taken from the French and Dutch central bank from 1993 and 2003 onwards, respectively. The growth rate of mortgage debt from Jordà et al. (2016) is employed to track mortgage debt back in time. I abstract from any short-term (consumer) credit as this is a relatively small amount in both nations.<sup>5</sup>

#### 2.2.2 Returns

The nominal returns on the various asset classes were derived from a variety of sources (see appendix A). The return on M1 (currency and deposits) is calculated as the fitted values of a regression of the return on M1 (overnight deposits) over the period of 2003-2018 on the money market rate (which is available for a longer time-period), similar to Avouyi-Dovi et al. (2014):  $r_{M1} = \beta_0 + \beta_1 * MM$ . The return on savings in France is equal to the weighted return on the main savings accounts. In the Netherlands, the return on savings is set equal to a 2 year term account.

For equity and bonds I make use of a total return index whereby dividends and coupons are reinvested. The return on life-insurance holdings in France is set equal to the return on bonds, as the majority of investments by life-insurers is directed towards the bond market (see Avouyi-Dovi et al., 2014). For Dutch life-insurers and pension funds, the weighted return of the asset side of their respective balance sheet is employed (see figures A.1 and A.2 in the appendix). The return on housing assets is comprised of the sum of housing price changes and owner's equivalent rent. The mortgage rate in France is defined as the rate on outstanding loans, as this was most consistent with historical sources. The Dutch mortgage rate is on new loans instead, again due to the availability of sources.

 $<sup>^5</sup>$ In 2010 housing debt outnumbers short-term debt by 27-1 in France and 30-1 in the Netherlands (OECD).

<sup>&</sup>lt;sup>6</sup>These include the Livret A, the Compte d'Epargne Logement, the Livret Bancaire (or regular savings account), the Livret d'Epargne Populaire, the compte de développement durable and the Plan d'Epargne Logement.

#### 2.3 The dataset

#### 2.3.1 The household balance sheet

Figure 2.1 displays the historical evolution of household financial assets and mortgages through time. All figures are expressed as a fraction of total assets, with the exception of net worth (assets - liabilities), which is a fraction of GDP (right axis).

With regards to the evolution of the French and Dutch household portfolio, the following main patterns can be discerned. First, M1 (currency and deposits) and savings display a fall as a share of total assets through time, although French savings are on the rise for much of the 1970s. In contrast, assets with higher risk and return appear to be on the rise form the 1980s onwards. Where equity holdings display a fall in the early 1970s – likely due to the First Oil Crisis which depressed stock market returns (see below) – they rise in the 1980s, although the effect is much more pronounced in France. The effect of the 2001 Dot-Com bubble is much stronger in the Netherlands, however. French life-insurance holdings also display a considerable increase from the late 1980s onwards, whereas this is – once again – much more subdued in the Netherlands. Instead, Dutch pension assets – which reflect claims on pension funds – display a remarkable rise throughout the time period under consideration. As discussed above, part of this increase is due to falling interest rates in the recent period which inflates the net present value of these household claims. For absence of a capital funded pension system, pension assets are not reported on the French household balance sheet. Housing assets are on the rise in both nations, particularly from the 1990s onwards, although housing assets appear to make up a much more considerable part of the French household balance sheet earlier on. Mortgage debt, on the other hand displays a much more abrupt rise in the Netherlands from the mid-1990s as compared to France. With regards to Net Worth, Dutch households appear somewhat more wealthy throughout the entire period under consideration.

At first sight, four main differences between the French and Dutch household portfolio can be discerned. First, pension assets are absent in France whereas they represent the largest part of household assets in the Netherlands. Second, both French and Dutch households hold sizeable stocks of housing assets, but the level of mortgage debt is much lower in France. In other words, French households build up much more wealth in housing as compared to the Netherlands. Third, life-insurance holdings are much more prominent in France as compared to the Netherlands. Fourth, net worth for French households appears to lie somewhat lower compared to the Dutch case.

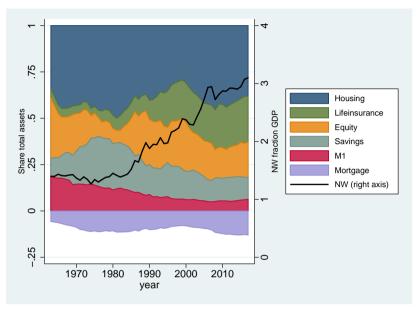
#### 2.3.2 Returns

Table 2.1 displays nominal returns on the aforementioned assets and the rate of inflation (CPI) over different intervals of time. Note that the return on life-insurance holdings is equal to that of bonds in France (see above).

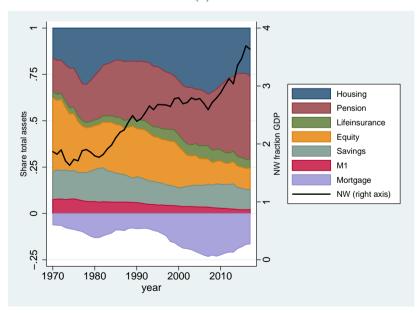
A first observation is that the French rate of inflation appears to be relatively high for much of the 1970s and 1980s. Given French and Dutch monetary history this

Figure 2.1: Portfolio shares of total assets and Net Worth





(b) The Netherlands



Source: see appendix A.

Table 2.1: Average yearly nominal returns

(a) France

	1960-69	1970-79	1980-89	1990-99	2000-09	2010-18
M1	0.20	0.31	0.38	0.25	0.15	0.06
Savings	1.89	5.32	5.90	3.87	2.72	1.41
Equity	-2.22	4.72	22.60	16.87	2.84	6.65
Lifeinsurance	1.75	4.34	13.30	11.66	6.81	7.82
Housing	15.78	11.79	9.86	4.55	10.68	4.26
Mortgage	8.54	13.95	15.28	9.36	5.12	3.14
CPI	3.88	8.85	7.38	1.87	1.73	1.03

(b) The Netherlands

	1960-69	1970-79	1980-89	1990-99	2000-09	2010-18
M1	0.76	1.01	1.07	0.90	0.63	0.31
Savings	6.28	6.53	6.24	4.92	3.66	2.30
Equity	8.13	6.72	21.82	22.10	1.84	8.07
Lifeinsurance		7.58	10.86	13.98	4.27	7.43
Pension	2.36	8.39	9.42	13.95	4.86	7.57
Housing	14.30	20.40	5.93	15.19	9.02	4.82
Mortgage	5.16	7.83	7.62	6.49	4.77	3.30
CPI	4.04	7.03	2.87	2.44	2.12	1.48

Source: see Appendix A.

*Note:* Returns on French savings are missing for 1960-1962. The return on Dutch household savings for 1960-69 reflects a single observation for 1969. For Dutch CPI the 1960 figure is missing.

comes as no surprise: French monetary policy was regarded as a policy tool to guide the allocation of capital, whereas Dutch monetary policy was largely focussed on monetary stability. Inflation rates start to converge in the 1990s with the first steps towards monetary integration in a European context following the 1993 Maastricht Treaty.

The return on M1 is low in both nations throughout the period under consideration. Consistent with a lower level of liquidity, the return on savings lies considerably higher in both nations. Equity returns show similar patterns for both nations with the exception of the 1960s and 1990s: French returns are negative in the 1960s in contrast to the Netherlands, whereas French equity returns are considerably higher for the 1990s as compared to the Netherlands. Bond returns in France appear somewhat lower compared to the Netherlands although the generally higher level of inflation in France closes the gap somewhat. Life-insurance and pension returns appear highly comparable across both nations, especially in real terms.

With regards to housing finance, a number of interesting differences can be identi-

fied. First, average housing returns appear to be relatively high in the Netherlands. The only clear break with this pattern is the early 1980s where the Netherlands faced a severe recession which had considerable repercussions for the Dutch housing market. A second observation is the French mortgage rate which (in real terms) lies above the Dutch mortgage rate until the late 1990s. Extensive regulation of French mortgage rates up until the mid-1980s potentially offers an explanation in this regard (also see chapter 5).

The French and Dutch household portfolio and their returns display a number of common trends, including a rise in more risky asset holdings over time and a overall fall in nominal rates and the rate of inflation. At the same time, French and Dutch households appear to consistently make different choices, with high levels of housing wealth and life-insurance assets in France, and high levels of pension assets and mortgage debt in the Netherlands. The following section proceeds with a functional analysis of these differences.

#### 2.4 Life-time consumption smoothing

Following the discussion in section 2.3, the main difference between the French and Dutch household portfolio appears to lie in the way in which households smooth their life-time consumption over time. Indeed, French households hold sizeable stocks of housing wealth and life-insurance assets, whereas pension assets dominate in the Netherlands instead. In this section, I first consider the organization of the French and Dutch pension system in greater detail. Second, I assess the valuation of claims by French and Dutch households on their pension system. In turn, I discuss the derived incentives for French and Dutch households.

As already mentioned above, French pension arrangements are largely organized on a PAYG basis. This system attained its current form in the early 1970s with the expansion of public arrangements towards the private sector. The Dutch PAYG and capital-based pension pillars instead originate in the 1950s. In other words, both pension systems were in operation throughout the period under consideration.

This raises the question how to effectively value these pension claims by French and Dutch households. Following OECD (2015), the net replacement rate, which is the ratio of post to pre-retirement earnings, gives some insight.<sup>9</sup> In France, mandatory private and public schemes offer a replacement rate of 67.7 percent, whereas in the Netherlands the figure amounts to 95.7 percent after a full career.<sup>10</sup> A similar picture emerges from historical figures between 1969 and 1980 (Aldrich, 1982).<sup>11</sup>

<sup>&</sup>lt;sup>7</sup>The French pension system is characterized by one large reform in 1993 (see Bozio, 2011).

<sup>&</sup>lt;sup>8</sup>Note that in the early 1970s, the French and Dutch system were not fully matured as of yet. In particular, households that joined the pension system halfway their career did not have the same opportunity to build up pension claims as somebody who joined at the start of their career.

<sup>&</sup>lt;sup>9</sup>The net figure takes social contributions and income taxation into account

<sup>&</sup>lt;sup>10</sup>Note that there is considerable variation in replacement rates across households. See for example Charpin (1999) on France and Knoef et al. (2016) on the Netherlands.

<sup>&</sup>lt;sup>11</sup>Aldrich (1982) only reports replacement rates on the PAYG component of the French and the

It thus appears that French households have an incentive to build up wealth in alternative assets to ensure a smooth path of life-time consumption. In the Netherlands, on the other hand, the risk of building up too much wealth for retirement appears relevant, potentially giving rise to an incentive to bring consumption forward. Moreover, given relatively low social (and pension) premiums, financial breathing room to build up wealth in alternative assets appears much greater in France as compared to the Netherlands. <sup>12</sup>

Considering the French household balance sheet of figure 2.1a, French households indeed appear to be building up wealth in other asset types. First, life-insurance holdings are relatively sizeable in France and display particularly fierce growth from the 1990s onwards. The growing popularity of life-insurance assets is related to a crisis of the welfare state in the late 1980s, whereby faith in the capacity of the welfare system to effectively smooth life-time consumption was increasingly questioned due to demographic developments (see chapter 6). Life-insurance assets in France thus perform the same function as Dutch pension assets.

Second, relatively low levels of mortgage debt make sure that French households actually build up wealth in housing. Moving to the Netherlands, mortgage debt is particularly high – both relative to French mortgages and Dutch housing assets. Dutch households hereby effectively avoid having to pay for home-ownership and in some cases even bring forward consumption by borrowing more than the cost of the house (see chapter 5). Housing wealth thus performs a different function in the French and Dutch household portfolio.

A final relevant point in the context of mortgage debt is its fiscal treatment. France knew a limited form of mortgage interest deductibility from 1965 until 1995. Until 1984, the first 10 years of a mortgage interest payments could be deducted from taxable income up to some maximum, whereas this was lowered to 5 years in 1984. <sup>13</sup> The Netherlands, on the other hand, is characterized by unlimited and full mortgage interest deductibility for most of the time-period under consideration, providing a much greater subsidy on indebtedness. Indeed, Scanlon et al. (2008) show that countries with mortgage interest deductibility have higher levels of indebtedness. At the same time, Alessie et al. (2013) show that capital based pension systems are associated with lower levels of wealth in alternative assets (also see Feldstein, 1974; Gale, 1998), whereas a number of authors have argued for a positive connection

Dutch pension system. The French PAYG system only performs marginally better than the Dutch PAYG system, however.

<sup>&</sup>lt;sup>12</sup>Net social premiums as a percentage of gross disposable income lie between 10 and 20 percentage points higher in the Netherlands as compared to France (ECB).

<sup>13</sup> See Loi n 64-1279 du 23 décembre 1964 de finances pour 1965 for the introduction of mortgage interest deductibility in France; retrieved from: https://www.legifrance.gouv.fr/affichTexteArticle.do;jsessionid=0D406B149777CA76E75933C8AC7CDC76.tplgfr25s\_2? idArticle=LEGIARTI000028872604&cidTexte=LEGITEXT000028872458&dateTexte=20180606. Prior to 1965, French households were allowed to deduct all expenses related to the maintenance or repair of the house from taxable income. See Journal Officiel de la République Française débats parlementaires Sénat, Samedi 14 Novembre 1964, page 1449; retrieved from http://www.senat.fr/comptes-rendus-seances/5eme/pdf/1964/11/s19641114\_1493\_1524.pdf. The full text of the law article between 1983 and 1985: https://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=63AD0AD5211A0D628446187CFB513777.tplgfr25s\_3?idArticle=LEGIARTI000006308072&cidTexte=LEGITEXT000006069577&categorieLien=id&dateTexte=20041231

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between pension assets and household indebtedness (DNB, 2015; Shirono, 2014; Fletcher et al., 2015). Both mortgage interest deductibility and the organization of the pension system thus appear to play a role in explaining the high level of indebtedness among Dutch households.

Although the insight that pension asset may crowd out alternative forms of household savings is not new in itself, the persistence of this displacement effect over time is. Indeed, the way in which households build up wealth that functions as a means to smooth life-time consumption appears to consistently differ throughout the time-period under consideration for both nations. These differences became further accentuated in the 1990s, when France faced worsened expectations over the sustainability of its public pension system. This insight returns in chapter 5 and 6, when I discuss the demand for a variety of financial assets in greater detail.

#### 2.5 Conclusion

In this chapter I provide a discussion of the main database that features in the chapters ahead. The database builds on national accounts data on the household balance sheet from a variety of sources to provide an overview of the evolution of the French and Dutch household balance sheet and the returns (costs) on the various assets (liabilities). Overall, a shift towards assets with greater risk and return can be discerned in both nations.

In this chapter I conclude that the main differences between the French and Dutch balance sheet lies in the functional implementation of life-time consumption smoothing in both systems. Where Dutch households semi-automatically build up a large stock of pension assets, French households have to look for alternatives themselves to build up wealth that allows for life-time consumption smoothing; life-insurance and housing wealth play an important role in this regard for French households. Conversely, mortgage debt allows Dutch households to transfer consumption forward in time. Housing wealth thus performs a different function in the French and Dutch household portfolio.

The following chapter now proceeds with a statistical analysis of the French and Dutch household balance sheet. In this regard I pay particular attention to possible substitution effects between pension assets on the one hand, and life-insurance and housing wealth on the other hand.

## Chapter 3

# Quid pro quo: substitution effects in the French and Dutch household portfolio

#### 3.1 Introduction

What can account for cross-country differences in the allocation of household wealth? Although some tentative answers are formulated which highlight culture, the regulatory setting or historical experiences (e.g. Badarinza et al., 2016), our understanding of cross-country differences in the allocation of household wealth remains limited. This is surprising given the economic weight of the household sector in the real economy and the relation between household financial decisions and economic crises (e.g. Jordà et al., 2016; Mian and Sufi, 2009; DNB, 2015).<sup>1</sup>

This chapter adopts a household perspective and employs the dataset presented in chapter 2 to estimate a Financial Almost Ideal Demand System (FAIDS). A FAIDS is an extension of the seminal AIDS model of Deaton and Muellbauer (1980) and allows for the estimation of wealth and interest rate elasticities for (financial) assets.

The contribution of this chapter is twofold. First, I make the case for a portfolio perspective when assessing the origin of cross-country differences in the allocation of household wealth. Much of today's literature focusses on relative holdings of particular financial assets, thereby disregarding potential substitution effects. Taking a functional perspective on the household balance sheet (Merton and Bodie, 1995), different financial assets may perform similar functions from a household perspective. Following the argument of chapter 2, life-time consumption smoothing appears a particularly relevant functional dimension in this regard. For the French case, I expect to find substitution effects between housing wealth and life-insurance assets as these both act as these both function as retirement savings

<sup>&</sup>lt;sup>1</sup>I would like to thank Robert-Paul Berben, Philip Fliers and participants at the finance seminar at Utrecht University for comments and suggestions on earlier versions of this paper.

in the French case. For the Netherlands I expect particularly strong substitution effects between pension assets on the one hand, and housing wealth and equity on the other hand. This line of argument is similar to a literature on the displacement effects of pension assets on household savings (Alessie et al., 2013; Feldstein, 1974; Gale, 1998). The advantage of the current approach is that such effects can be identified across different asset types.

A second contribution of the chapter is the introduction of time into the analysis. Where much if the literature considers the estimated elasticities stable through time static, the current chapter exploits the time dimension of the dataset presented in chapter 2 and allows for a structural break in the estimated long-run elasticities. The estimated long-run elasticities display indeed display a break following the deregulatory wave that took place in the 1980s – particularly in France.

The remainder of this chapter is structured as follows. Section 3.2 provides a discussion of the relevant literature after which section 3.3 provides a description of the main changes introduced to the dataset of chapter 2. Section 3.4 proceeds with an introduction of the FAIDS, which is subsequentially estimated in section 3.5. Section 3.6 introduces a variant to the baseline results of section 3.5 and allows for a structural break in the estimated elasticities. Finally, section 3.7 concludes.

#### 3.2 Literature

The FAIDS originates in the seminal AIDS model after Deaton and Muellbauer (1980), which allowed for the estimation of a system of demand equations. The functional form employed in the current paper was originally introduced by Blake (2004) to study the demand for financial assets. Similar specifications were used earlier on, however, to study the demand for short-term financial assets (Barr and Cuthbertson, 1991b), and the portfolio allocation of the non-financial sector (Barr and Cuthbertson, 1991a) and UK pension funds (Dinenis and Scott, 1993).

Blake (2004) was the first to apply this methodology to the household sector, and considered the portfolio allocation of UK households between between 1984 and 1994. Blake finds that, in addition to wealth and returns, demographics, the economic cycle, and government finances play a role in the adjustment process of the household balance sheet over time. More recently, Avouyi-Dovi et al. (2014) estimate a FAIDS on the French and German household portfolio between 1978-2009 and 1959-2009, respectively. Demographic factors appear to play an important role for both nations, although the effects are not always consistent: German ageing appears to result in greater equity holdings and smaller holdings of savings accounts, whereas a rising working population contributes to greater equity holdings and less household savings in France

Ochmann (2013) and Ricciarelli (2011) instead exploit household level variation to estimate a variation of the FAIDS. Ricciarelli (2011) finds substitution effects between bank deposits on the one hand, and bonds and equity investment on the other hand. Bonds and equity investment act as substitutes, which points at the use of capital gains to finance alternative forms of investment according to the author. Ochmann (2013) concludes that own-rate elasticities play a dominant role

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in the allocation of household wealth as opposed to the household decision to save or consume.

This chapter improves on earlier literature along a number of fronts. First, as opposed to Avouyi-Dovi et al. (2014) this chapter does not make use of estimated returns based on capital or money market rates. Instead, I employ realized figures, often derived from archival sources (see chapter 2 and appendix A). Second, the current chapter takes housing wealth into account as a separate asset which makes up an important share of the household portfolio. Blake (2004) instead subsumes mortgage holdings in financial wealth (see Blake and Michael Orszag, 1999). Moreover, the current paper explicitly distinguishes between various financial asset classes whereas Blake (2004) makes use of a single generic financial assets category.

### 3.3 Data

For the purpose of this chapter, I employ the same dataset as introduced in chapter 2 with some slight alterations. First, to limit the number of asset categories I combine life-insurance assets and pension holdings in a single category. Returns on these assets appear highly correlated and all of these assets tend to be long-term. Second, I define housing wealth as housing assets minus housing liabilities. The return on housing wealth is the weighted return (cost) of housing and liabilities. Figures 3.1a and 3.1b display the evolution of the French and Dutch household through time as a fraction of the total.

As was already highlighted in chapter 2, the French household portfolio is dominated by housing wealth, while equity and life-insurance holdings are on the rise from the mid-1980s onwards. The Dutch household portfolio is characterized by sizeable stock of pension assets throughout the period instead, and sizeable equity holdings in the early 1970. Dutch housing wealth is relatively limited given the high level of indebtedness (see chapter 2). The share of M1 and savings decreases through time in both nations.

Summary statistics on all variables employed are reported in tables 3.1 and 3.2.<sup>2</sup> The nominal figures on the (total) return form chapter 2 are transformed into real figures by deducting the rate of inflation.<sup>3</sup> Moreover, the return on these various assets are transformed into ln(1+r), which is consistent with the later econometric specification.

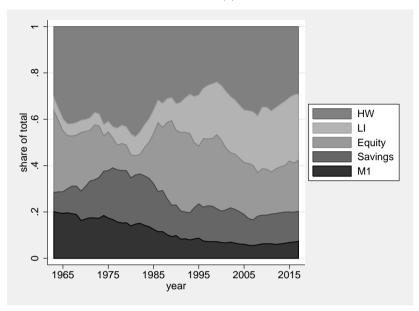
Considering returns, the large degree of volatility stands out for equity returns in both nations. Moreover, returns on housing wealth appear much more volatile in the Netherlands, which is consistent with the more market-driven Dutch housing market (see chapter 5). Average returns on total household wealth are positive in

 $<sup>^2</sup>$ Correlation figures can be found in tables C.3 and C.4. Unit root tests are provided in tables C.1 and C.2. Like in Blake (2004), non-stationarity is found for most variables, which is inconsistent with the assumptions underlying the FAIDS. Unfortunately, no clear solution is available within the confines of the model.

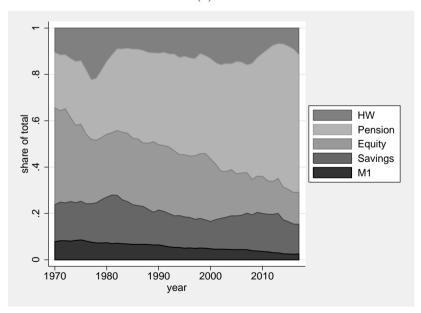
<sup>&</sup>lt;sup>3</sup>The return on pension assets in the Netherlands is constructed as the weighted return on life-insurance and pension assets on the balance sheet of insurers and pension funds, respectively.

Figure 3.1: The allocation of household wealth

# (a) France



# (b) the Netherlands



Source: see appendix A.

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Table 3.1: Summary statistics France

	mean	$\operatorname{sd}$	$\min$	max
Asset shares				
M1	0.11	0.05	0.06	0.20
Savings	0.15	0.04	0.10	0.23
LI	0.16	0.09	0.05	0.29
Equity	0.22	0.07	0.08	0.36
$_{ m HW}$	0.35	0.06	0.24	0.48
$Returns\ (transformed)$				
rWealth	0.03	0.07	-0.11	0.20
m rM1	-0.04	0.04	-0.14	0.00
rSavings	-0.00	0.03	-0.08	0.02
rEquity	0.03	0.23	-0.52	0.42
$_{ m rLI}$	0.03	0.12	-0.18	0.28
m rHW	0.03	0.06	-0.09	0.18
$Control\ variables$				
Unemployment	7.25	2.89	1.44	10.72
$\operatorname{sdCAC}$	6.41	2.11	3.54	13.22
Dependency	0.92	0.07	0.85	1.07
N	52			

*Note:* The transformation of the real return r is ln(1+r).

both nations, although somewhat higher in the Netherlands. This comes at the cost of greater volatility, however.

I employ three additional variables that likely contributed to the observed shifts in the composition of the household portfolio over time: the unemployment rate, stock market volatility and the dependency rate. The unemployment rate accounts for business cycle variations. A large literature finds that a business cycle downturn (and a heightened probability of becoming unemployed) is associated with greater precautionary savings and a boost in net worth (e.g. Carroll, 1997; Carroll et al., 2003; Engen and Gruber, 2001) Considering tables 3.1 and 3.2, the average of the French unemployment rate appears to lie considerably higher as compared to the Netherlands, and furthermore is characterized by a higher volatility.

A measure of stock market volatility is meant to capture uncertainty about stock market returns. Such uncertainty may increase risk aversion and hence negatively affect risky investment (e.g. Guiso et al., 2018). sdCAC and sdAEX capture the absolute value of the unexplained variation of a regression of the main stock market index on its lag.<sup>4</sup> Following the summary statistics, stock market volatility lies at a somewhat higher level in France, although the differences – also in their volatility

<sup>&</sup>lt;sup>4</sup>This regression was run on monthly data. The series reported here are the yearly averages of the resultant monthly series.

	mean	$\operatorname{sd}$	$\min$	max
Asset shares				
M1	0.06	0.02	0.02	0.09
Savings	0.16	0.02	0.12	0.21
Equity	0.25	0.07	0.14	0.42
Pension	0.41	0.11	0.23	0.62
HW	0.12	0.03	0.07	0.22
Returns (transformed)				
rWealth	0.06	0.09	-0.15	0.22
m rM1	-0.03	0.03	-0.10	0.02
rSavings	0.02	0.02	-0.04	0.05
rEquity	0.07	0.23	-0.73	0.46
rPension	0.05	0.08	-0.14	0.21
$_{ m rHW}$	0.10	0.18	-0.37	0.42
$Control\ variables$				
Unemployment	5.41	1.71	1.60	9.00
$\operatorname{sdAEX}$	5.82	1.58	2.82	9.60
Dependency	0.68	0.08	0.60	0.85
N	48			

Table 3.2: Summary statistics the Netherlands

*Note:* The transformation of the real return r is ln(1+r).

#### - appear minor.

Finally, I include demographic patterns in my analysis. An ageing society may display different saving patterns to ensure sufficient income after retirement. Moreover, the latter effect may be particularly large if the pension system is organised on a PAYG basis whereby the working population finances the pensions of the retired population. Where ageing may incite households to build up additional savings in long-term assets, the overall effect is not immediately evident. Demographic patterns are measured by means of the dependency rate, which is defined as the ratio of the dependent population (aged over 60 and below 20 years) over the working population (aged 20-59). Summary statistics show that the dependency rate in France lies substantially higher as compared to the Netherlands, consistent with a greater share of people over 60 in France both now, and historically.

# 3.4 Theoretical model

This section presents the derivation of the FAIDS model after Blake (2004). The objective function of the representative agent is equal to:

$$\operatorname{Max} \bar{U}(\theta_{i,t+1} W_{t+1}, ..., \theta_{N,t+1} W_{t+1}), \tag{3.1}$$

where U(.) is a utility function and  $\theta_{i,t+1}$  is the share of total real wealth  $W_{t+1}$  invested in asset i out of a total of N assets. The wealth constraint is:

$$\sum_{i=1}^{N} \theta_{it} W_t (1 + \bar{r}_{it}) = W_{t+1}, \tag{3.2}$$

where,  $r_{it}$  is the real return between period t and t+1, which is equal to the expected nominal return between period and t+1, minus the expected rate of inflation between period t and t+1, while a bar denotes an expectation.

Following Deaton and Muellbauer (1980), an associated cost function is minimized by using a PIGLOG utility function<sup>5</sup>, which results in the following (long-run) optimal portfolio weights:

$$\theta_{it}^* = a_i^* + b_i^* ln(W_t(1 + \bar{r}_{W_t})) + \sum_{j=1}^N c_{ij}^* ln(1 + \bar{r}_{jt}) + \sum_{j=1}^M h_{ij}^* Z_{jt}.$$
(3.3)

Here,  $r_{Wt}$  denotes the real return on the total portfolio under a number of assumptions (see Blake, 2004). The model thus suggests that the optimal portfolio weight on asset i at time t is a function of real wealth and the real return on the total household portfolio, the asset itself and the other assets in the household portfolio.  $Z_{jt}$  allows for M additional control variables in the model.

Demand theory implies the following restrictions on the model:

$$\sum_{i=1}^{N} a_i^* = 1, \qquad \sum_{i=1}^{N} c_{ij}^* = 0, \qquad \sum_{i=1}^{N} b_i^* = 0, \qquad \sum_{i=1}^{N} h_{ij}^* = 0, \tag{3.4}$$

which are implemented by dropping one asset class from the estimation and deriving its coefficients from the above restrictions. Moreover, homogeneity and symmetry requires the following to hold:

$$\sum_{i=1}^{N} c_{ij}^* = 0, \qquad c_{ij}^* = c_{ji}^*. \tag{3.5}$$

Allowing for dynamic adjustment<sup>6</sup> and applying the Bewley (1979) transformation allows for the direct estimation of the long-run coefficients of equation 3.3:

$$\min_{\theta_t} \frac{1}{2} [(\theta_t - \theta_{t-1})' \Psi(\theta_t - \theta_{t-1}) + (\theta_t - \theta_{t^*})' \Omega(\theta_t - \theta_{t^*})]. \tag{3.6}$$

The first part of this quadratic cost function takes into account the cost of making a change to the portfolio share, where the latter part accounts for the costs associated with diverging from the optimal portfolio share.

<sup>&</sup>lt;sup>5</sup>See Barr and Cuthbertson (1991b) for a derivation.

<sup>&</sup>lt;sup>6</sup>To allow for dynamic adjustments of the optimal portfolio weights, Blake (2004) defines a quadratic cost function through which the household chooses the actual portfolio weights:

$$\theta_{it} = a_i^* + b_i^* ln(W_t(1 + r_{Wt})) + \sum_{j=1}^{N-1} c_{ij}^* ln(1 + r_{jt}) + \sum_{j=1}^{M} h_{ij}^* Z_{jt}$$

$$+ \sum_{j=1}^{N-1} \lambda_j^* \Delta \theta_{jt-1} + \sum_{s=0}^{K} b_{is}^* \Delta ln(W_t(1 + r_{Wt-s}))$$

$$+ \sum_{s=0}^{K} \sum_{j=1}^{N-1} c_{ijs}^* \Delta ln(1 + r_{j,t-s}) + \sum_{s=0}^{K} \sum_{j=1}^{M} h_{ijs}^* \Delta Z_{j,t-s} + u_{it}^*.$$
(3.7)

The first line represents the long-run optimal portfolio weights of equation 3.3, where the last two lines denote the adjustment process. Note that the expected real returns are replaced with realized real returns, which is based on the assumption of rational expectations.<sup>7</sup> The various assets are summed over N-1 assets, reflecting that one of the asset categories is left out to allow for the introduction of the restrictions of equation 3.4.

The coefficients of the above equation are then employed to calculate the related elasticities. Note that these wealth elasticities express the response in the quantity of assets held in response to a wealth or price change. Wealth elasticities are calculated using  $\bar{P}_{i,t+1}Q_{i,t+1} = (1 + \bar{r}_{it})\theta_{it}W_t$ , where  $\bar{P}_{i,t+1}$  and  $Q_{i,t+1}$  are the expected price and units held of asset i at time t+1, respectively:

$$\eta_{iWt} = \frac{b_i^*}{\theta_{it}} + 1. \tag{3.8}$$

Interest rate elasticities are calculated as:

$$e_{ijt} = \frac{c_{ij}^*}{\theta_{it}} + \delta_{ij},\tag{3.9}$$

where  $\delta_{ij}$  is the Kronecker delta, which equals 1 in case of the own-rate elasticity. Finally, elasticities for the level and log control variables are calculated as:

$$\xi_{ijt} = \frac{h_{ij}^*}{\theta_{it}} z_{jt}, \qquad \xi_{ijt} = \frac{h_{ij}^*}{\theta_{it}}.$$
(3.10)

All elasticities are calculated at the average of the relevant asset share in the relevant time-period.

# 3.5 Baseline estimation

We now turn to the estimation of the long run equation 3.7.8 As the error terms of the N-1 assets are expected to be correlated, I estimate the model using seemingly

 $<sup>^{7}</sup>$ Prediction errors of nominal returns and inflation end up in the residual and are assumed to be orthogonal to actual returns and inflation.

<sup>&</sup>lt;sup>8</sup>Two lags are included in the model as K is set to 1. No further lags were included due to the limited amount of observations.

unrelated regression analysis which allows for the simultaneous estimation of the equations. As indicated in the previous section, elasticities are calculated on the basis of equations 3.8 through 3.10. For both the French and the Dutch case, asset N is chosen to be the Savings. As a consequence, no standard errors can be reported for the coefficients in the equation of Savings and the return on Savings in the other equations.<sup>9</sup>

The estimated elasticities can be interpreted in the following way. With regards to wealth elasticities,  $\eta_{iWt}=1$  implies that asset holdings grow at par with the growth in wealth, whereas for  $\eta_{iWt}>1$  asset holdings increase by a greater percentage than the increase in wealth. Conversely,  $\eta_{iWt}<1$  implies asset holdings grow at a slower rate than the increase in wealth.

Own-rate elasticities  $(e_{ijt}|_{i=j})$  can be expected to be positive as an increase in returns should, ceteris paribus, make the asset more attractive. A cross rate elasticity of  $e_{ijt}|_{i\neq j}>0$  would imply that two asset classes are complements, whereas  $e_{ijt}|_{i\neq j}<0$  implies the two asset classes are substitutes. Negative interest rate elasticities are expected for those assets that perform a similar function from the household's perspective: a higher rate of return on a substitute asset can be expected to result in lower asset holdings of the asset itself. The elasticities of the additional control variables are interpreted in the usual fashion.

Section 3.5.1 now presents the results of the baseline model, after which section 3.5.2 presents a discussion.

#### 3.5.1 Results

The results on the French and Dutch household portfolio are reported in tables 3.3 and 3.4, respectively. The figures below the coefficients indicate p-values; all coefficients that are significant at the ten percent level are marked in bold.

Considering the French results in table 3.3, all wealth elasticities are positive as expected, but not always significant. M1 and savings have a wealth elasticity below 1 which is perhaps unsurprising given the low-risk nature of these assets and the transaction motive of M1. The wealth elasticity on equity and housing wealth are close to unity but insignificant; the wealth elasticity of life-insurance is positive and significantly larger than one indicating that life-insurance holdings expand faster than an increase in wealth.

Own-rate elasticities are positive for life-insurance, equity and housing wealth, although insignificant for the latter two. Insignificance can potentially be accounted for by variations over time in the elasticities which will be taken into account in section 3.6 below. Own-rate elasticities are negative for M1 and Savings, which is in conflict with expectations although similar to the findings of Avouyi-Dovi et al. (2014) for France.

Considering cross-asset elasticities, equity and housing wealth appear to function as complements. Considering the negative correlation between housing and equity

<sup>&</sup>lt;sup>9</sup>The choice for Savings as a reference category is informed by the high correlation between the return on savings accounts and other return variables which may result in multicollinearity problems (see tables C.3 and C.4 for correlation figures). Like in Blake (2004), most of the variables are plagued by unit root which is in conflict with the modelling assumptions (see tables C.1 and C.2). Unfortunately, no remedy is available within the confines of the model.

	M1	Equity	LI	$_{ m HW}$	Savings
Wealth	0.758	0.911	1.761	0.996	0.557
	0.043	0.538	0.000	0.937	
rM1	-0.905	0.254	0.820	-2.961	3.792
	0.044	0.356	0.132	0.001	•
rEquity	0.126	0.809	0.324	0.264	-0.523
	0.356	0.640	0.018	0.092	•
rLI	0.610	0.487	$\boldsymbol{0.276}$	-1.629	1.256
	0.132	0.018	0.093	0.000	•
rHW	-0.949	0.171	-0.703	1.574	0.907
	0.001	0.092	0.000	0.278	•
rSavings	2.853	-0.795	1.272	2.128	-4.457
			•	•	•
Unemployment	-0.333	0.061	0.335	-0.268	0.448
	0.095	0.816	0.021	0.001	•
$\operatorname{sdCAC}$	-0.025	0.110	-0.409	0.037	0.180
	0.836	0.526	0.000	0.406	•
Dependency	1.415	-1.460	-0.027	-0.080	1.372
	0.021	0.102	0.954	0.721	

Table 3.3: Long-run elasticities France (1963-2017)

*Note:* this table reports the elasticities calculated on the basis of equation 3.3. P-values are immediately below the elasticities. All bold figures are significant at a ten percent level.

returns (see table C.3), this might not come as a surprise. Housing wealth and life-insurance assets instead act as substitutes, which is consistent with a similar life-time consumption smoothing function for both asset classes from the household perspective. Finally, equity and life-insurance appear to function as complements, which is more difficult to interpret.

Turning to the additional control variables, the unemployment elasticity is negative on M1 and housing wealth, while positive on life-insurance assets and savings. This observation is consistent with a move towards safe assets as uncertainty about (future) job prospects is low (although the coefficient on M1 is counter-intuitive). The elasticity on stock market volatility is negative on life-insurance holdings, and positive on savings, where the latter is line with greater precautionary savings in times of uncertainty. The insignificant effect on equity is against expectations as a negative effect was expected. The dependency elasticity is insignificant across most asset classes.

Turning to the Dutch results in table 3.4, all wealth elasticities are positive and significant as expected. Pension assets and housing wealth stand out with wealth elasticities above one, indicating that these assets holdings grow at a faster rate

	M1	Equity	Pension	$_{ m HW}$	Savings
Wealth	<b>0.301</b> 0.000	<b>0.110</b> 0.000	<b>1.549</b> 0.000	<b>1.359</b> 0.007	0.948
rM1	<b>3.224</b> 0.003	<b>0.355</b> 0.069	-0.006 0.989	$0.078 \\ 0.446$	-2.651 ·
rEquity	<b>0.079</b> 0.069	1.743 0.000	-0.813 0.000	<b>0.314</b> 0.001	-0.323 ·
rPension	-0.001 0.989	- <b>0.496</b> 0.000	1.253 0.194	-0.139 0.005	0.382
m rHW	$0.035 \\ 0.446$	<b>0.639</b> 0.001	<b>-0.464</b> 0.005	<b>1.756</b> 0.000	-0.967
rSavings	-0.955	-0.524 ·	1.016	-0.770	2.233
Unemployment	<b>-0.267</b> 0.000	<b>-0.110</b> 0.087	<b>0.283</b> 0.000	<b>-0.661</b> 0.000	0.048
$\operatorname{sdAEX}$	-0.008 0.860	<b>0.145</b> 0.009	<b>0.038</b> 0.091	<b>-0.414</b> 0.000	-0.003 ·
Dependency	<b>-0.410</b> 0.011	<b>-1.186</b> 0.000	<b>0.788</b> 0.000	-0.373 $0.231$	0.272

Table 3.4: Long-run elasticities the Netherlands (1970-2017)

*Note:* this table reports the elasticities calculated on the basis of equation 3.3. P-values are immediately below the elasticities. All bold figures are significant at a ten percent level.

than household wealth.

Own-rate elasticities are all positive – although the elasticity on pension assets is insignificant. The latter can potentially be accounted for by the fact that Dutch households semi-automatically build up pension savings and have only limited say in increasing pension savings.

Cross-asset elasticities show that housing wealth and pension assets act as substitutes, which is consistent with their similar function in the household portfolio of smoothing life-time consumption. Housing wealth and equity instead act as complements which is consistent with uncorrelated returns (see table C.4). Equity and pension assets appear to function as substitutes which seems consistent with a large share of the pension balance sheet invested in equity, particularly from the 1990s onwards (see figure A.1) and the generally high correlation of their returns.

Turning to the additional control variables, the unemployment elasticity appears to be negative for equity and housing asset holdings. These observations appear consistent with a move out of risky assets (equity) and reduced access to housing loans in times of higher unemployment. For stock market volatility a small positive elasticity is found on equity, which is against expectations. The negative elasticity

on housing wealth is consistent with reduced housing credit supply in times of uncertainty. The elasticity on the dependency rate appears positive on pension assets, consistent with the view that a larger dependent (and older) share of the population opts for greater pension savings. The dependency elasticity on equity and housing wealth is negative, on the other hand.

#### 3.5.2 Discussion

Comparing the French and the Dutch results, the following patterns can be discerned. Wealth elasticities are mostly positive and significant in line with expectations. Where the own-rate elasticities are positive and significant for the Dutch case, this does not always appear to hold in France. It is possible that the French estimates are less precise due to the overhaul of the French financial system in the mid-1980s which may have affected the elasticities there (see below).

In both nations, housing wealth and life-insurance or pension assets act as substitutes, whereas housing wealth and equity act as complements. The former is consistent with a similar function of life-time consumption smoothing for both assets, whereas the latter is consistent with a negative correlation of returns which gives rise to a potential hedging motive. Cross-elasticities for equity and life-insurance (pension) assets are of a different sign for the French and Dutch case, however.

Turning to the additional control variables, the elasticities on unemployment show similar patterns across both nations, with the exception of the equity equation for which the elasticity is insignificant in France. Larger differences exist for the stock market volatility elasticities, which display a negative effect on equity holdings in France and a positive effect in the Netherlands. Furthermore, the elasticity of stock market volatility in the housing wealth equation is negative for the Netherlands, and insignificant for France. Finally, the dependency rate appears largely insignificant across the various asset classes in France, whereas the elasticity is negative for the Dutch equity equation, and positive for the Dutch pension equation.

As was noted above, the estimated elasticities are derived from a period in which considerable institutional change took place – particularly in France. The following section takes a closer look at the dynamics.

# 3.6 Structural breaks

After having estimated the elasticities for the whole period, now I explicitly allow for the presence of a structural break in the estimated coefficients. A number of historical developments in the French and Dutch setting are of interest in this regard. In France, the mid-1980s were characterized by a large scale liberalization of the French financial system. The availability of mortgage credit and investment products grew as a result. Moreover, the 1990s were characterized by a crisis of the welfare state in France which resulted in growing demand for financial products that could smooth life-time consumption for French households (see chapter 6).

Developments in the Dutch setting were more limited in nature. Mortgage credit and equity products were already more widely available to the general public

and limitations imposed by Dutch government policies were relatively limited. Furthermore, and in contrast the French case, there were little doubts in the capacity of the Dutch pension system to effectively provide retirement income. <sup>10</sup>

A relationship between the long-run wealth and interest rate elasticities and institutional change can be motivated in the following two ways. First, the growing availability of some asset decreases transactions costs that may otherwise impede purchase. Falling transaction costs may, in turn, result in a relatively greater sensitivity in the holdings of this asset to changes in return or wealth. Given the historical account above, rising wealth and interest rate elasticities are particularly expected for the French case with the rising availability of mortgage credit, and equity and life-insurance assets. In the Netherlands, on the other hand, such products were already more widely available at an earlier stage.

A second way in which elasticities may change over time relates to the potential of portfolio rebalancing in response to a worsening outlook over the capacity of the existing pension system to effectively smooth life-time consumption. Given this worsening outlook, households may seek to hold a relatively larger share of their wealth in assets that allow for consumption smoothing. The wealth elasticity on life-insurance assets in particular may be expected to show a rise relative to other assets in such a case. Here, the largest dynamics are again expected for the French case given its crisis of the welfare state in the 1990s and the limitations introduced to the PAYG pension system thereafter.

The remainder of this section is structured as follows. Section 3.6.1 first explains how the introduction of a set of interaction terms allows for a structural break in the estimated elasticities. Next, section 3.6.2 proceeds with the estimation of the model, after which section 3.6.3 provides a brief discussion.

# 3.6.1 Specification

In order to consider the possibility of a structural break in the estimated coefficients, I add two interaction terms and a dummy to equation 3.7

$$k_i^* d1990_i + g_i^* d1990_i ln(W_t(1+r_{W_t})) + \sum_{j=1}^{N-1} m_{ij}^* d1990_i ln(1+r_{jt})$$
(3.11)

where  $d1990_i$  is a dummy that takes the value of 1 if the year is greater or equal to 1990, and  $g_i^*$  and  $m_{ij}^*$  capture potential changes in wealth and interest rate elasticities after 1990, respectively. The year of 1990 is chosen because many of the liberalization policies that were implemented over the course of the 1980s likely took some time to have their effect on local market practices. The largest changes are expected for the French setting, where the most significant institutional changes took place. For the Netherlands, relative stability of the coefficients can be expected given the more limited changes to the institutional setting.

To implement the estimation, the following restrictions are added to those of

<sup>&</sup>lt;sup>10</sup>See chapter 5 and 6 for an in-depth discussion of the institutional setting.

equation 3.4 and 3.5:

$$\sum_{i=1}^{N} k_i^* = 0, \qquad \sum_{i=1}^{N} g_{ij}^* = 0, \qquad \sum_{i=1}^{N} m_{ij}^* = 0$$
 (3.12)

which are again implemented by leaving the savings estimation out from the estimation and calculating the coefficients on the basis of these restrictions. Moreover, homogeneity and symmetry requires the following to hold:

$$\sum_{i=1}^{N} m_{ij}^* = 0, \qquad m_{ij}^* = m_{ji}^*. \tag{3.13}$$

The elasticities are calculated as in equation 3.9 at the average portfolio share. Changes in the elasticities thereby exclusively capture changes in the coefficient and disregard any potential changes in portfolio shares that would otherwise affect the estimated elasticities.<sup>11</sup>

#### 3.6.2 Results

Tables 3.5 and 3.6 display the French and Dutch results, respectively. The top six rows display the wealth and interest rate elasticities for the period up to the 1990s. The bottom six rows instead display the change in the wealth and interest rate elasticities between the period before and after 1990. The sum of the top and bottom rows therefore denote the elasticities for the post-1990 period. Note that I do not report the elasticities of the additional control variables here, although these are included in the regression.

Considering the French results in table 3.5 for the period up to the 1990s, the wealth elasticities for equity and housing wealth now turn positive and significant as compared to the baseline results from table 3.3, which is consistent with expectations. The wealth elasticity on life insurance now is insignificant compared to the positive and significant effect found in te baseline results.

Turning to the period after 1990, the interaction terms with the wealth elasticities are consistent with a structural break in the estimated elasticities. The wealth elasticity on equity falls below 1 (but remains positive) after 1990, whereas an opposite effect can be discerned for wealth elasticities on housing wealth and life-insurance from the 1990s onwards. The latter may reflect the crisis of the welfare state in the 1990s which led many households to allocate a growing share of their wealth towards life-insurance assets.

Where the own-rate elasticities were mostly insignificant in the baseline results of table 3.3, they are now significant for both equity and life-insurance for the period up to 1990. Contrary to expectations, the own-rate elasticity on life-insurance is negative, however. The interaction terms show considerable dynamics after 1990, with rising and positive own-rate elasticities for equity, life-insurance and housing

<sup>&</sup>lt;sup>11</sup>This comes at the cost of measurement error in the estimated elasticities. Indeed, household portfolio shares display considerable dynamics over time (see figures 3.1a and 3.1b).

	M1	Equity	LI	HW	Savings
Wealth	0.828 0.412	<b>1.931</b> 0.000	0.941 0.674	<b>0.672</b> 0.000	0.543
rM1	-0.469 0.108	$0.005 \\ 0.980$	$0.442 \\ 0.357$	-0.978 $0.180$	2.000
rEquity	$0.003 \\ 0.980$	1.538 0.007	0.106 0.314	<b>0.290</b> 0.032	-0.936 ·
${ m rLI}$	$0.328 \\ 0.357$	$0.159 \\ 0.314$	<b>-0.401</b> 0.000	-1.523 0.000	2.436
rHW	-0.313 0.180	<b>0.188</b> 0.032	<b>-0.657</b> 0.000	<b>2.279</b> 0.000	-0.497
rSavings	1.505	-1.424 ·	2.466	-1.165 ·	-0.381
d1990Wealth	$0.812 \\ 0.516$	<b>-1.459</b> 0.000	<b>1.962</b> 0.000	1.585 0.000	2.537
d1990rM1	$0.040 \\ 0.756$	0.136 $0.369$	-0.119 0.746	$0.796 \\ 0.170$	0.147
d1990rEquity	$0.067 \\ 0.369$	<b>1.554</b> 0.000	-0.397 0.000	<b>-0.568</b> 0.000	0.343
d1990rLI	-0.088 0.746	<b>-0.596</b> 0.000	<b>2.027</b> 0.000	0.191 0.446	-0.533 ·
d1990rHW	$0.255 \\ 0.170$	<b>-0.368</b> 0.000	$0.082 \\ 0.446$	<b>0.676</b> 0.085	0.354
d1990rSavings	0.111	0.522	-0.540	0.831	0.076

Table 3.5: Long-run elasticities the France with interactions (1970-2017)

Note: this table reports the elasticities calculated on the basis of equation 3.3 with the addition of the interaction terms of equation 3.11. P-values are immediately below the elasticities. All bold figures are significant at a ten percent level. Control variables are not reported here but included in the regression.

wealth after 1990. This is consistent with the growing availability of these assets following the French liberalization wave.

The cross-asset elasticities for the period up to 1990 are relatively stable as compared to the baseline results, although the cross-asset elasticity on equity and life-insurance assets turns insignificant. The substitution relationship between housing wealth and life-insurance appears stable after the 1990. This is not the case for the cross-asset elasticity between housing wealth and equity, and life-insurance and equity, however: both cross-asset elasticities turn negative after 1990.

Considering the Dutch results in table 3.6 for the period up to 1990, the wealth

elasticities change somewhat as compared to the baseline results in table 3.4. The wealth elasticity on equity turns slightly negative, whereas the wealth elasticity on housing wealth rises as compared to the baseline model. The wealth elasticity on pension assets remains stable, however, and is comparable to earlier results. Changes in wealth elasticities after 1990 appear modest: a slight drop can be discerned for the wealth elasticity on housing wealth.

Table 3.6: Long-run elasticities the Netherlands with interactions (1970-2017)

	M1	Equity	Pension	HW	Savings
Wealth	<b>0.406</b> 0.054	<b>-0.112</b> 0.000	1.432 0.000	<b>2.767</b> 0.000	0.460
rM1	<b>3.850</b> 0.081	<b>0.954</b> 0.027	$0.078 \\ 0.912$	<b>-17.220</b> 0.000	13.338
rEquity	0.212 $0.027$	1.813 0.000	<b>-1.063</b> 0.000	<b>0.243</b> 0.052	-0.206 ·
rPension	$0.011 \\ 0.912$	<b>-0.648</b> 0.000	1.296 0.191	- <b>0.329</b> 0.000	0.670
m rHW	<b>0.289</b> 0.010	<b>0.496</b> 0.052	<b>-1.098</b> 0.000	<b>2.180</b> 0.000	-0.867
rSavings	-1.629	-0.335 ·	1.782	5.745	-4.563
d1990Wealth	$0.875 \\ 0.696$	$1.215 \\ 0.334$	$1.107 \\ 0.305$	- <b>0.276</b> 0.000	1.429
d1990rM1	4.124 0.220	<b>-0.421</b> 0.099	-0.339 $0.583$	<b>-0.311</b> 0.043	-2.053 ·
d1990rEquity	<b>-0.094</b> 0.099	1.007 0.954	0.100 0.423	$0.079 \\ 0.335$	-0.093 ·
d1990rPension	-0.046 $0.583$	$0.061 \\ 0.423$	1.122 0.515	<b>0.106</b> 0.023	-0.244 ·
d1990rHW	<b>-0.141</b> 0.043	$0.161 \\ 0.335$	<b>0.355</b> 0.023	<b>0.666</b> 0.025	-0.041
d1990rSavings	-0.740 ·	-0.151 ·	-0.649 ·	-0.033	2.572

*Note:* this table reports the elasticities calculated on the basis of equation 3.3 with the addition of the interaction terms of equation 3.11. P-values are immediately below the elasticities. All bold figures are significant at a ten percent level. Control variables are not reported here but included in the regression.

The own-rate elasticities for the period up to 1990 appear relatively stable as compared to the baseline of table 3.4 as well. The only notable change is the own-rate elasticity on savings which turns negative. Changes after 1990 are modest as

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well, with generally insignificant interaction terms on the own-rate elasticities. The only exception is the own-rate elasticity on housing wealth, which displays a slight increase after 1990.

Cross-asset elasticities for the period before 1990 are similar to those of the baseline specification of table 3.4, and the changes over time are limited. The only real change is the negative cross-elasticity between housing wealth and pension assets, which is somewhat more negative in the period prior to 1990, to fall afterwards in absolute terms. Overall, the Dutch results appear consistent with a relatively stable institutional environment.

#### 3.6.3 Discussion

Comparing the French and the Dutch results, a first observation is that the French case is characterized by a structural break in the long-run coefficients, whereas the coefficients for the Dutch case appear relatively stable. Both wealth and own-rate elasticities display considerable change over time in France. One way to interpret this greater degree of change in the French elasticities is to regard them as the outcome of 1) a general overhaul of the French financial system from the mid-1980s onwards and 2) a crisis of the welfare state in the early 1990s. These factors altered incentives and opportunities for French households which are reflected in changing wealth and interest rate elasticities.

A second observation is that the precision of the estimation improved considerably as compared to the baseline estimation in table 3.3. Overall significance of the wealth and interest elasticities improves and the elasticities are more in line with theory – especially for the French case. It therefore appears that the estimation of a FAIDS with historical data should consider the incorporation of breaks in the estimated elasticities to improve precision.

# 3.7 Conclusion

In this chapter I estimate a Financial Almost Ideal Demand System (FAIDS) on the French and Dutch household portfolio for the period 1963-2018 and 1970-2018, respectively. In line with expectations I find generally positive wealth and own-rate elasticities the baseline estimation, although the results for France are plagued by greater standard errors. I hypothesize that this uncertainty around the French estimates revolves around 1) the general overhaul of the French financial system in the mid-1980s and 2) a crisis of the welfare state in the 1990s. Both factors likely affected household incentives and opportunities in their financial decisions and consequentially increased standard errors.

To incorporate these institutional dynamics in the analysis, a second specification explicitly allows for structural breaks in the long-run wealth and interest elasticities. Where the Dutch estimates appear relatively stable, this is not the case for the French case. In particular, I find a structural break in the long-run wealth and own-rate elasticities after 1990. Moreover, the precision of the estimates appears to improve considerably with a general rise in significance.

Cross-rate elasticities appear relatively stable, both across space and time. Both in France and the Netherlands, housing wealth act as a substitute for life-insurance or pension assets which likely reflects the role played by both asset types in smoothing out consumption over time. Instead, housing wealth and equity appear complements in both the French and Dutch household portfolio, which is consistent with a hedging function: housing and equity returns are negatively correlated in both nations. Furthermore, these cross-rate elasticities appear relatively stable over time as well.

Although this chapter identifies considerable change in wealth and interest elasticities following the 1980s reforms – particularly in France, this does not bring us closer to an understanding of the underpinnings of these institutional dynamics. The underpinnings of institutional dynamics are the subject of the second part of this dissertation.

# Chapter 4

# Explaining financial system dynamics: a new institutional framework

#### 4.1 Introduction

What can account for the evolution of financial service provision to households? Although some tentative answers are formulated which highlight culture, the regulatory setting or historical experiences (e.g. Badarinza et al., 2016; Arrondel et al., 2016; Bover et al., 2016), our understanding of how the financial service provision to households evolves over time and why cross-country differences in this regard persist is still relatively limited.<sup>1</sup>

In this chapter I develop an analytical framework which seeks to explain the evolution of the financial service provision to the household sector. To this end, I combine insights drawn from three strands of literature which each offer their own explanation for the general evolution of financial systems over time. Cross-country differences in the operations of a financial sector are explained with differences in norms, values and beliefs (the cultural school), legal origin (legal school), or the relative bargaining power of various interest groups in society (the political economy of finance). Unfortunately, these three strands of literature remain heavily entrenched: it's either culture, or legal tradition, or culture that explains the evolution of a financial system over time. This renders a comparative and historical analysis of financial systems difficult as it remains unclear what variables matter in which circumstances. Moreover, the literature is relatively static in nature, often ignoring the process and context in which this evolution occurs.

The foundation of the analytical framework that I propose is based on a framework by Williamson (2000), who introduces a hierarchy of institutional levels.

<sup>&</sup>lt;sup>1</sup>I would like to thank Bas van Bavel, Oscar Gelderblom, Richard Grossman, Eelke de Jong, Alan Taylor, Jan Luiten van Zanden and seminar participants at Groningen University and Utrecht University for comments on earlier versions of this chapter.

I place the cultural, legal and political literature in the context of this framework, and highlight the causal channels through which the set of financial products on offer to households evolves over time.

The benefit of employing the Williamson framework is twofold. First, the hierarchical character of the Williamson framework allows for the introduction of structure, and indeed a certain hierarchy, in the interaction between the various strands of literature. Second, the Williamson framework highlights the presence of varying rates of change for the different institutional levels. The hierarchical character of the framework in combination with these varying rates of change for the different institutional levels results in a path dependent evolution of financial systems. This paper thereby illustrates the importance of studying historical choices and events to come to a more complete understanding of the current institutional constellation, as well as its future evolution.

My analytical framework helps us to understand the evolution of financial service provision to households and proves instrumental in the execution of comparative case-studies.<sup>2</sup> The utility of the framework is illustrated by means of a case study of the impact of the 1989 Second Banking Directive on the financial sector composition and the financial service provision to households in France and the Netherlands. The case study highlights how the imposition of a single formal rule on two otherwise different systems of retail finance need not necessarily contribute to the integration of these systems. Cultural, supervisory and regulatory attitudes prevailed, as well as differences in the relative bargaining positions of the French and the Dutch banking system, leaving most retail finance practices nation-specific.

The remainder of this paper is organized as follows. First, the three main strands of literature are discussed in section 4.2, after which I introduce the framework of Williamson (2000) in section 4.3. Section 4.4 presents the analytical framework on the evolution of the financial service provision to households. In section 4.5, I present an application of the analytical framework to the case of the Second Banking Directive in France and the Netherlands. Section 4.6 concludes.

# 4.2 Literature

The literature on the evolution of financial systems is divided along three main strands: the cultural school, law and finance, and the political economy of finance (Perotti, 2014; de Jong, 2014). The following three sections highlight the main arguments that the three strands of literature employ to explain cross-country differences in financial service provision.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup>Although the current paper focusses on the financial service provision to the household sector, it holds wider applicability and could readily be expanded to other sectors such as the non-financial sector as well.

<sup>&</sup>lt;sup>3</sup>Although an important share of this literature focusses on financial structure rather than the evolution the financial service provision to households, a considerable degree of overlap exists, as will become evident in the discussion.

#### **4.2.1** Culture

The cultural school focuses on informal institutions, including norms, values and beliefs, to explain differences in the way the financial sector operationalizes its financial service provision. Here, norms refer to socially accepted behaviour, values denote what is seen as right or wrong, whereas beliefs are expectations about what type of behaviour other people will display (and thus about the consequences of one's own behaviour). Beliefs, norms and values are initially acquired through one's upbringing and afterwards updated through experience (Guiso et al., 2008), although some authors adopt a more primal view of norms and values (e.g. Akerlof and Kranton, 2000).<sup>4</sup>

The central idea of the cultural school is that culture structures economic and financial exchange by defining what can reasonably be expected from the parties involved. Informal institutions thus perform an important function that allow for relatively cheap exchange by lowering transaction costs. Without informal institutions, economic and financial exchange would be plagued by excessive cost and large uncertainty. Moreover, because informal institutions are generally accepted within society, they can also be referred to in case of disputes.

Cross-country differences in norms, values and beliefs therefore have the potential to result in different modes of exchange. For example, norms on personal liability for financial conduct display large variations across countries. Because such norms are also upheld in court, they affect the incentives of creditors and debtors alike.

Most of the literature of the cultural school focusses on the classical dichotomy between bank-based and market-based financial systems by relating a range of cultural measures to creditor's and investor rights, or outcome variables such as financial development. Stulz and Williamson (2003) find that countries that are predominantly catholic offer poorer investor rights than those with protestantism as the main religion, which correlates with lower stock market development (see below). Guiso et al. (2008) find that measures of trust can explain differences in stock market development even after controlling for investor's rights. Similarly, Guiso et al. (2004) and Guiso et al. (2008) find that within-country differences in stock market investment for Italy and the Netherlands can be attributed to differences in levels of trust. The role of culture is further corroborated by Osili and Paulson (2008), who find that investment behaviour of immigrants to the United States depends on the quality of institutions in their country of origin.

A complicating factor is the endogenous nature of culture: informal institutions can induce the legislators to introduce particular rules, but the reverse might also be true. Aghion et al. (2010) explain the observation that countries with low levels of trust are also characterized by high levels of regulation with a model. The model is characterized by two equilibriums: one in which people choose to display civic (trustful) behaviour if they believe others will display civic behaviour as well, which results in low levels of regulation and corruption. The second equilibrium is one in which people choose uncivic (distrustful) behaviour, which results if people believe others will display uncivic behaviour as well. In this case, high levels of regulation and corruption results. In the context of the model, government corruption is

<sup>&</sup>lt;sup>4</sup>See Alesina and Giuliano (2015) for a discussion.

preferred over the negative externalities of uncivic behaviour in society. For Aghion et al. (2010), informal and formal institutions are thus interdependent and co-evolve through time.

Although culture is generally considered to be a constant factor, Malmendier and Nagel (2011) find generational effects in risk-aversion due to extreme business cycle experiences. In particular, Malmendier and Nagel show that "depression babies", which grew up during the Great Depression, are more risk averse and invest less in equity. Conversely, younger generations that did not experience the Great Depression display lower risk aversion and greater stock market participation.

A number of studies consider the interaction between informal institutions and supranational legislation. Jonker et al. (2017) show that European legislation on consumer credit and overindebtedness did not take away local interpretations in court for the Netherlands and Belgium; Dutch courts continue to emphasize responsibility of Dutch households whereas Belgium courts instead highlight the role played by the intermediary in providing a sufficient amount of information to the client. Similarly, Milo (2018) discusses the incorporation of the 2016 Mortgage Credit Directive in national law. Here, Milo stresses the normative character of legislation, as well as the importance of case law in different legislative frameworks, thereby allowing for different interpretations of identical European directives. Cultural institutions can thus be expected to exert divergent pressure in an otherwise increasingly level playing field (also see de Jong, 2014; Anderson and Amayuelas, 2018).

The cultural school is able to explain part of the observed cross-country differences in investor protection and stock market participation. Still, the fact that culture generally takes decades to change, renders it a poor explanatory factor for more radical alterations to the organization of financial service provision (Perotti, 2014). Clearly, additional explanatory models are required to come to a deeper understanding of the dynamics and cross-country differences in financial service provision.

#### 4.2.2 Law and finance

The law and finance literature instead argues that cross-country differences in financial practices can be traced back to the two main legal traditions: common and civil law (La Porta et al., 1997, 1998). British common law and French civil law spread via conquest and colonization over the past centuries and these legal traditions are viewed by this literature to exercise a lasting effect on the judicial system of the recipient country. In particular, the tradition of common law is considered more bottom-up, with greater independence of the judicial system from the state, whereas civil law is considered top-down, with a more dominant role for the central executive. This literature argues that the greater independence from the state results in better protection of property rights, and thereby in a more market-based financial system. Instead, civil law systems result in a more bank-based financial system (Beck, 2012).

Although the importance of a legal framework for the organization of a financial system is generally accepted within the literature, the view of legal origin as an

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ultimate determinant was refuted. Lamoreaux and Rosenthal (2005) execute a comparative study of 19th century business law in France and the United States and find that, in contrast to the claims of the law and finance literature, 19th century France – where civil law originates – offered better (minority) investor protection and was actually more apt at adapting to changing market circumstances than the United States. Rajan and Zingales (2003) show that civil law countries were actually characterized by higher levels of financial development before the Second World War than common law countries. Only after the Second World War these positions reversed. For Rajan and Zingales (2003), the rise of financial development in common law countries can be attributed to legislative capture by local financial and non-financial incumbents.

# 4.2.3 Political economy

For the political economy of finance literature, the organization and service provision of a financial system is the outcome of a bargaining process over the proceeds of financial and economic exchange by a variety of interest groups, including households, (non-)financial organizations and government (Calomiris and Haber, 2014; Haber et al., 2008b; Perotti, 2014). Important, for the way in which financial systems evolve over time, are the associated redistributive effects of such change. The interests of various interest groups are thus strongly aligned with their level and composition of wealth. Interest groups will oppose institutional change to the detriment of their wealth position if they possess the necessary bargaining power and instead will seek institutional change that improves their wealth position. This introduces a degree of path dependency in institutional development.

Central to the political economy of finance literature is the relative weight of interest groups in the formation of new (financial) regulation and financial products. Various authors suggest a link between the distribution of wealth and the rise of supportive institutions for a market-based system. For Hoffman et al. (2007), a sizeable middle class is a prerequisite for both the rise of financial products that allow for diversification and a regulatory regime that supports this. Similarly, Pagano and Volpin (2005) argue that workers with lower wealth will prefer job security and stable low-risk income, whereas medium wealth workers will prefer the ability to diversify across high-risk high-return investments. This view is corroborated by Degryse et al. (2018), who find that the political stance towards stock markets became less favourable as suffrage was extended towards lower-wealth individuals.

The political economy of finance literature also demonstrated its explanatory power for the rise and fall of other types of products and regulation. Benmelech and Moskowitz (2010) argue that usury rates on business credit in 18th and 19th century United States were employed by the elite to safeguard their monopoly position. Usury rates were set sufficiently low so that possible entrants, who were considered risky were denied access to credit because creditors could not charge the rate that matched the risk of this new venture. Here, the interests of incumbent firms prevailed over public interests. Similarly, Kroszner and Strahan (1999) find that the timing of the relaxation of branching restrictions in the United States in the second half of the 20th century relates to the structure of the incumbent financial and non-

financial industry. In particular, states with larger banks and more bank-dependent small firms saw an earlier move towards relaxing branching restrictions than states with a lot of small banks. Because the first group is clearly gaining the most from this deregulation, these reforms point at regulatory capture for Kroszner and Strahan (1999). Mian et al. (2010) find greater support among representatives of constituents that experienced defaults for the Foreclosure Prevention Act which introduced insurance for renegotiated mortgages and unlimited support for Freddie Mac and Fannie Mae. Similarly, support among representatives for the Emergency Economic Stabilization Act, which allowed the state to bail-out the financial industry, was greater for those that received campaign contributions from the financial industry. Interestingly, this did not hold for more conservative representatives, which points at a role for ideology for Mian et al. (2010). Moreover, representatives close to retirement did not alter their voting behaviour in response to campaign contributions from the financial industry.

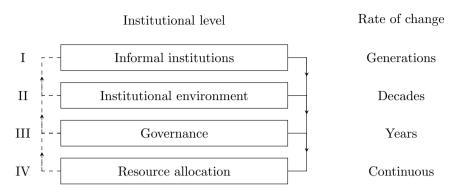
Whereas most alterations to the setup of a financial systems are incremental in nature, economic and financial crises can have more disruptive effects. In particular, a crisis has the potential to affect both wealth levels and risk preferences of all the interest groups involved. If a large part of society is affected by crisis, this strengthens calls for the legislator to curb financial innovation and risk taking (Hoffman et al., 2007; Reinhart and Rogoff, 2009). Structural breaks in the institutional setting can therefore be expected to occur right after a financial crisis.

Perotti and Schwienbacher (2009) extend the argument by Pagano and Volpin (2005), and argue for a relation between private pension savings and inflationary shocks in the aftermath of the Second World War. In particular, an inflationary shock eliminates much of private savings and thereby decreases the interests of the middle class in effective investor protection. For Perotti and Schwienbacher (2009), this resulted in a greater likelihood of public pension provision and lower stock market capitalization.

The three strands of literature thus take a different approach to explain the historical evolution of a financial system. For the cultural school, informal institutions form the main explanatory factor, whereas the law and finance literature instead focusses on the historical roots of legal systems. The above discussion shows that the main thesis of the law and finance literature on the connection between legal origin and the protection of property rights was refuted, although the legal framework is still considered to be highly relevant for the mode of operation of a financial system. The main thesis of the political economy of finance literature, and indeed, the main critique of the literature on the cultural and legal school, is that laws are the result of design, which can help to explain more radical alterations to the setup of a financial system.

How the insights from these three strands of literature can effectively be integrated into a single framework is the subject of the following section. I first introduce the Williamson framework and then explicitly link it to the three strands of literature.

Figure 4.1: Hierarchy of institutions



Source: adaptation of Williamson (2000)

# 4.3 A hierarchy of institutions

To introduce structure to the different explanations put forward by the cultural, legal and political economy literature on the evolution of financial systems, I employ a framework after Williamson (2000), which introduces a hierarchy of institutions. Following North (1990), institutions are the "humanly devised constraints that structure political, economic and social interactions". As explained below, institutions encompass a broad range of constraints on human interaction, including cultural factors, laws and their implementation, as well as contracts.

Williamson (2000) identifies four institutional levels – informal institutions, the institutional environment, governance, and resource allocation – which are displayed in figure 4.1. The hierarchy within the Williamson framework originates in the hypothesis that higher level institutions impose limitations on the institutions (immediately) below. Moreover, because higher level institutions generally change at a slower pace than lower level institutions, the evolution of lower level institutions is path dependent. A limited degree of feedback from lower-level institutions is denoted by the dashed upward arrows in figure 4.1.

Informal institutions comprise norms, values and beliefs. Relevant informal institutions for the organization of a financial system are, for example, norms on overindebtedness or measures of trust. Indeed, for the cultural school such informal institutions form the main explanatory variable when explaining cross-country differences in the organization of financial systems.

The second level is the institutional environment, or the formal rules of the game. Formal rules encompass the institutionalized boundaries within which economic and financial actors operate. Consider, for instance, a tax code, which sets out the main ways in which different types of assets and intermediaries are taxed. Note the close connection to the institutional level of governance where the implementation and interpretation of these rules takes place (see below). The institutional environment is the institutional level where the legal school and the political economy of finance

literature make their main argument, although both focus on different aspects of the same institutional level. For the political economy of finance, this second institutional level is where the formal rules of the games are formed through a bargaining process between the main interest groups. Note that for Williamson, the organization of this bargaining process makes up part of the institutional environment, that is the way in which various interest groups have their say in the decision-making process. The legal school instead argues that legal traditions invoke a lasting effect on the setup of the institutional environment, and property rights more specifically.<sup>5</sup>

The third institutional level is that of governance. This is the institutional level where the formal rules of the game are operationalized. Consider the determination of the exact level of taxation within a tax code, or the interpretation of a set of formal rules in case of a breach of contract. Second, this is the institutional level where the composition of the financial system is determined, or in other words, the types of financial intermediaries and markets that make up a national financial system. As highlighted in the literature discussion above, the different strands of literature all identify a different ultimate cause of the organization of a financial system, but are in general agreement over the proximate cause: the relative cost of different forms of finance determines the set of financial intermediaries and markets that are active within a financial system.

Finally, resource allocation is the institutional level at which actual economic and financial exchange takes place. Here, the interaction between demand and supply for financial services takes place, conditioned by the institutional levels above.

One crucial characteristic of the Williamson (2000) framework for the path of institutional change is the varying rate of change for the different institutional levels (see figure 4.1).<sup>6</sup> Differences in the rate of change for the different institutional levels can be attributed to the costs associated with institutional change. In particular, setup costs associated with the adoption of a new institution, as well as learning and network effects, introduce opportunity costs for the institutional constellation in place.<sup>7</sup> In this light, technology also plays an important role as it can render particular modes of exchange or organizational forms more or less attractive. Innovations in internet banking, for example, have radically altered the client-bank relationship over the past two decades. Although not explicitly treated in the framework of Williamson, more extreme cases, such as a financial crisis, can result in a more radical alteration of the institutional framework as the urgency of institutional change overturns its costs.

The following section now explicitly combines the insights from the literature and the Williamson framework into a single analytical framework which allows one to study the evolution of the financial service provision to households.

<sup>&</sup>lt;sup>5</sup>Note that La Porta et al. (2008) instead views legal origin as a cultural variable.

<sup>&</sup>lt;sup>6</sup>In contrast to Williamson (2000), I employ lower rates of institutional changes. For example, Williamson (2000) argues that informal institutions only change every 100 to 1000 years, but this seems too extreme. Take for instance the acceptance of homosexuality or women's rights over the past decades.

<sup>&</sup>lt;sup>7</sup>Note, however, that the process through which informal institutions change is generally poorly understood (see the discussion in section 4.2).

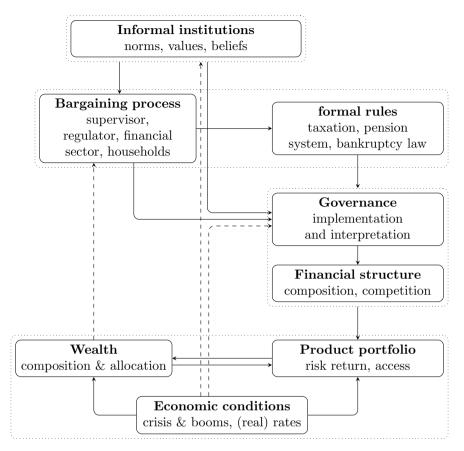


Figure 4.2: Analytical framework

# 4.4 The analytical framework

Figure 4.2 displays my analytical framework, which follows the same hierarchy of institutions as Williamson (2000). The framework runs from informal institutions at the top, through the institutional environment, governance, and, finally, resource allocation. Each of these institutional levels is encircled by a dotted rectangle and the Roman numerals on the left directly correspond to those in figure 4.1. Moreover, feedback effects from lower to higher-order institutions are indicated by the dotted arrows.

Although the current framework is specifically determined to understand the evolution of financial service provision to households, it could readily be expanded to also incorporate, for instance, the non-financial sector.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup>The framework of figure 4.2 highlights the main channels through which the various institutional levels interact, but does not claim to be exhaustive. For example, the causal link between informal institutions and the institutional environment is plagued by endogeneity but is not represented here. For the sake of tractability I abstract from some of such linkages.

At the top of the diagram are informal institutions, including norms, values and beliefs. The relation between informal institutions and 1) the institutional environment and 2) governance represent the cultural view on institutional change in finance.

Informal institutions in themselves do not result in the formation of a set of formal rules, however. Instead, informal institutions play an indirect role in the formation of formal rules: they limit the opportunity set of institutional change by classifying certain practices as inconsistent with informal institutions. Consider, for example, cross-country differences in the degree to which the state is expected to shield households from adverse market developments.

Following the political economy of finance literature, the formation of formal rules takes place through a bargaining process between various interest groups, in this case the supervisor, the regulator, the financial sector, and households. Formal rules encompass the laws and rules that structure economic and financial exchange such as bankruptcy laws, the way various assets, liabilities and financial intermediaries are taxed and the pension system.

Importantly, there is a difference between the set of rules in play, and the way that these are implemented. For example, the presence of different sets of regulation for savings banks, mutual banks and general banks can be regarded as part of formal rules. Governance, the third institutional level, deals with the implementation and/or interpretation of these laws, such as the exact level of profit taxation that holds for these different types of banks and the limitations which are imposed on the composition of their balance sheet.

The way in which laws are implemented and interpreted depends not only on the set of formal rules at play, however. First, there is an interaction between the interpretation of law and informal institutions. For example, there exist large crosscountry differences in the weight attached to the personal situation of a debtor in case of overindebtedness; such views over indebtedness are also taken into account in court.

Second, the relative bargaining position of various interest groups interacts with the implementation of law, as was convincingly shown by Benmelech and Moskowitz (2010) for the case of usury rates (see above).

Third, more extreme situations, such as a financial crisis, can result in the quick alteration of the exact implementation of the set of formal rules in place, or the institutional level of governance. This feedback effect from a lower institutional level does not necessarily run through the bargaining process as in this case institutional change involves a response to a quickly changing environment with little time for deliberation.

The set of incentives that derive from the implementation and interpretation of formal institutions determines the financial structure or the set of financial organizations and markets that makes up a national financial system. See the discussion on market-based vs. bank-based financial systems in section 4.2.

Together, the implementation and interpretation of formal institutions as conditioned by the bargaining process and informal institutions, and the resultant

 $<sup>^9{</sup>m The}$  regulator denotes politicians or other government-related organizations that introduce regulation.

financial structure, determine the set of products that are on offer by the various intermediaries and markets present in the financial system. Supply and demand, in combination with the limitations imposed by the institutional level of governance, result in different combinations of risk and return, as well as the inclusion and exclusion of particular groups in society of certain sub-markets. For example, financial intermediaries are often not allowed to grant a housing loan to households with low incomes.

The available set of products in a financial system and their specific conditions contribute to the composition and allocation of wealth in society. First, with regards to the composition of wealth, the set of financial products on offer by a financial system largely determines what financial assets households can hold. Access to financial products is not equal for all, however, which results in variations of the composition of wealth for different types of households.

Second, the allocation of wealth refers to the allocation of wealth between financial intermediaries and households. Here, pricing and product conditions play a key role. If competition within a particular segment of the market is low, financial intermediaries will be able to derive rents from their operations, which results in a redistribution of wealth from the household sector to the financial sector. Under high levels of competition, on the other hand, margins on financial services will be low and and may lead to a redistribution of wealth from the financial system to the household sector.

The composition of wealth (and the extent to which these wealth components are widely held) also holds implications for the demand for financial services. In particular, household demand for financial services is, in part, conditioned by wealth positions that were built in the past. If a household, for example, automatically builds up retirement savings through a capital funded pension system, this results in a lower private demand for financial products that offer a cash flow pattern similar to that of a pension product (e.g. life-insurance). In the 2016 Eurosystem Consumption and Household Survey, for example, households which reside in a country with a relatively extensive pension system (as measured by the replacement rate) display lower savings in other long-term assets (Arrondel et al., 2016). A similar relationship is found for the accumulation of housing wealth and the demand for housing credit in chapter 5.<sup>10</sup>

One final dimension to the analytical framework is that of the economic conditions. Economic conditions refer to the general state of the economy and the development of asset prices and (real) rates. First, economic conditions hold implications for the product portfolio on offer. In a literature on financial innovation, economic conditions, together with the regulatory and fiscal environment, are often considered as the main impetus for financial innovation (Frame and White, 2015). <sup>11</sup>

Second, the economic conditions one experiences throughout one's lifetime can also result in a more fundamental alteration of (inflation) expectations and risk

<sup>&</sup>lt;sup>10</sup>Also see Alessie et al. (2013) and Lehmann-Hasemeyer and Streb (2018).

<sup>&</sup>lt;sup>11</sup>An argument for a link between the product portfolio and the economic conditions can also be made. Products on offer that allow for high levels of risk-taking by households can be expected to accentuate business cycle fluctuations: the gains from a market upswing will be greater, whereas the bust will be more extreme as well. Consider, for example, the nexus between access to housing credit and household consumption volatility (DNB, 2017).

perceptions (Malmendier and Nagel, 2016, 2011). Similarly, crises and booms can result in changing societal norms on risk-taking behaviour the financial sector. Recent curbing of banker's bonuses in response to the 2008 financial crises is a clear example of this.

Third, and as discussed above, a crisis can result in a quick alteration of implementation of existing regulation at the level of governance.

Lastly, economic conditions, and the evolution of asset prices in particular, affect the composition and level of household wealth.

The relation between the composition and allocation of wealth and the bargaining process closes the circle of the framework. For the political economy of finance literature, the allocation of wealth is the objective function of the various interest groups that take part in the bargaining process. These interest groups can represent the supervisor, the regulator, the financial sector, the household sector, or subgroups of these; interests might, for example, diverge between wealthy and poor households or life-insurers and banks. By making alterations to the set of formal rules in place and the way they are enforced, various interest groups seek to end up with a larger share of total wealth.

As in the Williamson framework (see section 4.3), the various institutional levels are characterized by varying rates of change, which contributes to the path dependent evolution of financial service provision to households. Lower level institutions, including governance, and especially, resource allocation, are associated with relatively low costs of change. Indeed, at the household level, new (old) contracts are continuously (re)negotiated with slightly different terms. This does not imply, however, that at a macroeconomic level large shifts are taking place on a regular basis in the type of financial services on offer. Higher level institutions, including the formal set of rules, the implementation and interpretation thereof (governance), as well as informal institutions, limit the opportunity set for financial intermediaries in their financial service provision to the household sector.

The relative stability of wealth positions at a macroeconomic level also contributes to the persistence of the type of products on offer. This is because wealth positions built up in the past may be relatively costly to unwind. Households, for example, build up wealth in order to guarantee a stable level of consumption, also after retirement. Once a position has been taken in, for example, a life-insurance contract or housing, liquidating this position can entail significant costs. As before, this does not entail that at the household level significant changes cannot occur, especially throughout one's life-time. Instead, at a macroeconomic level, relative stability can be discerned; this implies that the demand for financial services that complement the remainder of the household portfolio remains also relatively stable in the aggregate.

Together, the persistence of higher level institutions and macroeconomic wealth positions built up in the past create a path dependent evolution of the type of financial service on offer.

The following section illustrates the utility of the framework by means of an application to the case of the 1989 Second Banking Directive in France and the Netherlands. The section gives particular attention to the process of institutional

change in both nations in response to the introduction of the Second Banking Directive, including the role of vested interests and cultural predispositions in this process.

# 4.5 An application: the Second Banking Directive

The 1989 Second Banking Directive authorized every European Economic Community (EEC) credit institution to establish branches in other member states and to offer its services freely across the EEC. Two key principles underlined the Second Banking Directive: the principle of mutual recognition and the principle of home country control. The principle of mutual recognition implied that credit institutions only required a single license (from their home country) to operate anywhere in the European Economic Community. The principle of home country control meant that credit institutions active abroad, be it through cross-border operations or through a branch, remained subject to the supervisory regime of the home country (Gruson and Nikowitz, 1989). The host country was only to regulate the activities of the credit institution insofar that served to protect the "public interest". Discrimination between local and foreign banks was not allowed, however (Dermine, 2006).

The current section employs the analytical framework to study the introduction of the 1989 Second Banking Directive in France and the Netherlands. In terms of the analytical framework, the Second Banking Directive makes an interesting case for it implies an identical shock to the set of formal rules in two otherwise distinct financial systems. French (financial) policy is often characterized by its dirigism, whereas in the Netherlands, competition and market-based processes are (historically) given much more leeway. How (and if) such national specificities played a role in the incorporation of the Second Banking Directive in the national institutional framework can be studied with the analytical framework.

In what follows, I first provide a brief discussion of the history of and motivation for European financial integration in retail finance and its success so far. Next, I analyse the impact of the Second Banking Directive in France and the Netherlands with the aid of the analytical framework.

# 4.5.1 European integration in retail finance

The process of European economic integration dates back to the 1957 Treaty of Rome, which led to the creation of the European Economic Community (EEC). For the six initial members, which included France and the Netherlands, the EEC meant little in terms of financial integration, however. This would change with the 1986 Single European Act, which set out the goal to establish a Single European Market by the end of 1993, including financial services.

<sup>&</sup>lt;sup>12</sup>To facilitate the principle of home country control, a number of supervisory standards were introduced, including minimum capital standards, supervisory control of shareholders and banks' participation in non-financial corporations, and accounting and control mechanisms (Gruson and Nikowitz, 1989).

In its 2018 annual report on financial integration in Europe, the European Central Bank (ECB) defines full financial integration as a situation in which "all potential market participants with the same relevant characteristics [..] 1) face a single set of rules when they decide to deal with those financial instruments and/or services; 2) have equal access to the above-mentioned set of financial instruments and/or services; and 3) are treated equally when they are active in the market" (ECB, 2018). In terms of the analytical framework, the first condition thus refers to formal rules and governance, whereas the last two refer to the product portfolio. This definition of financial integration thus remains neutral on the financial structure of European financial systems (cf. Baele et al., 2004). Moreover, the expectation that a common rule-book would result in convergence of the product portfolio is implied in this definition of financial integration. Whether this assertion is correct, will be studied in detail below.

The benefits of European financial integration in retail finance were considered large in the late 1980s. The 1988 Cecchini report studied the "costs of non-Europe" to estimate potential consumer gains. Price variations within the EEC for standard banking products were high, with ratios of the highest to the lowest observed price reaching 2.76 for mortgages, 3.29 for consumer credit, and 5 for credit cards (Commission of the European Communities, 1988). A fully integrated European market for retail finance was expected to, as per the law of one price, result in the elimination of such price differences and thereby result in considerable gains for European citizens. In terms of the analytical framework this implied a redistribution of wealth from the financial industry to European households insofar efficiency gains due to increases in scale were not possible for the financial industry. Other motivations for financial integration included improved product choice, enhanced service quality, and improved risk-sharing and capital allocation. These motivations for European financial integration are relevant to this day (European Commission, 2017; ECB, 2017).

With the Cecchini report in hand, a number of European policy initiatives were initiated starting in the late 1980s. The aforementioned Second Banking Directive allowed for cross-border banking starting in 1991, whereas the 1996 Investment Services Directive did the same for access to financial markets abroad for investment firms. 2001 saw the introduction of a single currency, which removed any currency-risk for cross-border financial service provision. More recent innovations include the 2004 Markets in Financial Instruments Directive, which harmonized rules on investor protection, the 2008 Single European Payments Area, which introduced the International Bank Account Number in the European Union, and the first steps towards banking union, including the 2012 Single Supervisory Mechanisms and the 2014 Single Resolution Mechanism.

Financial integration in retail finance remains limited to this day, however. The share of cross-border deposit holding and credit provision remained stable over the

 $<sup>^{13}</sup>$ Note that price convergence as a measure for financial integration is a problematic measures for a number of reasons. First and foremost, it assumes identical product characteristics which generally does not hold, especially in the market for retail finance. See Vesala (1993) for a discussion.

past 15 years at 1 percent of total holdings (ECB, 2018). <sup>14</sup> Similarly, the standard deviation of interest rates within the European Union on consumer credit shows an upward trend since 2003, whereas the cross-sectional standard deviation of interest rates on savings accounts remained largely stable at 50 basis points (ECB, 2017).

For the ECB, an important obstacle to further financial integration in European retail markets is the limited degree of cross-border Mergers and Acquisitions (M&As) between financial institutions. Instead, M&As remained largely domestic in nature, also in the period preceding and following the introduction of the Second Banking Directive (ECB, 2017; Dermine, 2006; Vesala, 1993). For the ECB, the absence of cross-border M&As is related to a variety of factors, including market structure, language and culture, and a lack of regulatory harmonization.

The following section will now study the impact of the Second Banking Directive on financial structure and retail finance practices by means of the analytical framework.

#### 4.5.2 The case of France and the Netherlands

Qui a peur de l'Union Economique et Monétaire? pas les banques françaises, en tout cas.

> Dominique Chatillion in 1992 Président, Association Française des Banques

The Second Banking Directive was widely anticipated across Europe, which gave French and Dutch interest groups the opportunity to timely respond to its coming into effect in 1991. The current section therefore starts with a discussion of the expected opportunities and threats of the Second Banking Directive from the perspective of the financial sector, the local supervisor, the regulator and the household sector. Second, I relate these expectations to the institutional setting by means of the analytical framework. Third, I discuss how a combination of threats, opportunities and local market conditions shaped the ensuing institutional response. Finally, I provide a brief discussion on the process and future of European financial integration.

#### Threats and opportunities

For the French and Dutch banking system the anticipation of the Second Banking Directive resulted in the following considerations. First, the opening of European markets meant an interesting opportunity for the larger French and Dutch banks which were both eager to expand their international business. Second, the opening up of the national market was seen as a competitive threat at home because it allowed for foreign entry.

For the French and Dutch supervisor, the principle of home control implied that a foreign take-over of a national institution meant a loss of control over the supervision

<sup>&</sup>lt;sup>14</sup>Note that cross-border deposit holding or lending includes both cross-border lending and activities by a local branch or subsidiary that is controlled by a foreign player. Still, the measures provides an indication of the activity of foreign players in the local market.

competitive; private banks larger banks; somewhat structure policy; poor Financial structure consumer protection Product portfolio high-risk financial limited number of products available self-regulation; Formal rules Governance Economic conditions (b) The Netherlands for the market to thrive Informal institutions set the right conditions Bargaining process among banks coordination average profitability Wealth subsidized savings products financial services, strict Financial structure monopolies, extensive variety of large banks; regulation household consumer protection competition limited; Product portfolio low-risk products; state-ownership Formal rules Governance Economic conditions condition market-processes (a) France Informal institutions strong position regulator Bargaining process rents for some banks Wealth

Figure 4.3: Institutional setting late 1980s

of parts of the banking system that operated locally. In this way, different regulatory cultures would make their way in the national financial system, which was deemed undesirable (see below). More generally, the creation of a European champion was broadly supported in both countries, also by the regulator.

Finally, households were expected to benefit from foreign entry as it would decrease the cost and increase the scope of financial service provision. In short, a reallocation of wealth from the financial sector to the household sector was anticipated, as well as an increase in the variety of financial products on offer.

#### Institutional setting

Foreign entry was not a given, however and largely depended on financial structure and the regulatory setting of the local market.<sup>15</sup> Note that acquisition was likely the only way to acquire a market share in the market for retail finance because an extensive branching network was required in the absence of internet banking.

Figure 4.3 displays the institutional setting of the French and Dutch system of retail finance for the late 1980s. In what follows, I discuss the composition of the banking landscape and the prevailing level of competition (financial structure), the presence of regulation which might make entry more or less attractive (formal rules) – including its effect on the product portfolio and its relation to the prevailing set of informal institutions – and the level of profitability (the allocation of wealth).<sup>16</sup>

With regards to financial structure, bank size is the first variable of interest because larger banks are more expensive to acquire. The inverse also holds, with large banks having more possibilities to take over a foreign bank. Related is bank ownership, which is of relevance because the owner of a bank must be willing to sell. A willingness to sell might be absent in case the owner has an interest in keeping competition low or keeping local banks local (e.g. state-ownership).

Considering bank size in the early 1980s, French banks were much bigger than their Dutch counterparts. For example, the Caisses des Dépôts et Consignations, the mother bank of the French savings banks, held assets worth 729 billion Francs (Conseil National du Crédit, 1980), whereas the largest Dutch bank at the time, ABN, only held assets worth 86 billion guilders (or 182 billion Francs) (NIBE, 1980).<sup>17</sup>

With regards to the distribution of bank size, the Netherlands was characterized by a relatively small number of larger banks, including ABN, AMRO, Rabobank, Postbank and the Nederlandse Middenstandsbank, which together controlled the majority of the market. Indeed, the five largest banks in the Netherlands held 69 percent of all assets and 84 percent of all deposits in 1985. In France, the number of large banks (especially by Dutch standards) was greater, including Crédit Agricole, Société Générale, Crédit Lyonnais, Banque Nationale de Paris and Crédit Foncier de France. All of these individual banks were over twice as big as the largest Dutch bank at the time. The five largest banks in France therefore held a smaller share of the

<sup>&</sup>lt;sup>15</sup>For a complete discussion on foreign entry in a local market of retail finance see Vesala (1993). <sup>16</sup>The institutional level of governance and the economic conditions appear less relevant for the current discussion.

<sup>&</sup>lt;sup>17</sup>The exchange rate stood at 2.12 Franc per Guilder in 1989 (Jordà et al., 2017).

market, at 46 percent for both total assets and deposits in 1985 (De Nederlandsche Bank, 1999). Still, the ten largest banks controlled 75% of the market in the late 1980s (Pastré, 1993).

Bank ownership also differed in the French and the Dutch setting. Close to all of the large French banks were nationalized in 1982 under Mitterand, and only gradually privatized from 1986 onwards. By 1988, the French state still held on to 42.2 percent of all banking assets in France (Thiveaud, 1997). The Netherlands only had two public financial institutions of importance, the Rijkspostspaarbank and the Postgiro, which merged and were privatized in 1986 to form the Postbank. The French state was thus disposed of greater opportunities to counter a foreign take-over.

A second relevant aspect of financial structure is the level of competition; high levels of competition lower the potential returns of entry. Related factors include the presence of monopolies introduced by the state (formal rules), the practice of cross-subsidization, switching costs and reputational effects. State-enforced monopolies simply prohibit entry in particular markets, whereas cross-subsidization implies the sale of particular financial services at a loss, rendering entry in this market alone unprofitable. Switching costs and reputational effects make households less willing to make use of the financial service provision of an entrant. Switching costs result from the mere administrative difficulty of changing intermediary, while reputational effects result from the generally greater level of trust in national(ized) institutions, making households potentially unwilling to switch, even if they receive a better deal at the new institution.

The level of competition in France varied per market segment. After the reforms of the mid-1980s and the introduction of a variety of financial markets, French banks increasingly reoriented towards financial service provision to the household sector. Large parts of the financial service provision to the household sector remained strictly regulated, however, including the remuneration on savings accounts and product characteristics of a sizeable share of housing credit (see chapters 5 and 6). This is also reflected in relatively high margins on savings and demand deposits in the first half of the 1980s at 11.7 and 4.3 percent, respectively (Neven, 1989). Moreover, the savings banks held a monopoly on the Livret A, a fiscally incentivized savings product, which gave the savings banks a clear competitive edge in savings market. In the market for housing credit, interests rates were partially liberalized in the early 1980s and competition was relatively strong, also because housing credit functioned as a way to build a durable relationship with customers. Cross-subsidization with other financial services (e.g. investment services and life-insurance) further contributed to low margins on housing credit in France.

In the Netherlands, competition was present – despite high levels of concentration – with relatively low margins on demand and savings deposits at 5.6 and 2.8 percent, respectively. Still, consistent with a setting of monopolistic competition that prevailed in the Netherlands at the time, competition mostly revolved around branding and identity, instead of pricing. The Rijkspostspaarbank and the Postgiro (and later the Postbank) was the main bank for the (lower-)middle class, the Rabobank mostly served a rural clientèle, and ABN and AMRO the upper-side of the market. Minimum price agreements among the larger general banks on labour-

intensive financial services were abandoned in the late 1980s due to the anticipated incompatibility with European legislation that was expected to come into force in 1993.  $^{18}$ 

Switching costs in France were relatively high. First, most French households held the Livret A, due to its superior remuneration over other savings products and its fiscal treatment. Second, low margins on housing credit functioned as a lock-in for consumers, and established a long-term client-bank relationship. Finally, French financial intermediaries were for a long time regarded as more of an extension of the French state and benefited from an implicit government guarantee in contrast to potential foreign entrants (Pastré, 1993). In the Netherlands, switching costs for consumers were also present due to the administrative difficulty. Moreover, as discussed above, competition mostly revolved around branding and price differences were minor.

In terms of formal rules, a few words on the regulatory and supervisory stance Note that the Second Banking Directive only gave right to entry under the supervisory umbrella of the home-country; regulation of local market practices was not affected (except for a non-discrimination clause). As already became apparent from the above discussion, French regulation provided relatively narrow conditions for the financial service provision to households. A strict law on overindebtedness from 1989 (Loi Neiertz) furthermore limited the degree of risk-taking French banks could undertake without running the risk of having to take responsibility for households defaulting. The Netherlands was characterized by a different regulatory and supervisory stance. De Nederlandsche Bank exclusively focussed on prudential supervision and market conduct was subject to self-supervision. Moreover, consumer protection was relatively poor and stressed consumer responsibility. All in all, financial intermediaries in the Netherlands had much greater opportunities to conduct business as they deemed fit, whereas the French institutional setting provided a various and extensive set of limitations to market conduct, rendering entry less attractive.

Note that these different regulatory approaches have a long history and can be regarded as a product of the prevailing norms on the degree to which market-based processes were allowed to play a role in society. In France, market processes were to be extensively conditioned, whereas in the Netherlands, market-based processes were regarded as the best way to allocate capital (also see chapters 5 and 6).

Finally, bank profitability provides an indication of the relative return of entry. In 1984, the pre-tax return on assets was 0.3 and 0.51 percent in France and the Netherlands, respectively. In this regard, French returns were among the lowest in Europe, whereas the Dutch were close to the European average. Part of the

<sup>&</sup>lt;sup>18</sup>On price agreements see NRC Handelsblad, March 3, 1971, retrieved from https://resolver.kb.nl/resolve?urn=KBNRCO1:000032358:mpeg21:a0169; Leeuwarder Courant, June 25, 1974, retrieved from https://resolver.kb.nl/resolve?urn=ddd:010619673:mpeg21:a0250; Leeuwarder Courant, January 15, 1976, retrieved from https://resolver.kb.nl/resolve?urn=ddd:010620113:mpeg21:a0270. On the abolition of these practices, see the Volkskrant, March 1st, 1988, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010856687:mpeg21:a0053; Parool, March 24, 1990, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010834155:mpeg21:a0286.

 $<sup>^{19}</sup>$ Note that both the French and the Dutch economy were gradually recovering from an economic

low profitability for the French banking system could be accounted for by the fact that it was relatively labour intensive (Neven, 1989). Note that there were sizeable differences in bank profitability within France as well. In particular, the savings banks were characterized by substantially higher profits, mainly due to their monopoly on the Livret A (Avouyi-Dovi and Boutillier, 1997).

#### Institutional Response

All in all, the French banking system felt well-equipped for an age of European banking (e.g. Chatillon, 1992). Risks of foreign take-over were considered small due to the size of the main French financial intermediaries, state-ownership, monopolies in particular sub-markets and generally extensive regulation of financial conduct, including strict consumer protection. Moreover, bank returns were relatively low, although there was certainly room for efficiency gains. Indeed, towards the late 1980s and the early 1990s, the smaller local mutual and savings banks increasingly started to cooperate or become part of larger institutions (see Thiveaud, 1997). Among the larger banks, mergers were absent, however. This is also reflected in the Herfindahl index, a measure of market concentration, which remained stable throughout the period (Point, 2016). The asset share of the five largest banks displays a minor decline from 46 to 40 percent between 1985 and 1997, on the other hand (De Nederlandsche Bank, 1999).

Dutch banks, on the other hand, were relatively small in size and in private hands, subject to limited regulation and displayed a level of profitability around the European average. In short, Dutch banks formed an interesting candidate for take-over by foreign financial intermediaries. Moreover, the limited size of Dutch banks was expected to inhibit a role in a European banking landscape.

The view that something had to happen was therefore widely shared among Dutch bankers, regulators and the supervisor. Dutch banks held a clear interest in their ability to expand abroad, but were also interested in limiting competition at home through consolidation. The Dutch regulator instead desired a dominant role for the Dutch banking system in Europe.<sup>20</sup> The Dutch supervisor feared the consequences of a foreign take-over because it would introduce a different supervisory culture into the national banking landscape with often close ties to politics. More generally, the Dutch feared a loss of control over local market practices.<sup>21</sup>

The potentially negative effect for the local competitive landscape was largely neglected, however. Dutch households had little say in this process and labour unions were mostly concerned with job losses. The Dutch supervisor expected only a limited effect on local competition and instead, viewed the introduction of new distribution channels through banking-insurance conglomerates as an asset for the

<sup>20</sup>See, for example, the response of Dutch politicians on plans of the Nederlandse Middenstandsbank and Postbank to merge in 1988; see De Telegraaf, September 9, 1988, retrieved from https://resolver.kb.nl/resolve?urn=ddd:110610868:mpeg21:p049; and De Volkskrant, September 9, 1988, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010856515: mpeg21:a0285.

crisis in the early 1980s.

<sup>&</sup>lt;sup>21</sup>Interview Nout Wellink.

household sector.<sup>22</sup>

For the Dutch banking sector to reach sufficient scale, a change of law was required. At the time, the composition of the Dutch financial sector was regulated via a 1952 law (Wet Toezicht Kredietwezen 1952), which allowed De Nederlandsche Bank and the Minister of Finance to exercise control over mergers and acquisitions. A statement of no objection was required prior to a merger or take-over. This so-called structure policy (structuurbeleid) served two objectives: limiting market power and ensuring transparent ownership structures. The former can be seen as a way to ensure a minimum level of competition in the Dutch banking landscape. The latter ensured a strict delineation between banks on the one hand, and non-financial corporations and insurers on the other. Combining these different business models was believed to result in elevated risks. Moreover, such conglomerates would possess too much political power (Stellinga, 2015).

In January 1990, it was decided to abandon the structure policy in the Netherlands. A consolidation wave followed suit in the early 1990s (see figure 4.4). Where the Dutch banking landscape was dominated by some 6 banks in the early 1980s, only three banking conglomerates were left by the end of 1991.<sup>23</sup> Moreover, because combinations between banks and insurers were already more common abroad, this piece of legislation was also removed so as to ensure a level playing field for Dutch banks in Europe. Here, the merger between NMB Postbank and the insurer Nationale Nederlanden is a prime example. To further discourage foreign banks from a take-over, Dutch banks took minority equity stakes in each other to ensure they would have a say in potential (foreign) take-overs.<sup>24</sup> Previous concerns over competition and political power that underlined the abandoned structure policy were thus deemed subordinate to a European role for Dutch banking and a fear of foreign take-over.

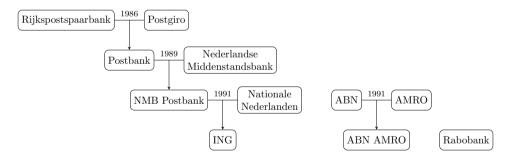


Figure 4.4: Mergers in Dutch banking

<sup>&</sup>lt;sup>22</sup>Interview Nout Wellink.

 $<sup>^{23}</sup>$ Not all of these banks were equally active in retail finance, however. The Rijkspostspaarbank and the Postgiro focussed on financial service provision to households – the former mostly in the field of savings products and household credit provision and the latter in payment services. The Nederlandse Middenstandsbank instead specialised in credit provision to non-financial corporations. ABN, AMRO and Rabobank offered a broader spectrum of financial services.

<sup>&</sup>lt;sup>24</sup>Financieel Dagblad, September 13, 2017, retrieved from https://fd.nl/ondernemen/1218206/bij-nederlandse-banken-en-verzekeraars-is-het-nu-ieder-voor-zich.

Market concentration in the Netherlands increased as a result. Between 1985 and 1997, the asset share of the five largest banks increased from 69 to 79 percent by 1997.

For both France and the Netherlands, foreign entry remained limited, however, especially in the market for retail finance. Dutch and French banks did acquire a number of banks abroad (Dermine, 2006; Thiveaud, 1997), in line with earlier hopes by the banking system, supervisor and politicians.

In terms of the product portfolio on offer, not much changed as a result of the Second Banking Directive. One noteworthy development in the Netherlands relates to a variety of mergers between banks and insurers that became possible with the cancellation of the structure policy, however. Insurers gained access to the branch network of the banking system, while banks gained access to a steady source of funds (see Wijffels, 1985). This consolidation process contributed to the growing popularity of life-insurance policies over the course of the 1990s, as well as the introduction of a variety of innovative life-insurance products on the Dutch market. In France, a similar development could already be discerned from the late 1980s onwards, with the rise of bancassurance (Thiveaud, 1997). Here, banks were interested in offering life-insurance products due to their generally higher margins as compared to other markets (Pastré, 1993). Product characteristics in the French and Dutch market for life-insurance continued to differ substantially, however; the level of risk associated with Dutch life-insurance products, for example, was substantially higher than in France (see chapter 6).

## 4.5.3 Discussion

The Second Banking Directive thus left little mark on the French institutional setting, where it invoked the abolition of the structure policy in the Netherlands. The abolition of the Dutch structure policy in turn allowed for a consolidation wave in Dutch banking and the rise of banking-insurance conglomerates, which were already present in France since the early 1980s.

Following the definition of European Financial Integration of section 4.5.1, little changed for France and the Netherlands, however. Local rules continued to dominate in both markets of retail finance, and product characteristics showed little signs of convergence. Differences in vested interests, household demand for financial services, and cultural views on what role the market (or the state) should play in the real economy persisted – and thereby the particularities of French and Dutch retail finance as well.

In contrast to the envisaged competitive European banking landscape, the Second Banking Directive facilitated a consolidation process in Dutch banking whereby only three players remained. The Dutch case is thereby representative for the domestic consolidation wave across a range of European nations in the aftermath of the Second Banking Directive.

Through the case study presented here, the analytical framework presents a new perspective on the process of European financial integration. In particular, the analytical framework underlines that European policy will have to be binding across a variety of regulatory spheres, including the fiscal regime and market regulation,

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in order to bring about a fully integrated European market of retail finance. Thus far, there appears to be little appetite across the European Union to bring about convergence in these national policy spheres, however. Moreover, informal institutions and household wealth positions only change gradually through time and will thereby continue to exert influence on the formation (and implementation and interpretation) of legislation and household demand for financial services. The European pursuit of financial integration in retail finance will thereby remain a slow and gradual process.

## 4.6 Conclusion

In this chapter I develop an analytical framework with which the evolution of the financial service provision to households can be studied. The analytical framework brings together and orders the various determinants put forward by the cultural, legal and political economy literature on the evolution of a financial system by making use of a framework after Williamson (2000). The analytical framework proves particularly instrumental to comparative case-studies which contrast the institutional development of a set of countries over time.

Two features of the analytical framework are key to understand the underlying dynamics within a financial system: the hierarchical nature of the institutional system, and the varying rates of change for cultural, political, legal and market-based developments. Combined, these two features result in a path dependent evolution of financial service provision to households. At the same time, the framework allows for an interaction between high-frequency events, such as crises and business cycles, and low-frequency political and cultural change, which can result in more radical institutional change.

The utility of the framework is demonstrated by means of a case study of the introduction of the 1989 Second Banking Directive in the French and Dutch institutional setting. Here, the analytical framework points at the need for European policy that interacts with a broader spectrum of formal rules in order to achieve financial integration of European retail finance markets. At the same time, vested interests and cultural preferences are expected to limit the willingness of individual member states to seek further convergence.

The framework offers new opportunities for comparative case-studies on the evolution of household financial practices. Whereas much of the literature is relatively static in nature and contrasts the cultural, legal, or political features of an institutional system, the current paper argues for a more holistic approach. A historical focus, in particular, is expected to shed light on the relative importance of the various interactions between these institutional features. All in all, the framework allows for the formulation of more precise expectations of future institutional developments in retail finance, also in interaction with European policies that seek to foster financial integration.

# Chapter 5

# A very fine house: the evolution of systems of housing finance

## 5.1 Introduction

Housing finance plays a key role in household financial decision-making and the operations and stability of the financial system at large. The decision to purchase a house is often regarded as the most important financial decision of a household and the associated asset and liability often dominate the household balance sheet. For the banking system, housing loans form a sizeable share of their assets. Furthermore, housing finance is increasingly recognized for its role in the business cycle and crises (Mian and Sufi, 2015; Jordà et al., 2016).

A number of trends can be discerned across most systems of housing finance over the past decades, including rising indebtedness and financial innovation. The organization of a system of housing finance mostly remains a national affair, however. Differences in the typical loan-to-value ratio, the maturity of the loan, the presence and functioning of personal bankruptcy laws, and the fraction of owner-occupied housing remain (e.g. Bover et al., 2016; ECB, 2009; Lunde, 2016). These differences have implications for the operations of a system of housing finance and financial stability. The strictness of bankruptcy law, for example, holds ramifications for the degree of access to housing finance for different groups in society, and the level of indebtedness holds ramifications for the nexus between housing finance and the business cycle.

<sup>&</sup>lt;sup>1</sup>I would like to thank Vincent Bignon, Jean-Stephane Mésonnier, Fédérique Savignac, Wolter Hassink, Rémy Lecat, Eric Monnet, Kees Dol, Sabine Effosse, Marietta Haffner, Anne Murphy, Pierre Sicsic, Roger Vicquéry, seminar participants at Utrecht University School of Economics, Banque de France, the WEHC pre-conference in Paris, the Financial History Workshop, the Groningen FRESH meeting, and the LSE Graduate Seminar for their constructive comments and suggestions.

Unfortunately, we only have a limited understanding of the origin of cross-country differences in the operations of systems of housing finance. The comparative housing literature often takes a static approach and posits cross-country differences rather than explaining their origin. Moreover, insights from the political economy literature are only scarcely employed (Bengtsson, 2009).

The current paper instead adopts a historical approach and executes a comparative case study of the French and Dutch system of housing finance from the 1960s until today. In particular, the paper seeks to understand the evolution of the French and Dutch system of housing finance by placing its evolution in the broader institutional context of both countries. Understanding the historical evolution of both systems of household finance will, in turn, shed light on the origin of cross-country differences today. A second innovation in the approach of the current chapter relates to the incorporation of a household perspective in the analysis. In particular, the analysis follows the insights from chapter 2 whereby different types of assets (and liabilities) may perform different functions in the overall household portfolio (Merton and Bodie, 1995).

The French and Dutch system of housing finance make an interesting case because the way in which French and Dutch households finance the purchase of a house differs along a number of dimensions, including the level of indebtedness and access to the owner-occupied sector for lower-wealth households. Moreover, the impact of the Great Financial Crisis on the Dutch housing market was large, while only limited in France.

The analysis follows the analytical framework of chapter 4, which is specifically built to analyse the evolution of financial service provision to households over time. To this end, the framework emphasizes the interaction between informal institutions, a bargaining process over regulatory change, and market developments in their joint determination of the financial service provision to households.

The main contribution of the paper is that it identifies three features in the French and Dutch institutional constellation that contribute to a considerable degree of persistence in French and Dutch housing finance practices. A first source of persistence are norms on the extent to which the markets should be allowed to operate freely. In France, this expresses itself in a considerable degree of state control over housing finance practices, whereas Dutch housing finance practices are subject to a much more limited degree of regulation.

A second source of persistence relates to the relative bargaining power of the financial and te household sector in both nations. In France, household interests appear to play a much greater role in the bargaining process over regulatory change as compared to the Netherlands. In France this expresses itself in strict rules on household overindebtedness, whereas in the Netherlands risky mortgage products are provided with much greater ease.

A third source of persistence is the organization of the pension system, which holds ramifications for both household vested interest and the demand for housing finance services. First, the relatively narrow French pension system generates a demand for housing credit that allows one to build up wealth, whereas the more generous Dutch pension system generates a demand for forms of housing credit that allow one to consume today instead. Put differently, housing assets and liabilities

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perform a different function in the overall household portfolio. The composition of the household portfolio consequentially generates a vested interest in policies that support such household financial choices, including housing loan savings schemes in France and mortgage interest deductibility in the Netherlands.

Neither the liberalisation wave that characterized France and the Netherlands in the mid-1980s, nor the introduction of a variety of European directives over the past decades with the explicit aim to integrate systems of retail finance across the European Union, proved able to challenge these three sources of persistence. As a consequence, both systems of household finance show little signs of integration, which questions the current European legislative approach to the integration of systems of retail finance.

The remainder of this paper is organized as follows. Section 5.2 provides an overview of the relevant literature after which section 5.3 provides an overview of the main stylised facts with regards to housing assets and liabilities. Section 5.4 proceeds with a description of the evolution of both systems of housing finance between 1960 until the early 2000s, after which section 5.5 provides an analysis of the main sources of persistence and change, as well as the institutional response to the 2008 Great Financial Crisis. Section 5.6 concludes.

## 5.2 Literature

Over the past decades, a great number of comparative studies was conducted which highlight the particularities of different systems of housing finance (e.g. Boleat, 1985; van der Heijden et al., 2002; Lunde, 2016). Although there is clear merit to such studies in contrasting different modes of operation for systems of housing finance, the origin of such differences is only rarely discussed. Similarly, the determinants of this process of change are only scarcely considered.

Kemeny and Lowe (1998) provide an influential critique on this prevalent practice in comparative housing research. The authors argue that the nature of housing studies is either too particularistic, providing lengthy historical narratives without considering the origin of such differences, or too universalistic, arguing for a universal law that drives all systems of housing finance towards the same mode of operation. Kemeny and Lowe instead argue for something of a middle way between both approaches, highlighting both sources of persistence and its interaction with (external) sources of change.

Stephens (2011) builds on the paper by Kemeny and Lowe and argues for comparative housing research that takes a system-embedded approach, which incorporates an analysis of "the wider social and economic structure with which the housing system interacts". The current paper takes up the analytical framework of chapter 4, which is consistent with Stephens' system-embedded approach, but has the advantage that it explicates the interaction between social and economic structures and the system of housing finance.

A number of studies explicitly take into account the broader institutional context in which a system of housing finance operates. Scanlon and Elsinga (2013) consider the impact of the Great Financial Crisis and the ensuing regulatory response for the

United-Kingdom and the Netherlands. Scanlon and Elsinga find that the regulatory response was mainly a function of the existing institutional setting: policies either built on the existing regulatory toolbox or focussed on problems particular to the national setting. Similarly, Stephens et al. (2015) study the liberalization wave of systems of housing across a range of Eastern European countries after the fall of the Soviet Union, and find that the path of institutional change reflects existing power relations as well as cultural preferences.

Others have considered the impact of European directives on local housing market practices. Stephens (2003) finds the process of European financial integration meant little for local housing finance practices. In particular, many of the non-financial features of systems which are key to the organization of a system of housing finance – including foreclosure and valuation systems – remain untouched by European financial regulation (also see Boléat, 1992; Stephens, 2000). Similarly, Milo (2018) executes a comparative case-study of the impact of the 2016 Mortgage Credit Directive, which introduced common rules on information provision and foreclosure systems. Milo finds that the Mortgage Credit Directive only had a limited impact on local practices due to local interpretation of the normative aspects of the directive; local preferences on overindebtedness and personal bankruptcy thereby continued to play a role in the national setting.

The current paper stands in the above tradition of literature, but places greater emphasis on the long-term historical development of a system of housing finance. A long-term perspective is motivated due to the long-term nature of housing investment, and the consequential vested interest in the existing institutional constellation that supports such past choices (Bengtsson and Ruonavaara, 2010; Malpass, 2011). In this light, a small literature considers the role of path dependence in housing policies. Next to vested interests, Bengtsson (2008) views the moral legitimacy of policy and the ease of building on past arrangements as important conditioning factors of the path of policy change. Similarly, a number of studies consider today's tenure choice in light of policy choices made in the aftermath of the Second World War (Kofner, 2014; Norris, 2016). To my knowledge, the current paper is the first to consider the role of path dependence for the case of housing finance.

The following section now turns to a discussion of the main stylised facts of the French and Dutch system of housing finance.

# 5.3 Stylised facts

To provide some first intuition on the main developments in both systems of housing finance, the current section provides some figures on the development of housing assets and liabilities on the household balance sheet. Figure 5.1 displays the development of housing assets and debt on the household balance sheet in France and the Netherlands as a fraction of GDP. Overall, housing assets display a similar development in both nations: housing assets rise more gradually up to the 1990s, to rise more forcefully towards the 21st century.

Three underlying factors can account for these similar housing asset dynamics.

Figure 5.1: Housing assets and mortgage debt (fraction GDP)

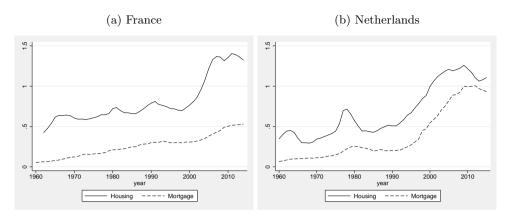


Figure 5.2: Housing prices and stock

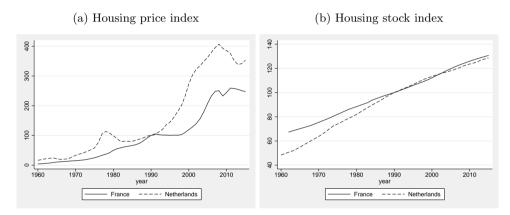
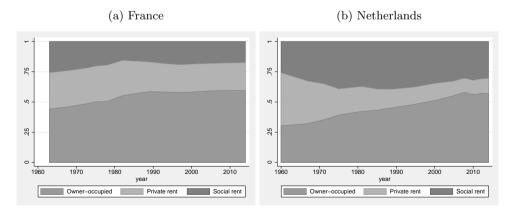


Figure 5.3: Tenure



Source: see appendix A.

First, housing prices (figure 5.2a) can account for the cyclical pattern, as well as the large increase in the value of housing assets starting in the late 1980s. Housing prices in the Netherlands appear somewhat more volatile than in France and have risen much more over time, however. Second, figure 5.3 displays a considerable increase in the fraction of owner-occupied houses at the expense of the social rental sector for both France and the Netherlands; the increase was more pronounced in the latter country, however. This development can be largely accounted for by explicit government policy that favours the owner-occupied sector over the social rental sector. The Barre reforms of 1977, which altered the structure of housing subsidies, were key in France, whereas in the Netherlands, social housing investment was reduced and social housing sold to the private sector in the late 1980s.<sup>2</sup> Today, the share of owner-occupied housing lies at roughly the same level in both countries. Third, the housing stock shows a considerable rise between 1960 and today. Figure 5.2b displays an index of the housing stock (1990 = 100) which shows that up to the 1990s the Dutch housing stock shows stronger growth than in France, after which growth rates become roughly comparable.

Figure 5.1 also shows considerable differences in both the level and dynamics of debt. At face value, the level of indebtedness relative to housing assets is substantially lower in France. Since the 1960s, the average loan to value ratio in France lies at 32.7 percent, whereas in the Netherlands this figure is 42.5 percent. In recent decades, however, differences have increased. By 2012 the loan to value ratio reached 91 percent in the Netherlands, whereas the figure remained relatively low in France at 37.4 percent (cf. Bover et al., 2016).

Housing debt dynamics also differ. In France, housing debt shows a slow but steady increase since the 1960s, and the large increase in housing assets (and housing prices) is only scarcely reflected in housing debt. In the Netherlands, on the other hand, debt dynamics track increases in housing assets much more closely, as is particularly evident in the second half of the 1990s.

It should be noted that these macroeconomic figures hide the large underlying (household-level) variation. In particular, lower-wealth and lower-income households in France have relatively poor access to the owner-occupied sector, whereas access is greater for those households in the Netherlands.<sup>3</sup>

The following section places these stylised facts in the context of the historical evolution of the French and Dutch system of housing finance. To structure the analysis, I make a distinction between the period before (section 5.4.1) and after (section 5.4.2) the liberalization wave of the 1980s. I show that despite a fundamental reorientation of the financial system, the way in which policy is formulated, and the financial system is supervised, housing finance practices in both nations remain largely distinct.

<sup>&</sup>lt;sup>2</sup>See Taffin (1987) on the French case and Heerma (1989) on the Dutch case.

<sup>&</sup>lt;sup>3</sup>For figures on owner-occupied housing across wealth classes today see Arrondel et al. (2016); for figures on owner-occupied housing across income classes today see van der Heijden et al. (2011), Blin (1978) for 1978 France, and Van der Schaar (1987) for 1967 and 1981 the Netherlands.

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# 5.4 Analysis

The current section provides an analysis of the French and Dutch system of housing finance by means of the analytical framework of chapter 4. Section 5.4.1 provides a discussion of the French and Dutch system of housing finance in the 1960s and 1970s, after which section 5.4.2 repeats the same exercise for the 1980s and 1990s. In both cases, I first discuss the bargaining process of institutional change and its relation to informal institutions and wealth positions. These features of the institutional setting are illustrated by a discussion of some of the key legislative and supervisory features of both systems. Second, I treat the structure of the market of housing finance and the type of housing credit products on offer, and place these in the context of the broader institutional setting.

## 5.4.1 Initial conditions: the 1960s and 1970s

#### France

Pour conduire le progrès de l'habitat, l'Etat doit continuer de susciter de vastes programmes d'investissement et mettre en place d'efficaces mécanismes d'aide et de transferts.

Barre (1975, p.18)

Figure 5.4 displays the institutional setting for France in the 1960s and 1970s. French financial policy formulation revolved around a technostructure in which four authorities largely determined the composition of the French financial system and the products on offer. These authorities included the Conseil National du Crédit, the Commission de Contrôle des Banques, the Banque de France and the Finance Ministry (see Cassou, 1995). Important, for an appreciation of this technostructure, is that these authorities were largely occupied by the so-called énarques, or alumni of the Ecole Nationale d'Aministration, which shared similar objectives for French society. More specifically, certain sectors in the French economy and the French state were to receive preferential access to credit (Monnet, 2013, 2014) while the position of lower-income households was to be safeguarded (see below).

Following figure 5.4, the bargaining process over regulatory change is conditioned by informal institutions and wealth positions. Wealth positions in turn determine one's vested interests in forms of regulation that support these wealth positions. Moreover, a wealth position generates a demand for particular financial services that complement the remainder of the wealth positions.

Informal institutions in France were based on the idea that extensive government regulation was necessary in order to reach a proper allocation of capital. This expressed itself in a range of monopolies on particular financial services and strict regulation of market practices; at the institutional level of governance little room was left for interpretation of legislation by market participants. A related norm in French society at the time was that (lower-income) households should be shielded

<sup>&</sup>lt;sup>4</sup>A technostructure is a group of technical experts that controls the workings of government.

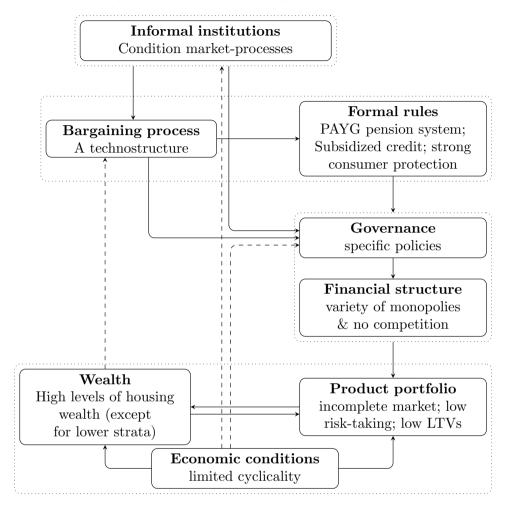


Figure 5.4: Institutional setting 1960s-1970s: France

from market developments and, consequentially, not exposed to financial products with a high level of risk (e.g. Barre, 1975).

Considering the composition of the French household portfolio, the relatively limited pension system generated a demand for financial services that allowed one to build up wealth (see chapter 2). In housing finance this expressed itself in a demand for housing credit with relatively low loan-to-value ratios and the relative popularity of two housing savings schemes.<sup>5</sup> Note that housing was the preferred saving form due its inflation proof returns (see Marjolin et al., 1969).

In terms of vested interests, incentives to build up wealth in alternative assets generate little of an incentive to lobby for more liberal housing finance policies. The institutional constellation of the 1960s and 1970s can be seen as an equilibrium

<sup>&</sup>lt;sup>5</sup>See chapter 6 for a discussion.

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between the interests of the public banking system which benefited from an absence of competition, the state which enjoyed cheap access to credit, and the interests of the household sector which benefited from extensive subsidies on housing credit and subdued real lending costs due to high levels of inflation and more limited real housing price appreciation in the 1970s (see chapter 2).

The financial structure of the French system of housing finance reflects the aforementioned centralizing tendencies. Housing credit was chiefly provided by a range of state-affiliated financial intermediaries. The semi-public Crédit Foncier de France played a key role in this regard as it held over 57 percent of the market in 1960.<sup>6</sup> Crédit Foncier de France derived its dominance from its monopoly on particular forms of subsidized housing credit which were widely in use; in 1965, 54 percent of all housing loans received some form of subsidy, whereas this figure was still 34 percent in 1976.<sup>7</sup> Next to Crédit Foncier de France, the French savings banks' central organization, the semi-public Caisses de Dépôts et Consignations, held over 20 percent of the market. This left only a small role for Crédit Agricole, the main agricultural bank, and the general and mutual banks.

Competition was largely absent due to extensive government regulation. For example, the state set the characteristics for the majority of housing credit forms, including its rate. Up until the mid-1960s, the rediscounting policy at the Banque de France played a key role in this regard, to be taken over by specific requirements on the type of housing credit that could be traded on a covered bonds market that was introduced in 1967.

French households typically made use of a principal and a complementary loan, where the former often received a form of state aid.<sup>8</sup> Two (regulated) housing savings schemes which were introduced in the second of the 1960s were also widely used. Although a variety of loan forms existed, the main form was a fixed-rate mortgage with a maturity between 10 and 20 years. At maturity, French households were required to refinance their loan (Taffin, 1987; Barre, 1975).

#### The Netherlands

Figure 5.5 displays the institutional setting for the Netherlands during the 1960s and 1970s. Dutch financial policy formulation mostly revolved around a coordination process between the regulator, supervisor and the banking system, whereas households (or their representatives) played less of a role in this regard. A further important aspect of the bargaining process over regulatory change was that Dutch banks engaged in self-supervision, implying that much of the market conduct was regulated through rules introduced and policed by the banking sector itself. In short, market conduct of the Dutch banking sector knew few limitations. Moreover,

<sup>&</sup>lt;sup>6</sup>Source: Banque de France archives: 1331200301/242.

<sup>&</sup>lt;sup>7</sup>3.5 percent of the state budget was allocated to housing in 1971, excluding a variety of subsidies, taxation and employer contributions; by 1975, this figures had risen to 4.6 percent (Barre, 1975). Some 36-43 precent of this figure was allocated towards the owner-occupied sector (calculations based on Barre, 1975, p. 21).

<sup>&</sup>lt;sup>8</sup>In 1980, some 25 percent of all households combined 2 or more (aided) loans to finance the purchase of a house (Banque de France archives, 1331201402/22).

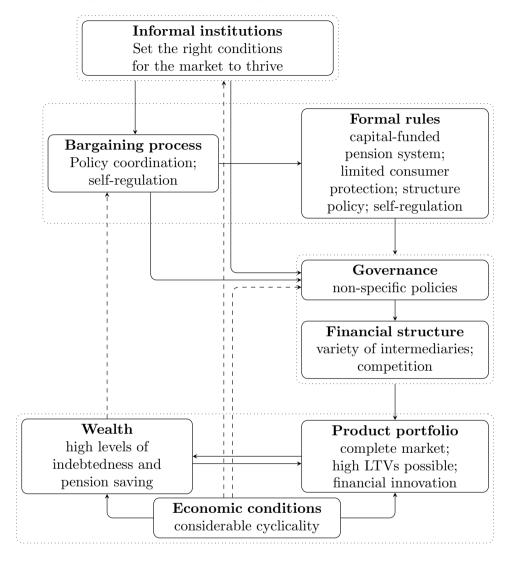


Figure 5.5: Institutional setting 1960s-1970s: the Netherlands

whenever limits were introduced, penalties were often absent.<sup>9</sup>

Dutch informal institutions were informed by the view that regulation should limit itself to setting the conditions in such a way that the market can operate freely and decide on the allocation of capital on its own. The 1952 structure policy (structuurbeleid), which prohibited mergers of banks with similar activities as well as mergers between banks and insurers, is an expression of this. The philosophy

<sup>&</sup>lt;sup>9</sup>Take, for example, the introduction of credit limits to fight inflation in 1969-1972 and 1977-1978. Several banks breached these limits without consequence. See Zijlstra (1985) and the Annual reports of De Nederlandsche Bank for these years; retrieved from http://www.gahetna.nl/archievenoverzicht/ead/index/nodes/YToxOntpOjA7czo2OiJjMDE6MC4iO3O%3D/eadid/2.25.103.

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behind the structure policy was to ensure sufficient levels of competition in the Dutch financial sector (Coljé, 1988). A similar approach was formulated in a policy document on the market for housing finance as early as 1956; intervention in the market for housing finance was deemed inefficient (Van der Schaar, 1987, p. 306). Finally, this approach is also reflected in the implementation of regulation (governance), which was often of a general nature, leaving ample room for financial innovation on its basis (see below).

Considering the composition of wealth, Dutch households held a portfolio that was increasingly dominated by claims on pension funds. The discussion in chapter 2 already made apparent that Dutch households had little incentive to build up additional retirement savings, and instead, due to the relatively high levels of pension premiums, had an interest to bring consumption forward. Moreover, high pension premiums left little room for Dutch households to built up wealth. Combined with a generous regime of mortgage interest deductibility, these two factors resulted in a demand for loans with a high loan to value ratio, and only limited incentives to pay back the loan.

For household vested interests, the large stock of housing debt on the household balance sheet resulted in a vested interest in mortgage interest deductibility. Banks, on the other hand, were content with the lax regulatory setting in which they received considerable leeway to introduce new forms of housing credit as they deemed fit.

Consistent with the structure policy, the Dutch market of housing finance was characterized by a wide variety of lenders for much of the 1960s and 1970s. Although cooperative banks and general banks played an important role with close to half of the market for housing credit, other types of intermediaries such as mortgage banks, insurance companies, as well as savings banks played their part (Barendregt and Visser, 1997; Boleat, 1985). Due to the limited amount of government regulation and the variety of intermediaries active on the market, one can speak of a relatively competitive market.

The most popular mortgage forms were the linear or annuity mortgage with a maturity of 30 years (Elsinga et al., 2016). Rates were generally fixed for an extended period: only 16 percent of housing credit extended before 1973 was characterized by a rate that was fixed for less than 10 years. This would change over the course of the 1970s, however, with two-thirds of all housing credit issued between 1979 and 1981 having a fixed-rate period of five years or less. <sup>11</sup> The typical loan to value ratio for a first-time buyer was 90 percent (Voûte, 1989), consistent with limited household interest in building up retirement savings in housing (Priemus, 1989).

Loan characteristics, including the loan-to-value ratio, varied over the business cycle and underline the innovative character of the Dutch market for housing credit. Consider the no-risk mortgage, whereby the debt was cancelled in case of disability

 $<sup>^{10}\</sup>mathrm{The}$  role of general banks in retail finance was relatively new. In the early 1960s, general banks mostly catered credit provision to non-financial corporations and richer households, but over time, in part inspired by the increasing need to attract savings, general banks discovered the household sector as a source of funds and profit. Cooperative, savings and mortgage banks had always had more affection with the retail market.

<sup>&</sup>lt;sup>11</sup>Van der Schaar (1987) points at real (rate) volatility as a possible explanation for the observed fall.

or death, the growth-mortgage, with low interest payments in the first years of the mortgage, and the top-mortgage, with a loan-to-value ratio of up to 130 percent (Wytzes, 1981; Voûte, 1989). The relatively vague definition of what a life-insurance product entailed furthermore allowed for a combination of housing credit and life-insurance products, benefiting from the deductibility of life-insurance premiums in addition to mortgage interest deductibility.

In contrast to France, only a limited amount of property subsidies existed (the so-called premie A B C subsidies), which were conditional on the value of the house and household income (Van der Schaar, 1987). <sup>12</sup>

### Discussion

Considering the institutional setting of the 1960s and 1970s for both systems of housing finance, three contrasting features stand out. First, the French organization of the bargaining process of regulatory change reflects a more diverse set of interests (although it remained dominated by an elite), while at the same time taking a top-down approach once a decision was made. In the Netherlands, the bargaining process over regulatory change was mostly one between the regulator and the banking system, while household interests played little of a role. Second, informal institutions differed, which resulted in a more dirigiste approach in France, while Dutch informal institutions brought about a laissez-faire approach. Third, the design of the national pension system conditioned household demand for financial services, which, in turn, strengthened household vested interest in the existing institutional setting.

The following section now turns to the evolution of the French and Dutch system of housing finance in the 1980s and 1990s.

# 5.4.2 A liberalization wave: the 1980s and beyond

Whereas the institutional setting of the 1960s and 1970s was relatively stable in nature, a liberalization wave introduced considerable change from the 1980s onwards. In this section, I describe the developments that marked the French and Dutch system of housing finance during the 1980s and 1990s. As before, I first discuss the bargaining process, informal institutions and wealth positions, after which I discuss its relation to the system of housing finance. In the figures that display the institutional setting of both countries, factors that have changed are noted in italics. The impact of the Great Financial Crisis is briefly discussed in the discussion of section 5.5.

#### France

In response to the ongoing economic crisis of the early 1980s, Mitterrand introduced a variety of measures in 1981 that strengthened the existing institutional features,

<sup>&</sup>lt;sup>12</sup>In total, 0.9 percent of the state budget was directly related to housing expenditure in 1970, to rise to 2.7 percent in 1980. Subsidies towards the owner-occupied sector amount to some 40-60 percent of this figure – the remainder was related to mortgage interest deductibility after accounting for impute rents. Own calculations based on Boelhouwer and Priemus (1990) and CBS, retrieved from https://opendata.cbs.nl/statline/#/CBS/nl/dataset/80504ned/table?dl=12973.

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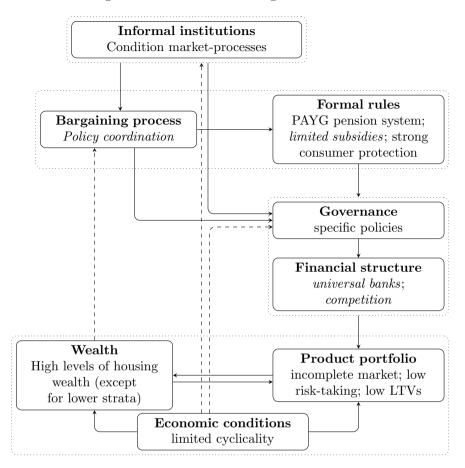


Figure 5.6: Institutional setting 1980s & 1990s: France

including credit controls and subsidized credit. The consequent failure of these reforms to revitalize the French economy paved the way for Mitterrand's turn in 1983, which heralded a liberalisation wave of French finance over the subsequent decade, which also meant considerable repercussions for its system of housing finance.

Figure 5.6 displays the French institutional setting that unravelled after Mitterrand's turn. Compared to the 1960s and 1970s, three main developments can be discerned: the rise of policy coordination (bargaining process), the more limited use of subsidized housing credit (formal rules), and the rise of universal banks and competition (financial structures). I discuss these changes below.

In the aftermath of the 1983 reforms, the bargaining process over institutional change gradually changed from a centralized technocratic process, towards more of a bargaining process; the state and the financial system could no longer automatically be regarded as a single entity. With the disappearance of the technostructure's influence, the role of informal institutions to condition market-based processes and to

protect household's interests gained ground. Moreover, household interests became more firmly rooted in the bargaining process over regulatory change.

The strong protection of household interests is reflected in the formation process of the *Loi Neiertz*, a 1989 law which served to protect overindebted households. In particular, the *Loi Neiertz* placed most of the blame of overindebtedness with the credit provider.<sup>13</sup> The introduction of the Loi Neiertz provides a clear example of regulatory capture by the household sector despite fervent opposition of the French financial system (Kilborn, 2005; Ramsay, 2012).

The consequence of this new law was that the French market for housing credit is left incomplete to this day: lower income households do not have access to housing credit because the French banking system is afraid to become responsible for problems related to overindebtedness.

Turning to household wealth positions, retirement savings continued to play a role in the demand for financial services; limited institutionalized pension savings incentivized French households to repay their housing debt and amass housing wealth. This became particularly clear in the early 1990s, when trust in the French pension system fell due to anticipated demographic developments and the PAYG nature of the arrangements (e.g. Chemillier-Gendreau, 1997; Vernière, 1990b). In response, French households increasingly turned to housing wealth to ensure a stable path of life-time consumption (Tutin and Vorms, 2014).

Limited household indebtedness in France also meant vested interests in mortgage interest deductibility were limited. The 1995 abolition of mortgage interest deductibility did not result in much unrest, also due to the introduction of a new loan form, the prêt à taux zéro. The prêt à taux zéro offered a loan without interest payments and thereby resembled much of the benefits that French households derived from mortgage interest deductibility before.

In terms of financial structure, the following developments are of interest. First, starting in the second half of the 1980s, the French financial sector was gradually privatized (Thiveaud, 1997). The French government did not abandon all control, however, as it always held on to a small share of equity (le noyau dur). Over time, France became characterized by a universal banking system.

A second development relates to the waning of the dominant position of Crédit Foncier de France. Here the gradual reduction in subsidized housing credit over the 1980s and 1990s played a key role, from which Crédit Foncier de France had previously derived its dominance. For the French state, economic peril in the early 1980s and the consequent fiscal limitations resulted in the gradual narrowing down of eligibility criteria. What also played a role, however, was the move towards an economic and financial system where market-based processes played an larger role. Indeed, the private sector increasingly offered a viable alternative to the previous initiatives by the state (Levebvre, 1993).<sup>14</sup>

 $<sup>^{13}</sup>$  The previous set of legislation on overindebtedness, the Loi n78-22 du 10 janvier 1978 relative à l'information et à la protection des consommateurs dans le domaine de certaines opérations de crédit, or Loi Scrivener, was already relatively protective of households interests. The Loi Neiertz introduced procedures on how to deal with overindebtedness, however, which were previously unavailable.

<sup>&</sup>lt;sup>14</sup>Today, Crédit Foncier de France specializes in tailored housing8 credit to predominantly low-income households, and is part of the banking group BPCE (Tutin and Vorms, 2014).

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The 1980s also saw the introduction of competition in the market for housing credit. Four factors played a role in this regard. First, housing credit characteristics – including housing credit rates – were liberalized. Second, the private part of the French banking industry increasingly played its part in the provision of housing credit at the expense of Crédit Foncier de France. Third, the French financial system increasingly oriented towards to the household sector due to the introduction of financial markets and thereby an attractive alternative for non-financial firms – the former clientèle of the French banking system. Fourth, cheap housing credit increasingly became a way to built a durable bank-client relationship. To this end, cross-subsidization from more profitable financial services such as investment accounts towards housing credit ensured low rates in the latter market.

In terms of credit characteristics, the French setting shows considerable stability. Fixed-rate mortgages of relatively continue to dominate, although loan-to-value ratios and loan maturities show a minor rise. For Antipa and Lecat (2010), the rise in loan maturities can be accounted for by rising housing prices and increased competition in the market for housing credit.

#### The Netherlands

The Netherlands too underwent a liberalization wave in the 1980s, although its scope was more limited – in part due to the already relatively liberal practices in the 1960s and 1970s. Figure 5.7 displays te institutional setting for the Netherlands in the 1980s and 1990s. Compared to the 1960s and 1970s, three main developments can be discerned: the institutionalization of self-regulation (bargaining process), the rise of universal banks (financial structure), and sizeable risk-taking with housing credit (product portfolio).

Whereas the bargaining process in the 1960s and 1970s for an important part relied on policy coordination and reaching agreement between the regulator and the banking system, the 1980s saw a move towards institutionalized self-regulation. Starting in the 1980s, self-regulation itself became regarded as an effective policy instrument. Indeed, De Nederlandsche Bank as the banking supervisor focused on prudential supervision and showed limited interest in market conduct unless it affected the monetary base.

A related process was the growing independence of the Dutch banking system vis-a-vis the national authorities, especially from the late 1980s onwards. The Dutch banking system increasingly became international in nature and came to feel less responsible towards the local Dutch setting. This resulted in a tougher stance of the Dutch banking sector towards requests from the regulator and a reduction in the use of policy coordination. <sup>15</sup>

This alteration to the regulatory stance should be seen in the context of a shift in views on market-based processes as well. Although these were still consistent with the view that regulation should provide the right set of regulation to allow the market to do its work, belief in this view grew with the Thatcherian revolution across the European continent. A combination of self-regulation, competition and consumer choice was regarded as an effective measure against market-abuse.

<sup>&</sup>lt;sup>15</sup>Interview Nout Wellink

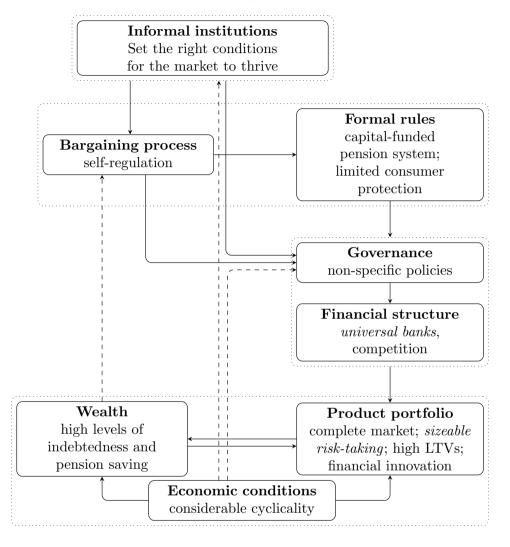


Figure 5.7: Institutional setting 1980s-1990s: the Netherlands

With regards to the composition of the household balance sheet, the Dutch pension system matured, leaving its mark on household financial choices. If anything, household vested interests in policies that supported high levels of indebtedness grew over time with the rise of the stock of housing credit – particularly from the 1990s onwards (see figure 5.1b). Mortgage interest deductibility in particular became more and more important for Dutch households due to the rising stock of housing debt (see figure 5.1b). This is also reflected in the political debate of the 1990s and 2000s, where proposing limitations on mortgage interest deductibility was regarded as political suicide (Lejour, 2016).

The composition of the Dutch banking landscape underwent two important

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changes that are also of relevance to the market for housing credit. First, the economic depression in the aftermath of the 1979 Second Oil Crisis resulted in falling real estate prices and, consequentially, the failing of the Dutch mortgage banks.<sup>16</sup> By the mid-1980s, all independent mortgage banks either went bankrupt or were taken over by banks or insurance companies (Barendregt and Visser, 1997).<sup>17</sup>

Second, in response to the Second Banking Directive which limited national opportunities to counter foreign take-over, the structure policy was abandoned. The abolition of the structure policy resulted in a consolidation wave in Dutch banking, from which point three banks dominated the Dutch housing market: ING, ABN AMRO and the Rabobank (see chapter 4 for an in-depth discussion). <sup>18</sup> In other words, Dutch policy makers favoured the (international) position of the Dutch banking system over a competitive banking system under the structure policy locally. Vested interests of the Dutch banking system thus appear to have prevailed over existing norms on market-efficiency.

In terms of the products portfolio on offer, a whole range of financial innovations characterized the offer of housing credit from the late 1980s onwards. For example, the late 1980s saw the introduction of the savings mortgage, the interest-only mortgage, the investment mortgage and the life-mortgage. <sup>19</sup>

Central to the introduction of these housing credit types were two fiscal incentives which were of interest to banks and households alike: mortgage interest deductibility and the deductibility of life-insurance premiums. Besides these fiscal incentives, a variety of motives existed on the demand and supply side for the introduction of these products.

On the demand side, the pension system and rising housing prices played their part. First, the pension system continued its effect on household financial incentives; Dutch households benefited from extensive pension provisions at retirement while being strapped for cash today due to high pension premiums. This effect only got stronger with rising housing prices over the 1990s and falling affordability. In short, Dutch households had an interest in forms of housing credit that suppressed current day's expenses, while showing little interest in building up wealth.

 $<sup>^{16}</sup>$ Over the course of the 1980s, Dutch mortgage banks started to invest in commercial real-estate as it was perceived as a good hedge volatility in the owner-occupied sector (Voûte, 1989).

<sup>&</sup>lt;sup>17</sup>The Tilburgsche Hypotheekbank went bankrupt in 1982, whereas the Friesch-Groningsche Hypotheekbank and the Westland/Utrecht Hypotheekbank were taken over by two insurers: AEGON and Nationale Nederlanden (Barendregt and Visser, 1997).

<sup>&</sup>lt;sup>18</sup>ABN and AMRO joined forces in 1991 and formed ABN AMRO, the fourth largest bank in the world at the time. The merger between NMB Postbank Groep and the insurer Nationale Nederlanden resulted in the formation of ING in 1991.

<sup>&</sup>lt;sup>19</sup>With the savings mortgage, capital repayments were not employed to repay the mortgage but instead deposited into a savings account. At maturity, the savings were used to repay the mortgage. This came with the advantage that the savings account paid interests and indebtedness was maximized over the loan term, thereby maximizing the benefits from mortgage interest deductibility. With the interest-only mortgage, capital repayments were forgone until maturity, leaving the capacity to repay the loan at maturity to the thriftiness of the borrower, or its capacity to refinance. The investment mortgage functioned much like the savings mortgage, but instead of a savings accounts, an investment account was employed. The ability of the household to repay it loan at maturity thus became dependent on stock market developments. The life-insurance mortgage functioned in a similar way, but had the added benefit of the deductibility of life-insurance premiums in addition to mortgage interest deductibility (see chapter 6 on universal life-insurance).

On the supply side, poor consumer protection and high profitability of more complex financial products such as the investment and life-insurance mortgage were important. A liberalization of housing credit income standards in 1993, whereby households were allowed to report household income instead of breadwinner income, also played its part by allowing for higher indebtedness and further pushing housing prices up.

Finally, the stance of the Dutch regulator and supervisor left ample room for Dutch financial intermediaries to introduce these relatively risky (and sometimes expensive) financial products.<sup>20</sup> Moreover, all of these new financial products were deemed eligible for mortgage interest deductibility, which is consistent with the general nature of Dutch regulatory practices at the level of governance.

## 5.4.3 Discussion

A number of common developments can be discerned in the French and Dutch system of housing finance throughout the 1980s and 1990s. First, the French state held a less prominent position in setting market conditions, whereas the Dutch strengthened their self-regulatory approach. Second, and related, both the French and Dutch system of housing finance experienced increasing room for private initiative. In France, this expressed itself in a reduced role for subsidized (and regulated) credit, whereas in the Netherlands financial innovation in housing credit products reached unprecedented levels. Third, and in part due to the liberalization wave that characterized both nations, household indebtedness rose to unprecedented levels in both nations.

Even though both France and the Netherlands display developments in a similar direction – i.e. a retraction of the state, rising private initiative and increased household indebtedness – both systems appear to have remained largely distinct. A number of key differences stand out in this regard. First, the French state retained its strong position when it comes to the protection of lower-income households from financial abuse. The French market for housing finance therefore remained largely incomplete: low-income households only held limited access to housing credit as opposed to low-income Dutch households. Second, even though private initiative was on the rise in France, it could not compare to the innovation wave that took place in the Dutch market for housing finance. Third, even though household indebtedness rose in both nations, the rise was much more forceful in the Dutch situation. Between 1990 and 2010, mortgage debt doubled as a percentage of GDP in France, while it quadrupled in the Netherlands. In short, both systems of housing finance appear to have displayed similar tendencies throughout the 1980s and 1990s, but it remains difficult to speak of convergence through time.

The following section places these developments more explicitly in the long-run evolution of both systems of housing finance.

 $<sup>^{20}</sup>$ Over the early 2000s, the Dutch regulatory stance became somewhat more strict (see chapter 6).

# 5.5 Persistence and change

The analysis in the previous section discerns a number of patterns in the French and Dutch system of housing finance since the 1960s. In what follows, I discuss the institutional factors that account for this relative persistence in housing finance practices.

Considering the bargaining process, in France a move away from a technostructure towards one of policy coordination can be discerned. In France, a failure of previous, more dirigiste, policies to bring the economy back to a path of growth provided the impetus for change. This change in the bargaining process coincided with a change of views on how economic growth could be restored; market-based processes were regarded as part of the solution. In the Netherlands, a move from policy coordination towards institutionalized self-regulation instead became visible, whereby financial organizations received greater leeway to control and structure market-exchange. The view that self-regulation would result in greater market efficiency and better outcome for all – including households – also concerns a change in normative views on how a market should be organized. Changes to these normative views on policy formulation should not be overstated, however. In France, protection of lower-income households and a degree of state-control (and ownership) of financial institutions prevailed, whereas in the Netherlands, the practice of selfregulation was already present in the 1960s and 1970s. In other words, there appears to be considerable consistency in legislative and regulatory approaches over time which partially originate in normative views.

Alterations to the organization of the bargaining process also appear to have accentuated the relative bargaining power of various interest groups in both France and the Netherlands. In France, the banking sector lost part of its bargaining power with the fading away of the technostructure as a discussion platform over the course of the 1980s. Instead, the household sector gained a stronger position in the regulatory process, of which the Loi Neiertz is a prime example. In the Netherlands, the age of policy coordination was left behind in the 1980s, granting greater leeway for the Dutch banking system to determine its own faith through self-regulation. This is reflected in the continuation of relatively poor consumer protection, but also more generally in the regulatory response to the introduction of the Second Banking Directive. With regard to the latter, the capacity of the Dutch banking system to compete internationally was regarded as more important than the local competitive situation. In turn, the relative size of Dutch banks grew which only improved their bargaining position further.

Next to regulatory formation, pension systems in both nations continued to condition household demand for financial services, including those related to housing finance decisions. In particular, French households had an incentive to build up additional savings in alternative assets, whereas high pension savings in the Netherlands contributed to relatively high levels of indebtedness. Where the effect of the pension system on household financial decisions in the Netherlands remained roughly constant through time, this was not the case for France. In particular, a crisis of the welfare state in the 1990s meant increasing concern among French households over the capacity of the French PAYG pension system to effectively

smooth household consumption. In turn, incentives to build up additional pension savings were on the rise. Indeed, figure 5.1a shows that housing wealth was on the rise.

The composition of the French and Dutch households portfolio also contributed to to the relative persistence of institutional practices through the channel of vested interests. In particular, pension, housing and mortgage holdings are all of a long-term nature and often difficult (or impossible) to unwind. In turn, high adjustment costs of these long-term assets and liabilities result in a vested interest in policies that support such past choices. Consider, for example, a French savings product that allows households to build up wealth prior to the purchase of a house, or Dutch mortgage interest deductibility in the Netherlands. Especially the latter Dutch policy fits well with high levels of indebtedness, rendering reforms particularly difficult (see box 5.1).

Considering the relationship between normative considerations and vested interests, the following observations can be made. Norms on market-based processes in France were generally in accordance with the relative bargaining position of interest groups. In particular, protection of lower-income households from financial abuse was regarded as important in French society, while French households were at the same time relatively apt at capturing the legislative process. For the case of the Netherlands this was not always the case, however – particularly from the 1980s onwards. Here, the search for market efficiency and sufficient levels of competition at times clashed with the interests of the financial industry. In these cases, the interests of the Dutch financial industry often prevailed.

## Box 5.1: The Great Financial Crisis

The French system of housing finance proved highly resilient to the Great Financial Crisis; the impact on housing prices was limited, default rates hardly increased and residential investment quickly recovered (Tutin and Vorms, 2014, 2016; Scanlon et al., 2011). The incompleteness of the French market for housing finance, in particular, played its part here, because those affected most by the effects of the Great Financial Crisis did not have access to housing credit (Tutin and Vorms, 2014). The Great Financial Crisis thus reaffirmed the French view that their housing finance model functioned well.

The impact of the Great Financial Crisis on the Dutch housing market was large, with a large drop in housing prices and large numbers of households ending up with negative housing equity (Elsinga et al., 2016). The large impact on household welfare gave the Dutch government the impetus to introduce some limitations on housing credit lending. First, mortgage interest deductibility now only applies to linear or annuity mortgages that are paid back in full within 30 years, and the maximum loan to value ratio decreased from 120 to 106 percent, to decrease further to 100 percent. Moreover, the crisis experience resulted in an ongoing discussion on the desired organisation of the Dutch system of housing finance, including the theme of mortgage interest deductibility, high levels of indebtedness and pension savings (e.g. DNB, 2015;

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Camps, 2019). It thus appears that the Great Financial Crisis resulted in a limited degree of convergence of both systems of housing finance.

The impact of a range of European directives on housing finance practices appears limited. The Second Banking directive led to a consolidation wave in Dutch banking, but cross-border banking and the related import of foreign financial practices remains limited to this day (ECB, 2017). A recent study by Milo (2018) of the Mortgage Credit Directive across a range of European nations points at a continuing relevance of local norms in deciding how this European directive should be interpreted, leaving ample room for a French approach of consumer protection and a Dutch approach of self-reliance.

Following the current analysis, norms on consumer protection are not the only inhibiting factors of European financial integration of systems of housing finance. In particular, at the level of governance, French policy is likely to remain well-defined as opposed to the Dutch more loosely defined policies. These differences are inspired by different normative views on state intervention in market-based processes, as well as the relative bargaining position of the financial sector in both nations. In other words, the implementation of European Directives in France and the Netherlands is likely to display persistent differences, limiting their capacity to bring about integration. Moreover, differences in the organization of the French and Dutch pension system will continue to incite different household preferences. Product availability will remain conditioned by such preferences, again hampering the potential for financial integration. A set of minimum standards on welfare arrangements across the European Union may be a way forward, although this policy option seems unlikely given the high levels of adjustment costs (see above).

On the basis of the current analysis, a number of advantages and disadvantages of both systems can be discerned. The French system of housing finance proved highly resilient to the Great Financial Crisis, but could only do so by limiting access to financial services to particular strata in French society. Moreover, the relative resilience of French housing finance is also the outcome of relatively poor pension provisions, emphasizing personal responsibility. The Dutch system of housing finance, on the other hand, went through a deep slump which affected many. Still, the offer of financial products is relatively inclusive, granting housing credit to large parts of society, while safeguarding pension savings for all.

The preceding analysis also underlines the utility of the analytical framework developed in chapter 5, by moving beyond often frequented classifications such as dirigiste France or Dutch frugality. Instead, the analytical framework allows one to more precisely identify the underpinnings of the evolution of a financial system through time, and the evolution of a system of housing finance more specifically.

## 5.6 Conclusion

In this chapter I analyse the historical evolution of the French and Dutch system of housing finance between 1960s and today. The current chapter makes the case that normative views on market-based processes, the relative bargaining position of the national banking system, and the organization of the pension system lend

a considerable degree of persistence to the organization of the French and Dutch system of housing finance. Norms on market-based processes and the relative bargaining position of different interest groups condition the bargaining process of legislative. The organization of the pension system instead generates a demand in financial services that complement the composition of the household balance sheet and, in turn, results in a vested interest in policies that support such financial choices.

These findings hold a variety of implications. First, an understanding of cross-country differences in national systems of housing finance necessitates an analysis which places these practices in the broader institutional and historical context, including normative views, the political economy and the pension system. The historical dimension proves particularly valuable in this context as it allows one to unearth sources of persistence that would otherwise not come to the fore.

Second, the case of France and the Netherlands seem to point at a trade-off between pension security and more extreme housing market dynamics, on the one hand, and responsibility to acquire enough pension savings one-self and relative stability in the housing market, on the other hand. Because French households enjoy relatively limited pension provisions, they seek alternative ways to build up wealth which expresses itself in relatively low levels of housing credit. Dutch households instead complement high levels of pension savings with higher levels of indebtedness to be able to consume today. These differences in indebtedness consequentially translate in higher levels of cyclicality in housing Dutch housing markets. Future research should consider the test this finding for a broader range of countries empirically.

Third, these findings hold implications for the ongoing quest of European financial integration. In particular, a variety of policy initiatives was undertaken over the past decades to foster the integration of European systems of retail finance. Typically, such policies imply the introduction of a new set of legislation in the national setting with the idea that this will necessarily result in the gradual convergence of national retail finance practices – also in housing credit. The current paper shows that a more holistic approach to household financial behaviour is required for an understanding of the dynamics in systems of housing finance. Following the above analysis, the considerable degree of heterogeneity in normative views and the relative bargaining position of different interest groups require particular attention in assessing the potential impact of a European policy innovation. Moreover, without convergence of welfare regimes across the European Union, household preferences will continue to limit the degree of convergence attainable.

# Chapter 6

# Live and let live? The evolution of household financial assets

## 6.1 Introduction

The composition of household financial assets holds implications for household welfare and financial well-being (Brüggen et al., 2017), as well as the financing model of the real economy at over 24,000 billion Euro assets in the Eurozone alone. Moreover, the literature finds a connection between the type of household financial assets held and the business cycle dynamics (DNB, 2015; Mian et al., 2013; Ji et al., 2019). Given the above, it is surprising that our understanding of the often sizeable cross-country differences in the composition of the household portfolio lags behind (Arrondel et al., 2016; Badarinza et al., 2016; Christelis et al., 2013). This lack of understanding originates – in part – in our neglect of the historical process through which the financial service provision to households evolved through time. The presence of path dependent processes, as argued for in chapter 4, can likely account for a large amount of persistence in the organization of the French and Dutch financial system.

In contrast to chapter 5, which focussed on the main financial liability and nonfinancial asset on the household balance sheet, the current chapter instead considers the evolution of household financial assets. I find that many of the same features that contributed to a considerable degree of persistence in the French and Dutch system of housing finance also play their part for the case of household financial assets. Indeed, this chapter highlights similar sources of persistence as compared to the French and Dutch system of housing finance. A first source of persistence are norms on the extent to which the markets should be allowed to operate freely.

<sup>&</sup>lt;sup>1</sup>I would like to thank Chris Colvin, Laure Quennouëlle-Corre, and seminar participants at the "Financing the real economy – Echoes from the past" workshop at Utrecht University for their constructive comments and suggestions.

In France, this expresses itself in a considerable degree of state guidance over the allocation of household financial assets, with the intent to favour particular forms of investment. In the Netherlands, on the other hand, household financial conduct is left largely unregulated and the allocation of capital is left to the market.

A second source of persistence is the relative bargaining position of the financial industry and the household sector. In France, households have historically received greater opportunity to steer regulation in their favour, whereas this is not the case in the Netherlands. In the Netherlands, it is the banking system that has been able to influence the regulatory system to its advantage. This expresses itself in relatively strong consumer protection in France, and considerable influence over Dutch regulatory practices of the financial sector in the Netherlands.

Note that for the case of France, normative views and the preferences that sprung from the relative bargaining power of households are generally in accordance with one another, where the bargaining power of the Dutch financial industry at times overshadowed normative views.

Together, these two sources of persistence contribute to the continuation of past practices in both France and the Netherlands. In terms of private initiative, the Dutch system appears to be much more fertile breeding ground for financial innovation, whereas the French system is relatively conservative. This does come at a cost, however, as the Dutch system is characterized by a variety of scandals – particularly during the 1990s – whereas abuse of households in France is largely absent. This difference can to an important extent be accounted for by relatively 1) poor consumer protection and 2) ill-specified (fiscal) regulation in the Netherlands as compared to France.

The role of the pension system, which is highlighted in chapters 2 and 5, appears more limited at first sight. Life-insurance holdings are relatively limited in both France and the Netherlands for much of the 1960s and 1970s. Only in the 1990, French life-insurance holdings display a large increase with a crisis of the welfare state. More generally, the normalization of the French inflation rate starting in the 1980s resulted in a shift towards marketable assets, including life-insurance (also see chapter 2).

The analysis follows the analytical framework of chapter 4 as before. It should be noted, however, that many of the institutional features of the French and Dutch financial system were already discussed in the previous chapter. Consider, for example, the evolution of the bargaining process in both nations, or the consolidation wave in Dutch banking in the 1980s. These institutional dynamics will therefore not be discussed again in the context of household financial assets, unless the specifics reaffirm or contrast the findings of the previous chapter.

The remainder of this paper is organized as follows. Section 6.2 provides an overview of the relevant literature after which section 6.3 proceeds with an analysis of the evolution of the financial service provision to households from the 1960s onwards. Section 6.4 places this evolution in the long-term perspective, while section 6.5 concludes.

## 6.2 Literature

Over the past decade, household finance is increasingly recognized as a separate field in economics (Campbell, 2006; Guiso and Sodini, 2013). Although there is great cross-country variation in household financial holdings (Arrondel et al., 2016; Campbell, 2016; Badarinza et al., 2016), such differences are much less explored.

A sizeable literature considers the determinants of household risky investment and finds that risk-aversion decreases with wealth (Calvet and Sodini, 2014; Wachter and Yogo, 2010) and financial literacy (Van Rooij et al., 2011; Christiansen et al., 2008). Others have investigated the link between equity investment and past experiences with poor stock-market returns (Malmendier and Nagel, 2011; Guiso et al., 2018; Ampudia and Ehrmann, 2017). Household characteristics alone cannot account for cross-country differences in the composition of the household portfolio, however. Instead, the main source of cross-country variation appears to originate at the institutional (and not the household) level (Christelis et al., 2013; Guiso et al., 2003). An analysis of cross-country differences (and the evolution of) the financial service provision to households must therefore necessarily take into account the broader institutional constellation.

A variety of explanations for cross-country differences in holdings of individual assets has been put forward, including studies with a focus on equity (Guiso et al., 2008; La Porta et al., 1997, 1998; Stulz and Williamson, 2003; Degryse et al., 2018), pension assets (Perotti and Schwienbacher, 2009; Cutler and Johnson, 2004; Aggarwal and Goodell, 2013), tenure choice (Norris, 2016; Kofner, 2014) and mortgages (Stephens, 2011; Hilber and Turner, 2013; Scanlon et al., 2008). Unfortunately, this type of approach often disregards the potential of substitution effects within the household portfolio, with similar assets performing similar functions (Alessie et al., 2013; Lehmann-Hasemeyer and Streb, 2018). The current chapter will therefore also adopt a portfolio perspective in its analysis.

The long-term nature of the current study is motivated by the potential of path dependence in the evolution of the financial service provision to households. Indeed, once households have decided to purchase a long-term asset that is difficult to unwind, adjustment costs render an alteration of the household portfolio costly. These adjustment costs are likely particularly high for pension and life-insurance assets (see chapter 4). Because household financial demand is in part dependent on the already existing composition of the household balance sheet, such historical choices generate a path dependent evolution of the household balance sheet (also see Perotti and Schwienbacher, 2009). Moreover, and as reflected on in a literature on the political economy of finance, the composition of household wealth generates vested interests in those policies that support such past financial choices (Calomiris and Haber, 2014; Lejour, 2016; Degryse et al., 2018). Related is the regulatory response to financial crises, which is for an important part conditional on the extent to which large groups in society are affected. If large groups in society are affected this likely generates a broadly supported interest in society to engage in reforms such that a crisis can be avoided next time around (Hoffman et al., 2007; Reinhart and Rogoff, 2009). An understanding of today's financial choices thus necessitates

<sup>&</sup>lt;sup>2</sup>See Badarinza et al. (2016) for a review of the literature.

an understanding of the past.

# 6.3 Analysis

The current section provides an analysis of the French and Dutch financial asset holdings by means of the analytical framework of chapter 4. Section 6.3.1 first provides a discussion of the evolution of the French and Dutch institutional constellation in the 1960s and 1970s, after which section 6.3.2 repeats the same exercise for the 1980s and 1990s. In contrast to the previous chapter, I assume knowledge of the main developments in the bargaining process, norms and relative bargaining power. If particular features of the evolution of household financial assets strengthen or contrast the findings of chapter 5 these are discussed.

## 6.3.1 Initial conditions: the 1960s and 1970s

#### France

Figure 6.1 displays the institutional setting for France in the 1960s and 1970s. As in chapter 5, the process of policy formulation revolved around a technostructure in which an elite determined the organization and product supply of the financial sector. The choices made in this regard were largely inspired by a normative view on government intervention that prescribed strict conditioning of market-based processes to attain an allocation of capital towards those industries that were deemed of national interest and cheap credit for the state (e.g. Bertrand et al., 2007; Monnet, 2013). Moreover, the high levels of inflation that characterized France until the early 1980s were considered problematic for the household sector to effectively build up wealth. This, in turn, troubled the financing model of the French economy which heavily relied on debt-financing (Marjolin et al., 1969).

The investment preferences of the French technostructure were reached through a range of monopolies on particular financial services and strict regulation of market practices and product characteristics. Consider, for example, the monopoly of the French savings banks on issuing the Livret A (see below), and the fact that the funds collected with the Livret A were earmarked to finance social housing. Alternatively, consider the introduction of two housing savings schemes in the late 1960s of which the collected funds could only be employed to extend housing credit, mortgage bonds, or bonds issued by Crédit Foncier de France, a semi-public mortgage bank (see chapter 5). In other words, the ways in which the banking system could employ its liabilities was heavily regulated.

Considering the composition of wealth (as reported in chapter 2), relatively limited pension provisions generated a demand for alternative forms of wealth that performed the same function of smoothing consumption over one's lifetime. Next to housing wealth (see chapter 5), life-insurance assets also appear to have played a role in this regard as penetration rates were particularly high for those not covered by any supplementary pension arrangement (Turc, 1973). On the other hand, at a macroeconomic level these holdings were still relatively limited (see figure 2.1a). Housing wealth was the preferred choice for French households as an investment

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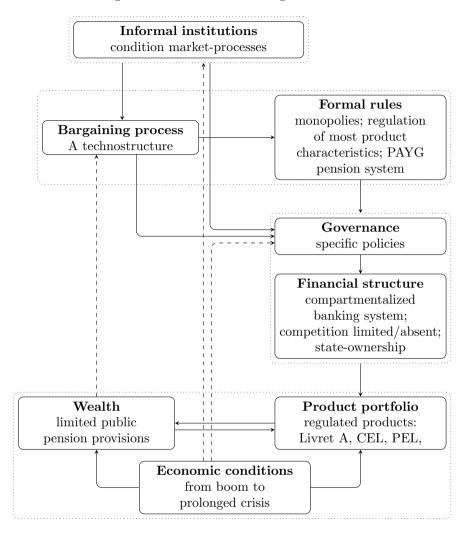


Figure 6.1: Institutional setting 1960s-1970s: France

vehicle due to its inflation proof returns and the relatively low and uncertain returns on market-based instruments such as life-insurance (Marjolin et al., 1969).

With regard to financial structure, the market was dominated by a few large public banks and life-insurers; competition was low due to a variety of of monopolies and regulation of the remuneration on savings accounts. The savings banks held a monopoly on the Livret A and – due to the tax-exempt nature of this savings forms – derived a competitive advantage over other (private) actors.<sup>3</sup> The private part of the French banking sector lobbied against this competitive advantage of the

<sup>&</sup>lt;sup>3</sup>Indeed, the market share of the savings banks in the French savings market was between 40 and 51 percent throughout the 1960s and 1970s. Source: 1963-1976: Annuaire statistique de la France, various years; 1970-1976 Rapport Annuel du Conseil National du Crédit, various years.

French savings banks without success; this underlines the relatively poor bargaining position of the private part of the French banking system.

The role of the private banking sector would rise from the late 1960s, however, due to government policy that sought to improve the financing model of the French economy by allotting a greater role to household savings in financing the real economy. Similarly, 1978 saw the introduction of a fiscal advantage for those who invested on the stock market so as to improve the financing model of the French economy (Dailly, 1978; Blin, 1978). Although popular at first, the success of the latter measure was short-lived with the Second Oil Crisis and the election of Mitterrand in 1981 with a program of nationalizations.

### The Netherlands

Figure 6.2 displays the institutional setting for the Netherlands during the 1960s and 1970s. As in chapter 5, the process of Dutch financial policy formulation revolved around a process of policy coordination, whereas market conduct itself was largely subject to self-supervision.

Self-supervision in the life-insurance sector contained aggressive pricing strategies and market-misbehaviour for much of the 1960s (Langenhuyzen, 1998; van Gerwen, 1998). Similar practices were present in the banking sector on a number of labour-intensive financial products (van den Brink, 1969).<sup>4</sup> These practices highlight the strong bargaining position of the Dutch financial industry.

Dutch informal institutions were consistent with the view that regulation should limit itself to setting market conditions in such a way that the market can operate freely and decide on the allocation of capital on its own. This is reflected in the imposition of a structure policy that promoted a competitive setting (see chapter 5), as well as the implementation of legislation that was largely non-specific. This non-specificity is reflected in a premium (company) savings account which knew a large variety of exceptions to the requirement that the funds were to be placed in a four-year term deposit<sup>5</sup> (van Ballegooijen and Vermeend, 1995; van Koetsveld, 1966), or the vaguely specified requirements for fiscal deductions in relation to life-insurance products, allowing for a variety of fiscal constructs.<sup>6</sup>

Considering the composition of wealth (as reported in figure 2.1b), the stock of Dutch pension assets was still relatively limited for much of the 1960s and 1970s. The flow of pension savings at this point in time was already substantial, however, which is reflected in the fast growth of pension assets over time and a 1958 survey among working households (Centraal Bureau voor de Statistiek, 1958). High pension savings can likely account for the only limited level of life-insurance holdings.

Equity holdings made up a considerable part of the total household portfolio in

<sup>&</sup>lt;sup>4</sup>Also see Volkskrant, March 1st, 1988, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010856687:mpeg21:a0053.

 $<sup>^5</sup>$ The deposits also could be employed to purchase a house, repay mortgage debt, or pay for life-insurance premiums or marriage costs.

<sup>&</sup>lt;sup>6</sup>Consider, for example, purchasing a life-insurance product with borrowed money, which allowed a household to deduct interest payments on the loan as well as life-insurance premiums from taxable income (see de Kam, 1977).

<sup>&</sup>lt;sup>7</sup>According to the survey, 25 percent of the flow of savings consisted of pension premiums.

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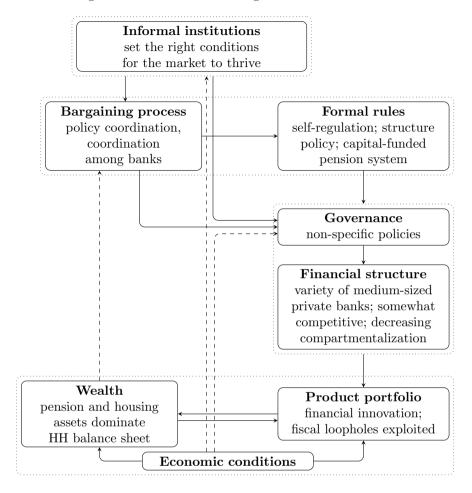


Figure 6.2: Institutional setting 1960s-1970s: The Netherlands

the early 1970s, however (see figure 2.1b). Still, only 15 percent of all households held (in)direct equity in 1973 (Slot, 2004), implying a highly unequal distribution over the Dutch population.<sup>8</sup> Over the course of the 1970s, equity holdings would fall with the unfavourable climate of the First and Second Oil crisis and poor (real) returns (see table 2.1b). By 1984, only 8.4 percent of the population held equity.

With regard to vested interests, the relevance of mortgage interest deductibility for the household sector was already discussed in chapter 5. Other fiscal measures were of more limited interest to the household sector due to their more limited scope (premium savings accounts, see above) or more limited holdings (life-insurance). The Dutch financial sector, at the same time, was content with its ability to control market practices and set minimum prices on particular financial services.

Competition was on the rise due to the fading of traditional borders between

<sup>&</sup>lt;sup>8</sup>Moreover, unlisted shares likely make up a sizeable share of these equity holdings.

mortgage, cooperative, savings and general banks. The last three, in particular, gradually offered an increasingly similar product portfolio, including savings accounts, investment products and mortgages. In the savings market, rising household wealth provided an interesting opportunity for the general banks which were looking for alternative sources of funds (Eizenga, 1985; Hoffmann, 1971).

In this light, the position of the Dutch savings banks is of interest, given their historical non-profit activities and related exemption on profit taxation. As the Dutch savings banks gradually expanded their product portfolio from the late 1960 onwards, this raised increasing concern in the Dutch parliament over unfair competition and the absence of a level playing field. The Dutch government responded by limiting the capacity of both the private and public savings banks to effectively compete which consequentially resulted in a fall in their market share. This regulatory attitude is both consistent with norms that prescribe a dominant role for market-based processes, as well as strong bargaining position of the private part of the Dutch banking system.

A noteworthy innovation in life-insurance was the introduction of the single premium policy in the early 1970s, which was characterized by a single premium payment (koopsompolis) and paid out within a relatively short amount of time – typically five to six years. The single premium policy benefited from three fiscal advantages, including the deductibility of premiums paid and interest (if financed through a loan) from taxable income as discussed above. A third fiscal advantage related to the only limited taxation on returns. Despite increasing abuse of this fiscal loophole, it would take until 1977 for a change of law. 11

#### Discussion

Considering the institutional setting of the 1960s and 1970s that conditioned the financial service provision to households, two contrasting features stand out. First, the French bargaining process over regulatory change was built around a technostructure in which a variety of interest groups were represented. The bargaining position of the private banking sector was relatively poor, however. In the Netherlands, on the other hand, a bargaining process between the regulator and the banking system dominated the process of regulatory formation and households only had a limited say.

Second, normative views on government intervention differed in both nations. Extensive and precise intervention characterize the French government's attitude,

<sup>&</sup>lt;sup>9</sup>Profit taxation was introduced for those financial services that lay outside the traditional scope of the savings banks (Barendregt and Visser, 1997). The largest and only public (savings) bank, the Rijkspostspaarbank, relied on legislative change to expand its product portfolio and to make changes to the remuneration on its savings accounts which hindered its capacity to adjust to changing market circumstances. The combined market share of all savings banks in the savings market fell from 36 percent in 1970 to 24 percent in 1980. Source: CBS spaarstatistieken, various years.

<sup>&</sup>lt;sup>10</sup>Income from life-insurance products was subject to a 50 percent tax rate over a fictive return of only 1.5 percent per year. Despite poor average equity returns in the 1970s, this could still result in returns of over 20 percent.

<sup>&</sup>lt;sup>11</sup>See Telegraaf, November 15, 1977; retrieved from https://resolver.kb.nl/resolve?urn=ddd: 011200825:mpeg21:p047 and de Kam (1977).

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whereas the market was left to its own devices to a considerable extent in the Netherlands. Although the structure policy and the (fiscal) treatment of the Dutch savings banks appear to point at a preference for a competitive market of retail finance, the acceptance of collusion by the Dutch regulator instead appear to indicate that the bargaining position of the Dutch financial industry was relatively more important than these normative considerations.

Differences in the incentives over life-time consumption smoothing do not appear to have played a particularly big role at this point in time. life-insurance holdings as a share of the household portfolio are roughly similar (see figure 2.1), although French households that are not covered by any supplementary pension provision appear to hold more life-insurance assets.

Starting in the 1980s, the financial service provision to French and Dutch households underwent considerable change. This process of change is the subject of the following section.

## 6.3.2 A liberalization wave: the 1980s and beyond

Developments in the broader institutional setting of the 1980s and 1990s were already discussed at length in chapter 5. The current section will therefore focus on those elements which are specific to household financial asset holdings. In what follows, I discuss the French and Dutch case in turn.

#### France

Figure 6.3 displays the French institutional setting that unravelled after Mitterrand's turn. <sup>12</sup> Generally speaking, the aim of the various reforms that were introduced in the second half of the 1980s was to improve the financing model of the French economy. The implementation of these reforms was consistent with existing informal institutions and the relative bargaining power of different interest groups, however.

With regards to informal institutions, two normative aspects played a particularly important role in the reforms of the second half of the 1980s. First, market processes were to be conditioned to ensure a proper (and improved) allocation of capital, and second, low-income household were to be protected from market excesses and high levels of inflation. Indeed, both are prominently featured in the Dautresme (1982) report, which formed the blueprint for much of the reforms that would follow suit.

The search for a proper (and improved) allocation of capital is reflected in the introduction of the 1983 livret de développement durable (LDD, later CODEVI). Here, much like the Livret A, the collected funds were earmarked for specific goals, in this case SMEs. Private banks were allowed to issue the LDD, but were required to transfer half of the collected funds to the public Caisse des Dépôts et Consignations (CDC). The use for the remainder of the funds was strictly regulated, which is consistent with the institutional level of governance. A more general measure to

<sup>&</sup>lt;sup>12</sup>See chapter 5 for a more complete discussion.

<sup>&</sup>lt;sup>13</sup>Funds collected via the CODEVI could be employed to purchase bonds issued by the CDC or employed to issue loans to non-financial corporations that were consistent with the requirements

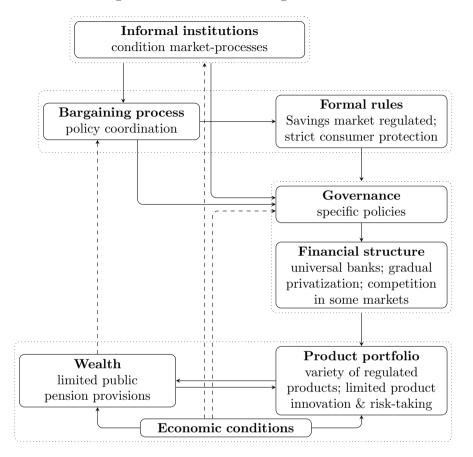


Figure 6.3: Institutional setting 1980s-1990s: France

improve the French financing model was to increase equity investment through the Compte d'Epargne en Action (CEA), which allowed for a 25 percent deduction of all new equity purchases from taxable income up to a maximum of 7000 Francs a year.<sup>14</sup>

The introduction of the livret d'épargne populaire (LEP) in 1982 was instead consistent with the normative stance that prescribed protection of lower-income households. As was already noted, the remuneration of the livret A was generally negative in real terms for much of the 1960s and 1970s (see table 2.1a), which was seen as particularly problematic for lower-income households that mostly relied on the Livret A to save. The livret d'éparge populaire was therefore only accessible for

set by the French government, generally SMEs. The share of funds that had to be transferred to the CDC fell over time. In 1993, the figure was 6.5 percent (Loridant and Marini, 1995).

<sup>&</sup>lt;sup>14</sup>The CEA replaced the 1978 fiscal incentive on stock market investment. See Loi de Finances 1983, retrieved from https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=DAE3C4E54B6A57A7A52741D4BB54F1EC.tplgfr25s\_2?cidTexte=JORFTEXT000000503959&dateTexte=19821230&categorieLien=id#JORFTEXT000000503959.

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lower-income households and featured a remuneration in excess of the Livret A.

The privatization of French public firms in the second half of the 1980s reflects the same normative stance. First, the French state always held on to a *noyau dur*, or a fraction of the stock issued, which reflects the limited appetite of the French state to lose full control. Second, shares of public firms were sold in batches whereby a maximum number of stocks could be purchased by a single individual so as to avoid concentration. In this way, also lower-income households had the potential to purchase stocks.

With regards to vested interests, the bargaining position of the private part of the French banking sector appeared particularly weak. Consider the ineffectiveness of the lobby by the French financial industry to generalize the Livret A and to liberalize the remuneration on the livret bancaire<sup>15</sup>, or the introduction of two further regulated savings accounts, the LDD and the LEP, which introduced strict requirements with regards to the employment of these funds (see above).

The large degree of regulation and control of the French state over the savings market also meant the French financial system reoriented towards markets with more limited regulation and greater potential for profitability (Pastré, 1993). In terms of financial structure, the early 1980s saw the introduction of the business model of bancassurance<sup>16</sup> and the rise of money market mutual funds. Here, the move towards services as opposed to products and the introduction of related management costs also played a role (Kessler, 1987; Point, 2016), although the latter would never rise as much as in the Netherlands (see below and Négiar and Billiard (1995)). One consequence of the strict regulation of some markets but not others, was the introduction of a considerable degree of cross-subsidization, harming the level of competition present (see chapter 4 and Castel (1995)). Overall, financial innovation in retail finance remained limited and new products mostly originated in state action.

With regards to the composition of wealth, two main developments stand out. First, equity ownership is on the rise from the mid-1980s onwards (see figure 2.1a). The privatization of a large part of the (non-)financial industry played an important role in this regard, as well as the normalization of the rate of inflation which rendered the real return on these assets more predictable (also see chapter 2).

A second development in the composition of the French household portfolio was the rise of life-insurance assets. Here, relatively limited pension savings and the realization that demographic change increasingly put the sustainability of the PAYG pension system under pressure played an important role.<sup>17</sup> Indeed, retirement

<sup>&</sup>lt;sup>15</sup>See Ledoux and Burgard (e.g. 1981) and Chatillon (1992). Only in 2009, after an intervention of the European Commission who regarded the monopoly of the savings banks as a "restriction on freedom of establishment and freedom to provide services", were all French banks allowed to offer the Livret A. See European Commission press release IP/06/746, retrieved from http://europa.eu/rapid/press-release\_IP-06-746\_en.htm?locale=en and European Commission press release IP/07/641, retrieved from http://europa.eu/rapid/press-release\_IP-07-641\_en.htm?locale=fr. From the perspective of the French state, continued regulation of interest rates on savings accounts ensured relatively low costs of capital.

<sup>&</sup>lt;sup>16</sup>Note that margins would drop over the course of the 1980s due to increased competition, however (Chemillier-Gendreau, 1997).

<sup>&</sup>lt;sup>17</sup>On July 27, 1990, for example, La Tribune de l'Expansion featured an article "pension reform is urgent and indispensable" (Chemillier-Gendreau, 1997). A special issue of Economie et Statistique in 1990 featured articles such as "pensions: the urgency of reform" and "Can pensions be financed."

savings increasingly featured as a motivation for French households to save (Artus, 1997).

Two further factors also contributed to the rise of life-insurance holdings, however. First, the supply of life-insurance products increased with the rise of bancassurance since the 1980s. Whereas prior to the 1980s, French banks would often advice against life-insurance products, now that they offered the product themselves, their attitude changed. Second, fiscal considerations played their part, with the introduction of the plan d'épargne populaire in 1990 (PEP), which provided a bonus on certain life-insurance products. For the French government, the introduction of the plan d'épargne populaire addressed the relatively limited long-term savings of lower-wealth households (Lambert, 1995) and was thus yet another attempt to improve the financing model of the French economy. The latter is consistent with the French normative stance whereby market-based processes need to be conditioned so as to arrive at an improved allocation of capital.

#### The Netherlands

Figure 6.4 displays the institutional setting for the Netherlands in the 1980s and 1990s. As discussed in chapter 5, the Dutch bargaining process moved towards a setting of institutionalized self-regulation over the course of the 1980s. Self-supervision remained the norm in banking in life-insurance as was the case in the 1960s and 1970s, where the supervision of the stock market became delegated by Stichting Toezicht Effectenbeheer in 1988, an organization mainly run by insiders. <sup>19</sup> Supervision of mutual funds, on the other hand, was only instituted in 1990 in order to comply with European regulation (Slot, 2004).

This development reflects two particularities of the Dutch institutional setting. First and foremost, it reflects the strong bargaining position of the Dutch financial industry in setting the regulatory landscape.<sup>20</sup> Second, self-supervision became

after 2000?" (see Vernière, 1990b,a). A series of reforms of public pension provisions also played their part. For the largest scheme, the Régime Général, the number of years required for a full career increased from 37.5 to 40 years in 1993, and the best 25 years were now used to compute the average wage as opposed to 10 before. Moreover, indexation no longer occurred based on wage growth, but instead on inflation (Bozio, 2011).

<sup>18</sup>The plan d'épargne populaire held a maturity of 8 years and granted a bonus upon its completion and its returns were free of taxation. Moreover, the product could be transformed into a life-insurance product (CNC, 1997). The success of the plan d'épargne populaire was so great that the it was cancelled again in 1993 by the French government who found its fiscal costs too great but also sought to increase household consumption. Moreover, the fiscal incentives were regarded as ineffective given the already high returns on life-insurance products (Lambert, 1995). Indeed, life-insurance holdings would continue to grow in the second half of the 1990s.

<sup>19</sup>Moreover, Stichting Toezicht Effectenbeheer was understaffed at 4 FTE and had not formal means to intervene. Instead, it could only make recommendations. See See Volkskrant, November 13, 1989, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010857182: mpeg21:a0057; Parool, December 16, 1989, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010834268:mpeg21:a0579; NRC Handelsblad, February 1, 1989, retrieved from https://resolver.kb.nl/resolve?urn=KBNRC01:000030507:mpeg21:a0098; Volkskrant, November 13, 1989, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010857182:mpeg21:a0057. Parool, December 16, 1989, retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010834268: mpeg21:a0579.

 $^{20}$ Also see chapter 4 on the consolidation wave of Dutch banking and life-insurance after the

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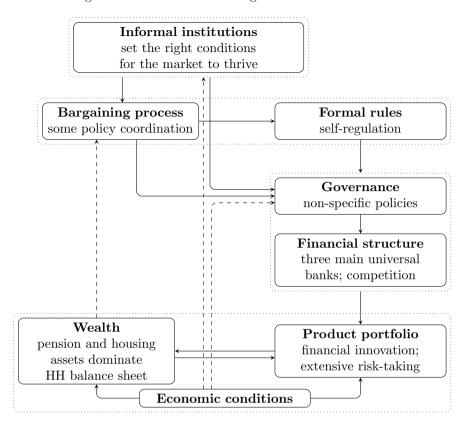


Figure 6.4: Institutional setting 1980s-1990s: The Netherlands

increasingly regarded as an efficient way to ensure a well-functioning market – in line with the spread of Thatcherian ideals across the European continent which prescribed market-based solutions.

With regards to the composition of the household balance sheet, pension assets now started to dominate as the pension system matured. Life-insurance holdings remained limited at the same time. Stock market investments were on the rise, however, and were mostly fuelled by increasing profitability in the run-up to the 2001 Dot-Com bubble (see chapter 2). Between 1984 and 2001, direct stock ownership of households would rise from 4.7 percent to 18.2 percent (Slot, 2004).

Like the 1970s, the 1990s featured a variety of financial innovations. In the field of life-insurance, the 1980s saw the introduction of universal life-insurance. In short, universal life-insurance combined an investment account with a life-insurance account, and – due to the imprecise and vague definition of what a life-insurance product exactly entailed – benefited from deductibility of the premiums paid (Boot, 1995). Universal life-insurance was characterized by an opaque cost structure, in which a large share of the premiums paid in effect were absorbed by management

adoption of the Second Banking Directive.

fees.<sup>21</sup> Next to a lack of information requirements, the dubious role played by financial advisors also deserves particular attention. Because financial advisors were not allowed to be paid directly by their customer they instead charged a percentage of the premiums paid.<sup>22</sup> This resulted in the situation where insurers were often more concerned with appeasing the financial advisor than their ultimate customer.<sup>23</sup> A critique on these practices in life-insurance by Boot (1995) was met by the Minister of Finance Gerrit Zalm with the response that "[such abuse] was impossible because there was competition" (Boot, 2014). This provides an illustration of prevailing Dutch norms on what role the market plays in the allocation of resources and the wilful blindness on the part of the government.

In the field of equity investment, equity-lease provides another illustration of opaque financial business practices. An equity-lease product allowed households to purchase stocks with borrowed money and sometimes employed a long-term putoption to hedge against a fall in stock prices. The product explicitly targeted low-income households and heralded the start of "people's capitalism", according to Legio-Lease, the company that introduced the product in 1989. Equity-lease benefited from deductibility of interest rates that financed the purchase of these stocks. Like universal life-insurance, equity-lease products were characterized by opaque costs structures and high interest rates on the related loan.

The issuance of investment related products – including universal-life insurance – reached its zenith in 2001, right before the burst of the dot-com bubble. For the years 2001-2003, equity returns were -16, -23 and -23 percent and stock market participation rates fell from over 20 percent to some 12 percent between 2001 and 2003. A similar picture emerges from figure 2.1b, which displays a sizeable drop in equity as a share of the total household portfolio.

For those households that invested in universal life-insurance or equity lease, the fall in equity prices often meant they lost all their money – despite regular payments of premiums – or were left with a sizeable debt.<sup>27</sup> The latter was particularly the case for equity lease.<sup>28</sup> The resulting outrage among the Dutch public about these financial malpractices has since then resulted in a variety of court cases which remain

<sup>&</sup>lt;sup>21</sup>Management fees of 20 percent of the premiums paid were the norm, rather than the exception (Boot, 1995).

<sup>&</sup>lt;sup>22</sup>See article 14.1 and article 16.1 of the Wet Assurantiebemiddelingsbedrijf; retrieved from https://www.delpher.nl/nl/tijdschriften/view?coll=dts&identifier=KBDC001: 003025002:00140.

<sup>&</sup>lt;sup>23</sup>See Vriesendorp-van Seumeren (1989) and Het Parool, May 5, 1989, retrieved from: https://resolver.kb.nl/resolve?urn=ABCDDD:010833101:mpeg21:a0276.

<sup>&</sup>lt;sup>24</sup>see Commissie Geschillen Aandelenlease (2004), De Volkskrant, February 5, 1994; retrieved from https://resolver.kb.nl/resolve?urn=ABCDDD:010866641:mpeg21:p041 and de Telegraaf, March 16, 1991; retrieved from https://resolver.kb.nl/resolve?urn=ddd:010646505:mpeg21:p099.

 $<sup>^{25}</sup>$ A real interest rate of 15 percent on the related loan was not uncommon, where the cost of the put-option often introduced a charge of 5 percent.

<sup>&</sup>lt;sup>26</sup>Source: DNB, household surveys, fraction of respondents in the survey that hold equity.

 $<sup>^{27}</sup>$ According to Autoriteit Financiële Markten (2002), some 700,000 equity lease contracts were outstanding in 2001 worth some 6.5 billion euro. In total, 6 percent of Dutch households were thought to own the product.

<sup>&</sup>lt;sup>28</sup>E.g. Trouw, December 17, 2002, retrieved from http://academic.lexisnexis.eu/??lni=48M0-DGN0-0150-Y30N&csi=12435&oc=00240&perma=true.

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unresolved to this day. Holders of universal life-insurance stand little chance in court because there were no formal information requirements when these products were sold. In the context of the framework, this highlights the poor level of consumer protection, as well as the weak bargaining position of Dutch households vis-a-vis the financial sector.

The regulatory response to (early signs) of malpractices were limited. A 1998 law required to set up its own information provision standards, consistent the practice of self-regulation and a strong bargaining position of the Dutch financial industry. Laws in 2002 and 2006 further improved the consistency of information provision among insurers although industry standards remained important in this regard (Autoriteit Financiële Markten, 2008).

Market excesses of the 1990s (also see chapter 5) also resulted in a gradual reorientation of the supervisory stance. Starting in the late 1990s, the relation between financial innovation and financial stability increasingly came to the fore at DNB. In life-insurance, the failure of Vie d'Or in 1995 – a life-insurer that took excessive risk over the course of the 1990s – highlighted the need for a different approach to supervision for the Verzekeringskamer (Langenhuyzen, 1998). The Verzekeringskamer and DNB merged in 2004, and a shift from supervision through closeness and trust towards that of control started to develop.<sup>29</sup> Still, Dutch policy continued to be dominated by a belief in household's self-reliance, consistent with prevailing informal institutions. Real change in information requirements would only come at the European Union's initiative, with the introduction of the Markets in Financial Instruments Directive in 2007.

#### 6.3.3 Discussion

A number of common developments can be discerned in the financial service provision to households in both France and the Netherlands. First, both systems display liberalizing tendencies, consistent with a changing mindset across the European continent following the Thatcher period. The French state reduced its coordinating role in the national economy, whereas the Dutch state formalized the self-regulatory stance – thereby accepting greater input from market participants in setting the regulatory sphere. Second, and related, both systems witnessed increasing room for private initiative. For France, this was particularly the case for bancassurance and equity-related services, where the Netherlands witnessed a boom in financial innovation marketable financial products.

Although both systems displayed tendencies in a similar direction, a number of important differences remained. The liberalization wave in France, for example, did not imply a complete loss of opportunity to condition market-based processes. This is evident in the savings and life-insurance market where the state took initiative to improve the financing model of the French economy. Moreover, supervision remained tightly controlled by the French state. In the Netherlands, on the other hand, the state withdrew further and supervision of market conduct increasingly resided in the hand of the financial sector itself.

<sup>&</sup>lt;sup>29</sup>Interview Nout Wellink; also see Volkskrant, December 12, 2002, retrieved from http://academic.lexisnexis.eu/??lni=48KT-WSNO-0150-V3S7&csi=263237&oc=00240&perma=true.

In terms of private initiative, the opportunities for new business ventures in France certainly increased. Still, regulation remained strong. Consider the absence of competition in the market for household savings due to continued regulation of interest rates, or the presence of strict consumer protection which limited the extent to which risky financial products could be offered. Indeed, financial innovation in French retail finance remained limited. In the Netherlands, on the other hand, a large variety of new financial products was introduced, in which the limited degree of government intervention certainly played its part.

The following section now places the evolution of the French and Dutch institutional setting more explicitly in a long-run perspective.

### 6.4 Persistence and change: discussion

The preceding discussion discerns a number of common patterns in the historical evolution of the financial service provision to French and Dutch households over time. Still, sizeable differences remain as is evident from the discussion above. The current section considers what can account for this large degree of persistence.

Regarding the historical evolution of the financial service provision in France and the Netherlands, three features stand out: the normative stance on the degree to which market-based processes should play a role in the allocation of capital, the relative bargaining position of the financial industry, and household financial incentives derived from the pension system.

With regards to norms on market-based processes, relative stability over time can be discerned. For France, conditioning market-based processes was regarded as effective means to enhance the financing model of the French economy and to protect (low-income) households against inflation and financial abuse. Moreover, the funds collected through these regulated savings forms could be employed to channel funds towards those investments that were deemed important by the French state. Although the deregulatory wave of the 1980s allowed for more private initiative, large parts of the financial sector remained subject to well-defined conditioning factors.

In the Netherlands, the dominant normative view among policy makers was that market-based processes should instead be facilitated. This expressed itself in the practice of self-regulation, as well as the presence of regulatory and fiscal voids for prolonged periods of time. At the same time, it should be noted that a degree of collusion was deemed acceptable within this context, both as a means to stop too aggressive – and consequentially risky – business strategies, or to protect Dutch financial institutions from foreign takeover (also see chapter 5). Over time, the belief in these self-regulatory practices increased, which is also evident from the institutionalization of self-regulation over the course of the 1980s.

The bargaining position of financial intermediaries also displays relative stability over time. The private banking sector in France only had limited say in the way it conducted its business until the early 1980s, where it continued to face serious limitations up until the 2000s. Consider, for example, the monopoly of the Savings banks on the Livret A until 2007, or extensive consumer protection against which the financial sector lobbied to no avail (also see chapter 5). In the Netherlands,

on the other hand, the financial industry held sizeable power over the direction of regulatory chance, also due to the practice of self-regulation. Moreover, consumer protection was relatively weak, of which the ongoing court cases about Universal Life Insurance products provide a clear example.

With regards to the organization of the pension system, the effects on financial asset holdings in France only became apparent starting in the 1990s with the crisis of the welfare state. French households increased their life-insurance holdings considerably as a consequence (see chapter 2). In the Netherlands, on the other hand, the influence of its pension system is reflected in the relatively limited amount of life-insurance holdings. Discussions over the sustainability of the Dutch pension system are a more recent phenomena.

As in chapter 5, norms and the relative bargaining position of financial intermediaries and households were generally in accordance with each other in France, although a number of exceptions can be discerned for the Netherlands. Collusion in the Netherlands was allowed early on (although for a specific subset of products) which appears inconsistent with normative views that prescribe a competitive market environment. Moreover, concentration of the Dutch financial sector was deemed acceptable so as to avoid foreign take-over. The interests of the Dutch financial industry thus appear to have prevailed over normative considerations.

Normative considerations and the relative bargaining position of financial intermediaries also played their part in the dynamics surrounding the French and Dutch product portfolio. First, normative considerations left their mark at the institutional level of governance. In France, regulation and fiscality were often welldefined, leaving little room for innovation on its basis. In the Netherlands, on the other hand, the regulator often adopted ill-defined terminology and requirements for fiscal benefits, or introduced a variety of exemptions on existing requirements. Together, this provided a relatively sound basis for financial innovation in the Netherlands. Second, both normative considerations and the relative bargaining power of the financial industry meant a different degree of consumer protection in both nations. Normative considerations in France prescribed extensive consumer protection, where the strong bargaining power of the French consumer only strengthened this practice. In the Netherlands, on the other hand, self-reliance played a more important role in limiting consumer protection, while the strong bargaining position of the Dutch financial industry also contributed in this regard. In short, it proved risky for French financial intermediaries to transfer risk to the household balance sheet, whereas this was certainly not the case for the Netherlands.

Differences in the innovative capacity of the French and Dutch financial system both have their advantages and disadvantages. The French financial system is relatively conservative in nature and offers products of relatively low risk. On the other hand, the innovative capacity of the French financial system appears much more limited, and much of the initiative in this regard comes from the French state. The Dutch financial system, on the other hand, shows a remarkable capacity to innovate and bring new products on the market which partially caters for the evolution of household financial demand. On the other hand, many of these financial products appear relatively risky and opaque in nature, as the affairs surrounding

universal life-insurance and equity lease highlight.

European regulation appears to have contributed to a degree of convergence on several occasions. For France, the forced generalization of the Livret A in 2009 is an example in this regard, although it should be noted that the way in which the collected funds are employed remain subject to regulation. On the other hand, the French savings market now is more of a level playing field. In the Netherlands, the 2007 Markets in Financial Instruments Directive introduced more stringent information requirements, making a repeat of the gravest market excesses of the 1990s difficult. Still, personal accountability remains an important feature of the Dutch legislative system, whereas the responsibility of the financial intermediary is stressed more in France. Similarly, important differences in the implementation of (European) legislation are likely to persist, providing French intermediaries with more limited opportunity to interpret regulation, as opposed to the Dutch case.

As was the case for chapter 5, the current chapter underlines the utility of the analytical framework in analysing the evolution of the financial service provision to households over time. In particular, the framework places the analysis in the broader institutional context, incorporating insights from the cultural and political schools in the literature, as well as the incentives that derive from the system of social security. Moreover, the current analysis from a household perspective also contributes to our understanding of French and Dutch financial system dynamics, or the evolution of systems of retail finance more specifically.

#### 6.5 Conclusion

In this chapter I analyse the historical evolution of French and Dutch household financial assets between 1960s and the early 2000s. The current chapter makes the case that norms on the required degree of government intervention and the relative bargaining position of the banking sector lent a considerable degree of persistence to the evolution of the evolution of the financial service provision to households over time. The organization of the pension system plays a more limited role as compared to chapter 5, however. The rise in French life-insurance holdings in response to the crisis of the welfare state in the early 1990s appears the exception to this.

These findings hold a variety of implications. First, an understanding of cross-country differences in household financial holdings necessitates an analysis which places these practices in the broader institutional and historical context, including normative considerations, the political economy and the pension system. The historical dimension in particular proves to be valuable because it allows one to unearth sources of persistence that would otherwise not come to the fore.

Second, there appears to be a trade-off between innovation in retail financial products on the one hand, and the potential for financial abuse on the other. The French financial system appears relatively conservative and many of the innovations and changes that were introduced over the past decades in fact originate in state action. Although this results in relatively safe financial practices, the potential for French households to make use of innovative financial products and services is relatively limited. In the Netherlands, on the other hand, financial innovation

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appears a constant factor, with a variety of life-insurance and investment-related products brought on the market that benefit from (potentially) high returns due to risk-taking and fiscal benefits. As the Dutch experience shows, particularly for the period of the 1990s, product complexity often also resulted in heightened risks and damage for the consumer. Future research on this trade-off, also in light of prevailing normative stances, should address such a trade-off in greater detail.

Third, these findings hold implications for the ongoing quest of European financial integration. In particular, a variety of policy initiatives was undertaken over the past decades to foster the integration of European systems of retail finance. Typically, such policies imply the introduction of a new set of legislation in the national setting with the idea that this will necessarily result in the gradual convergence of national retail finance practices. The current paper shows that a more holistic approach to household financial behaviour is required for an understanding of the evolution of household financial holdings.

## Chapter 7

## Conclusion

#### 7.1 Contributions

My dissertation studies the evolution of financial services provided to the households sector in France and the Netherlands between 1960 and 2000. To this end I employ two main approaches. Chapter 2 sets the stage and presents the dataset which describes the evolution of the French and Dutch household portfolio from the 1960s until today. Chapter 3 employs the aforementioned dataset and estimates wealth and interest rate elasticities for the French and Dutch household portfolio by means of a portfolio model. The analysis uncovers a considerable change in these elasticities after the 1990s for the case of France, which seems to point at sizeable shift in the French institutional setting. The Dutch institutional setting appears relatively stable instead.

Chapter 4 through 6 take a more analytical approach and seek to unearth the factors that contribute to the historical evolution of the financial service provision to households. To this end, chapter 4 presents an analytical framework which provides the necessary structure to the existing literature in order to execute such an analysis. Chapter 5 and 6 consequentially study the way in which French and Dutch households finance the purchase of a house and the evolution of household financial assets, respectively.

The contribution of my dissertation is fourfold. First, I make the case for a functional analysis of the financial service provision to households, and financial systems more generally, both across space and time. Second, I develop an analytical framework that brings together insights from various strands of literature. This framework thereby facilitates the study of the evolution of the financial service provision to households. Third, the application of this framework yields insights into the factors that account for the evolution of the financial service provision to households in both nations. Fourth, the insights on how the financial service provision to households evolves hold implications for the process of European financial integration. I discuss these contributions in greater detail below.

#### 7.1.1 Functional equivalence

My first contribution relates to the adoption of a functional perspective on financial intermediation after Merton and Bodie (1995). A functional perspective on financial intermediation explicitly allows for functional equivalence of different financial services and intermediaries from the household perspective. My dissertation shows that functional equivalence is of importance both across time and space.

Functional equivalence across space takes a central position in chapter 2. French and Dutch households employ different financial means to ensure a smooth path of life-time consumption. Where the system of social security in the Netherlands ensures sizeable and mandatory pension savings, French households cannot and do not rely on the limited PAYG pension system present in France. Instead, as is also emphasized in chapter 5 and 6, French households make use of housing wealth and life-insurance products to supplement the public PAYG provisions. In the Netherlands, on the other hand, there is relatively limited appetite and possibility to build up alternative forms of wealth, which is reflected in only limited amount of life-insurance and equity holdings (chapter 6). Moreover, as argued for in chapter 5, high levels of forced pension savings depress the ability of Dutch consumers to consume today. To off-set this effect, Dutch households rely on high levels of mortgage debt to sustain a more smooth level of consumption throughout their working life.

Functional equivalence across time takes a central position in chapter 3 with the estimation of a portfolio model. In particular, the model allows for substitution effects between different type of assets. Life-insurance and housing wealth, in particular, appear to act as substitutes in the context of the French and Dutch household portfolio throughout the period under consideration. The same holds for pension assets and housing wealth for Dutch households, which is consistent with mortgage debt as a means to offset high pension premiums. In chapter 6, substitution effects play a role in France on two occasions. First, there is the rise of money market mutual funds and the continued strict regulation of the savings market in the 1970s. Second, the rise of life-insurance holdings in the 1990s can be explained by falling confidence in the ability of the French welfare state to effectively smooth life-time consumption.

#### 7.1.2 Understanding the evolution of retail finance

A second contribution of the dissertation is the introduction of an analytical framework in chapter 4, which incorporates insights from various strands of the literature in a single framework of analysis. Chapter 4 starts out with the observation that the various strands of literature on the evolution of financial systems through time remain heavily entrenched; while all three strands of literature – the cultural, legal and political economy school – have made important contributions to our understanding of how financial systems change through time, insights from each of these schools are only rarely employed outside the scope of each of these schools. This renders a comparative and evolutionary analysis of financial systems difficult as it remains unclear how these three explanatory models effectively relate to each other.

The analytical framework of chapter 4 builds on the seminal work by Williamson (2000) who introduces a hierarchy of institutions. This hierarchy of institutions provides structure to the various explanatory models that can be found in the literature. Three structural features of the institutional framework stand out in this regard. First, the bargaining process over regulatory change is not only conditioned by vested interests – as is the main proposition from the political economy school – but also by informal institutions – which represents the cultural school. The formulation of policy is thus not only the outcome of the relative bargaining power of different interest groups in society, but also depends on existing norms on financial conduct.

Second, the composition of household wealth not only conditions household vested interests but also affects household demand for financial services – in line with the aforementioned functional approach. In particular, household wealth positions built up in the past condition today's demand for financial services. A prime example, in this regard, is the presence of a well-funded capital funded pension system, which depresses household demand for functionally equivalent products such as life-insurance products in the Netherlands.

Third, the analytical framework predicts that institutional dynamics are path dependent for two reasons. First, higher level institutions – including informal and formal institutions – tend to change relatively slow over time due to the presence of setup costs, learning and network effects. Because higher level institutions condition lower-level institutions, including market exchange and financial structure, this renders institutional dynamics path dependent. Second, the relative stability of household wealth positions at the macroeconomic level also contributes to path dependent institution dynamics. Household wealth positions at a macroeconomic level show relatively little dynamics because wealth positions built up in the past may be relatively difficult to unwind. Because such household wealth positions condition both household interests in the bargaining process over regulatory change, as well as household demand for financial services (see above), the relative stability of household wealth positions contributes to a path dependent institutional evolution through time as well.

#### 7.1.3 Culture, politics and life-time consumption smoothing

"Que faut-il faire pour vous aider?" asked Colbert.

"Nous laisser faire" answered Legendre.

Attributed to the French merchant Legendre adressing French finance minister Colbert in 1680.

A third contribution of my dissertation is directly derived from the application of the analytical framework in chapter 4 through 6. In particular, the impact of cultural, political and functional considerations on the evolution of French and Dutch financial intermediation to households can be assessed.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Insights from the law and finance literature have largely been discredited and are therefore disregarded here; see chapter 4.

With regard to the cultural dimension, there appear to be a number of important differences between the French and Dutch setting. First, the regulatory attitude of the French state is dirigiste throughout the period under consideration, which expresses itself in far-reaching state-control over market-based processes. In this regard, the French state views the French financial system more a as a policy tool, rather than a free market. In the Netherlands, on the other hand, norms on market-based processes are quite different. The Dutch state considers it its responsibility to set the conditions in such a way that the market can function well as this is expected to provide an optimal allocation of capital. Competition and a level playing field appear particularly important in this regard.

A second and related cultural dimension is the degree to which French and Dutch households receive protection while they engage in financial transactions. French households receive a considerable degree of protection while French financial intermediaries are responsible for household financial "mistakes". In the Netherlands, the state seeks to limit its interference instead. If things go awry, however, it is the household itself that has to deal with the consequences.

A third product of these cultural dimensions is the implementation of legislation in both nations. When the French state introduces regulation the specific conditions are often well-defined, leaving little room for interpretation. Innovation on the basis of fiscal incentives is thereby more limited. The Dutch regulator instead tends to keep free choice in mind when it introduces fiscal advantages or regulated products. Fiscal advantages in the Netherlands can thereby by exploited in a variety of ways and provide fertile breeding ground for financial innovation.

With regard to the political economy dimension, the relative bargaining position of the financial industry vis-a-vis the household sector is particularly relevant for institutional dynamics in both nations. French (private) financial institutions hold a relatively poor bargaining position when it comes to policy formulation. In particular, the French government often gave preference to policy interventions that served its own goals (the French financial system as a policy tool) over the demand and wishes of the French financial system; pleas by the French financial system were in several instances disregarded. Moreover, household interest often prevailed over the interests of the financial industry in formation of regulation. In the Netherlands, on the other hand, interests of the banking sector were often honoured. This can be seen in a preference for self-regulation whereby the financial industry oversaw its own activities, as well as the relatively poor protection of household interests in case of disputes.

Considering the connection between cultural factors and the relative bargaining position of households and the financial industry, these two were generally in accordance with each other in France. Indeed, informal institutions prescribed strong protection of consumers when engaged in financial exchange, while the bargaining position of French households was strong at the same time. Both factors thus point at similar policy interventions. In the Netherlands, on the other hand, norms on market-based processes sometimes clashed with the interests of the financial industry: while such norms prescribed legislation that ensured sufficient levels of competition, the Dutch financial industry on several occasions managed to steer the regulatory process towards one where collusion and market concentration

were allowed to rise.

With regards to functional considerations, the organization of the pension system appears a constant factor in guiding household demand for financial services (see above). Depending on perspective, the organization of the French and Dutch pension system is not necessarily consistent with existing norms of the degree of government interference in the national economy. In France, the organization of the PAYG pension system is largely determined by the state, but at the same time demands a considerable degree of self-reliance from the side of households to ensure a smooth path of life-time consumption. In the Netherlands, on the other hand, the management of a pension fund is largely left to representatives of employers and employees (unions), while household financial behaviour is at the same time limited to a considerable extent by this forced savings regime. If anything, French self-reliance and Dutch paternalism in the context of both pension systems appear inconsistent with existing norms on the degree to which market-based processes should be conditioned.

Another perspective, which is consistent with a political economy view, is that these pension systems are highly persistent due to the associated adjustment costs. Vested interests are likely to be particularly important in this regard, as households 1) hold claims on the existing institutional constellation and 2) have adjusted their life-time consumption pattern in accordance with these claims. Consider, for example, the current discussion over pension reforms in the Netherlands, where an adjustment of the pension premium payment schematics is associated with adjustment costs of up to a 100 billion euro (SER, 2015), although these costs can be reclaimed from future generations who benefit form this policy adjustment (Lever et al., 2017). In sum, the organization of the pension system is largely dependent on the institutional setting during its installation, and can normally only be adjusted marginally at a later point in time.

It should be noted that the above discussion not only holds implications for the evolution of the financial service provision to households over time, but also for dynamics in the overall financial system. In particular, the aforementioned cultural and political consideration affect the bargaining process over institutional change, and thereby also the regulatory and supervisory setting in which the broader financial system operates. The organization of the pension system, on the other hand, holds implications for the structure of the financial system. In particular, a capital funded pension system can be expected to crowd out service providers that offer similar financial functions such as a life-insurers.

### 7.1.4 European financial integration

A fourth contribution of the dissertation relates to the process of European financial integration. A number of local particularities originating in cultural and political institutions were somewhat weakened due to the introduction of European legislation. First, consider the local supervisory approach in France and the Netherlands. In France, the supervisor kept close oversight over financial practices of French financial intermediaries, whereas the Dutch practised an

approach of self-regulation. The introduction of banking union in 2012 meant that the link between supervisor and supervised institution was largely broken at the national level for large financial institutions, leaving less room for political control. Second, requirements on information provision were harmonized in 2007 with the introduction of the Markets in Financial Instruments Directive. Financial malpractices, which were particularly present in the Netherlands of the 1990s, became more difficult to execute as a result, as consumers became able to make more informed decisions. Third, European legislation meant the end to a variety of French monopolies and practices of collusion in the Netherlands. Indeed, European policy sought to facilitate a level playing field for all players within the local market. The introduction of the 1989 Second Banking Directive also played a key role in this regard with the introduction of the principle of home country control.

However, whether these (and other) regulatory innovations have promoted integration of systems of retail finance is not immediately clear. The European Central Bank defines full financial integration as a situation in which "all potential market participants with the same relevant characteristics [..] 1) face a single set of rules when they decide to deal with those financial instruments and/or services; 2) have equal access to the above-mentioned set of financial instruments and/or services; and 3) are treated equally when they are active in the market" (ECB, 2018). This definition of full financial integration and the regulatory approach to achieve financial integration implies that a single set of rules would necessarily result in convergence of financial practices at the local level as well. This need not be the case, however, for two reasons.

First, local interpretations and implementations of European directives are conditional on cultural and political economy type of considerations. The case of the Second Banking Directive in chapter 4, for example, shows that political economy considerations play their part in the translation of a European directive. For example, fear of foreign entry meant the end to the Dutch structure policy, which ensured a competitive environment in Dutch banking up to that point. Bargaining power of Dutch banks thus proved decisive for the eventual effects on the competitive setting in the Dutch banking landscape.

Second, the current dissertation makes the case for a close connection between the system of social security and household financial demand for financial services (see above). For the integration of systems of retail finance this implies that if we seek to bring about full financial integration and equal availability of financial services across different national markets, the system of social security cannot be left out of the equation. A degree of convergence in systems of social security appears to be a precondition for further financial integration in the European Union.

### 7.2 Limitations and future research opportunities

Where the current case-study can be expected to hold sufficient levels of internal validity, external validity is potentially more problematic given that only two cases are considered in my dissertation. In this regard, a trade-off between scope and depth of the study can be discerned. The more countries one incorporates, the less

in depth the study will be, while generalizing one's results becomes more difficult. The results of this research should therefore be seen as a first attempt at unravelling the determinants of the evolution of the financial service provision to households. The results of this dissertation can thereby be regarded as hypotheses that should be tested across a broader set of nations. Further comparative research opportunities lie ahead in this regard.

Two characteristics of the main database on the historical evolution of the French and Dutch household balance sheet also necessitate caution. First, the macroeconomic nature of the dataset obfuscates within-country variation in asset holdings. The distribution of wealth may, for example, be more or less unequal, not to speak of regional variations. Although such considerations were treated whenever possible in the individual chapters, historical data was often scarce and limited an effective assessment.

A second characteristics of the main database that necessitates caution relates to the way in which claims on a national pension system are incorporated. Claims on pension funds are dependent on net present value calculations and thereby sensitive to changes in interest rates. Moreover, as the recent period in the Netherlands shows, such pension claims are sometimes readily adjusted if pension reserves fall below some predetermined minimum level. One take is to regard them as deferred salary payments (van Bavel, 2014), but this would not do justice to the incentives that households derive from these future claims in the current analysis. Similar problems arise with regards to PAYG pension provisions, which are also difficult to represent on the household balance sheet but affect household incentives as well. Replacement rates gave some insight in the scope of the French and Dutch pension system.

The exclusive focus on the household sector could be coined as another limitation to the current dissertation. Although the relative bargaining position of the household sector vis-a-vis the financial sector is explicitly taken into account, the role of the non-financial sector in institutional change is disregarded. The perspective of the non-financial sector would bring about a number of interesting research opportunities. First, this line of research would imply greater emphasis on the financing model of an economy. As already became evident from the discussions in chapter 5 and 6, views on the financing model of the economy display considerable differences for the French and Dutch setting. Second, this line of research emphasizes different financial functions. Consider, for example, how problems of information asymmetry are resolved or how risk is managed. In the context of the French and Dutch setting, the close connection between public French financial and non-financial corporations would be of particular interest.

Furthermore, it would be of interest to study the financial function of payment systems. Where much of the discussion in the current dissertation revolved around financial products that allow for the transfer of economic resources through time – in combination with pooling and risk management, payment systems are still unexplored. Network effects are expected to play a sizeable role in the evolution of payment systems, granting greater potential for path dependent processes. The integration of European payment systems over the recent decade would be of particular interest in this context, for it provides another illustration of the tensions

that may arise between European legislative innovation and local practices.

Finally, my dissertation raises questions about the welfare gains of European financial integration. From a household perspective, the benefits of European financial integration include the elimination of price-differences of financial service provision across the European Union, as well as improved opportunities for diversification. On the other hand, the preconditions for European financial integration require institutional convergence (Baele et al., 2004) which goes against local preferences that originate in normative views, the pension system, and the composition of (household) wealth more generally. Future research should consider the relationship between the process of European financial integration and local institutional preferences in greater detail in order to arrive at an improved understanding of the overall welfare effects.

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# Appendix A

# Data sources

#### A.1 France

Table A.1: Data sources household assets and mortgage debt France

Variable	Source
Currency	1960-1976: Annuaire statistique de la France; 1977-1994: BdF;
	1995-2017: Eurostat.
Deposits	1963-1976: Annuaire statistique de la France; 1977-1994: BdF;
	1995-2017: Eurostat.
Savings	Sum of the Livret A, Livret Bancaire, CEL, PEL, LEP,
	CODEVI/LDD, livret jeune and PEL.
Livret A	1963-1968: Annuaire Statistique de la France; 1969-1992:
	Rapport Annuel du Conseil National du Crédit; 1993-2018:
	BdF.
Livret Bancaire	1963-1968: Annuaire Statistique de la France; 1969-1992:
	Rapport Annuel du Conseil National du Crédit; 1993-2018:
	BdF.
CEL	1965-1968: Annuaire Statistique de la France; 1969-1992:
	Rapport Annuel du Conseil National du Crédit; 1993-2018:
	BdF.
$\operatorname{PEL}$	1969-1992: Rapport Annuel du Conseil National du Crédit;
	1993-2018: BdF.
LEP	1982-1992: Rapport Annuel du Conseil National du Crédit;
	1993-2018: BdF.
CODEVI/LDD	1983-1992: Rapport Annuel du Conseil National du Crédit;
	1993-2018: BdF.

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Variable	Source
Bonds	1963-1976: Annuaire Statistique de la France. The growth rate
	between 1976 and 1977 was derived from the growth rate of the
	French bond market (Bozio, 2002); 1977-1994: BdF; 1995-2017:
	Eurostat.
Equity	1963-1976: growth rates of stock market capitalization from
	Bozio (2002); 1977-1994: BdF; 1995-2017: Eurostat.
Life Insurance	Sum of life-insurance holdings and the Plan d'épargne
	Populaire. Life insurance holdings: No information prior to
	1977; 1977-1994: BdF; 1995-2018: Eurostat.
PEP	1990-1992: Rapport Annuel du Conseil National du Crédit;
	1993-2018: BdF.
Housing wealth	See section A.3.
Mortgage debt	1960-1992: Jordà et al. (2016); 1993-2018: Banque de France.

Table A.2: Data sources returns and costs of assets and liabilities France

Variable	Source
Money market	1945-1999: Levy-Garboua and Éric Monnet (2016); 2000-2018: DNB (3-month Euribor).
M1	Fitted values of a regression of the return on M1 (overnight deposits) over the period of 2003-2018 on the money market rate: $r_{M1} = \beta_0 + \beta_1 * MM$ .
Overnight de- posits	2003-2018: ECB.
Livret A	1962-2018: Banque de France.
Livret Bancaire	1962-1986: Rapport annuel Conseil National du Crédit; 1987-
	2006: Annuaire statistique de la France; 2007-2018: Banque de
	France.
CEL	1962-2018: Banque de France.
PEL	1962-2018: Banque de France.
LEP	1962-2018: Banque de France.
CODEVI/LDD	Rate livret A.
Bonds	Total return index. 1960-2015: Jordà et al. (2019); 2016-2018: fitted values of a regression of the total return index of Jordà et al. (2019) on a total return index of bonds from Datastream (1986-2018): $r_{Bonds-Jorda} = \beta_0 + \beta_1 * r_{Bonds-Datastream}$ . R-squared 88 percent.
Capital market	1945-2015: Levy-Garboua and Éric Monnet (2016); 2016-2018: Banque de France.

A.1. FRANCE

Variable	Source
Equity	Total return index. 1960-2015: Jordà et al. (2019); 2016-2018: fitted values of a regression of the total return index of Jordà et al. (2019) on a total return index of equity from Datastream (1970-2018): $r_{Equity-Jorda} = \beta_0 + \beta_1 * r_{Equity-Datastream}$ . R-squared 96 percent.
Life-insurance	Bonds. See chapter 2.
PEP	Bond return.
Housing wealth	Weighted return (cost) of housing assets and mortgages.
Housing assets	Sum of owner's equivalent rent and housing price increases.
Owners equival-	Ratio of a rent and price index multiplied by 2.8 after Jordà
ent rent	et al. (2017) and MSCI (2016).
Rent index	1970-2015: CGPC (2018); 2016-2018: INSEE
Mortgage rate	1960-1967: fitted values of a regression of the mortgage rate on the capital market rate between 1968 and 2018 $rMortgage = \beta_0 + \beta_1 * rCapitalMarketRate$ ; 1968-1988: Annuaire statistique de la France, average of lower and upper bound mortgage rate; 1989-1990: Rapport annuel Conseil National du Crédit; 1991-1993: Bulletin Trimestriel Annuaire statistique de la France; 2004-2018: ECB, mortgage rate outstanding loans.
Inflation	1956-2017: OECD.

Table A.3: Data sources control variables France

Variable	Source			
sdCAC40	The absolute value of the unexplained variation of a regression of CAC40 index changes on its lag. Regression run on monthly data, where sdCAC40 is the yearly average. CAC40 index from BdF.			
Unemployment	1969-1974: Annuaire statistique de la France; 1975-2017: INSEE.			
Dependency ratio	1946-2017: INSEE.			

### A.2 The Netherlands

Table A.4: Data sources household assets and mortgage debt the Netherlands

Variable	Source
Currency	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
	2017: Eurostat.
Transferable de-	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
posits	2017: Eurostat.
Savings ac-	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
counts	2017: Eurostat.
Equity	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
	2017: Eurostat.
Pension	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
	2017: Eurostat.
Life-insurance	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
	2017: Eurostat.
Bonds	1970-1994: CPB, macroeconomische verkenning 2013; 1995-
	2017: Eurostat.
Housing wealth	See section A.3.
Mortgage debt	1960-2003: Jordà et al. (2016); 2003-2018: DNB.

Table A.5: Data sources returns and costs of assets and liabilities the Netherlands

Variable	Source
Money market	1960-1976: CBS; 1977-2018: DNB.
M1	Fitted values of a regression of the return on M1 (overnight deposits) over the period of 2003-2018 on the money market rate: $r_{M1} = \beta_0 + \beta_1 * MM$ .
Overnight deposits	2003-2018: ECB.
Savings account	1969-1998: CBS Maandstatistiek van het financiewezen (various years), 2 year term account; 1998-2002: DNB statistical bulletin (various years), 2 year term account; 2003-2017: DNB, term accounts smaller or equal to 2 years.
Equity	Total return index. 1960-2015: Jordà et al. (2019); 2016-2018: fitted values of a regression of the total return index of Jordà et al. (2019) on a total return index of equity from Datastream (1988-2018): $r_{Equity-Jorda} = \beta_0 + \beta_1 * r_{Equity-Datastream}$ . R-squared 85 percent.

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Variable	Source
Pension assets	Weighted return of the components of the balance sheet of Dutch pension funds. 1960-1986: De Nederlandsche Bank
	(1987); 1987-2015: CBS. For 2016-2018, 2015 figures are used due to breaks in the data. Components of pension fund balance sheet reported in figure A.1.
Life-insurance	Weighted return of the components of the balance sheet of
	Dutch life-insurers. Weights are from CBS. For 2016-2018, 2015
	figures are used due to breaks in the data. The same holds for
	1970-1974, where the 1975 values are used. Components of
	Life-insurance balance sheet reported in figure A.2.
Bonds	Total return index. 1960-2015: Jordà et al. (2019); 2016-2018:
	Datastream.
Housing wealth	Weighted return (cost) on housing assets and mortgages.
Housing assets	Sum of owner's equivalent rent and housing price increases.
Owner's equival-	Ratio of rent and price index multiplied by 4.4 after Jordà et al.
ent rent	(2017) and MSCI (2016).
Rent index	Product of owner-equivalent rent and index of rent increases.
	1970-2017: CBS.
Mortgages	2003-2018: DNB, new loans; 1945-2002: CBS Statline, new
	loans.
Inflation	1956-2017: OECD.

Table A.6: Data sources control variables

Variable	Source
Unemployment	1969-2018: CBS Statline.
Life expectancy at birth	1970-2016: CBS Statline.
	1070 2016. CDC Statling, fraction of manle and between 40
Fraction of high savers	1970-2016: CBS Statline; fraction of people aged between 40 and 65.
$\operatorname{sdAEX}$	The absolute value of the unexplained variation of a regression
	of AEX index changes on its lag. Regression run on monthly
	data, where sdAEX is the yearly average. AEX data from CBS.

#### A.3 Housing assets

Housing assets are calculated using the following

$$HW_t = P_t * HS_t * DS_t, \tag{A.1}$$

where  $P_t$  is the housing price,  $HS_t$  is housing stock, and  $DS_t$  is the fraction of houses owned by households.

We approximate the housing price over the years by making use of a methodology inspired on Slacalek (2009), and make use of a housing price index which is published for both France and the Netherlands by the BIS. Specifically, we calculate an average house price for 2011 (because this is the last year for which we have figures for both countries), and make use of the price index to calculate the development of the price over time. The average housing price over time is therefore equal to:

$$P_t = PI_t * \left(\frac{HW_{2011}}{HS_{2011}} * \frac{1}{DS_{2011}}\right),\tag{A.2}$$

where  $PI_t$  is a price index and  $HS_{2011}$  is the number of houses in 2011. The figure in brackets is the average housing price in 2011 and, consequently,  $PI_{2011}$  is equal to 1.

Variable	Source
Price index	1945-2012: Knoll et al. (2017); 2013-2017: BIS.
Housing wealth 2011	OECD.
Housing stock	1962-1981: Annuaire statistique de la France (various
	editions), several years linearly interpolated. 1982-
	2018: INSEE.
Tenure	1953-1983: Annuaire Statistique de la France; 1984-

Table A.7: Data sources housing wealth France

Table A.8: Data sources housing wealth The Netherlands

2018: INSEE.

Variable	Source
Price index	1945-2012: Knoll et al. (2017); 2013-2017: BIS.
Housing wealth 2011	OECD.
Housing stock	CBS.
Tenure	1947-2006: Haffner et al. (2009); 2007-2018: CBS.

### A.4 Figures

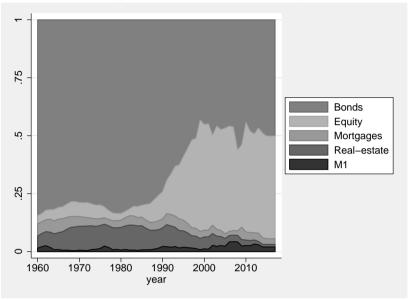
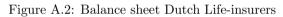
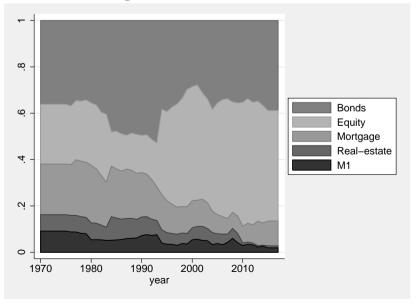


Figure A.1: Balance sheet Dutch pension funds





# Appendix B

# Interviews

Table B.1: Interviews

D. A	Name	Place	Affiliation
Date			
25-10-2016	Bert Jan Tiesinga	Utrecht	Former CFO insurer
23-03-2017	Olivier de Bandt	Paris	Director of research
			ACPR
19-04-2017	Bernard Vorms	Paris	President CNTGI
30-03-2017	Laurent Clerc	Paris	Director Financial Sta-
			bility BdF
05-04-2017	Michel Aglietta	Paris	Professor Paris X
12-04-2017	Olivier Pastré	Paris	Professor Paris 8, former
			banker
15-04-2017	Michel Castel	Paris	Former Director Banque
			de France
19-04-2017	Jean-Pierre Patat	Paris	Former Director General
			Banque de France
21-04-2017	Jean-Michel Charpin	Paris	Inspecteur Général des
			finances honoraire
07-11-2017	Hugo Priemus	Delft	Professor TU Delft
15-11-2017	Arnold Kuijpers	Den Bosch	Former Rabobank em-
			ployee
07-03-2018	Nout Wellink	Wassenaar	Former president DNB
16-04-2018	Tom de Swaan	Amsterdam	Former director DNB
24-04-2018	Dick Harryvan	Bleiswijk	Former ING Direct
			France
04-07-2018	Age Bakker	Bussum	Former director DNB

## Appendix C

# Appendix chapter 3

Table C.1: Unit Root tests France

#### (a) Asset shares

	Wealth	M1	Savings	LI	Equity	$_{ m HW}$	
Dfuller PPerron	$0.72 \\ 0.67$	$0.98 \\ 0.99$	$0.35 \\ 0.39$	$0.54 \\ 0.42$	$0.53 \\ 0.40$	$0.42 \\ 0.27$	

#### (b) Returns

	rWealth	rM1	rSavings	rEquity	rLI	rHW	rHW
Dfuller PPorron	0.00	0.00	0.65	0.51	0.00	0.00	0.11 0.10
PPerron	0.00	0.00	0.57	0.41	0.00	0.00	

#### (c) Control variables

	Unemployment	$dependency\_NL$	$\operatorname{sdCBS}$
Dfuller	0.95	1.00	0.00
PPerron	0.89	1.00	0.00

*Note:* Unit root tests on regression variables. Figures are p-values where H0 is unit root. Both the Dickey-Fuller and Phillips-Perron test include a trend.

Table C.2: Unit Root tests the Netherlands

#### (a) Asset shares

	Wealth	M1	Savings	Equity	Pension	HW
Dfuller	0.83	0.01	0.82	0.48	0.57	0.67
PPerron	0.87	0.01	0.64	0.38	0.46	0.35

#### (b) Returns

	rM1	rSavings	rEquity	rPension	rHW
Dfuller	0.32	0.53	0.00	0.00	0.31
PPerron	0.19	0.37	0.00	0.00	0.19

#### (c) Control variables

	Unemployment	Dependency	$\operatorname{sdAEX}$
Dfuller	0.55	1.00	0.02
PPerron	0.40	1.00	0.02

Note: Unit root tests on regression variables. Figures are p-values where H0 is unit root. Both the Dickey-Fuller and Phillips-Perron test include a trend.

Table C.3: Correlation table France

	rWealth	rM1	rSavings	rEquity	rLI	m rHW	Unemp.	Dep.	$\operatorname{sdCAC}$
rWealth	1.000								
rM1	0.514	1.000							
rSavings	0.515	0.899	1.000						
rEquity	0.785	0.252	0.338	1.000					
$_{ m rLI}$	0.574	0.359	0.468	0.380	1.000				
$_{ m rHW}$	0.292	0.244	-0.018	-0.114	-0.130	1.000			
Unemp.	0.444	0.502	0.675	0.386	0.456	-0.220	1.000		
Dep.	-0.367	-0.309	-0.537	-0.254	-0.367	0.037	-0.828	1.000	
$\operatorname{sdCAC}$	0.327	-0.072	0.080	0.303	0.143	0.080	0.253	-0.346	1.000
			Table C.4:			0.00			
	rM1	rSavings	rEquity	Correlation	table the	Table C.4: Correlation table the Netherlands			1
rM1	1.000			Correlation tak y rPension	table the	e Netherlands	Unei	sdAEX	Dep.
${ m rSavings}$	0.767	1.000		Correlation rPens	table the sion r	Netherlands HW	Unei	sdAEX	Dep.
rEquity	0.200	0.160		Correlation rPens	table the sion r	Netherlands HW	Unei	sdAEX	Dep.
	0 917		1.000	Correlation	table the sion r	Netherlands HW	Unei	sdAEX	Dep.
rPension	0.017	0.248	$1.000 \\ 0.730$	rPens 1.000	table the sion r	Netherlands HW	Unei	sdAEX	Dep.
rPension rHW	0.317 $0.075$	0.248 $-0.141$	1.000 0.730 -0.025	rPens 1.000 0.029	sion r	Netherlands HW .000	Unei	sdAEX	Dep.
rPension rHW Unemp.	0.517	0.248 $-0.141$ $0.494$	1.000 0.730 -0.025 0.478	Correlation  rPens  1.000 0.029 0.428	sion r	Netherlands HW	Unei	sdAEX	Dep.
rPension rHW Unemp. sdAEX	0.517 0.075 0.506 0.233	0.248 -0.141 0.494 0.339	1.000 0.730 -0.025 0.478 0.108	Correlation  y rPens  1.000 0.029 0.428 0.069	sion r	rHW 1.000 -0.204 -0.117	Une:	sdAEX	Dep.

## Nederlandse samenvatting

#### Motivatie en opzet

Financieel gedrag van huishoudens onderging een aanzienlijke transformatie vanaf de jaren 60 in West Europa. Waar in de jaren 50 nog slechts een beperkt deel van alle huishoudens een formele financiële relatie had met een financieel intermediair zou dit in de jaren 60 veranderen met de introductie van het retailbankieren. Vanaf de late jaren 80 werd nog een slag gemaakt met de opkomst van een reeks complexe financiële diensten, waaronder levensverzekeringen, investeringsproducten, hypotheken en een reeks combinaties daarvan. Het verklaren van deze ontwikkelingen is het onderwerp van mijn dissertatie.

De evolutie van de financiële dienstverlening aan huishoudens wordt binnen de literatuur op een aantal manieren geduid. De dominante stromingen in de literatuur richten zich daarbij op cultuur en de politieke economie. Alhoewel beide scholen belangrijke bijdragen hebben gemaakt tot ons begrip, blijft het grotendeels onduidelijk hoe de inzichten van deze verschillende scholen zich tot elkaar verhouden. Een analyse waarin beide facetten aan bod komen is mijn belangrijkste bijdrage.

Om mijn onderzoek naar de evolutie van de financiële dienstverlening aan huishoudens vorm te geven voer ik een vergelijkende studie uit naar de ontwikkelingen in Frankrijk en Nederland vanaf 1960. Frankrijk en Nederland zijn twee interessante casussen omdat 1) er vandaag de dag grote verschillen bestaan tussen het financiële gedrag van huishoudens, 2) beide landen tot de oprichters behoren van de Europese Unie en daarmee onderhevig zijn aan dezelfde Europese richtlijnen en 3) de beleidsattitude (historisch gezien) aanzienlijk verschilt. De jaren 60 zijn gekozen als startpunt aangezien dit de opkomst van het retailbankieren markeert in beide landen.

De dissertatie bestaat uit twee blokken. In het eerste blok voer ik een meer traditionele analyse uit van het Franse en Nederlandse huishoudportfolio. Hoofdstuk 2 presenteert de dataset met daarin de huishoudportfolio's op macroniveau, waarna ik de belangrijkste patronen en verschillen bespreek. Hoofdstuk 3 voert vervolgens een econometrische analyse uit met behulp van een Financial Almost Ideal Demand System (FAIDS) waarmee substitutie en vermogenseffecten geschat worden.

Het tweede blok bouwt voort op het eerste maar neemt een institutionele

<sup>&</sup>lt;sup>1</sup>Een derde stroming die strikt juridisch is, is grotendeels verworpen.

invalshoek. Met een institutionele invalshoek wordt het mogelijk om culturele en politieke elementen in de analyse mee te nemen die op basis van kwantitatieve data alleen moeilijk te duiden zijn. Hoofdstuk 4 presenteert allereerst een analytisch kader waarmee de evolutie van de financiële dienstverlening aan huishoudens kan worden geanalyseerd. In de twee daaropvolgende hoofdstukken pas ik dit analytisch kader toe. Hoofdstuk 5 analyseert de manier waarop huishoudens het kopen van een huis financieren, waarna hoofdstuk 6 de markt voor spaargeld, aandelen en levensverzekeringsproducten onder de loep neemt.

#### Bijdragen

#### Een functioneel perspectief

Mijn dissertatie levert vier bijdragen. De eerste bijdrage bouwt voort op de functionele analyse van financiële systemen van Merton en Bodie (1995). Ik laat zien dat functionele equivalentie tussen verschillende financiële producten en intermediairs van belang is door tijd en ruimte. Financiële equivalentie door de ruimte staat centraal in hoofdstuk 2 en houdt in dat Franse en Nederlandse huishoudens verschillende financiële oplossingen gebruiken om consumptiefluctuaties te verkleinen. Zo maken Nederlandse huishoudens gebruik van semi-verplichte pensioenbesparingen terwijl Franse huishoudens terugvallen op private besparingen – veelal in de vorm van levensverzekeringen en vermogen in huizen. Functionele equivalentie door de tijd staat centraal in het portfoliomodel van hoofdstuk 3. Hier laat ik zien dat er substitutie-effecten bestaan tussen levensverzekeringen en huizenvermogen in beide landen. Hetzelfde geldt voor pensioen en huizenvermogen in Nederland wat in lijn is met schuld als compensatie voor hoge pensioenpremies.

#### Analytisch kader...

Een tweede bijdrage vloeit voort uit de toepassing van het analytisch kader in hoofdstuk 4. Hoofdstuk 4 begint met de observatie dat de twee dominante stromingen binnen de literatuur – cultuur en politieke economie – sterk naar binnen zijn gekeerd: inzichten van de twee stromingen worden zelden gecombineerd. Om mijn analyse vorm te geven maak ik gebruik van het werk van Williamson (2000) die een hiërarchie van instituties introduceert. Deze hiërarchie geeft structuur aan de verschillende verklarende modellen en faciliteert daarmee een analyse die de inzichten van beide stromingen binnen de literatuur in acht neemt.

Drie structurele kenmerken van het resulterende analytisch kader vallen op. Allereerst wordt het onderhandelingsproces over beleidsverandering niet alleen geconditioneerd door gevestigde belangen – de belangrijkste thesis van de politieke economie school – maar ook door culturele factoren, waaronder normen, waarden en verwachtingen.

Een tweede kenmerk is dat de vermogenspositie van huishoudens niet alleen van invloed is op de positie van huishoudens in het onderhandelingsproces over beleidsverandering, maar ook op haar vraag naar financiële diensten. Deze laatste observatie is consistent met een functionele kijk op het financiële systeem.

Een derde kenmerk is de padafhankelijke ontwikkeling van het financiële systeem. Deze padafhankelijkheid komt voort uit twee factoren. Ten eerste veranderen informele en formele instituties relatief langzaam vanwege adoptiekosten, leereffecten en netwerkeffecten. Aangezien deze informele en formele instituties de organisatie van een financiële systeem conditioneren is ook de ontwikkeling van dit systeem padafhankelijk. Een tweede reden voor deze padafhankelijke ontwikkeling van het financieel systeem is de relatieve stabiliteit van de huishoudbalans op macroeconomisch niveau. Deze stabiliteit komt voort uit het bestaan van aanzienlijke kosten bij de verkoop van bepaalde financiële producten (of de onmogelijkheid daarvan). Het gevolg is dat evolutie van de belangen van huishoudens en hun vraag naar financiële diensten gekenmerkt wordt door padafhankelijkheid. Hetzelfde geldt daarmee voor het financiële systeem.

#### ... en haar toepassing

Een derde bijdrage van mijn dissertatie houdt verband met de toepassing van mijn analytisch kader in hoofdstuk 4 tot en met 6. Op cultureel vlak is er sprake van een aantal belangrijke verschillen tussen Frankrijk en Nederland. Allereerst is de Franse beleidsaanpak gedurende de gehele periode dirigistisch terwijl in Nederland het marktdenken sterk is ontwikkeld. In Frankrijk uit zich dit in verregaand ingrijpen van de overheid om haar eigen doelen na te streven, terwijl in Nederland competitie en efficiëntie hoog in het vaandel staan. Ten tweede genieten Franse huishoudens in sterke mate bescherming tegen financiële missers, terwijl Nederlandse huishoudens grotendeels zelf verantwoordelijk worden geacht voor een financiële miskleun. Ten derde verschilt de beleidsimplementatie. In Frankrijk worden regels duidelijk gespecificeerd terwijl er in Nederland juist ruimte wordt gelaten voor een ruime interpretatie.

Op het gebied van de politieke economie laat ik zien dat de onderhandelingspositie van de financiële sector relatief zwak is in Frankrijk terwijl deze sterk is in Nederland. Tegelijkertijd is de onderhandelingspositie van de huishoudsector sterk in Frankrijk en zwak in Nederland. De belangen van de Franse huishoudens en de Nederlandse financiële sector zijn daarmee goed gewaarborgd.

In Frankrijk zijn culturele en politieke factoren daarmee grotendeels in overeenstemming. Culturele normen schrijven het beschermen van de consument tegen ongunstige marktomstandigheden voor, terwijl de onderhandelingspositie van consumenten sterk is. In Nederland waren culturele en politieke factoren niet altijd in overeenstemming. Marktwerking kwam bijvoorbeeld af en toe in botsing met de sterke onderhandelingspositie van het financiële systeem. Op verschillende momenten wist het Nederlandse financiële systeem het beleidsproces zo bij te sturen dat dat ten nadele was van de concurrentie. De politieke thesis won het in dergelijke gevallen dus van de culturele.

#### Europese financiële integratie

Een vierde bijdrage houdt verband met de queeste naar Europese financiële integratie. Allereerst kan gesteld worden dat een aantal van de Franse en

Nederlandse culturele en politieke kenmerken zijn afgezwakt als gevolg van een reeks Europese beleidsmaatregelen. Denk hierbij bijvoorbeeld aan lokale toezichtspraktijken die met de introductie van de Europese Bankenunie in 2012 grotendeels zijn overgeheveld naar het Europese niveau. Een ander voorbeeld is de introductie van het *Markets in Financial Instruments Directive* die de informatievoorziening bij de aanschaf van een complex financieel product in Europa harmoniseerde.

Het blijft echter de vraag of deze initiatieven ook daadwerkelijk zullen leiden tot de integratie van Europese financiële systemen. Lokale interpretaties van Europese wetgeving blijven immers bestaan waarmee culturele en politieke factoren hun rol behouden. Daarnaast bestaan er grote verschillen in de samenstelling van het huishoudportfolio waarmee convergentie in de belangen van Franse en Nederlandse huishoudens en hun vraag naar financiële diensten naar verwachting uitblijft. Een zekere mate van convergentie op het vlak van sociale zekerheid lijkt daarmee een voorwaarde voor verdere financiële integratie binnen de Europese Unie.

### Curriculum Vitae

Tim van der Valk (1987) was born in Utrecht, and obtained his Bachelor and Research Master degree at U.S.E. After receiving his Master degree in 2014, he was consecutively employed as a junior lecturer at U.S.E. and a research assistant at the European Central Bank. In 2015 he started his PhD, during which he did consulting work at the European Central Bank and completed research visits at the Banque de France and De Nederlandsche Bank. As of 2019, he is working as a Lecturer in Finance at U.S.E. and as a Postdoctoral researcher at the department of history working on household financial fragility.

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