The London School of Economics and Political Science

Essays on the Euro and Inequality

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Declaration

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This thesis is dedicated to the memory of
Efthimios Savoulidis and Aristea Papalexatou

Abstract

My thesis investigates the distributional consequences of euro area (EA) membership in the so-called "peripheral" countries (Greece, Spain, Ireland, Italy and Portugal) prior to the eruption of the crisis. I focus on these countries, even though the periphery label hides significant differences among them, because they had to adjust the most to enter to the EA. In the years prior to the introduction of the euro, the dominant narrative was that the delegation of monetary policy to an independent central bank and the fiscal constraints imposed by the Stability and Growth Pact would lock countries into a "golden straitjacket". This would leave no room for democratic politics and redistributive concerns. After the introduction of the euro, the misfit of the ECB's monetary policy rate led to new concerns and discussions of why the euro could be detrimental for inequality, this time due to the creation of bubbles and the increasing financialisation of these economies. The question about potential and actual distributional effects of the euro is addressed by identifying and testing empirically policy relevant channels through which EA membership can affect wealth and income inequality (paper 1) above all the channel of interest rate convergence. Then I study these channels with in-depth studies of comparative country cases. The first follows a most different systems design of Greece and Ireland (paper 2) which tries to explain their increased social spending on pensions, and its distributional consequences, when lower costs of public debt and debt-driven growth created "fiscal space". The other applies a most similar comparative research design of Spain and Italy (paper 3) to examine how EA membership affected wealth inequality through housing and mortgage markets. These comparative case studies identified that the various channels were filtered by domestic institutions, policies and politics. The three papers contribute to a similar conclusion. They do not support the received wisdom that the loss of monetary and fiscal autonomy unduly restrains government's capacity to tackle inequality. My thesis suggests that a crucial explanatory factor for the effect of monetary integration on inequality in countries of the "periphery" is market forces unleashed by the EA. In particular capital movements did not constrain and in some policy areas might even have expanded national governments' degrees of freedom. This then still allowed domestic politics and policies to shape the final distributional outcome in the EA.

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1. Introduction

Inequality has been a major concern among policy makers and academics, especially after the crisis. There is a vast literature, which investigates potential determinants of inequality. The intense academic debate and political interest in economic inequality in recent years is a product of inequality trends themselves: they have been increasing in most countries over the last decades due to the rapid political and economic change, even before the crisis. One of these major changes was the creation of the European Monetary Union between a set of diverse nation states, which is arguably one of the biggest experiments in history. However, the distributional outcome of this monetary regime shift has not been studied systematically, which is somewhat surprising.

This thesis aims to shed light on this rather underexplored link between inequality and currency unification. It specifically asks whether inequality outcomes and European Monetary Union are linked. It focuses on economic inequality (income and wealth). It consists of an attempt to systematically map out and evaluate this connection – a connection of immense relevance to our academic research and beyond. My thesis investigates the distributional consequences of euro area (EA) membership in four of the so-called 'peripheral' countries: Greece, Spain, Ireland, and Italy. This summary term hides significant differences among them as will be discussed later.

The question about potential and actual distributional effects of the euro is addressed by identifying policy relevant channels through which EA membership can affect inequality, above all interest rate convergence. Following this, I investigate these channels using in-depth comparative country case studies. The first one uses a most different systems design approach (Greece and Ireland) and the second one builds on a most similar comparative research design (Spain and Italy). This allows me to investigate how the distributional outcomes of these channels have been filtered through domestic institutions, policies, and politics.

My PhD project consists of three academic papers that contribute in different ways to our understanding of the impact of monetary integration on inequality outcomes. The three papers build on the political economy of monetary integration and on the economics of inequality, using the analytical tools of both disciplines. Each paper has a distinct contribution to the literature and investigates different empirical puzzles.

The theoretical expectations outlined below link monetary integration with income inequality and redistribution (from pre- to post-tax and transfer income) but also with wealth inequality. Thus, the three papers explore links to different inequality concepts. All three papers aim at providing insights about how the monetary regime change interacted with domestic institutional domains in affecting the distribution of income and wealth in the EA 'periphery'.

Yet, the three papers contribute to a similar conclusion, which goes against the established wisdom in the field. The debate on the euro and inequality has so far been dominated by the idea that the loss of monetary and fiscal autonomy would restrain a government's options for redistributive policies, leading to negative consequences for inequality outcomes. However, the inequality outcomes are too diverse and cannot support this generalisation. On the contrary, this thesis studies the implications of massive capital flows for inequality, which have been overlooked in the euro inequality discussion until recently. The thesis sustains that monetary integration for the countries of the 'periphery' unleashed market forces that did not constrain– and in some policy areas even expanded – national governments' degrees of freedom. This allowed domestic institutions and policies to shape the final distributional outcome in the EA context by filtering the supranational forces and often mitigating their effects.

The Introduction – together with the Conclusion – provides a contextual framework for the three papers. More specifically, the introduction starts by setting out the wider context of this thesis. It continues by exploring the predominant narratives and theoretical concerns, which linked monetary integration and inequality outcomes in the literature twenty years ago. This was the state of the art until recently. Then, it reports the inequality trends between 1995 and 2008. Using the insights from this empirical overview, it explains the reasons of the case selection. The next section identifies other channels, which connect EA and inequality, based on the most recent literature of monetary integration and the Eurozone crisis, explaining the shift in the debate and reviewing the most relevant contributions. The sixth section presents the theoretical stance of this thesis and discusses how these recent political economy contributions provide a sound theoretical and empirical basis on which this thesis builds on. At the same time, it underlines what seems to be missing from the literature, and what this thesis aims to add to the euro inequality debate. The last section provides an overview of the three papers, followed by a discussion and an outlook.

1.1 The wider context of this study: inequality, democracy, and monetary integration

While inequality is a global phenomenon, much of the academic literature focuses on the increase of wealth and income inequality in the US. One of the reasons is that inequality has increased massively on the other side of the Atlantic. The second reason is that despite differences among European countries, the European social model is still considered as being dynamic in general, with distinctive European welfare reform process, which is deeply embedded in the notions of equity and solidarity (Featherstone, 2004). EMU has challenged all these- European monetary integration has been considered to be largely shaped by business interests- leaving labour interests to member states (Hemerijck and Ferrera, 2004). This question of whether and how EA membership is associated with income and wealth inequality outcomes is very relevant for an older but ongoing debate. Do global forces undermine the autonomy of governments in policy-making?

In *Capital in the Twenty-First Century*, Thomas Piketty suggested that the increasing inequality trends are actually endemic to capitalism. Rising inequality can be attributed to the fact that r (the rate of return to capital) over the long term is systematically larger than g (the overall rate of growth), attributing this global increase to the fact that capitalism consists a "force for divergence". While his analysis is based on long-term historical data, recently the one-size-fits-all 'neoliberal' version of market capitalism is considered responsible by numerous scholars for the excessive gains at the top of the distribution (Schmidt, 2002). Indeed, world leading trade economists, such as Krugman (2007) argued that that globalisation has a significant impact on the income distribution in the United States. In contrast to Piketty (2014), Krugman considers trade and other channels, such as foreign direct investment (FDI) and offshore activities, as the major drivers. Piketty is singular in identifying the level of interest rates as a secular driver of inequality trends, which is important for my study.

Contributions that are more recent also suggest that the exponential growth of financial markets had a significant impact on economy and society, leading to an increase of income disparities (Van der zwan, 2014). The scholars who support that shareholder value is the main driver of corporate behaviour, suggest that the expansion of the financial sector redirected economic resources from production-based sector to the

financial sector. This increased the income and wealth of financial workers and affluent households, at the expense of poorer households and non-financial workers (Lin and Tomaskovic–Devey, 2013). At the same time, other scholars who perceive financialisation as a new regime of accumulation, suggest that this has empowered individuals that receive their income form financial assets. Yet, this happened at the expense of wage earners, which increased their indebtedness to keep up with consumption (Stockhammer, 2012). High debt levels create an unstable system and when crisis erupts indebted households can go underwater- which will increase wealth and income disparities (Lapavitsas, 2013).

The literature has recognized, however, that these trends are not overriding specific institutional arrangements but are filtered by them. While these un-equalizing economic forces are perceived to be endemic to capitalism, and globalisation and financialisation affect the macro labour share and mainly top incomes, their final impact on the distribution of disposable income depends on institutional factors. These institutional factors are idiosyncratic and country specific and may mitigate or reinforce this effect (Bourguignon, 2017). The most direct impact on inequality is stemming from the policies that directly redistribute income through taxes and transfers and (Bourguignon, 2017).

Other country specific policies also influence the income distribution. Labour market institutions have been the focus of scholarly attention. Even the OECD, a supranational organisation always in search of 'best practices', has found that minimum wages can increase the lower tail inequality of earnings, reversing its position that they would always lead to higher unemployment and thus hurt those they are meant to serve (OECD, 2011). Wage setting institutions are also important in explaining pay dispersion. Other scholars have emphasized the importance of trade unions and the share of the labour force that is covered by collective bargaining agreements for achieving more equitable distributions of income (Wallerstein, 1999; Rueda and Pontusson, 2000). In general, policy choices, regulations, and institutions are very important in shaping the income distribution.

At the same time, domestic institutions are influenced by globalisation. The decrease in marginal income tax rates in advanced capitalism democracies can be seen as a response to potential capital flight (Bourguigon, 2017). It is often argued that interests

of multinational companies, businesses and investors seem to have influenced various policies i.e. labour, and social policies, which in turn, results in higher inequality in advanced capitalist nations. Rodrik (2011) argues that globalisation, especially low wage competition in trade along with the ability of companies to locate wherever they want, threatens the foundations of the welfare state.

EU membership is believed to intensify the pressures of globalisation. Beckfield (2006, 2009), in particular, emphasizes the impact of regional integration on economic inequality, especially in the European Union (EU) context. The Single Market comes with a huge labour pool and creates new opportunities for investment in other EU countries. Hence, foreign factors of production can more easily substitute domestic workers and firms. In that sense, European integration decreases the bargaining power of organised workers even more intensely than globalisation. This increasing competition across borders but also increased elasticity of labour demand thanks to technical advances can be seen as a direct weakening of trade union's market power (Busemeyer and Tober, 2015)

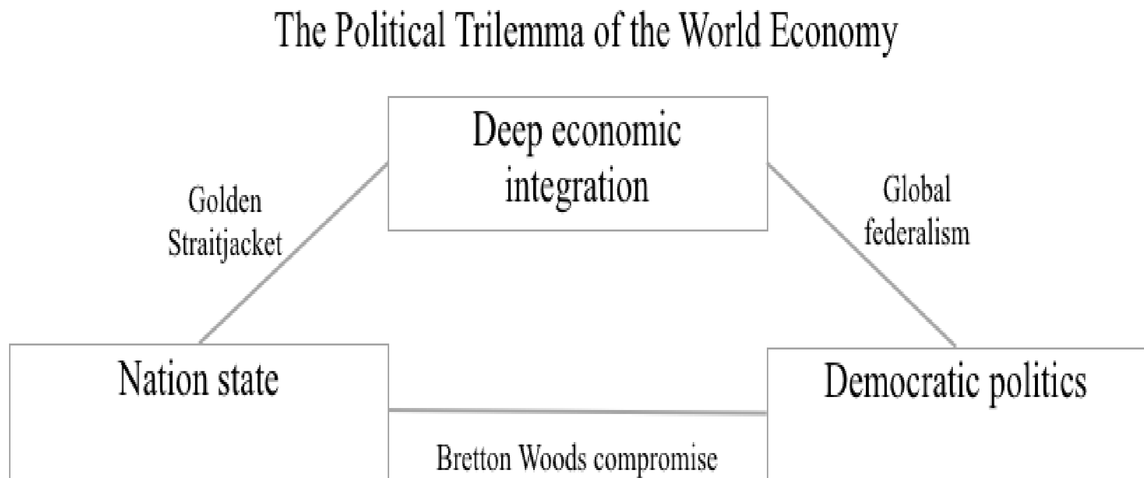
Despite the fact that monetary integration produces losses of national autonomy and control, the literature on monetary integration and inequality remains limited. Indeed, national currencies were replaced by the euro and monetary policy – a core policy for national governments – was delegated to the supranational European Central Bank (ECB). The Stability and Growth Pact (SGP) intended to diminish member states' discretion over fiscal policy (Martin and Ross, 2004a).

Most of the debate emphasizes on the distributional implications of EA membership, between debtor and deficit countries (Lapavitsas et al. 2010). Yet, the few scholars (Bertola. 2010, Busemeyer and Tober, 2015) that have written about it expected that EA membership would contribute to rising economic inequality. These empirical studies have often based their motivation on the fact that that EA is a 'Trojan horse', bringing a neoliberal policy shift, which deteriorates the foundations of the European social model (McNamara, 1998). Many believed that the EA, given its stringent institutional framework, would reinforce low growth and high unemployment and, thus, increase pressure on welfare financing. Some even argued that EA could undermine Europe's growth potential by triggering a vicious cycle of deflationary beggar-thy-neighbour strategies involving internal devaluation through social

dumping and competitive wage moderation (Hemerijck and Ferrera, 2004). The 'sound money, sound finances' principle for the design of the EA seemed to threaten the traditional redistributive capacity of national welfare states, leading to an increase in disposable income inequality.

These various and diverse strands of the literature can be captured by Rodrik's Trilemma, since it talks about the tensions inherent in the simultaneity of the economic forces unleashed by openness, domestic redistribution and an elite policy consensus that supported European integration. In his article "Feasible Globalizations", he conceptualises the political trilemma of the global economy by arguing that the nation-state system, democratic politics, and full economic integration are mutually incompatible. Only two of the three could coexist. Rodrik (2002) suggests that if we want to push global economic integration much further, we have to give up either the nation state or democratic politics. If we want to maintain and deepen democracy, we have to choose between the nation state and international economic integration. In addition, if we want to keep the nation state, we have to choose between democracy and international economic integration. Specifically, one can claim that in Rodrik's view, the European Union is choosing the 'Golden Straitjacket' of deep economic integration and a neoliberal consensus that values competition for its own sake.

Figure 1.1*: The Political Trilemma of the World Economy*



Source: Rodrik (2002) p. 25

The "golden straitjacket" equilibrium or regime is characterised as follows: in a fully integrated global economy, states would seek to exhibit an image of credibility towards financial investors. In that sense, domestic institutions would be reoriented towards the promotion of international commerce and capital mobility. Subsequently, the respective national taxation and the regulatory framework would follow such a rationale, i.e. being completely harmonized with international standards, or being structured in a way that causes minimal hindrance to international economic integration. In effect, the state would provide only public goods that are compatible with this form of economic integration (Rodrik, 2002). Tight monetary policies, low taxation, flexible labour legislation, product market deregulation and a limited and small state are all seen as indispensable for the attraction of trade and capital inflows. According to Thomas Friedman (1999), these policies have created a "golden straitjacket" of international commitments, based on a liberal neoclassical view of growth conditions that this would be most conducive to growth. The "golden straitjacket" provides a small array of 'good governance' policies or 'best practices', which narrow down the alternatives that national, formally sovereign governments have. In national democracies, the commitment to deep economic integration clashes with the voters' quest for social protection and equitable income distribution. Thus, the preferences of investors are inherently opposed to the preferences of domestic

constituencies, so the factor of democratic politics is a constant irritant for the "golden straitjacket".

In Rodrik's theory, an alternative to the "golden straitjacket" is to abandon the concept of the nation-state altogether: the solution of "global federalism". Global federalism would entail that markets replace different jurisdictions and eliminate "border effects". In such an arrangement, political decision-making would be relocated to the global level, a model close the United States, but on a global scale. In the US, the presence of a national constitution, national government, and federal judiciary guarantees that an integrated market can be governed with a democratic mandate, despite the different regulatory and taxation regimes of states. In a regime of global federalism, national governments would not necessarily disappear but will be complemented and ultimately governed by supranational legislative, executive, and judicial authority. Finally, one could imagine that an alternative option would be to sacrifice the goal of deep economic integration. An example of such a regime would be the Bretton Woods GATT regime where states had to remove a number of border restrictions on trade and commit to not discriminate among their trade partners, while their national policy preferences in all other issues were left unchecked (Rodrik, 2002).

As Matthijs (2017) suggest the Eurozone is an obvious case of deep economic integration, so Rodrik's globalization trilemma could apply. Following this idea, EA is incompatible with either sovereignty of national elites or democratic politics. National elites would fear that idiosyncratic national laws and policies would result in reduced inward investment or even capital flight. To avoid this, they fashion their rules to suit the requirements of 'markets', rather than to respond to the wishes of citizens (Rodrik, 2002).

Yet, it would be an oversimplification to claim that deeper economic integration would directly lead to welfare retrenchment and thus higher inequality. The seminal work of Paul Pierson (1994) has indicated that while changes in the global economy put pressures on welfare states, support for the welfare state policies continues to be popular intense and broad. Most citizens receive or have received social benefits or share a household with someone who does. Hence, the gains of retrenchment for welfare state opponents are generally diffuse; the core constituencies for the welfare state have a concentrated interest in the maintaining existing benefits. Moreover,

welfare state's electoral base is very large and it is ready to punish politicians for unpopular initiatives (Pierson, 2014). In addition, the EU Treaty left almost all other policies, including policies over welfare state and employment relations in the hands of member states (Featherstone, 2004).

Moreover, as we shall see neither the ECB's monetary policy played out restrictively everywhere across the EA, nor were the fiscal constraints imposed by the SGP implemented as strictly as originally requested. Market forces, which came with the EA, did not necessarily impose fiscal pressures on peripheral states. The sharp drop in interest rates and the elimination of exchange risk in all countries of the EA 'periphery' increased capital flows. This could have allowed these countries to escape the narrow limits of their domestic financial markets and supported domestic consumption growth. Budgetary room for manoeuvre may have increased rather than tightened both due to the reduction of the cost of public debt, but also depending on the tax system and especially the taxation of real estate. Yet, these developments were different across different institutional settings. This fiscal capacity could actually provide alternatives and room for additional domestic policy-making and even welfare expansion. All these provide new insights into the literature of EA and inequality. In the next parts, I analyse in depth, how financialisation studies when entering the territory of institutionalist analyses of political economy provide a stimulating body of thought, which can add to our understanding of EA within country inequality developments. Moreover, this thesis takes the Rodrik (2002) trilemma as a sharp lens with which to analyse the impact of the common European currency on inequality in its member states as a broader question of how redistributive policies and politics relate to market integration.

1.2 The EA policy institutions and its effects on inequality

Although a systematic empirical examination of the relationship between monetary integration and economic inequality was missing in the political economy literature before the crisis, there were a number of influential scholars highlighting the negative effects of monetary integration on equality. These concerns were based on two basic points: the dedication of the ECB to ensuring price stability, on the one hand, and fiscal constraints imposed by numerically defined rules, on the other.

The Maastricht Treaty provided the legal framework for launching EA and defined the convergence criteria: a stable inflation rate (1.5 per cent above the inflation rates in the three best performing member states), stable interest rates (an average nominal long-term interest rate of no greater than 2 per cent above the interest rates of the three best performing economies), limited exchange rate fluctuation (within a narrow band of ERM of less than 2.5 per cent around the central rate), no currency devaluation in the ERM for at least two years, and low budget deficit and low debt levels (3 % and 60% of GDP).

The prospect of the euro led political leaders and social partners to deploy the standard policy tools to address their historic problems of high inflation and periodic devaluations. This made governments with weaker currencies more determined than ever to join EA, as a means of containing the power of international currency speculators (Dyson and Featherstone, 1999). There was a widely held view that governments wanted to emulate Germany's stability culture (McNamara 1998). The Bundesbank in particular, became an ideational model for other central banks that envied its independence from government and its performance in achieving price stability and a strong currency (Dyson and Featherstone, 1999). This growing consensus on a model required to ensure low inflation coincided with, and was possibly caused by, a spread of neoliberal monetary policy ideas (Dyson and Featherstone, 1999).

This 'ordo-liberal' philosophy which was adopted based on market principles of 'sound money, sound finances' soon raised concerns between heterodox economists (Ryner, 2015). One of the earliest concerns in the literature was that the dedication to price stability and the ways in which ECB is likely to pursue this was that it would keep employment growth in the EA low. The ECB was seen as a conservative monetary authority with a strong mandate for price stability and a weak responsibility for stabilizing output and employment fluctuations (Martin and Ross, 2004).

The academic debate on the distributional consequences of monetary policy is not new. It can be traced back to Keynes (1936) who studied the distributional consequences of high interest rates by the Bank of England in the 1920s and 1930s. The topic gained prominence again in the Volcker disinflation period, when heterodox economists investigated the links between monetary policy and inequality. They had

been warning about the impact of restrictive monetary policies on wealth and income distributions. Galbraith (1998) suggested when governments abandoned the goal of full employment and focused on the goal of low inflation, inequality rose. High interest rates halted economic growth and led to continuous recessions that increased unemployment, which in turn led to a vast increase in inequality. Thus, as he argues, inequality cannot be treated as an unavoidable evil but as the consequence of economic policies and in particular monetary policy. Besides monetary policy, the predominant narrative was that the EA would affect inequality via national fiscal policies even if EA membership would deliver higher growth. This was expected especially for the countries of the EA 'periphery'. These arguments had as their origin the constraints imposed on EA member states' fiscal policy, as outlined in the Maastricht criteria and in Stability and Growth Pact (SGP).

In 1998, the governments supported the Commission's proposal that EA should be launched between 11 member states even through only three had met all convergence criteria. Greece was the only member that wished to join from the start but was excluded for not meeting the convergence criteria. It eventually joined on 1 January 2001 when the currency was physically introduced in the other 11 member states as well. Since more members were set to join than the German government had expected, the German treasury proposed the establishment of a Stability Pact to prevent governments from running large deficits once EA was launched (Hix and Hoyland, 2011).

Finally, the Stability and Growth Pact (SGP) was adopted in July 1997 and was designed to significantly strengthen the constraints imposed on national fiscal autonomy by the Maastricht Treaty. Moreover, the Excessive Deficit Procedure of the Pact gave the ECOFIN Council the competency to sanction a government for exceeding the borrowing limits. However, a political decision in the Council was needed to impose sanctions (Hix and Hoyland, 2011).

Meeting the convergence criteria for EA membership was thought to pose major problems for those member states with substantial public deficits. In many countries, there was only one powerful option to meet these criteria: cut spending in social welfare provision (Korpi, 2003). This built on recommendations by the IMF at this time to focus on large-scale social security reforms to consolidate public finances

(Kopits, 1997). Yet, in Southern Europe and Ireland, euro membership was an unquestioned national objective with only marginal, and mostly extremist, political forces offering an alternative view (Hopkin, 2015). The overriding sentiment was that the participation in the EA would 'lock in' the gains of EU membership, further spurring modernisation and growth. Moreover, EA membership would provide and anchor and a 'vincolo esterno' (externally imposed economic discipline, external constraint) to improve institutions and to facilitate reforms. In that sense, governments could identify strategic advantages for political competition from claiming that they are bound by EA commitments. The government could signal that it had lost parts of its national autonomy to a supranational decision-making system but would, paradoxically, be empowered vis-à-vis domestic opponents (Dyson and Featherstone, 1999).

The rationale underlying these proposals was that the member states, lacking their own monetary policy – and having severe restrictions imposed on their fiscal policy – would need to implement structural reforms that they were previously reluctant to adopt. Some of these reforms would be in the sphere of redistributive policy. These reforms might also lead to modernisation, especially in the fragmented and underdeveloped welfare states of the 'periphery'. However, the predominant narrative was that EA accession would increase inequality (Scharpf, 2002). The ability of welfare states to counteract rising inequality trends depends on the mix of policies and the progressivity of taxes and transfers. One of the most robust findings of the literature is that post-tax and post-transfer levels of inequality are on average lower in countries with more generous welfare states. Hence, it was mainly considered that if EA reduces the ability of member states to freely enact accommodating fiscal and social policies, the result would be higher levels of disposable income inequality (Busemeyer and Tober, 2015).

Hence, the first channel found in the literature via which member ship is linked to inequality *is the fiscal channel*. Despite the fact that the literature linking EA to inequality is limited most of the early contributions are link the adoption of the common currency with a reduction in welfare spending. This effect is expected to manifest itself in disposable income inequality (after tax and transfers) and usually this literature assumes as uniform effect among member states (Berola, 2010 ;

Busemeyer and Tober, 2015) The next section provides a first overview that questions this deeply held belief in the literature.

1.3 Economic inequality in the EA: An empirical overview

In Europe, concerns about inequality have been raised especially in countries which were at the epicentre of the Eurozone crisis. Greece, Ireland, Portugal, and Cyprus signed macro-economic adjustment programmes. Spain was granted European funds to recapitalise and restructure its banking system. Italy was several times on the brink of a bond market crisis and still poses a potential threat to the EA due to its worsening public finances and a banking sector saddled with non-performing loans. Against this background a popular perception took hold that the EA has from the start been biased in favour of business interests and developed at the expense of the social dimension. The crisis has made this perspective worse as it required sacrificing social standards in order to achieve economic adjustment. This argument has formed the starting point for most of the research endeavours which have investigated inequality and poverty in the country's most hit by the crisis. The ensuing debate has placed for the first time the euro and the policy architecture of the euro area at the forefront of inequality discussions (Bertola, 2010). Overall, research has shown that the crisis has been detrimental for lower income brackets and had ambiguous inequality effects even though the crisis has also reduced profits. Consequently, especially Euro-sceptic parties and anti-austerity movements have blamed the euro for causing adverse inequality trends.

The crisis was, however, a secular event comparable only to the Great Depression, not confined to and not originating in the euro area. It is therefore important to remember that the euro existed for more than ten years before the crisis in the euro area erupted. Democratically elected governments in these crisis-hit countries had previously convinced their electorates or their representatives that joining the EA would be in the national interest. To understand the validity of these hopes and the role of monetary integration in the distribution of wealth and income requires an evaluation of the relationship between 'winners' and 'losers' within EA member states predating the crisis period.

Details will follow in the first paper, but here is a summary of how overall inequality of household incomes developed in the initial EA member states between 1995 and

2008. In the next graphs I report, economic inequality measures that are available for the EA countries in the period of interest: disposable and market income. I do that in order to observe the trends before and after the implementation of government policies enacted to correct inequalities created by the market. I do not report wealth data in this section, not because it is not a relevant dimension of inequality in the EA context, but due to the lack of data availability. In the chapters that follow I do focus on wealth inequality in the cases of Spain and Italy - the two member states for which there are available wealth surveys.

Disposable income is composed of labour and capital income, cash transfers, and pensions, all net of taxes. Market income is composed of labour and capital income before taxes and transfers. The most commonly used inequality measure is the GINI index, which measures the extent to which the actual distribution deviates from a perfectly equalized distribution. The coefficients range between zero (maximum equality) and one (maximum inequality). Income inequality data is available for most EA countries. However, the problems of the GINI are well documented. These indicators do properly take into account the relationship between the lower tail and the upper tail of the income distribution. Moreover, Perry and Steinberg (2012) investigated how the crisis has impacted economic inequality in the United States. They did so by analysing, earnings, disposable income, consumption and wealth. They argue that a more in-depth analysis on the different income sources is crucial for having an accurate picture of what drives inequality. However, this cannot be revealed simply by using GINI of disposable income. An increase in the GINI does not reveal the income sources from which inequalities stem and nor does it take into account these changes in the tails.This analysis tries to address this problem by focusing on different dimension of inequality and by using a range of inequality indicators. The advantage to using a Gini coefficient is nevertheless that in the first instance it summarizes all the information about the distribution of income and thus allows for easy preliminary comparison. For this reason I use cross-country GINI coefficients in the first macro paper of this study.

The most common problem with inequality data for EA countries is that there are missing values for the period immediately after the adoption of the common currency. For the period between 1994 and 2001, data are taken from the European Community Household Panel (ECHP). However, the ECHP expired in 2001 and was replaced by

the European Statistics on Income and Living Conditions (EU-SILC) in 2003/2004. Due to the transition between end-ECHP and start-EU-SILC, there is a disruption in the time series between 2001 and 2005. [1]. This is the reason that in this thesis, the GINI coefficients of pre-tax and pre-transfer income are drawn from Solt (2009) and the Standardized World Income Inequality Database (SWIID).

Wealth data is even less well documented. There are dedicated wealth services, which provide important steps for an accurate measurement of wealth: the Spanish Survey of Household Finances (EFF), the Italian Survey of Households Income and Wealth (SHIW), and the UK Wealth and Assets Survey (WAS) are examples for this. The ECB has recently started a bi-annual survey of household wealth.

A first look at the income inequality data (Figure 1.1 and Figure 1.2) reveal that the inequality of market income increased for all countries with the exception of Spain. Interestingly, the increase is more pronounced in Austria, the Netherlands, Germany, and Ireland, compared to Portugal, Italy, and France where the increase is more modest. Overall, in all initial member states, market income inequality was higher on the eve of the crisis in 2008 than in 1998, the year before the euro adoption. At a first glance, this supports the concerns raised by the literature reviewed above which sees the adoption of the euro as a regressive process of the 'winner takes it all'.

Yet, disposable inequality trends are more mixed in the EU12. It is striking that prior to the crisis inequality did not increase but even fell in the so-called periphery. This is despite good reasons to expect otherwise – notably constraints on redistributive budgetary policies. Moreover, a core-periphery divide is revealed in the data but not in the expected way. While most peripheral countries experienced a reduction in income inequality after taxes and transfers, most core countries report an increase.

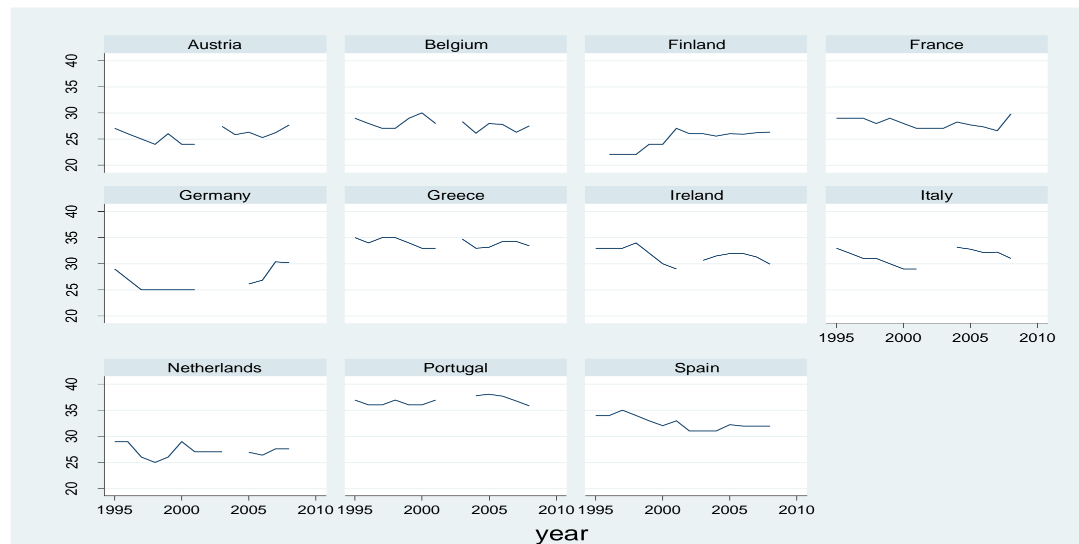
[1] For the period between 1994 and 2001, harmonised data were collected by the European Community Household Panel (ECHP). However, the ECHP expired in 2001 and was replaced by the European Statistics on Income and Living Conditions (EU-SILC) in 2003/2004. Due to the transition between the end of the ECHP and the start of EU-SILC, there is a disruption in time series between 2001 and 2005.

Despite the break in the series, in all peripheral countries, disposable income inequality is lower in 2008 than in 1998.

Figure 1.2: Gini of market income, EA12 countries, 1995-2008.

Source: SWIID.

***Figure 1.3**: Gini of equivalised disposable income*[2]*, EA12 countries, 1995-2008.*

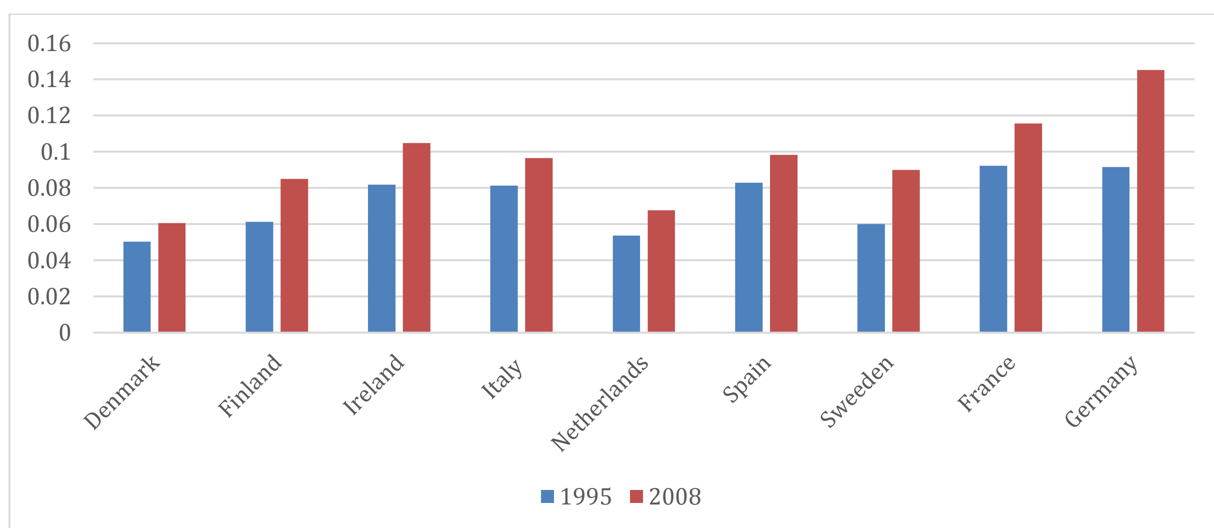


Source: Eurostat.

[2] The 'equivalised income' is the concept most frequently used in measuring inequality. It means that each individual in the population is arbitrarily allocated the income of the household where he/she lives and Equivalised disposable income would also include taxes and cash transfers, divided by the weighted number of people in the household.

Different summary measures of inequality (e.g. GINI, variance of logarithms, mean log deviation) are generally correlated. However, in some cases, the analysis of tails of distribution and especially the top incomes highlight significant features regarding the way overall inequality has evolved. The evidence suggests again that the market income of the top 1% has risen relative to lower income strata in all EA-12 member states for which data are available. Unfortunately, only two Southern European countries are among them.

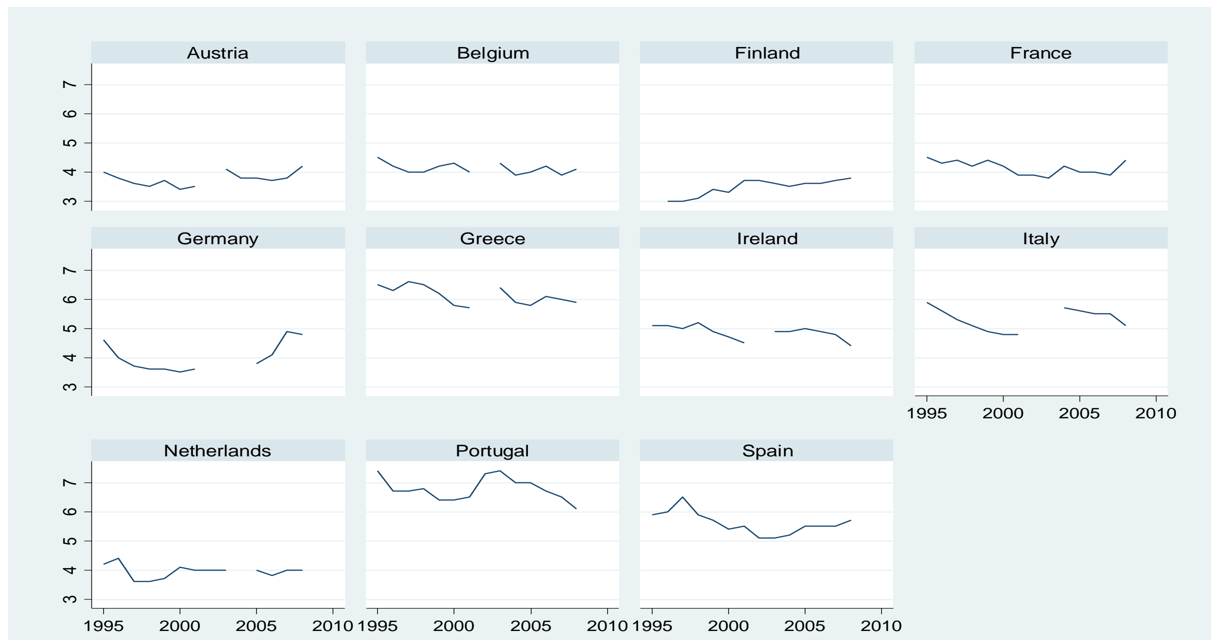
Figure 1.4: Top 1% of market income inequality, EU12 countries, 1995-2008.



Source: WID

An alternative approach to measure income inequality is to compare relative (disposable incomes) of the top two deciles of the distribution with the bottom two deciles. The income quantile share ratio is the measure of the S80/S20 indicator and reveals the income of the person at the 80th percentile in the distribution of incomes relative to the income of the person at the 20th percentile. A higher value, thus, indicates a higher level of income inequality. Disposable income inequality measured as a S80/S20 ratio follows similar trends to the GINI coefficient of disposable income. Countries of the 'periphery' report a declining trend in disposable income inequality.

Figure 1.5*: S80/S20 ratio of disposable income, EU12 countries, 1995-2008.*



Source: Eurostat.

Overall, this first overview of the data suggests that in peripheral countries for the measures of economic inequality that are available, market income inequality increases, yet, more modestly than in the core. However, inequality of *disposable income* does not increase in all countries but even falls in some countries regardless of the indicator used. This happened in a period in which these countries underwent a significant change in their framework of economic governance. It is this factor that most political economists expected would promote the interest of capital at the expense of the working classes, and, hence, lead to an increase in inequality.

1.4 Case selection and period under consideration

Given the expectations expressed in the literature, the findings reported in the last section are surprising. Inequality of disposable income does not increase in all countries and actually falls in some countries regardless of the indicator used. This happened in a period in which these countries underwent a significant change in their framework of economic governance. It is this factor that most political economists expected would promote the interest of capital at the expense of the working classes, and, hence, lead to an increase in inequality.

Departing form this empirical puzzle, this thesis focuses on the countries of the so-called EA ‘periphery’: Greece, Portugal, Spain, Italy, and Ireland. Their economies were characterised by weaker currencies, high inflation, with most of them experiencing high current account deficits. Some of these economies had had to adjust a great deal to enter the EA and were therefore the ones in which the distributional outcome of the monetary regime change could be expected to be most significant.

These countries are often grouped together, but even so they provide significant intra-regional variation. Firstly, the countries witnessed different macroeconomic developments in terms of economic growth, public debt levels, and inflation rates during the euro years up until the crisis. Secondly, they demonstrate substantial differences in terms of economic structures and domestic institutions. This is especially intriguing for investigation into how common ‘EA effects’ were absorbed by these structures and institutions and what this meant for inequality trends. Economic structures and domestic institutions can either insulate or further expose a member state to the global forces of finance. Overall, this shows a great variation among the ‘periphery’ countries besides their mentioned commonalities. Moreover, this calls for a more nuanced view on these countries than has been suggested by the use of the term during the recent crisis. All member states that needed external financial assistance were classified as ‘peripheral’ (Schelkle, 2017). The ‘periphery’ countries were considered debtor countries and contrasted with the ‘core’ and creditor countries during the crisis. In order to precisely understand the periphery’s experience during the euro years before the crisis, this thesis goes beyond the broad periphery narrative used during the crisis years.

This thesis focuses on the period of ‘catch up growth’, from the phasing in of the euro to its actual introduction until 2008, the year in which the financial crisis broke. This is arguably the time when the common currency could be deemed to deliver on its promises of convergence and ‘rising tides’ lifting perhaps not all, but most ‘boats’. The ‘peripheral’ states that voluntarily joined the EA may have seen other advantages for stability and prosperity besides the fact that EA would play out as a ‘vincolo esterno’ (externally imposed economic discipline, external constraint), which, after all, was an incentive to adopt the euro that was difficult to make politically popular. . Yet, the question that remains is how the benefits and losses of monetary integration were spread across the population in the peripheral countries.

The busts are hard for everyone and this is why the debate on inequality was stimulated during this period. Indeed, many scholars have investigated how the crisis affected inequality developments in the EA. Moreover, the EA has been criticized for amplifying the booms and the busts (De Grauwe, 2018). Jacoby (2013) with a focus on new member states of CEE emphasized how EU membership and the single market encouraged economic policy liberalization played a role in promoting the economic boom and contributed to very sharp fall during the recession. These scholars suggest that EU increased vulnerability, which led to detrimental consequences during the bust.

However, one should keep in mind that booms and busts are endemic to capitalism, and capitalism is inherently unstable. The crisis was global in nature and started on the other side of the Atlantic. European banks were involved but through global imbalances and financial innovations that were primarily created by US investment banks. I explain in the individual papers that the EA crisis was de facto a number of different national crises that did not have a uniform root cause. The Greek crisis was fiscal. Portugal and Italy did not have financial cycles that deviated much from the average of the EA. The problem of competitiveness was more relevant for Spain and Portugal than in Italy, while the fiscal stance of Spain and Ireland was prudent (Jones, 2015).The role of EA architecture was that it limited safety nets for member states that can lead to self-fulfilling speculative attacks. This has been analyzed by others and goes beyond my thesis (De Grauwe, 2018; Jones, 2015).

By only looking at the crisis, does not allow for a full picture of the impact of the EA on income and wealth distribution. Recent research revealed especially in the other side of the Atlantic, that even in booming periods, inequality does not always go down. This study aims to discuss the developments in these first years of the adoption of the common currency to evaluate whether the peripheral country's decision to join choice was of a wider national interest- or whether it benefits the upper classes as the "original fears" suggested.

This thesis focuses on the interaction between euro adoption and inequality, but whether these channels differ between crisis and non-crisis period is a valid question. During the crisis, the transmission of mechanism of monetary policy is broken, the fiscal rules were tightened, and capital inflows stopped. In the next sections, I suggest

that some of the channels of interaction between monetary integration and inequality nevertheless (?) not only remained relevant for the crisis period but that the phenomenon in question also travel beyond the cases which have been examined in the thesis. I come back to this discussion in the conclusion.

Lastly, each chapter of this thesis focuses on several but not all of the mentioned 'periphery' countries, depending on the research question and its operationalisation. Overall, the first paper focuses on all initial 12 EA member states and the second and third papers study in-depth the country cases of Spain, Italy, Greece, and Ireland. Focusing on the gains and losses for different income groups in these different member states can help to explain why these peripheral countries voluntarily participated in this large-scale monetary experiment, which is a puzzle for those who perceive the euro as exclusively bad news for fiscal space and redistribution.

1.5 Economic Inequality in the EA: The new concerns

With the benefit of hindsight and in search for the root causes of the Eurozone crisis, there is an extensive discussion on what exactly happened in the peripheral states the first decade of the Euro. The introduction of the euro on January 1, 1999, changed the conditions of membership significantly. The irony is that the entry into the EA led to the dismantling of the institutional arrangements that had secured low inflation in the countries in the run up to the EA: a national central bank with the capacity to raise interest rates if wages did not develop as desired. Joining the euro meant that inflationary price hikes or wage rises would not necessarily lead to a policy response from a monetary authority (Hall and Gingrich 1998, Hopkin, 2015). Moreover, the procedures of imposing financial penalties under the SGP were relaxed in 2005, although the Commission continued to monitor and advise member states on fiscal diligence in detail (Hix and Hoyland, 2011). Hence, these developments point to new channels of interaction between EA and inequality, which go beyond the fiscal channel.

There is no doubt that monetary union not only deprived member states of the ability to adjust exchange rates, but also replaced national monetary policy by common one-size-fits-all interest rates. Since the common interest rate must necessarily respond to average conditions in the euro area at large, real interest rates might be too high for economies in recession and too low for countries that are overheating. This is the

essence of the so-called Walters critique (1988) of the ERM. Despite the shift to much greater price stability, inflation differentials remained across the EA states, except for Italy (De Grauwe, 2012a). From the perspective of investors, domestic and from the northern Europe, low real interest rates combined with high growth potential presented an attractive business opportunity (Perez and Rhodes, 2012).

Lower real interest rates created the room for private and public borrowing and set the stage for a debt-driven growth cycle (Pérez and Rhodes, 2014). While, housing and mortgage debt was considered as high-quality collateral globally, it is unquestionable that the build-up of the housing booms in the periphery has been also linked with the lowering (or even negative) interest rates, which came with the euro (Bohle, 2017). In addition, the elimination of exchange risk has favoured financial markets and their institutions, reducing the risk of mobile financial capital across borders. The EA has increased the role of finance-related activities for the economic system of member states (Rossi, 2013).

Among the heterodox economists there is discussion about a new channel which links EA to inequality: the financialisation channel. They derive their theoretical framework form Keynes' and Minsky's work. They define financialisation as an accumulation regime and suggest that the financial fragility in combination with declining wages has created a growth regime that that relies on debt-driven consumption and housing bubbles. They suggest that internationally, the liberalisation of capital flows has created imbalances (Lapavitsas. 2013). This seems to be a relevant channel for the countries of the 'periphery': the liberalisation of capital and the elimination of exchange rate risk increased massively intra EA capital inflows and these economies experienced higher current account deficits compared to the countries of the North. While this discussion is mainly on inequality among countries, it can also be extended to intrapersonal inequality.

The increasing share in the sectors of finance, insurance companies and real-estate (FIRE) and the vast decline in the share of non-financial businesses' profits occurred in the peripheral countries before the euro area crisis erupted (Rossi, 2013). The decreases in the profitability of the real sector of the economy, compared to the FIRE sectors, leads to lower salaries and wages for middle and low class workers employed in productive industries. Moreover, the increasing importance of the financial sector

as the main source of profit in the economy has been associated in the literature with the diminishing importance of domestic institutions that traditionally have an equalizing effect i.e. union density, (Kus, 2012). It needs to be noted that maybe this channel is more relevant for some peripheral countries rather than others. Spain and Ireland were the countries which experienced financial cycles of increasing duration and magnitude due to increase in private debt (Franks, 2018). Lower real interest rates led to housing and construction booms in Ireland and Spain which turned into bubbles, while for Portugal and Italy capital inflows remained more modest (Franks, 2018).

Another interpretation of the EA crisis is the 'competitiveness' hypothesis which focuses attention on wage negotiators (Jones, 2015). According to this view, the fundamental problem in the Eurozone crisis is the structural imbalance between export-led countries with current account surpluses and domestic demand-led countries with current account deficits. The persistence of these current account deficits in the euro periphery made the markets nervous, which then pushed these economies to crisis. The monetary regime was more compatible with the so-called 'export-led' growth models pursued by northern European member states such as Germany, Belgium, the Netherlands, and Finland. However, it would not be beneficial for 'demand-led' growth models pursued by Southern member states, notably Greece, Portugal, Spain, Italy and France (see Hall, 2012, 2014; Johnston et al., 2014).

Taking the Eurozone crisis and the growth model literature as his starting point, Matthijs (2016) suggests that the EA may have a led to divergent inequality trends among member states through the competitiveness channel. More specifically, he suggests that the institutional design of the EA may lead to an increase in inequality in the Northern CMEs. He claims that as capital flows from the North to the South intensified, the core countries, due to their bargaining systems, had the ability, to restrain growth in their overall wages and prices in order to compete in a currency union with the lower-wage 'periphery' members. This in turn led to higher income inequality in the North. The 'periphery' experienced a reduction of interest rates, due to the capital inflows and the returns were lower because of the diminishing returns of a rapidly increasing capital stock. Lower interest rates permitted these economies to implement inflationary policies in the booming euro years, resulting in higher wages. The combination of higher wages and lower returns on capital in the 'periphery' led to a reduction of income inequality during the boom period. In his view the channel

will work in reverse during the crisis. In Southern MMEs had no choice but to respond to the euro crisis by a series of deflationary spending, price and wage cuts. These policies intensified recessions and led to widening income inequality. The Northern CMEs not so much hit by the crisis by inflationary policies domestically by letting their automatic stabilizers kick in, which led in turn to declining levels of domestic inequality.

Hopkin (2015) investigates the distributional consequences of euro adoption in an in-depth case study of Italy and Spain. While he does not make direct links to income inequality, he finds that the introduction of the euro indeed brought mainly large gains in the sheltered sectors of these economies such as construction and retail, as well as large parts of the public sectors and banking. Nevertheless, he suggests that the introduction of the euro led to stagnation in the Mediterranean countries' manufacturing sectors as these became more heavily exposed to international competition. His analysis confirms the importance of examining the interaction between monetary regime change and the structure of economies and wage-bargaining systems that the growth models literature focuses on.

A closer examination of the case of Germany challenges this view and suggests that it was not an overall wage restraint but it was redistribution of rents between the sheltered and the manufacturing sector that sapped wage inequality outcomes (Johnston et al 2014). Ochsenfeld (2018) suggests that the EA has reinforced dualisation as well as the insider-outsider cleavage in the country's welfare state and production models. The introduction of the euro supposedly distorted real interest rates and exchange rates and the resulting imbalances redistributed rents from the domestic sector to the manufacturing sector in Germany. According to Ochsenfeld (2018) this shift in industry rents explains the increase in wage inequality in Germany under the euro. These studies suggest that indeed the Varieties of Capitalism (Hall and Soskice, 2001) and growth regime literature remain relevant for the euro inequality debate. However, peripheral economies are often referred to as one group in the literature, even though they differ substantially in terms of macro-economic performance both before and after the euro.

However, the competiveness explanation seems to be more relevant for countries like Spain and Portugal. Not all countries experienced competitiveness problems (Jones,

2015). A closer look of Italy's export performance before the crisis suggest that Italian firms managed to hold on world export manufacturing shares but also manufacturing employment (Jones, 2015). In Greece, the real effective exchange rates appreciated by less after it joined the euro than they did beforehand (Jones, 2015).

To summarize, most of the early literature has focused on how the policy architecture of EA would lead to an increase in inequality across the euro area, as the latter was built on stability-oriented monetary policy and prudent fiscal policy: (this will be referred to in the thesis as *the fiscal channel).* However, these concerns were not justified for all countries of the 'periphery'. More recently, additional concerns have also been based on a competitiveness hypothesis, which suggests that the growth models of the North and the South are incompatible together due to the interplay between central banks and wage bargains (Johnston et al., 2014). This hypothesis seeks to explain different inequality dynamics between the North and the South with the latter group of countries experiencing a decline in income inequality: (This will be referred to in the thesis as *the competiveness channel*). These two channels are mainly relevant for the EA case because they are particularly linked with the institutional design of the EA: the competitiveness channel with the centralization of monetary policy and the fiscal channel with the rules of fiscal governance. Finally, a third channel is inspired by the literature on financialisation. Heterodox economies would also support that EA led to an increase of capital inflows that were absorbed by the FIRE sectors of peripheral states, and that it was mainly affluent households that benefited. This led in turn to an increase of pre-tax income inequality *(financialisation channel).*

1.6 The theoretical stance of this thesis: The interest rate channel

In the next section I explain why I focus on the so-called "interest rate channel" as a key channel of interaction between EA and inequality. This thesis is inspired by the literature of financialisation but it takes an institutionalist perspective. Despite the fact that this availability of credit led to an increase of economic imbalances, comparative political economists provide an explanation of why Southern countries would still have had an incentive to join. I adopt the same starting point as comparative political economists who claim the incentive of peripheral countries to join the monetary union

was to enjoy the benefits of low and less volatile interest rates and exchange rate stability (Iversen et al., 2016).

Moreover, this thesis follows the institutionalist strand of CPE (comparative political economy) that has stressed the relevance of institutional settings. Hence, I also expect their insights to be relevant for the interest rate channel. However, while the VoC and the growth model literature provide a useful framework for understanding Northern and Southern countries' different experience under the euro and give a compelling story about their inequality trends, they broad-brush the differences between the periphery. As Schelkle (2017) stresses that structural diversity of member states is not, per se, a reason why some member states entered a crisis with all its negative consequences for income distribution.

This interest rate channel is more complex than the Walter's critique implies (Walter, 1990). According to Schelkle (2017, p.117), high and volatile interest rates affect the economy in at least four different ways. There is first the effect on economic activity: interest rates act like a tax on debt-financed investment. The higher the interest rate tax, the lower profits for investors and the shorter the time horizon of investors, making them less likely to innovate. Theoretically, the distributional effect of this reduction of interest rate is difficult to determine a priori. To the extent that low nominal and real interest rates succeed in stimulating economic activity, lower rates would increase both income and corporate profits, and the effect on inequality would depend on whether wages will raise more than profits and on the distribution of labour and capital income across households (Pannetta, 2015). When real and nominal interest rates converged downwards in the 'periphery', this stimulated investment substantially and spurred growth and employment. Secondly, interest payments on the stock of public debt are also a major component in public expenditure (Schelkle, 2017, p.116). Rising interest payments can push a sovereign into a debt trap, from where it must raise debt in order to service the existing stock. Thus, a decline in interest rates can be a great boon for countries with high levels of public debt, notably Italy and Greece. With interest expenses falling and tax revenues increasing fiscal space increases and governments can use and allocate the freed up funds for other purposes, or lower taxes. To the extent that this funding is used also for increased redistribution, lower interest rates on public debt could also lead to lower inequality especially in peripheral countries, which are traditionally considered as being laggards in social

policy provision (Sotiropoulos, 2004). Thirdly, interest rate influences the price of equities, real estate, and bonds. However, housing price variations affect a much larger part of the population than bond or equity price changes. That said, the biggest investment a household typically makes is the acquisition of a home and it is typically financed by debt. In countries with high rates of homeownership and flexible exchange rates, an increase in interest rates can threaten the households' solvency and wellbeing (Schelkle, 2017, p.117). A small but growing body of academic literature in political economy has underlined the importance of housing in contemporary capitalism for the politics of wealth inequality (Ansell, 2014; Bohle 2017). At the individual level, costs of accommodation are the single largest item in most household budgets. They seriously limit the degrees of freedom that households have to spend disposable income. For low-income homeowners, housing wealth is often the only asset they have at their disposal.

Variation in house prices has a large impact on households' wealth and permanent income, as well as on their borrowing capacity. Moreover, in the EU, residential investment usually comprises around twenty percent of Gross Domestic Capital formation and the construction sector provided five to ten percent of all European employment (Maclennan et al, 1998). Lower interest rates and higher house prices stimulate construction activity and real estate transactions, increasing revenues for the government and reducing unemployment. Finally, interest rate levels and changes also have a direct impact on banking (Schelkle, 2017). High interest rates make refinancing from the central bank more expensive, and tend to squeeze bank margins. As banks see economic activity to decrease, they also become more risk averse and aggravate the downturn. As interest rates rise, the number of non-performing loans is likely to rise. Conversely, lower interest rates that came with the euro lowered banks' cost of refinancing credit, increased housing prices, and made local banks lend more against the rising value of collateral. This positive feedback loop fed the mortgage credit and housing boom (De Grauwe, 2012a).

Overall, the interest rate effect seems to have various interlinked implications for the peripheral economies that affect also inequality trends in various ways. This thesis focuses specifically on two mechanisms, which link the interest rate channel not only with the income but also with the wealth distribution. I analyze in depth how financialisation studies provide a stimulating body of thought for institutionalist

analyses of the political economy and can add to our understanding of EA within country inequality developments. Building on the literature of political economy and housing, it asks how national differences in housing and finance systems, rather than labour markets and wage bargaining systems, absorbed this decrease in interest rate and what this meant for wealth inequality trends (paper 3). It also reports that institutions also may change under the impression of capital flows.

While interest rate convergence leads to asset price variations it also increases fiscal space via the increasing tax revenues and the reduction of the cost of public debt. Hence this thesis departs from the political economy literature of public finances, which emphasizes on the downside of easy finance, namely soft budget constraints which lead to reform postponement (Fernandez-Villaverde et al., 2013). In contrast, it engages with more recent post-Keynesian analysis of the EA crisis which explain how increased financialisation of the peripheral economies may come with welfare expansion (Stockhammer et al., 2016). It adds to this literature, by investigating how these loose budget constraints are not only linked with higher social spending but it asks whether this spending is used in a progressive way. This contrasts to the literature which emphasizes that loose budget constraints would only lead to institutional deterioration.

Changes in welfare provisions and the increase of the housing prices are developments which affect not only the top or the bottom of the distribution but rather most households within the peripheral states. While most of the work on inequality has focused more on the differences between the top and the bottom this study also tries to tackle inequalities from a perspective, which is relevant for all the different income groups but with a particular focus on middle classes. The reason why one should also put emphasis on middle classes stems from the traditional power resource theory, which even today continues to provide an interesting explanation on patterns of redistribution. A rich literature in this tradition documents how the size and structure of the welfare state is related not only to the power of the political left but also to alliances with the middle classes (Korpi 1983; Esping-Andersen 1990). It is almost conventional wisdom that middle classes are crucial for the welfare state developments and that they are an electorally important group.

However, when political leaders single-mindedly pursue the agenda of deep integration and the demands of foreign creditors clash with the needs of domestic constituencies then the literature suggests that democratic concerns and median voters' interests are ignored. Hence, national sovereignty remains in the sense that elected governments can decide how they implement international commitments to openness but these commitments are no longer open day-to day democratic contestation. As explained above, the EA is then seen as locking countries into a 'golden straitjacket'.

Rodrik (2002) claims that the "golden straitjacket" regime leaves only a small set of policy choices, narrowing the alternatives those national governments have. Most of the conventional wisdom after the crisis follows this rationale and suggests that that the combination of deep integration and social protection cannot be any longer sustainable despite the fact that the latter may be democratically desirable. I challenge this view and explain that the interests of domestic constituencies are not necessarily and permanently opposed to the changes that international capital flows bring about. Surely, international investors tend to challenge existing firms and their employment, but capital inflows also provide an abundance of credit that benefits liquidity-constrained households (Crouch, 2009). Hence, domestic constituencies' interests did not always collide with the interests of market actors. This thesis goes beyond the view, which suggests that various aspects of deep economic integration influence negatively social protection, despite the fact that the latter is democratically supported. I suggest that that the relationship between integration and equality can also be compatible - conditional upon other domestic-political factors (Burgoon, 2012). I argue that in the pre-crisis period the euro came with market forces, for the periphery, which not only did not restrict but also expanded government degrees of freedom for redistributive politics

While this study focuses on the interest rate channel in the pre-crisis period (and its effect on disposable income and housing wealth), one should ask whether this channel would play out in reverse when the crisis occurs. The reality is that there was a massive capital outflow, and government bond spreads increased massively in the first years of the crisis. However, the ECB's announcement of the OMT (Outright Monetary Transactions), and the implementation of the Quantitative Easing led to a decrease of sovereign bond yields. Interest rates were lower in these economies compared to the

pre-EA years after ECB's unconventional monetary policy measures. While these governments were fiscally restrained during the crisis, still, this interest rate effect may have allowed for some leeway even in the hard years of the bust. Different crisis paths and inequality dynamics in the periphery generate the question of whether there is leeway for governments even in periods of economic hardship and whether this leeway will be 'accepted' by the markets. Statements from IMF officials reveal that the imposition of conditionality in EA member states entailed additional challenges and societal backlash beyond those faced in less mature democracies (Henning, 2017). This suggests that democracy cannot be so easily ignored. I return to these issues in the conclusion.

1.7 The operationalisation of the argument

To summarize, the overview of the channels above suggests that there are good reasons to believe that EA may have an effect on pre-tax but also after tax income distribution and also wealth inequality. Given these theoretical expectations, financialisation may affect the distribution of market income. The interaction between then loss of monetary autonomy and domestic wage bargaining systems are most likely to affect the distribution of wages.

However, the emphasis of this thesis is on inequality of disposable income and housing wealth. There are several reasons for this. The first is that in this thesis, EA adoption means a reduction in real interest rates in ex-high inflation economies and this thesis focuses on this *interest rate channel*. This affected the prices of asset and especially housing. When housing is the most important assets in household's portfolio its effects on wealth disparities is sizeable (paper 3).

Secondly, the descriptive evidence suggests that inequality of disposable income follows surprising trend in the years before the crisis because it is reduced in the countries of the periphery. Moreover, the empirical investigation of the first paper provides strong evidence for the association between euro membership and disposable income inequality. Besides the empirical puzzle there are good reasons to believe that the EA framework is linked with these patterns: Contrary to what has been originally claimed this influence on fiscal space is not found in the common rules of fiscal governance but it is rather due to the market forces that came with the EA and interest rate convergence. .

Thirdly, this thesis is interested not only in how economic forces have affected income and distributions but also in how government responded to these forces of divergence. This makes disposable income (which is income after taxes and transfers) inequality - the appropriate concept of inequality to apply. This is linked with the overarching framework of this thesis, which is the conflictual relationship between democracy and capitalism.

Having reviewed these theoretical considerations, the aim of this thesis is to answer the following initial questions:

> *Is there indeed a link between currency unification and inequality in the periphery; if so, is it different from the core and is the association positive or negative?*
>
> *How did the monetary and fiscal policy framework, which came with the EA accession, affect income and wealth inequality and redistribution policies? Did the original concerns indeed materialise, and if not why?*
>
> *What was the role of the domestic institutional framework and what were the degrees of freedom of the national governments in defining the final distributional outcomes?*

This thesis investigates these questions both theoretically and empirically. While the first paper sets the theoretical and empirical basis for exploring the topic, the other two papers deliver in-depth case studies. The analytical logic of this thesis is comparative. The second and third papers present a paired evaluation of two carefully selected cases. The next section briefly outlines the questions addressed in each paper and the data methods. Moreover, it provides a first examination of their conclusions. Separate introductions, specific backgrounds, research designs and methods, and empirical analyses are given in each paper.

The above questions have been the driving puzzles behind the design of this thesis. It should be noted that this thesis does not claim that the EA is the only or even the prime determinant of inequality trends. It is indeed true that there is considerable difficulty in determining the net distributional effect of currency unification, a priori, because currency unification works via wealth and income channels and would depend on a

series of economic and institutional characteristics of the different economies. Given the numerous channels of transmission, which are described in depth in paper 1, conducting a valid study on all potential channels is, unfortunately, beyond the scope of this thesis. Instead, this thesis will embark on an in-depth study of the channels that can be hypothesised as having the most significant distributional consequences. Paper 1 provides thick evidence for the selection.

Secondly, most of the literature focusing on the impact of EA membership on inequality looks at income distribution as such. However, this thesis devotes greater attention to the flow of income to specific groups of individuals and households rather than on their stock of assets or debts. This is one of the reasons why, in the EA inequality debate, developments in institutions comprising the labour markets and social policies have been discussed in more detail.

While these contributions are of relevance to this thesis and need to be considered when assessing the impact of currency unification on inequality, they fail to explain the developments in wealth distribution. This suggests that given that currency unification is operating through both income and wealth channels, one should analyse the effect on both.

The first paper of this thesis aims to investigate whether EA accession has had a uniform effect on member states, and if so whether it is associated with an increase in income (disposable and market) inequality for all cases. It draws on literature on the political economy of European monetary integration and identifies theoretical mechanisms (channels), which link the institutional design of the EA to inequality developments in the post-tax and pre-tax income distribution: the *competiveness channel*, the *financialisation channel*, the *fiscal channel* and the *interest rate channel*. These channels are tested empirically using a time-series cross-section dataset covering the EU15 member states for the period 1995–2008 and in subgroups of countries with more homogenous characteristics.

The examination of these channels suggests that, unlike much of the established wisdom, the impact of the EA is not necessarily, or always, one of increasing inequality. On the contrary, I find modest evidence that EA accession associated negatively with market income inequality in countries with demand-driven growth models. Moreover, there is strong evidence of a negative association between EA

membership and disposable income inequality in the countries that experienced a strong convergence of real interest rates and large capital inflows.

Building on this finding, the second paper unpacks the *interest rate channel*. The initial motivation for investigating this stems from the concern that links EA accession with a decline in social spending, and thus an increase in inequality. The paper builds on the threat that interest rate convergence and the elimination of exchange rate risk meant that the budget constraints under the EA resulted in a loosening rather than a tightening for peripheral countries. Thus, governments in peripheral economies gained fiscal space and room for more budgetary manoeuvre. We argue that this allowed the governments not only to avoid embarking on the path of welfare state retrenchment but also to increase social spending, especially in countries that are traditionally considered laggards in terms of social policy provision. In particular, we argue that the allocation of this fiscal space and its final distributional consequences still lay in the hands of national governments. While the existing literature suggests that loose budget constraints led to reform postponement, we suggest that the existence of fiscal space enabled governments to materialise 'parametric' changes in welfare state reforms, which had positive distributional outcomes. To demonstrate this dynamic we study the cases of Greece and Ireland in depth: two countries with different welfare states, the latter compliant with the EA's fiscal rules with the former continuously in breach of those. We focus on one particular area of transfers, namely old-age pensions, which reported the higher increase in social spending during the EA years and evaluate the distributional consequences of this increase.

The final paper also builds on the *interest rate channel* and studies in-depth the related *housing channel*. It focuses on one of the possible channels through which monetary integration affects inequality, namely the housing market. To different extents in different countries, the housing market is strongly influenced by the process of monetary integration due to interest rate convergence and the elimination of exchange risk.

Due to these forces, housing markets in the Eurozone 'periphery' experienced significant booms. Building on the literature on Varieties of Residential Capitalism (VoRC) and financialisation, this paper focuses on the distributional implications of the housing booms in Italy and Spain in the euro years up until the crisis. At the point

of the euro adoption both countries were characterised by low mortgage debt as a percentage of GDP and high homeownership. In the euro years these two countries started to diverge with Spain experiencing high capital inflows, increasing financialisation and a very frantic housing boom. In contrast, Italy maintained rather modest capital inflows and a quite stringent housing and finance system but still experienced a housing boom even though it was less frantic. By employing inequality decomposition techniques I find that housing wealth inequality contributed in both countries to the evolution of overall wealth inequality trends. However, the analysis suggests that the distributional consequences of the housing channel varied across institutional settings. Spain, which embraced financialisation and moved towards a liberal variety of capitalism, had already experienced an increase in housing wealth inequality since the second phase of the boom. In contrast, in Italy, the housing market was less financialised, and the housing boom led to a slight decline in housing wealth inequality.

1.8 Discussion and Outlook

Despite their differences in substance, approach, and design, the three papers jointly advance the understanding of how inequality developed in the EA context. The three papers do not investigate competing hypotheses but complement each other in order to enhance our understanding on how different channels between currency unification and inequality outcomes have been interconnected. They take seriously the theoretical criticisms, which suggest that EA will generate in-equalising tendencies due to fiscal constraints and centralised monetary policy. The papers explore in depth the validity of these claims.

I build on, but also depart from the recent comparative political economy literature, and identify other channels via which EA may affect inequality, and different other institutional features - besides wage bargaining systems-, which may define the final distributional outcome. While the first paper focuses on the overall income inequality trends to provide the empirical map and for this thesis, the next two papers significantly narrow down the focus. Looking at very specific aspects of income and wealth inequality in each of the papers (namely inequality of housing wealth and inequality among the elderly) allows me to answer the questions outlined above. Narrowing the focus enables me to observe the exact interaction between

macroeconomic policy shifts, - domestic policies-and redistribution outcomes and thus to unpack the mechanisms of interaction. The question of whether the euro had an impact on inequality is related to the long-term sustainability and legitimacy of the euro area. The idea of equality is deeply rooted in the foundation of the European Integration. According to Article 3 of the Treaty on European Union "The Union shall promote economic, social and territorial cohesion". The academic literature suggests quite regularly that the EA has challenged all these goals. European monetary integration has been considered to be largely shaped by business interests, leaving labour interests to member states (Hemerijck and Ferrera, 2004). Hence, if the adoption of the common currency is/ or is perceived by European citizens as a driving source of economic inequality, the already waning political support for the euro will be further reduced and this will put at risk the long-term sustainability of the EA project.

2. The institutional design of the Eurozone and income inequality: Exploring the linkages

This study examines the links between EA (euro area) accession and income inequality. It draws on the literature concerning the political economy of European monetary integration and identifies potential theoretical mechanisms (channels) which link the institutional design of the EA to inequality developments in the post-tax and pre-tax income distribution: the competiveness channel, the financialisation channel, the fiscal channel and the interest rate channel. These channels are then examined empirically using a time-series cross-section dataset covering the EU14 member states for the period 1995–2008 and in subgroups of countries with more homogenous characteristics. The examination of these channels suggests, unlike much of the received wisdom, that the impact of the EA is not necessarily, or always, one of increasing inequality. On the contrary, the most significant finding of this paper is that there is a negative association between EA membership and disposable income inequality in the "peripheral" countries that experienced interest rate convergence and high capital inflows.

2.1 Introduction

Critics of European monetary integration have often argued that the design of the euro would lead to an increase in inequality since it is bound to favour the interests of capital over labour and creditors over debtors by prioritising price stability over full employment (Matthijs, 2016). In addition, the obligation of EA members to follow stricter budgetary rules would limit their ability to counteract economic crises with higher levels of social spending (Busemeyer and Tober, 2015). The eruption of the eurozone crisis, which has been considered by many scholars to be endogenous to the institutional design of the EA (De Grauwe, 2012a; Lapavitsas et al., 2010), intensified this perspective and shifted the academic focus towards rising income inequality and increasing poverty levels due to the impact of austerity policies (Bertola, 2010). However, the theoretical linkages between EA participation and inequality under crisis conditions can be different than the pre-crisis period, given that exceptional monetary

policy measures were taken, that the transmission mechanism of monetary policy was broken and that economic adjustment programmes were applied.

Furthermore, in recent decades, the international organisations also raised concerns about rising inequality in other developed countries outside the eurozone. Moreover, it is considered that the crisis has intensified the increasing inequality trends elsewhere (OECD, 2011). Hence, the rise of inequality appears to be a global phenomenon, which makes it important to question whether there are distinctive factors linked to European monetary integration which lead to the increase in inequality.

The aim of this paper is to explore the linkages between EA membership and economic inequality before the crisis, and to contribute to this recent but rapidly developing literature that has tried to understand the distributional consequences of monetary integration in the euro area. To achieve this, this paper re-examines the end of the 1990s and asks whether and how this monetary regime change affected the distribution of income within the euro area member states when institutional membership of the euro area should have allowed them to pursue policy objectives to catch up with growth, leading to convergence between poorer and richer countries. The paper also builds on the political economy literature on monetary integration and identifies four theoretical mechanisms which link the institutional design of the EA with developments in post-tax and pre-tax income distribution: the competiveness channel, the financialisation channel, the fiscal channel and the interest rate channel. Finally, the paper tests these channels with the use of time-series cross-section data covering the EU15 member states for the period 1995–2008.

2.2 The EA and inequality

There is a constant discussion of the idea that developed countries have witnessed a rise in inequality over the last quarter of a century (Milanovic, 2012). Many studies have highlighted the impact of domestic forces in affecting the distribution of income, for example partisan politics, electoral institutions and educational systems (Huber and Stephens, 2014). Moreover, others have emphasised the role of labour market institutions and suggested that declining unionisation, lower relative levels of minimum wage and declining unemployment benefits have mainly affected the lower end of income distribution and led to higher inequality levels (Wallerstein, 1999; Rueda and Pontusson, 2000). There is little doubt that besides the idiosyncratic

country factors, common forces are also driving changes in the distribution of income (Bourguignon, 2017). Globalisation and technological progress are considered the most obvious factors responsible for the rise in the share of total income going to capital and the slow growth of wages and employment of unskilled labour (Bourguignon, 2017).

The exponential growth of financial markets that came with globalisation is considered to be another factor that has worked in favour of capital income. Financialisation is associated with the restructuring of national economies, since profits are primary accrued through financial investment rather than trade or commodity production (Krippner, 2005). The expansion of financial labour force increases wage premiums for workers in financial sectors compared to the workers of in production based sectors (Kus, 2012). Moreover, the increase of the size of the financial sector leads to the distribution of national income to more affluent households by increasing executive compensation, and by leading to higher returns to investment. This benefits households at the upper part of the income distribution Goldstein, 2012)

Inequality trends around the world (according to various indicators of inequality) suggest that while inequality has been on the rise in recent decades in a great many countries – most notably when considering the inequality at the top of the distribution and the GINI of gross income – there is also strong heterogeneity observed in relation to other inequality indicators, such as the GINI coefficient of disposable income (Bourguignon, 2017).

The same complex picture also holds true for the EA member states. Table 2.1 examines whether inequality, measured by different indicators, was higher in 2008 (prior to the eruption of the crisis) than in 1998 (prior to the introduction of the common currency) in the original EU14 member states[3]. It is clear that in the EA member states, there is heterogeneity among the countries but also among the indicators. Market income inequality (measured by the GINI coefficient, and the top

[3] Luxembourg observations are excluded: inequality indicators are very similar in Luxembourg, Belgium and the Netherlands, but Luxembourg's much higher per capita GDP and peculiar financial specialisation may spuriously affect regressions.

1%) was higher in 2008 than in 1999 for all countries in the sample. However, there seems to be an opposing dynamic in terms of disposable income inequality when this is measured both by the GINI and by S80/S20 among the “core” and “peripheral” member states, with the former experiencing higher income inequality levels in 2008 than in 1998 and the latter lower levels. Moreover, there are no clear patterns between Eurozone insiders and outsiders.

Table 2.1: *Change in inequality levels between 1998 and 2008*

	GINI of market income	**GINI of disposable income**	**Top 1%**	**S80/S20**
Denmark 1999–2008	+	+	+	+
Sweden 1998–2008	+	+	+	+
United Kingdom 1998–2008	+	+	N/A	+
Germany 1999–2008	+	+	+	+
Austria 1998–2008	+	+	N/A	+
Belgium 1998–2008	+	-	N/A	+
Netherlands 1999–2008	+	+	+	+
France 1998–2008	+	+	+	+
Finland 1998–2008	+	+	+	+
Spain 1998–2008	+	-	+	-
Portugal 1998–2008	-	-	+	-
Greece 1998–2008	+	-	N/A	-
Italy 1998–2008	+	Stable	+	+
Ireland 1998–2008	+	-	+	-

Data: *Source GINI Market Income SWIID, GINI Disposable Income Eurostat, Top 1% WIID, S80/S20 Eurostat EU-SILC. Notes: The change between the GINI of disposable income and S80/S20 ratio in Sweden and Denmark was calculated between 1997 and 2008. The change in the top 1% for Portugal was calculated between 1998 and 2004.*

Against this rather complex reality, the political economy literature on monetary integrations provides theoretical evidence for the existence of policy-relevant channels between EA membership and inequality. The debate surrounding the social dimension of the EA is by no means new (Fernandes and Maslauskaite, 2013). Even before the adoption of the common currency, various scholars were discussing the social challenges in the EA, providing inspiring literature on which one could build in order to identify the channels through which the EA may also influence income inequality.

One of the first arguments highlighted was that the EA would expand inequalities by contracting the welfare state. While the degree to which welfare states contribute to mitigating inequality depends on their respective institutional design, there is sound evidence that post-tax and post-transfer levels of inequality are on average lower in more generous welfare states; however, generosity is not predictably related to market income inequality (Bradley et al., 2003). Hence, if the EA reduces the ability of member states to freely enact accommodating fiscal and social policies, this would contribute to higher levels of disposable income inequality.

There are various arguments that link the EA with welfare state retrenchment. Firstly, the Maastricht convergence criteria and the Stability and Growth Pact rules, which require that state budget deficits should not exceed 3% of GDP and that state debt levels should not rise above 60% of GDP, were thought to contribute to welfare state retrenchment (Rhodes, 1995). Further to that, the EA could also be linked to welfare state retrenchment through the politics of "blame avoidance": political actors might seek to shift the "blame" for contracting welfare programmes to constraints imposed by the EA (Beckfield, 2006). As a consequence, we should observe a negative association between EA membership and levels of welfare state generosity as well as between EA membership and total and social public expenditure (Bertola, 2010; Busemeyer and Tober, 2015). According to this line of reasoning, the causal mechanism that links political integration by way of EA membership to inequality runs via national fiscal policies.

Other useful insights can be drawn from the political economy literature that has attempted to examine the origins of the European debt crisis. This argument builds on Hall (2012) and Johnston et al. (2014) who all provided an intuitional explanation as to what gave rise to these competitiveness imbalances in the pre-crisis years of the

EA. They argue that the EA's northern economies used features of their qualitatively distinct corporatist wage-setting institutions to promote an export-oriented growth regime.

Coordinated wage-setting institutions constrained the growth of labour costs and helped to deliver low inflation, which promoted real exchange rate competitiveness. Because the EA's northern economies were able to produce such high levels of wage moderation through their coordinated collective bargaining regimes, these member states produced consistent current account surpluses that were mirrored in the south's current account deficits.

Building on this literature, Matthijs (2016) suggests that if there is an EA effect on inequality, it would not necessarily be uniform among member states but would be different among "export-led" growth models (Germany, Belgium, the Netherlands, Finland, Austria and France) and domestic "demand-led" growth models (the southern states, Ireland). He suggests that the institutional design of the EA may have led to an increase in inequality in the northern CMEs in the pre-crisis years. He claims that due to the euro area's institutional design, as capital flows from the north to the south intensified, the core countries restrained growth in their overall wages and prices in order to compete in a currency union with the lower-wage 'periphery' members. This was permitted by the nature of their bargaining systems which were export-favouring. Their collective bargaining institutions that tied wage developments in sheltered sectors to those in the exposed sectors limited the inflationary potential of the sheltered sectors and enhanced national competitiveness, but also led to lower wages, higher profits and in turn to higher income inequality in the pre-crisis years.

Matthijs (2016) suggests that the domestic demand-led economies experienced a reduction in interest rates and capital inflows from the north. In these countries, the wage setters in sheltered sectors in the EA 'periphery', not subject to a competitive constraint like their exposed sector counterparts nor to an institutional constraint like their sheltered sector counterparts in the EA core, were able to push for inflationary wage increases that produced adverse consequences for national inflation. However, higher wages and lower returns to capital also led to a reduction in wage and market income inequality.

These intra-euro area capital inflows that were intensified between the north and the south have raised other concerns regarding the impact of the EA on inequality, and their roots can be found in the literature between financialisation and inequality. As Rossi (2013) argues, the EA has increased the impact of finance-related activities on the whole economic system. Interest rate convergence and the elimination of currency risk boosted intra-euro area capital flows. Banks in core countries substantially increased their claims on banks in 'periphery' countries. After the introduction of the euro, 'periphery' countries (especially Greece, Ireland and Spain) experienced financial cycles of increasing duration and magnitude (Franks et al., 2018).

It was perceived by policy makes that financial institutions would allocate capital in efficient way and that flows of money to the southern countries reflected the real prospects for growth through productivity enhancing investment (Hopkin, 2015). This assumption has proven to be wrong (Hopkin, 2015). The reason is that pre-crisis, housing and mortgage debt, considered high-quality collateral, were absorbing (though to a different extent in each "peripheral" country) an increasing amount of intra-Eurozone capital inflows.

The new lending was concentrated in sectors with low productivity (but high returns) especially housing, construction and other real estate activities (Franks et al., 2018). While this is a phenomenon which is also taking place outside the EA, it is unquestionable that the build-up of the housing booms has been linked with the lowering (or even negative) interest rates which came with the euro, and the elimination of exchange risk that boosted intra-Eurozone capital inflows (Bohle, 2017). Thus, these countries experienced the rising importance of financial institutions and the higher contribution of the "FIRE" sector (Finance, Insurance and Real Estate) to gross value added (Rossi, 2013).

These developments however may have an impact on income distribution. As explained above, prior research has pointed out that there are good reasons to believe that financialisation leads to a reduction in labour income share and an increase in the inequality of personal/household income (Hein, 2011). Empirical studies validate this. Jacob (2012) suggests that the growth in employment and value added in the FIRE sectors is positively associated with income inequality and unemployment. Flaherty (2015) argues that deregulation and expansion of the financial sector contributes to

the growth in top incomes in post-industrial countries. Overall, these studies highlight that the expansion of the financial economy is associated with higher income inequality.

Surprisingly, and in contrast to the literature on financialisation, Stockhammer et al. (2016) suggest that in Greece, Ireland, Italy, Spain and Portugal, the increased financialisation was used to generate improvements for the working classes that went beyond better access to credit, a phenomenon which they define as "the social compromise backed by financialisation". These countries experienced a debt-driven growth model, a strong wave of financialisation with sharply increasing levels of household debt and a property price boom. However, they also indicate that these countries also experienced moderate real wage growth, considerably stable wage dispersion and an increase in the size of the welfare state. The mechanism via which fianncialisation can increase the size of welfare state in the EA context has been discussed by other scholars. Fernandez-Villaverde et al. (2013) suggests that the adoption of the euro did not entail tight budget constraints but in contrast allowed "peripheral" economies that experienced large capital inflows to loosen their budgets. This happened via two main mechanisms: a direct one which was related to the reduction in the cost of public debt as explained above, and also an indirect one which was via the increased tax revenues coming from the capital inflow-driven economic booms. The second mechanism, is relevant for the financialisation literature.

Nevertheless, this goes against the early concerns which linked EA accession to hard budget constraints and increased inequality. Since the ERM crisis, rising interest payments were thought to push a sovereign state into a debt trap where it had to raise debt in order to service the existing stock. As a result, the reductions in interest rates and risk premia, which came with the EA, were very welcome, especially for highly indebted economies as they would reduce the cost of public debt (Schelkle, 2017). At the same time, the elimination of exchange risk led creditors to reduce the risk premium to former inflation-prone countries. This led to increased capital inflows and robust growth in these economies prior to the crisis.

The main argument in the analysis conducted by Fernandez-Villaverde, Garicano and Santos (2013) concerns reforms: they suggest that looser budget constraints allowed governments to postpone reforms and this deteriorated domestic institutions even

further. However, their framework may be of interest to the EA inequality discussion. Matthijs (2016) has already built on this link and suggested that the strong downward convergence of interest rates and the subsequent reduction of borrowing costs would leave some room for fiscal policy discretion in the 'periphery'. In this sense, the euro inequality debate rises from a different basis. Due to this "fiscal space", EA member states could avoid the path of fiscal retrenchment and also increase social spending even under the "stringent" institutional framework of the EA. The extent that this room is used to increase social spending could also mean a decline in disposable income inequality. As stated previously, while the degree to which welfare states contribute to mitigating inequality depends on their respective institutional design, a more generous welfare state could lead to lower disposable income inequality.

To summarise, there are various theoretical considerations that directly or indirectly link EA membership to inequality. Despite this, studies which empirically test the existence of a link between monetary integration and inequality remain scarce. As far as we are aware, there are two empirical studies which examine the links between monetary integration and inequality. Bertola (2010) uses data from 1995–2005 for all the original EA member states, including the UK, Sweden and Denmark. He finds that EA accession is always negatively and significantly related to lower social spending and higher disposable income inequality. He further finds that euro area countries appear to have experienced increasing disposable income inequality, mainly due to social policy becoming less generous. Yet, as he acknowledges, changes in the definition and measurement of inequality at times that broadly coincided with the advent of the EA may have weakened the reliability of the results. Busemeyer and Tober (2015) also draw on time-series cross-section data in the same sample of 14 EU member states for 1999–2010. Their analysis shows that, while economic integration exhibits no systematic relationship with inequality, political integration [4] is consistently associated with a more unequal distribution of disposable income. Furthermore, their research is similar to Bertola's (2010) in that it corroborates that

[4] The indicator of political integration combines information on the member states' institutional participation in the Schengen Area and membership of the EA as well as compliance with EU law by counting infringement proceedings of the European Commission and ECJ verdicts in sectors such as the environment, social policy and harmonisation of legislation.

the causal mechanism linking political integration to inequality runs through national fiscal policies: higher levels of political integration are systematically related to lower levels of public spending in general and social spending in particular. Nonetheless, their analysis is constrained by the time-series availability. The time span only starts in 1999, the year that most countries (except Greece) adopted the common currency, and not beforehand, and it concludes in 2010, which means that there is not a clear distinction between crisis and non-crisis years.

Despite the various theoretical considerations, the empirical evidence so far concentrates only on the impact of EA accession on disposable income inequality, supporting the widespread theoretical concern that there is a uniform, un-equalising effect of monetary integration on disposable income inequality which runs via national fiscal policies.

2.3 The channels and the hypotheses

It becomes apparent that connecting the EA to overall economic inequality is not straightforward; the various channels are interlinked and the impact may not be identical across member states. However, the theoretical overview suggests that the effect of the EA can play out through various policy-relevant channels of interaction. In addition, the above discussion reveals that the architectural design of the EA is linked to both the ability of member states to counteract market trends in inequality, but also to the impact of monetary integration on the income distribution prior to member states' intervention. Thus, EA integration seems to be associated with both market and disposable income inequality (so both before and after taxes and transfers). The next section examines these theoretical motivations in more depth and identifies four well-defined channels. Then, four testable hypotheses which link EA membership with inequality are derived.

2.3.1 EA and market income inequality: the competitiveness channel and the financialisation channel

The first two channels to be analysed are the ones that are linked with the developments in the distribution of income prior to a government's intervention. The first channel is *the competiveness channel.* This is based on Varieties of Capitalism

literature and the competiveness argument. It is important to note that this channel directly affects wage inequality and only indirectly market income inequality.

According to the competitiveness channel, in demand-led economies, the absence of highly coordinated wage bargaining institutions and the absence of a disciplining central bank could lead wages in the sheltered sector (relatively sheltered from both foreign and domestic competition) to rise faster than manufacturing wages which are constrained by competitiveness considerations (Johnston and Regan, 2016). Yet, what happens to market income inequality depends on a) whether wages in the sheltered sector were lower before the introduction of the common currency, b) the share of each sector in the economy (sheltered and non-sheltered) in terms of wage earners and value added, and c) whether this inflationary pressure in wages would benefit the upper part of the income distribution to a greater degree.

Before deriving a hypothesis, it is important to explore some of the descriptive evidence which provides useful insights for the establishment of this channel. Figure 2.1 below reports the total compensation per hour worked in the sheltered and non-sheltered sectors of the economies. For the sheltered sector, I selected total compensation and employment in public administration and defence, education, health and social work, and construction. For the exposed sector, I selected manufacturing as a proxy[5].

The data reveal that total compensation per hour worked was lower in the manufacturing sector prior to the adoption of the common currency in the demand-driven economies of the EA (Italy, Greece, Spain, Portugal and Ireland). This goes against the common pattern according to which workers in export-intensive industries tend to earn more (export-intensive industries employ a more highly educated

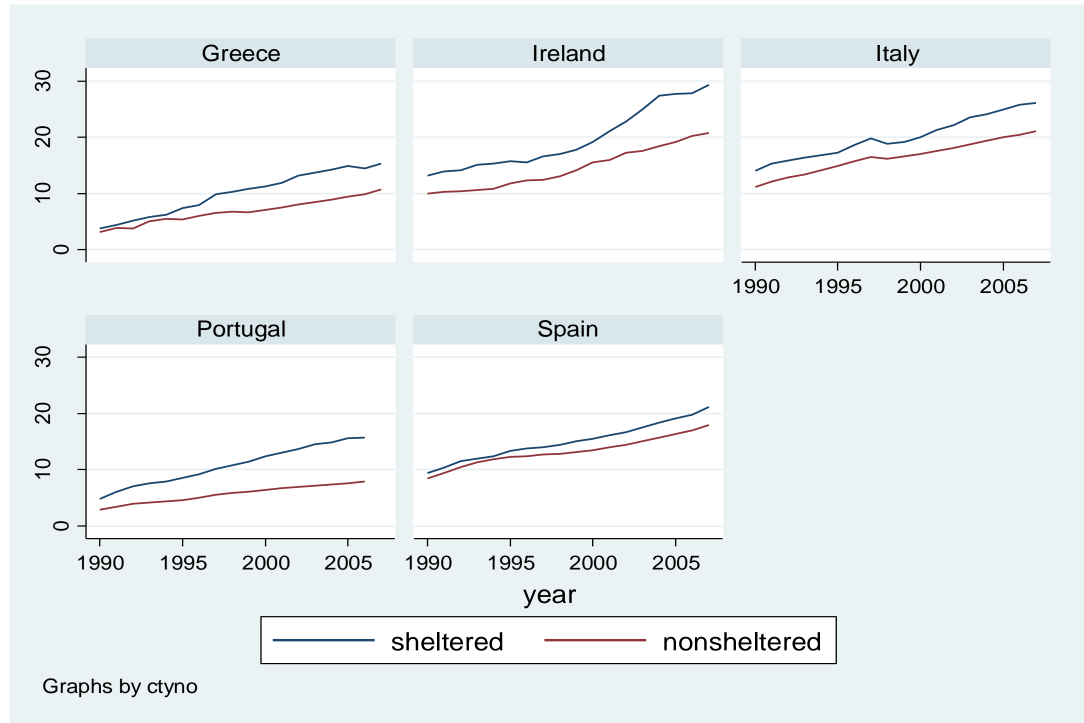
[5] When construction is not included in the calculations – see for example Johnston and Regan (2016) – the results are similar. They find that, in 2007, the hourly wage in the non-market services sector (which encompasses health and social work, education, and public administration and defence) in Italy, Spain, Ireland and Portugal was 38 per cent, 24 per cent, 50 per cent and 120 per cent higher, respectively, than the hourly wage in the manufacturing sector (EU KLEMS, 2010). In contrast, the hourly wage in the non-market service sector of the EA's northern export-oriented economies was either at parity with (the Netherlands) or below (Austria, Belgium, France, Finland and Germany) that in manufacturing.

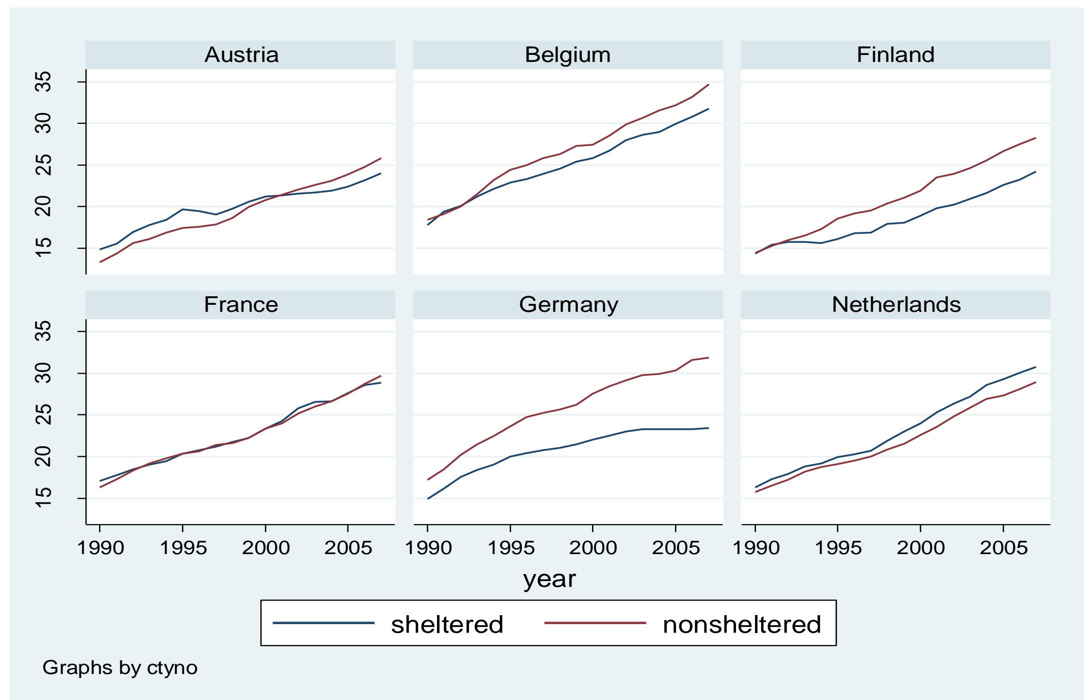
workforce, and workers in these industries have greater access to international markets that benefit from the industries' investments in capital and technology).

Therefore, the sector in the economy which will benefit is the one where wages are already higher and thus this will not necessarily lead to a decline in wage inequality. On the other hand, according to EU-KLEMS (2007), the number of employees is higher in the sheltered sector which would imply that higher wages in that sector would indeed benefit more workers.

Thus, the impact on wage inequality, and in turn on market income inequality, is overall ambiguous in domestic demand-led growth models. Inflationary pressures may also lead to an increase in wage inequality if they would disproportionally benefit the upper end of the income distribution (Johnston et al., 2014).

Figure 2.1: *Total compensation/hours worked in the export-oriented manufacturing sector and the sheltered sector*





Source: EU-KLEMS.

On the contrary, in the export-oriented economies, the ratio in manufacturing is higher than the ratio in the sheltered sector (except in the Netherlands which follows a similar

trend as the MMEs, and in Austria where the dynamic seems to change in the 2000s with the sheltered sector increasing the hourly compensation relatively to manufacturing). Wage-setting regimes that discipline wages in the sheltered sector should, all else being equal, witness lower wage inflation. To the extent that wages increase in the export sector more than the sheltered sector, and this sector already has higher wages, this could lead to an increase in wage inequality and potentially to market income inequality.

Taking these considerations into account, the first hypothesis is derived:

The competitiveness channel

Hypothesis: *Under the EA, countries with collective bargaining institutions delivered sheltered sector wage moderation. Manufacturing wages rise in line with (relatively high) productivity growth while wage bargaining does not allow service sector wages to keep up with the export sector. This leads to increasing wage inequality for export-led models in the EA. Since labour income comprises the most important component of market income, this could be associated with an increase in market income inequality.*

Countries without permanent mechanisms to constrain sheltered sector wage growth, in which devaluation is no longer possible, experience an increase in wages in the non-tradable sectors. However, the effect on wage inequality and in turn market income inequality is overall ambiguous since it is conditional on the relative wage level and the relative employment share.

The next channel to consider is *the financialisation channel*. Many scholars argue that the EA has increased the impact of finance-related activities on the whole economic system. In particular, in "peripheral" countries (Greece, Ireland and Spain) which experienced financial cycles of increasing duration and magnitude, the data reveal (Table 2.2) that they also experienced an increase in the value added as a percentage of GDP of the so-called FIRE sector consisting of Finance, Insurance and Real Estate. Moreover, lower-growth countries such as Italy and Portugal experienced an increase in the share of the FIRE sector and a dramatic reduction in the profits of non-financial businesses (Rossi, 2013).

Table 2.2: *% change in the FIRE sector's value added as a percentage of GDP (1999–2008)*

Country	**% change in the FIRE sector (1999–2008)**
Austria	6.03%
Belgium	-7.41%
Denmark	12.28%
Finland	2.70%
France	13.43%
Germany	-2.05%
Greece	13.87%
Ireland	26.61%
Italy	20.15%
Netherlands	-7.03%
Portugal	27.50%
Spain	42.39%
Sweden	-12.70%
United Kingdom	6.67%

Source: Author's calculations from Eurostat.

Building on the literature which links higher levels of financialisation with higher market income inequality, I derive the following hypothesis:

The financialisation channel

Hypothesis: *The downward convergence of interest rates and the elimination of risk premia boosted intra-euro capital inflows which were channelled to the FIRE sector of the "peripheral" states; the increase in this sector with its higher salaries predicts an increase in market income inequality.*

2.3.2 EA and disposable income inequality: the fiscal channel and the interest rate channel

While the first two channels linked EA accession with market income inequality, the next two channels refer to inequality after a government's intervention. The first channel to consider is the so-called *fiscal channel*. This fiscal channel, which remains the most tested, links EA accession to inequality via domestic fiscal policies and specifically through the constraints that the EA imposes on public spending. However, there are some considerations which need to be taken into account. First, the

Maastricht criteria allowed member states to maintain national responsibility vis-à-vis their own adjustment strategies concerning their way to the euro (Blavoukos and Pagoulatos, 2018). In that sense, the way budget consolidation would be achieved could rely both on revenue and expenditure measures and thus the distributional implications of abiding by the Maastricht criteria cannot be determined from the outset. Moreover, the institutional constraints that were supposed to keep EA countries fiscally balanced proved ineffective. The corrective arm of the SGP proved to be a soft constraint, unable to perpetuate the harder conditionality of the convergence criteria. SGP rules have been weakly enforced and often changed, and the resulting complexity of the framework has hampered effective monitoring (Eyraud and Wu, 2015). With these considerations in mind, I derive this hypothesis:

The fiscal channel

Hypothesis: *EA members are obliged to follow stricter budgetary rules; therefore, we should observe a negative association between EA membership and levels of welfare state generosity and in turn disposable income inequality (mainly in SGP–compliant member states).*

The final channel to be considered is *the interest rate channel*. This channel is built on a different basis than the previous one and suggests that EA accession entailed looser rather than tighter budget constraints. EA membership for "peripheral" economies came with a strong downward convergence of interest rates and elimination of exchange risk. This actually loosened state budget constraints and created fiscal space via the reduction of the cost of public debt and the increased tax revenues coming from the capital inflow-driven economic booms.

EA member states could not only avoid the path of fiscal retrenchment but also increase social spending even under the "stringent" institutional framework of the EA. It is indeed true that the expenditure on social protection a percentage of GDP did not decline everywhere (Table 2.3).

Table 2.3: *Total social expenditure in % of GDP*

	1995	**2008**	**% change**
Sweden	32.4	27.7	-14.5
United Kingdom	24	25.8	7.5
Denmark	31.4	28.9	-8.0
Italy	23.3	26.7	14.6
Ireland	18.2	20.7	13.7
Greece	19.1	22.8	19.4
Spain	21	21.4	1.9
France	29.9	30.4	1.7
Portugal	20.1	23.4	16.4
Netherlands	28.8	26.4	-8.3
Austria	28.9	27.6	-4.5
Finland	30.6	25.1	-18.0
Belgium	26.9	27.7	3.0
Germany	27.5	27.1	-1.5

Source: Eurostat.

On the contrary, some of the countries in southern Europe which had to adjust the most in order to fulfil the Maastricht criteria experienced an increase in levels of social spending between 1995 and 2008. Moreover, Belgium and France experienced a slight increase. Social spending is declining in countries of the core after EA accession (i.e., Finland, Germany, Austria and the Netherlands) but this is also the case in countries that did not adopt the common currency (i.e., Sweden, Denmark). Several studies have established a strong empirical relationship between the overall level of social spending and various measures of inequality and inequality reduction, also including relative poverty (Marx and Nolan, 2012; Immervoll and Richardson, 2011).

This evidence leads to the final hypothesis:

The interest rate channel

Hypothesis: *In the countries where interest rates fell sharply from higher levels, the EA led to looser budget constraints. This allowed for more accommodating fiscal policies and an increase in social spending which in turn led to a decline in disposable income inequality. I expect this effect to be more sizable in countries that received high capital inflows.*

Having explored some of the descriptive evidence, it has become clear that the introduction of the common currency has led to a fundamental transformation of the participating economies, with variable effects across a number of areas (capital inflows, wages, employment, interest rates, rates of growth, social spending) and ambivalent general equilibrium effects on inequality. However, in this part, four testable hypotheses describing the impact of EA accession on inequality have been identified. These hypotheses, which do not always point towards the same direction, suggest that the effect of the EA on inequality is overall ambiguous. Hence, the examination of the relationship between the EA and inequality (the magnitude and direction of any effect) essentially becomes an empirical question.

2.4 Methods

To examine the impact of the EA on inequality, I follow a simple empirical model which is based on an "event study" rationale, introducing an EA dummy as the main regressor of interest. In order to examine the various predictions and mechanisms as identified in our earlier discussion of the four channels, my approach is to introduce level and interaction terms of the EA dummy with various country groupings (categories). The model also includes a time trend, country dummies and a number of controls for the economy and various institutional characteristics. Thus, the main estimating relation takes the following form:

$$y_{it}=\beta_0+ \beta_1\text{EMU} + \beta_2 (\text{EMU}_{it}*\text{CATEGORY}_{it}) + \beta_3 \text{ CATEGORY}_{it} + \Sigma\beta\text{K}_{it} + \lambda\text{time}_t + \varepsilon_{it}$$

This analysis uses time-series cross-sectional data covering 15 EU[6] countries for the period 1995–2008. I employ Prais–Winsten regressions as an empirical strategy as these have been widely used in the empirical literature on inequality (Volscho and Kelly, 2012). Prais–Winsten regressions are estimated using ordinary least squares (OLS) and they include both panel-corrected standard errors (PCSEs) and a correction for first-order auto-regression. The approach is useful for addressing the problems of serial correlation, group-wise heteroscedasticity and contemporaneous cross-sectional

[6] Luxembourg is excluded from inequality regressions since this small city-state and financial centre contains many extreme values.

correlations that are common in regression analyses using time-series cross-section data (Beck and Katz, 1995, 2011; Plümper et al., 2005).

In the models, y_{it} refers to the GINI coefficient of disposable income and the GINI coefficient of market income are the only indicators available annually. The GINI coefficient of equivalised market and disposable income measures the extent to which the actual distribution deviated from a perfectly equalised distribution. The most common problem with inequality data for EA countries is that there are missing values for the period immediately after the adoption of the common currency[7]. This is the reason that the GINI coefficients of pre-tax and pre-transfer income are drawn from Solt (2009) and the Standardized World Income Inequality Database (SWIID).

The main independent variables in the analysis are EMU_{it}, a dummy variable equal to unity in the year that a country enters the EA and later years. The coefficient of the EA dummy will capture variations associated between monetary union and inequality for a given country in comparison to countries that remain out and in comparison to the years before the adoption. The association with the EA needs to be disentangled from that with the time of observation, and that with permanent characteristics of the countries considered. I control for time via a trend and for the countries' different characteristics via the inclusion of country dummies. $CATEGORY_{it}$ is a dummy variable indicating whether a country belongs to any of the subsamples which are derived from the theoretical framework and described below.

Category EDP/NO EDP: To test the fiscal channel, countries are grouped based on whether the Council has at least once decided on the existence of an excessive deficit between 1999 and 2008 (the UK, Germany, France, Italy, the Netherlands, Greece and Portugal). Countries with no decision are the following: Sweden, Denmark, Ireland, Spain, Austria, Belgium and Finland.

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[7] For the period between 1994 and 2001, harmonised data were collected by the European Community Household Panel (ECHP). However, the ECHP expired in 2001 and was replaced by the European Statistics on Income and Living Conditions (EU-SILC) in 2003/2004. Due to the transition between the end of the ECHP and the start of EU-SILC, there is a disruption in time series between 2001 and 2005.

Category Export-Led/Demand-Led: To test this hypothesis, I derived the sample between "export-led models" (Austria, Belgium, Finland, Germany, the Netherlands, Sweden, Denmark, and to a lesser degree France) and "domestic demand-led models" (Greece, Italy, Portugal, Spain, and to a lesser extent Ireland and the UK).

Category High FIRE/Low FIRE: To test the financialisation hypothesis, countries are grouped based on whether the increase in their FIRE sectors (gross valued added as a percentage of GDP) between 1999 and 2008 is above or below the median increase of the sample. The countries that experienced a more pronounced increase in their FIRE sectors are Greece, Ireland, Italy, Spain, Portugal, Denmark and France.

Category High Interest/Low Interest and Capital Inflows: To test the interest rate hypothesis, the countries are first grouped based on whether the difference in long-term nominal interest rate between 1995 and 2000 is above or below the median difference of the EU15 sample. The countries where nominal interest rates converged from relatively high rates (above the sample median) are Finland, Greece, Ireland, Italy, Portugal, Spain, Sweden and the UK. Secondly, I test the channel more specifically for the countries that not only experienced a decrease in their nominal interest rates above the median but also experienced high capital inflows. These countries are the "peripheral" economies of Greece, Ireland, Spain, Italy and Portugal. It needs to note that Italy's external imbalances are a much more modest share of GDP than those of the other four.[8]

The interaction of the main independent variables (EMUit∗CATEGORYit) allows me to investigate the channels described in the paper. The different categories are tested in separate regression models, all of which also include an intercept term $\beta 0$, a time trend t and a large set of regressors.

Control variables are intended to account for structural differences across countries and periods when assessing the relationship between the EA and inequality. Many structural features are heterogeneous across countries. To the extent that they are correlated to inequality and EA membership, it would be desirable to include all of these in regressions meant to detect the relationship between those two phenomena.

[8] See Chen at al. (2012) for a detailed analysis of capital inflows in the EA

The small number of available observations, however, limits the extent to which including additional controls improves the information content of the regression results.

Thus, the entire model includes the main controls used in the inequality literature. The variables which are used to capture the economic context are unemployment, which is expected to be associated with higher levels of inequality (if unemployment benefits are lower than wages, the higher unemployment means automatically higher market and disposable income inequality), and real GDP growth, which is usually found to depress (market and disposable) income inequality.

Moreover, pre-tax and pre-transfer household income is heavily influenced by income from work. In turn, wage dispersion is heavily shaped by a number of factors, such as the supply and demand of skills and a country's system of labour relations and political power distributions (Wallerstein, 1999; Rueda and Pontusson, 2000; Pontusson et al., 2002). Based on this literature, Pontusson et al. (2002) suggest that since union density and wage coordination will affect wage dispersion, they will indirectly affect pre-tax and pre-transfer inequality. Thus, both wage coordination and union density are included as controls in the model.

Finally, following Nickell (2004), I hypothesise that the dispersion of education and skills will affect wage dispersion and therefore market household income inequality. Thus, I also include as a control variable the percentage of the population having at least upper secondary education. The expected impact on market and disposable income inequality is negative.

2.5 Results

To assess the relationship between the channels of interest and the EA, the following tables report regressions on a dummy variable equal to unity in the year a country enters the EA and later years. The comparison group is of course far from ideal for the EU15 (including Denmark, the UK and Sweden). However, the results are not significantly influenced when the remainder of the EU25 countries are included in the sample. Tables 2.4 present the results of the Prais–Winsten FEMs with AR (1) disturbances and PCSEs. The first and third columns contain simple regressions of the EA dummy and inequality indicators for the EU15 member states. Meanwhile, the second and fourth columns include the full battery of controls. Furthermore, the model

is applied to both inequality measures. This approach suggests that there is a negative association between EA membership and market income inequality before the inclusion of controls, but the relationship changes if we include a full battery of controls. However, the effect is not statistically significant with or without the inclusion of controls. The most important finding that can be deduced from this table is that the coefficient of the EA exhibits a consistently negative association with disposable income inequality and it remains statistically significant when we include a full battery of controls for the EU15. The controls perform generally as expected.

Table 2.4: *GINI of disposable/market income as a dependent variable (EU15)*

Country fixed effects included

	(1)	(2)	(3)	(4)
	GINI	**GINI**	**GINI**	**GINI**
	Market	**Market**	**Disposable**	**Disposable**
EMU2	-0.0390	0.179	-0.137**	-0.176**
	(0.113)	(0.149)	(0.0691)	(0.0823)
Time Trend	0.118***	0.127***	0.0350***	0.0491***
	(0.0237)	(0.0235)	(0.00976)	(0.0153)
GDP Growth		-0.0194		0.0280**
		(0.0199)		(0.0137)
Unemployment		0.181***		0.0342
		(0.0306)		(0.0239)
Union Density		-0.0731***		-0.0378**
		(0.0251)		(0.0172)
Education		-0.0471***		-0.0674***
		(0.0131)		(0.0152)
Coordination		-0.0457		0.0456
		(0.0520)		(0.0767)
Constant	43.43***	48.14***	27.20***	32.18***
	(0.738)	(1.251)	(0.352)	(1.249)
Observations	196	196	196	196
R-squared	0.994	0.994	0.990	0.991
Number of Countries	14	14	14	14

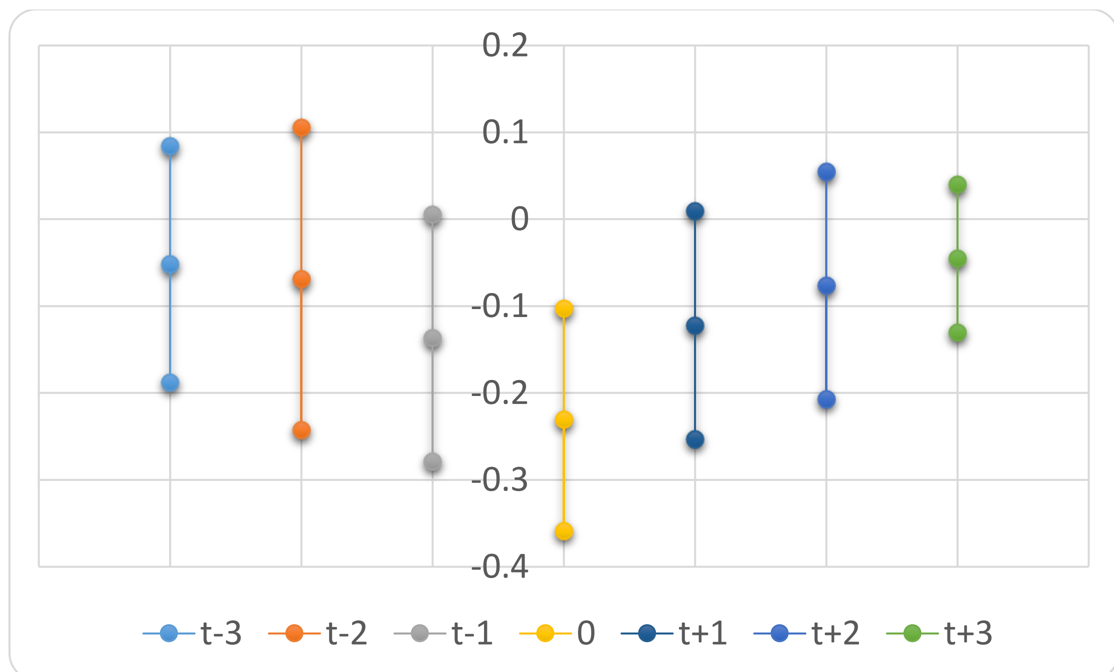
* $p<0.1$; ** $p<0.05$; *** $p<0.01$

This negative relationship comes as a surprise given the "conventional" wisdom which suggests that EA membership would lead to higher inequality of disposable income since it would reduce the ability of member states to enact more accommodating fiscal and social policies. To examine whether this effect is only transitional, an event analysis is performed. The aim is to explore whether the negative EA effect on disposable income inequality that the previous models suggests is permanent or not.

The following graph plots the coefficients and the confidence intervals for the EA dummy (and its three leads and lags) which takes the value 1 only for the year the country enters the monetary union.

Figure 2.2 reveals that disposable income inequality is decreasing as we approach entrance to the monetary union. Indeed, the year that the country actually enters the effect of the EA is negative and statistically significant. EA participation has the largest of the effects considered here in the year it occurs. However, one-year and second-year lag effects of the EA impact continue to be negative for the first years of adoption, but smaller and not statistically significant. Thus, this suggests that if there is an effect in the overall sample, this effect of institutional membership on disposable income inequality is transitional with inequality being on the rise after the actual year of adoption.

Figure 2.2: *Event analysis*



Despite the fact that the effect in the whole sample is transitional, the theoretical consideration provides a clear motivation for splitting the sample of Eurozone countries into smaller subsamples based on the channels. To test the hypothesis, I estimate the models including the interaction term of the EA dummy and the variable category.

First, I examine the channels which are linked with market income inequality, namely the financialisation channel and the competiveness channel. I estimate the same model as in the full sample with the same control variables but without country fixed effects. In the next table (2.5), I report the marginal effects which give the coefficients of the EA dummy for the different subsamples.

Table 2.5: *GINI of market income for subgroups*

	(1)	(2)
	GINI	**GINI**
EA effects on countries		
	Export-Driven	**Low FIRE**
	0.097	-2.51
	(0.152)	(0.302)
	Demand-Driven	**High FIRE**
	-0.231	0.001
	(0.136) *	(0.136)
<u>Estimation of control variables</u>		
Time Trend	0.141***	0.151***
	(0.0267)	(0.0244)
GDP Growth	-0.0219	-0.0219
	(0.0175)	(0.0200)
Unemployment	0.0771**	0.0749**
	(0.0374)	(0.0366)
Union Density	-0.00633	-0.0202**
	(0.00866)	(0.00893)
Education	-0.0280**	-0.0799***
	(0.0138)	(0.0149)
Coordination	-0.136**	-0.214***
	(0.0603)	(0.0794)
Constant	46.75***	51.13***
	(0.813)	(0.836)

Observations	196	196
R-squared	0.989	0.987
Number of Countries	14	14

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

To begin, in order to test the competitiveness channels, the countries are divided according to export- and demand-led economies. The analysis reveals that while there is a positive association between EA membership and market income inequality in export-led countries, this effect is not statistically significant with or without the inclusion of controls. On the contrary, while the theoretical prediction was overall ambiguous for demand-led economies, I find that EA membership is associated with a decrease in market income inequality and the effect is statistically significant at a 0.1 level of significance. This latter finding, while weak, is consistent with the analysis carried out by Matthijs (2016) and provides reasons to conduct a more in-depth investigation for the competiveness hypothesis (Matthijs, 2016). Moreover, it should be noted that data on wage inequality would be more appropriate for the examination of this channel.

Turning to the financialisation channel, the countries that experienced an increase in the FIRE sector above the median of the EA sample are positively associated with inequality, while for countries where the increase in the FIRE sector is below the median increase in the sample, there is a negative association between the EA and inequality. However, again there is a significant relationship between EA membership and market income inequality. Thus, I find no evidence for the financialisation channel. Nevertheless, other inequality measures, such as the top 1%, would be preferable for the identification of this channel but they are not available annually.

Table 2.6 reports the results for the models that test the channels which are linked theoretically with disposable income inequality: the fiscal and interest rate channels. The sample is split between countries which were under an excessive deficit procedure at least once and the ones which were not. The result indicates that EA accession is negatively associated with disposable income inequality in the countries that did not comply with SGP, and positively associated in the countries that did. However, the relationship is not statistically significant and I find no evidence for the fiscal channel.

Finally, column 2 presents the relationship between EA accession and inequality in countries that experienced a strong downward convergence of interest rates (above the median of the sample). The model suggests that in these countries, EA accession is negatively associated with disposable income inequality and the effect is statistically significant at a 0.1 level of significance. Hence, the interest rate channel seems to play a role.

Table 2.6: *GINI of disposable income for subgroups*

	(1)	(2)
	GINI	**GINI**
EA effects on countries		
	EDP	**Low long-term interest rate**
	0.102	-0.187
	(0.140)	(0.131)
	No EDP	**High long-term interest rate**
	-0.423	-0.178
	(0.263)	(0.099)*
Estimation of control variables		
Time Trend	0.0491**	-0.0181
	(0.0199)	(0.0158)
GDP Growth	0.0246	0.0202
	(0.0193)	(0.0149)
Unemployment	0.0674**	-0.0125
	(0.0291)	(0.0286)
Union Density	-0.0752***	-0.119***
	(0.0114)	(0.00955)
Education	-0.107***	-0.0552***
	(0.0132)	(0.0123)

Coordination	-0.0572	0.0824
	(0.0693)	(0.0704)
Constant	34.55***	34.05***
	(0.898)	(0.770)
Observations	196	196
R-squared	0.961	0.976
Number of Countries	14	14

* *p*<0.1; ** *p*<0.05; *** *p*<0.01

Lastly, I explore the effect of the EA in the countries that received high capital inflows. The capital flows financed government debt (in Greece), financial sector borrowing (in Spain or Ireland), or a combination of both (in Portugal or Italy).

The regression results suggest that the effect on disposable income inequality is negative and statistically significant at a 0.01 level of significance. The result is also sizable. This finding points to the existence of the interest rate channel.

Table 2.7: *GINI of disposable income for subgroups*

	(1) **GINI Disposable**
EA effects on countries	
	High capital inflows
	-0.582
	(0.208)***
Estimation of control variables	
Time Trend	0.0250
	(0.0198)
GDP Growth	0.00849
	(0.0203)
Unemployment	-0.0238
	(0.0275)

Union Density	-0.0698***
	(0.00800)
Education	-0.0311**
	(0.0133)
Coordination	-0.390***
	(0.116)
Constant	32.61***
	(0.678)
Observations	196
R-squared	0.967
Number of Countries	14

* *p*<0.1; ** *p*<0.05; *** *p*<0.0

To conclude, while EA membership is negatively associated with disposable income inequality, this effect is transitional. Moreover, the empirical analysis suggests that the most robust evidence is that EA accession does not have a uniform impact on member states. Re-running the models to test the different channels for the subgroups of countries, we do not find evidence for the financialisation and fiscal channels. However, there is a negative association between EA membership and market income inequality in demand-led economies, supporting the competiveness hypothesis. Moreover, EA accession is negatively associated with disposable income inequality in the countries that experienced a strong downward convergence of interest rates. However, the results for both these channels are relatively weak. The most significant result is that the EA is negatively associated with disposable income inequality in the countries that experienced a strong convergence in interest rates and increasing capital inflows. This evidence points to the fact that the EA did not only come with a constraining fiscal institutional framework, it also opened a way to new market forces for "peripheral" economies which gained credibility almost overnight, and capital inflows increased allowing for more room for fiscal policy discretion.

2.6 Conclusions

This paper has analysed the links between the EA and economic inequality. Based on the literature on the political economy of monetary integration, it has documented four theoretical links through which the EA could potentially affect inequality: *the financialisation channel*, *the competiveness channel, the fiscal channel and the interest rate channel.* It has been demonstrated that the theoretical impact of the EA on inequality is *a priori* ambiguous, with some channels leading to an increase in inequality and others to a reduction.

The empirical analysis draws on time-series cross-section data covering 14 European Union member states for the time period 1995–2008, but the analysis is also performed in country subgroups with more homogenous characteristics. The most important finding of this paper is that post-EA, inequality evolution is not always consistent with both concerns expressed and previous theoretical considerations. To begin, there is a negative association between EA membership and disposable income inequality, but this effect is transitional rather than long-lasting.

When these channels are tested empirically in regressions estimated for subsamples, I find evidence for *the competitiveness channel.* In the demand-driven economies, EA membership is negatively associated with market income inequality.

Regarding post-tax and post-transfer inequality, *the interest rate channel* is also statistically significant. This suggests that there is a negative association between EA membership and disposable income inequality, and this effect is significant in countries that experienced a strong downward convergence in interest rates.

However, EA effect is more sizable and significant in "peripheral" economies that experience a convergence in interest rates and an increase in capital inflows. This finding suggests that EA membership prior to the crisis came with market forces that may have operated in an equalising manner in these economies.

However, the analysis presented in this paper has numerous limitations that point to avenues for further research. Regression analysis shows basic correlations. Despite the fact that the regression controls for a large number of potential inequality drivers, this analysis cannot strictly prove the existence of a causal relationship between EA accession and inequality. Moreover, the empirical analysis is constrained by the time-

series availability of the income inequality measures. Further, even within subgroups, the heterogeneity in terms of magnitude is not captured.

More importantly, the abovementioned analysis does not say much about the underlying mechanisms of the *interest rate channel.* This opens avenues for further research and highlights the relevance of investigating economic inequality in the EA in more depth by accounting for country characteristics and national policies. Thus, qualitative case study analyses should accompany this cross-country empirical analysis to unpack these channels and examine how domestic politics and national institutional domains have interacted with supranational developments in the post-euro period and how these interactions have affected the distribution of income.

3. EA and fiscal space: Redistribution in Greece and Ireland

Our study contributes to the literature on European monetary integration and the political economy of redistributive policies. Our point of departure is that interest rate convergence and the elimination of exchange rate risk meant that massive capital inflows softened rather than tightened budget constraints for peripheral countries in the EA. Thus, governments in these peripheral economies gained some room for more budgetary manoeuvre. We argue that this allowed them not only to avoid the path of welfare state retrenchment, but also to increase social spending, especially in countries that are considered to be laggards in terms of social policy provision. Yet, in contrast to the important contribution by Fernandez-Villaverde et al. (2013), we suggest that this increase in fiscal space does not necessarily lead to a deterioration of existing institutional arrangements accompanied by regressive or clientelistic patterns of social spending. Fiscal space can also be used to modernize and spend on transfers more equitably. By focusing on two rather different peripheral countries, Greece and Ireland, and spending on old age pensions, which lends itself to the influence of organised interests, we show that in both cases, planned pension reforms in conjunction with the newly created fiscal space allowed governments to implement reforms that reduced poverty and inequality among the elderly.

3.1 Introduction

The literature on monetary integration and inequality suggested that the convergence criteria, during the pre-accession phase, and the Stability and Growth Pact, post-accession, would lead to some type of fiscal retrenchment and to a subsequent decline of redistribution. Nonetheless, with the benefit of hindsight, it is now known that the fiscal constraints were not implemented as strictly as originally claimed.[9] Thus, in this paper, we postulate a different starting point which is based on scarce but growing literature. This literature suggests EA accession did not only entail a new stringent

[9] See paper 1 of this thesis for an overview of the literature.

institutional framework for some countries, but also unleashed new market forces. More specifically, EA membership for peripheral economies directed a strong downward convergence of interest rates and elimination of exchange risk which actually softened state budget constraints. This developed mainly via two mechanisms: the reduction of the cost of public debt, and the increased tax revenues coming from the capital inflow-driven economic booms. In this sense, the euro inequality debate rises from a different basis. We suggest that under soft budget constraints, EA member states could avoid the path of fiscal retrenchment, and also increase social spending even under the "stringent" institutional framework of EA.

However, an increase in social spending does not necessarily proffer an equalizing effect. The existing literature suggests that soft budget constraints lead inevitably to postponement of reforms and institutional deterioration (Fernandez-Villaverde et al. 2013). Under soft budget constraints, especially in countries with chronic problems of bureaucratic inefficiencies and gross inequalities of welfare provisions, increased social spending could adversely exacerbate unequitable distribution of benefits and fiscal sustainability problems. On the other hand, the existence of soft budget constraints could kick-start a modernization process of these unbalanced, fragmented and underdeveloped welfare states, leading to positive distributional consequences.

To examine these dynamics and their distributional consequences, this paper focuses on Greece and Ireland within the scope of transfers: old age pensions. These countries represent, respectively, the "reckless" and "prudent" fiscal managers under EA; they have different tax and transfer systems, but in both cases after the introduction of the common currency, social spending increased and it was old age pensions of all social transfers which were most pronounced during the euro-years. Moreover, while pensioners are among the most vulnerable and sizable groups in terms of poverty risk (Gini report Ireland 2013: 73), spending on pensions is also very path-dependent, with strong traditional stakeholders.

The remainder of the paper is organised as follows. In the next section, we refer to the literature upon which our argument is based. In section 3 we present the country cases. In section 4 we provide evidence for the existence of "fiscal space" in the two countries and the composition of social spending. Then, by reviewing the pension reforms in each country case following the euro (section 5), we are offering a contextual analysis

of how the interaction of domestic politics with soft budget constraints led to positive distributional consequences. The last section concludes.

3.2 Literature review

Starting with the pre-euro literature, one can find a clear stream of thought arguing that a country's accession in the EA would force it, via market discipline, to maintain balanced budgets and to implement far-reaching structural reforms. The argument is usually presented in conjunction with the fiscal institutional constraints that the EA entailed, i.e. the SGP. Vis-à-vis the implementation of structural reforms, the literature has presented a variety of reasons why the euro would favour structural reforms. During the pre-euro period, it was that the flexibility which the EA would provide to businesses in terms of relocation that would push EA MSs to compete among each other to provide the most business-friendly environment (Fernandez-Villaverde et al. 2013: 4-5).

Furthermore, adopting the euro as a common currency would mean that countries would lose the ability to devaluate while lagging behind in terms of competitiveness. Hence in order to lower unemployment they would have to implement structural reforms. Certain commentators of the time suggested that by relinquishing the control of monetary policy, the EA Member states would have to prepare for a negative shock by making sure that a flexible and efficient labour and product market is in place (Bean 1998). It was hoped that the euro would increase market discipline on government borrowing because domestic private institutions would be able to lend in other countries of the euro area without exchange risk instead of just to their own treasuries (Fernandez-Villaverde et al. 2013: 4-5). Finally, these structural reforms were also expected to influence social spending. In the wake of the Maastricht Treaty, policy makers were expected to adopt cost-containment measures. The social policy provision and welfare states also became a reform target (Martin and Ross, 2004).

This stimulated the debate about inequality in the EA and whether fiscal policies have been the major causal link between EA and inequality of disposable income. It was thought that while EA would lead to lower levels of social spending it could also lead to an increase of disposable income inequality. While the degree to which welfare states contribute to mitigating inequality depends on their respective institutional

design, less social spending is in general associated with higher disposable income equality (Busemeyer and Tober, 2017).

Despite the above argumentation, the dynamics that emerged after the introduction of the euro were quite different compared to the ones expected from the above literature. First of all, the institutional constraints that were supposed to keep EA countries fiscally balanced proved ineffective. The corrective arm of the SGP proved to be a soft constraint, unable to perpetuate the harder conditionality of the convergence criteria.

Moreover, vis-à-vis domestic reforms it was argued that the advent of the euro had the exact opposite effects for a number of countries, namely Spain, Ireland, Greece and Portugal; i.e. not only they did omit the necessary reforms, but also their domestic institutions deteriorated due to euro accession (Fernandez-Villaverde et al. 2013). As these countries entered the Eurozone their interest rates fell dramatically, making the budget constraints even laxer (Fernandez-Villaverde et al. 2013: 149). Fernandez-Villaverde et al.'s seminal paper argues that the laxity of fiscal constraints essentially allowed governments to postpone the necessary reforms. This is a very common argument for scholars working on emerging economies, who find that countries that undergo an increase in foreign debt or foreign aid manifest a slowdown in the reform process (Alesina and Drazen 1991, Alesina and al. 2008). Reforms are implemented only under fiscal pressure, i.e. when constraints are harder. Another reason for reform postponement is that it was difficult for the respective principals of credit contracts to extract credible information about the performance of financial institutions and government agencies, i.e. their agents. If the observed outcomes in terms of performance and output are always positive, due to the financial boom, then signal extraction and agent evaluation is extremely difficult, making the hiring and firing of agents equally hard. Subsequently, politicians and bankers can follow popular and beneficial programs without much regard to their long-term costs. In that sense the quality of governance suffers further deterioration through the soft budget constraints entailing euro adoption (Fernandez-Villaverde et al. 2013:150-151). In order to prove its point about institutional deterioration, the paper employs a number of case studies. Specifically, it uses the cases of Spain, Ireland, Greece, Portugal and Germany, finding that only the latter experienced the rigidity of the macro policy channel, leading to painful reforms while in the 'periphery' the financial booms allowed for reform postponement and institutional deterioration.

Fernandez-Villaverde et al. (2013) provide an interesting starting point to approach our question of how the fiscal effects of abundant capital on redistributive policies and inequality. Peripheral economies obtained more room for budgetary policies thanks to market processes. Institutions like the ECB and the IMF have therefore come to talk about "fiscal space". It captures the degree to which governments have room for fiscal expansion while maintaining debt sustainability, which is to a large extent determined by the market conditions of government credit. This change in terminology is motivated by increasing concerns about low-growth equilibria, in which countries can become mired during an extended process of deleveraging (IMF, 2017). We will apply this post-crisis shift in emphasis to the situation of over indebtedness.

While fiscal space is a complex concept, the most prominent definition is that fiscal space is the budgetary room to create and allocate funding for a certain purpose without threatening liquidity and sustainability of a sovereign financial position (Heller 2005). The underlying theme of all approaches assessing "fiscal space" is that a government is seen as having fiscal space when it can raise spending or lower taxes without endangering market access and putting its debt sustainability at risk (ECB 2017, OECD 2016, IMF 2017). In that sense, these market forces can provide an important link between EA membership and inequality trends, as this potentially allows governments to increase spending towards social protection, something which would not be expected under hard budget constraints.

However, whether this increase would be done in a regressive or progressive manner is not clear. According to Fernandez-Villaverde et al. (2013), soft budget constraints would lead to reform postponement and institutional deterioration. Indeed, if institutional deterioration is only assessed in terms of *economic efficiency* - then social spending, made possible by soft budget constraints, is by definition, distortionary. Yet, soft budget constraints and additional discretionary spending may benefit less privileged groups. Thus the effect of such an increase regarding equality, cannot be predetermined from the outset. Hence, the existence of fiscal space can lead to negative but also positive social outcomes.

On one hand, soft budget constraints may allow for the implementation of equality-enhancing reforms which were already on the national agendas but were not possible before, given the existing macroeconomic constraints. Additional fiscal space can then

allow governments to either compensate the losers of a reform, or even to implement reforms that do not create losers, avoiding the war of attrition that usually surrounds such reforms (Acemoglu and Robinson 2000, Claussen 2002). On the other hand, if fiscal space is used primarily to increase hand-outs for existing beneficiaries, then the inequalities in fragmented welfare states worsen.

Thus, there are three major issues which will be explored further below. The first one is to examine whether governments used this space to increase social spending. The second question is whether such use of fiscal space was tied to a particular reform narrative, i.e. institutional deterioration/status quo preservation or modernisation. Modernisation had several definitions, but especially during the Maastricht period, it has been perceived as entailing policies of fiscal discipline and structural reforms. Nevertheless, our paper adopts the original definition of modernisation which was dominant in the 1980s, i.e. democratisation around values like equality and social justice. This has been elided from the policy discussions of the time, due to the narratives of fiscal discipline, but it is very relevant for welfare state reforms and for the inequality debate (Spanou, 2017). Finally, the paper will analyse the distributional consequences of these policy choices.

3.3 Greece and Ireland: presenting the cases

We employ a comparison between two most different cases, namely Ireland and Greece. Firstly, they are certainly different vis-à-vis their economic performance before the euro, with Ireland growing very rapidly for almost a decade while in Greece robust growth performance started only after EA accession. Varieties of Capitalism (VoC) literature places the two countries under very different models of political economy, with Ireland being a liberal market economy and Greece following the more recent VoC variation of mixed market economies (Molina and Rhodes, 2007, Hall and Gingerich, 2009).

Secondly, the two countries are also different in terms of their tax and transfer system - which is used to achieve redistribution. More particularly, tax and transfer systems are viewed as being historically linked with the development of the welfare state. The two countries have different welfare state models, with Ireland being inside the liberal paradigm and Greece following the southern European model. These models do not

justify increased redistribution for either country under the euro, since both models are linked to low social policy provision.

According to Esping-Andersen's (1990) typology, the liberal model minimises solidarity and decommodification, while it delivers modest benefits via means-tested assistance and modest universal transfers, catering largely to a clientele of low income working class dependents. It favours minimal state intervention and relies on the market for the provision of social insurance and welfare services, either by subsidising private welfare schemes or by maintaining a modest level of social benefits reserved only for the needy. Thus, transfers are strongly concentrated at the bottom.

On the other hand, Greece belongs to the Southern model which supplements the classical typology of welfare state regimes. The Southern European model has been characterized by highly fragmented income maintenance systems with polarised provision of income maintenance between hyper-protected groups (public employees, white collar workers, and private wage-earners of medium-sized and large enterprises working on full contracts) and under-protected groups (the unemployed who have little income support and workers in weak sectors of the extensive informal economy). It is also characterized by little welfare state intervention, providing a small minimum income for individuals in need. Welfare provision is mainly directed to old-age populations, relative to working age populations (Perez and Rhodes, 2014). Indeed, the welfare state in Greece places great emphasis on contributory benefits, while other social transfers remain at an early stage of development (Matsaganis, 2005). Consequently, while pensions account for the greatest part of social transfers, policies aimed at families with children, the unemployed, or other social groups are far less developed. Another crucial difference for the purposes of this paper is that the experience of the two countries is certainly different vis-à-vis their compliance with the EA institutional framework. Ireland on the one hand was a country with "sane" public finances and always in compliance with the SGP rules, while Greece had a more profligate fiscal stance and was usually in breach of the SGP.

Yet, in both countries social spending as a percentage of GDP increased after euro-adoption. This similarity is surprising, given that the two countries are different in almost every other respect, including the political orientation of their governments, with Ireland having a centre-right coalition and Greece a social democratic

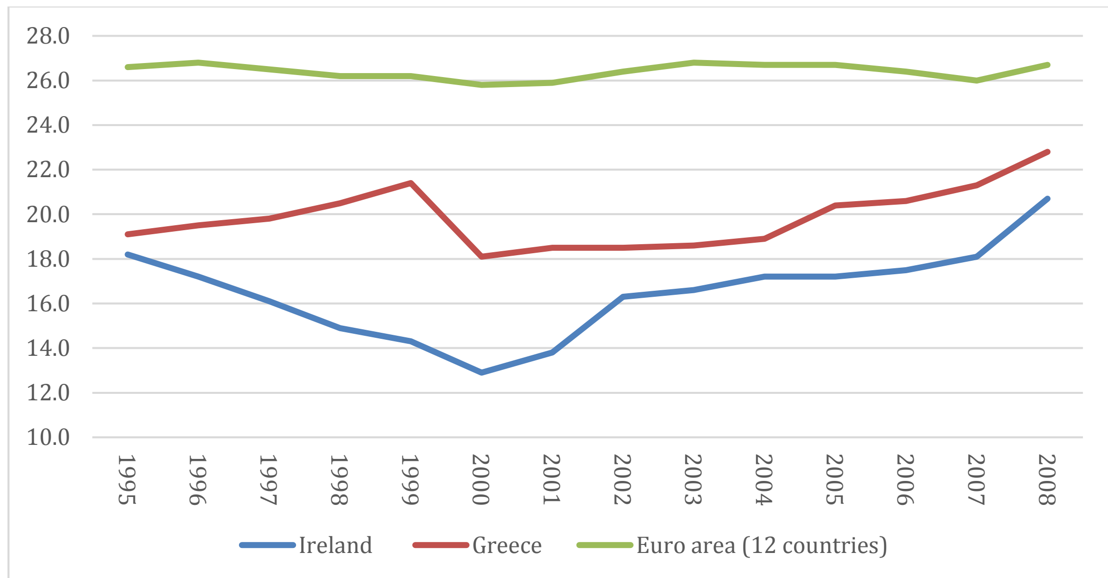
government succeeded by a moderate conservative one. By employing such a comparison of these two divergent cases, the insights we derive will allow us to unpack some of the dynamics which influence redistribution and inequality for a set of two very different countries adopting the common currency. It needs to be clear that the aim of the paper is not to answer what drove down the overall inequality trends. Inequality is a complex phenomenon which is influenced by various factors, some of which may owe to structural composition of household demographics, immigration, labour market institutions, etc. On the contrary, its aim is to focus on the distributional implications of government decisions to increase social spending under soft budget constraints, and only secondarily how this may affect overall inequality.

3.4 Fiscal space and social spending in Ireland and Greece

3.4.1 Evidence for fiscal space in Ireland and Greece

In Ireland, social protection as a percentage of GDP declines in the Maastricht period, but increases steadily in the 2000s, reaching a higher level in 2008 than in 1995. In the case of Greece, between 1995 and 1999, social protection increases steadily, declining from 2000 to 2002 (the period this country was entering the Eurozone) but then it increases until 2008. Overall, in both countries social protection as a percentage reached higher levels in 2008 compared to 1995. Moreover, in both economies, social spending moved closer to the EA (12) average in 2008 compared to 1995. More precisely, while social spending for Ireland and Greece was 19.1 and 18.2 in 1995, respectively, it was 26.6 for the EA (12). In 2008, both economies, which have been considered as laggards in terms of social policy provision, moved closer to the EA average with Greece spending 22.8 % of GDP in social policy and Ireland 20.7%, while the EA average remained nearly stable.

Figure 3.1*: Social Protection as a percentage of GDP.*



Source: Eurostat.

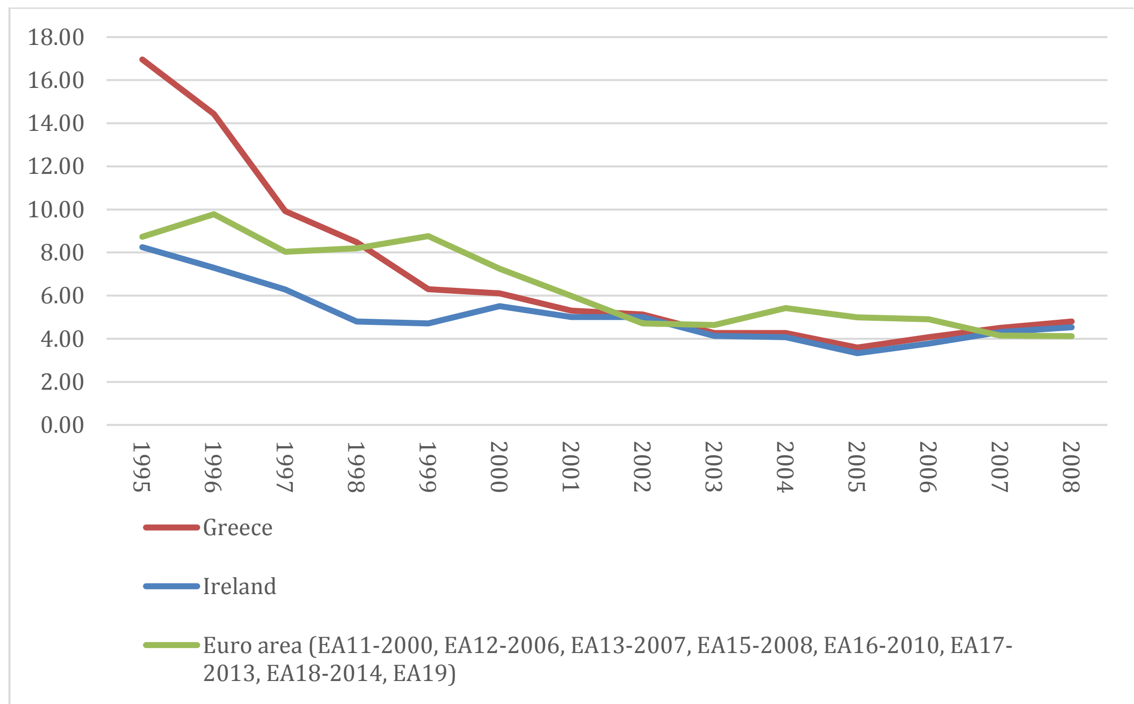
In order to explain this similarity we suggest, that the common thread that ties them together is the macroeconomic environment of EA. Below we will provide some evidence, which confirms that that accession to the euro entailed two mechanisms via which budget constraints were softened. The first mechanism is directly related to the reduction of interest rates, which subsequently led to a lower cost of public debt. "Peripheral" economies have had a windfall gain in policy credibility that will result in permanently lower nominal interest rates, reduction of risk premia, and big cuts to real interest rates (Begg, 2003). Access to the EA improved debt management and provided cheaper access to money markets.

The second mechanism is indirectly related to the downward convergence of interest rates. The single currency led to a narrowing of spreads among member countries. Peripheral economies became a "safe" destination for capital inflows almost overnight since currency depreciation was not feasible, and meanwhile default was understood as unlikely. Thus, peripheral countries attracted extensive capital inflows and experienced a robust growth performance which resulted in increased tax revenues. Below we examine how the two mechanisms may have affected Greece and Ireland.

Although the euro did not appear until 1999, it is clear that the anticipation of the EA was having an effect on spreads in the late 1990s. In the case of Greece, bond yields converged from much higher levels (from 16.96 in 1995 to 6.10 in 2000). In the case

of Ireland this decrease was less pronounced (from 8.25 to 5.91), but still it was more marked than the average decrease in the euro area.

***Figure 3.2**: Central government bond yields on the secondary market, gross of tax, with around 10 years' residual maturity bond, 1995-2008*

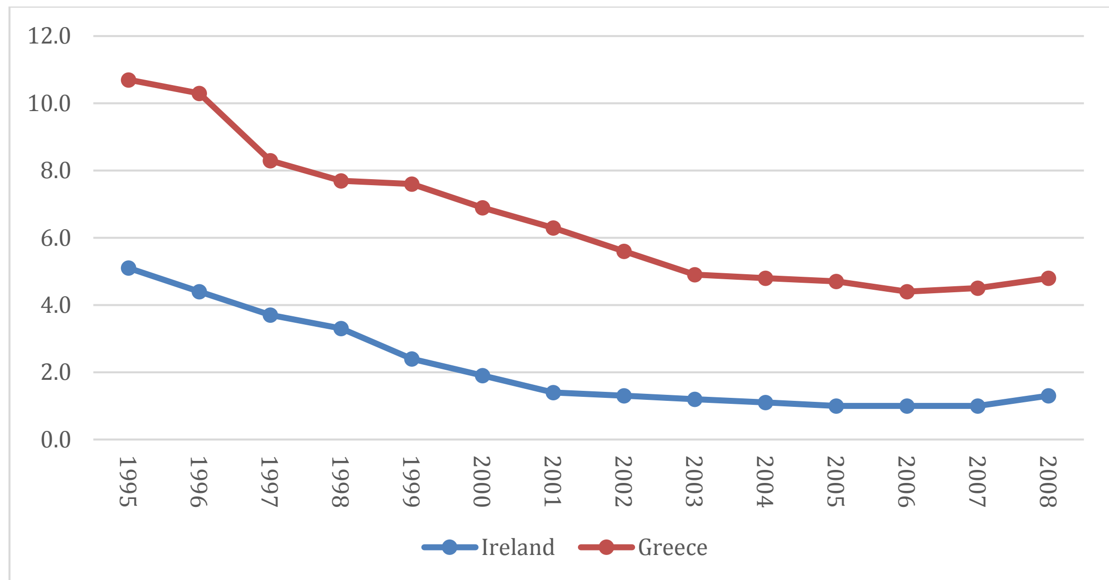


Source: Eurostat.

Interest rate payments on the outstanding stock of debt are an important component in public expenditure. According to data from the World Bank, in 1995, Greek interest costs amounted to 23.8 per cent of total government expenditure and in Ireland, they account for 10 per cent of the same.

Thus, the decline of interest rates the years before the adoption of the common currency meant that the decreasing interest payments would result in savings on interest costs for both governments. In the case of Greece, the interest payable as a percentage of GDP was 10.7 in 1995 and it fell to 6.9 in 2000. In the case of Ireland, it was 5.1 as a percentage of GDP in 1995, falling to 1.9 in 2000.

***Figure 3.3**: Interest costs of public debt, 1995-2008 as a percentage of GDP.*

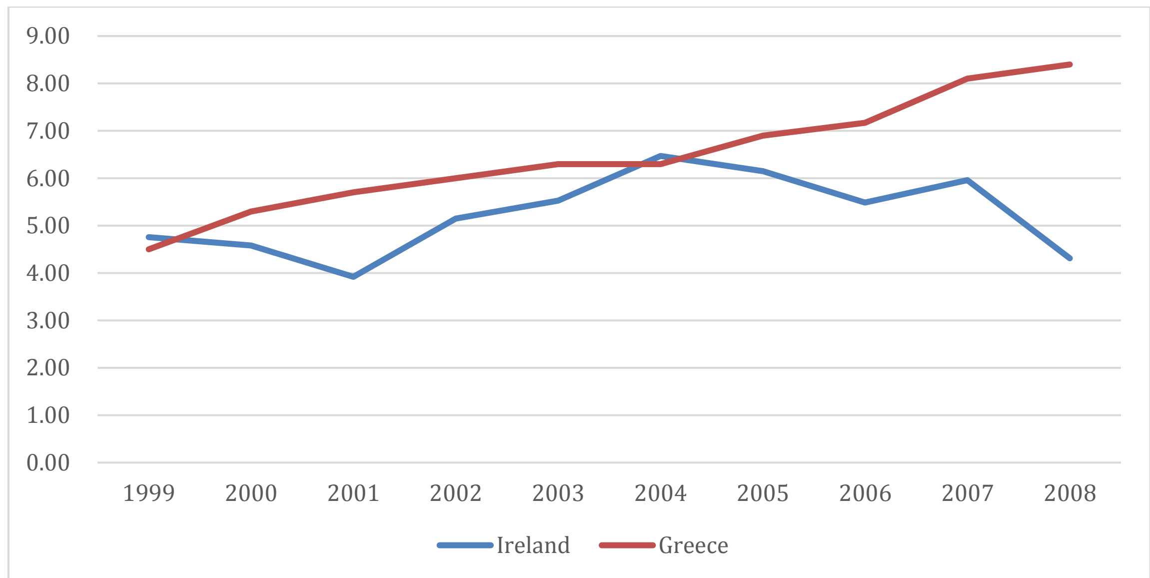


Source: Eurostat.

At the same time, during the euro years the composition of the public debt also changed and the introduction to the common currency allowed governments to gradually replace the short-term debt with long-term debt. Before the entrance into the euro, short term debt was a significant component of overall debt. According to data from the Greek Ministry of Finance, short-term debt as a percentage of total debt was 17.9% in 1999 and it was reduced to 10.3% in 2006 (reaching a record low of 8.5 in 2005). Simultaneously, in Ireland, according to data from the National Treasury Management Agency, short term debt as a percentage of total debt was 17.69% in 1999, reduced to 8.7% of total debt in 2006. Interestingly, it increased quite substantially the next year, jumping to 14.7%. One potential reason for this increase are the concerns that the 20-year period of a booming Irish economy would come to an end were consequently mirrored in the average maturity of public debt.

The next figure confirms the change in the composition of public debt. It reports the average term to maturity for total debt. This change in the composition of public debt represented the reduction of the annual cost of public debt, since its repayment costs would be distributed over a longer period.

Figure 3.4: *Average maturity of total debt.*



Source: OECD and Greek Finance Ministry.

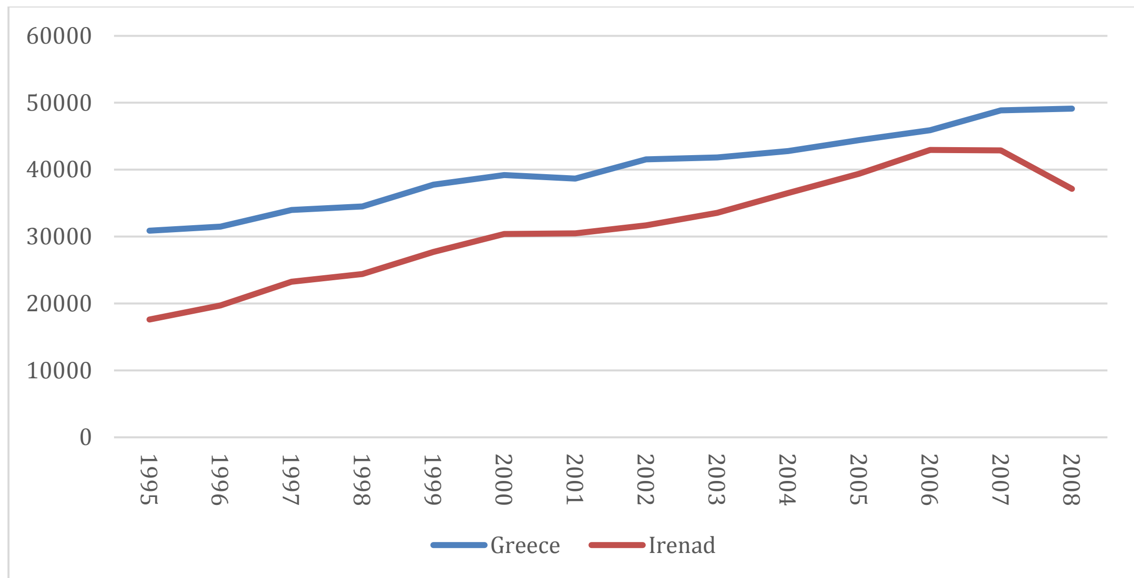
Although this first mechanism seems to be more evidently in place in Greece, the second mechanism seems to play an important role in the case of Ireland. The decline in interest rates which came with the EA, and the elimination of currency risk, boosted intra-euro area capital flows (Franks et al, 2018). In particular, these capital flows set the stage for a demand-driven growth cycle. Indeed the euro years were a period of robust growth for both economies. Intense growth implies an increase in incomes and profits and an increase in employment opportunities, along with a multiplication of wage earners – which led to further tax revenues for both countries.

While tax revenues in million euros increased for both economies, taxes as a percentage of GDP were declining in Ireland from 1998 to 2002 but increased from 2002 thereafter and were above the EA average. One of the reasons that tax revenues were decreasing in Ireland in the periods of the boom is that substantial cuts in income tax were implemented. Between 1999 and 2001 the government decided to reduce the standard rate of personal income tax from 26% to 20%, while the higher rate was reduced from 48% to 42%. However, total income tax revenue continued to increase due to expanding employment and rising incomes. The large cuts in income taxes were considered affordable due to significant increases in revenues coming from transaction taxes, such as stamp duty and capital gains tax due to the housing boom. As an example, stamp duty contributed to 2% of total tax revenue in 1995 and to 7.4% in 2007. Fifteen per cent of the national income in Ireland came from house building and

six per cent came from other forms of construction in 2006. Thus, revenue from pro-cyclical taxes increased substantially in the case of Ireland (Report of the Joint Committee of Inquiry into the Banking Crisis, Irish National Parliament, 2016).When the housing bubble came to an end, taxes as a percentage of GDP started falling again, revealing the erosion of the tax base.

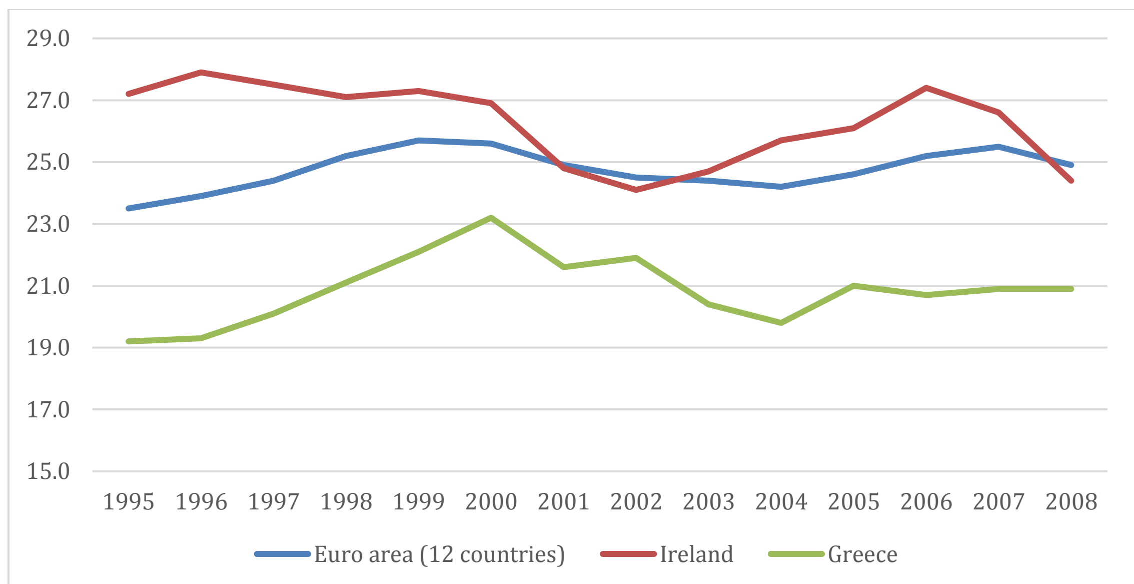
In the case of Greece, revenues increased in the first period (1995 and 2000). The extra revenues had two sources: the revenues from the economic growth that increased profits and expanded salaried labour and from the abolishment of numerous tax exemptions of a social nature. During 1995 and 2000 more taxes were collected due to the government's effort to reach the relevant criteria and access the EA (Ioannidis, 2015). Immediately after the entrance to the Eurozone and as a result of political choice, there was a sharp decline in revenues. The governments of PASOK (socialists) and Nea Dimocratia (conservatives) after 2001 gradually reduced the corporate income tax rate from 45% in 1995 to 21% in 2008. From 2004 to 2010, revenue from corporate taxation decreased sharply from 46% of total income taxes to 28.7% (or from 4.1% of GDP in 2000 to 2.5% in 2008). Thus, tax rate of corporate income in Greece (18.6%) remained at levels well below the Eurozone average (27.8%) (Ioannidis, 2015). Given the robust growth of the period the government had space to proceed with such reductions. During the period of 1995 and 2008, salary earners increased from 54% to 65% of total employment. Given the precept that "salary-earners do not evade," the increase in their numbers expanded the tax base and hence led to an increase of revenues from personal income taxes. However, in contrast to Ireland, tax revenues in Greece as a percentage of GDP remained lower than the EA average, while they did not increase markedly in the euro-years. This trend should be attributed to the lack of a housing bubble, but also to the high levels of tax evasion (Ioannidis, 2015).

Figure 3.5a: *Tax revenues, in millions of euros (1995 prices).*



Source: Eurostat.

Figure 3.5b: *Tax revenues, as a percentage of GDP.*



Source: Eurostat.

To conclude, with the cost of debt servicing declining, with growth above the EA average, and with increased tax revenues during the period of robust growth, it can be argued that there was some room for budgetary manoeuvring. However, how this fiscal space was used remained in the hands of the national governments and in general it is obvious that it could be used in multiple ways.

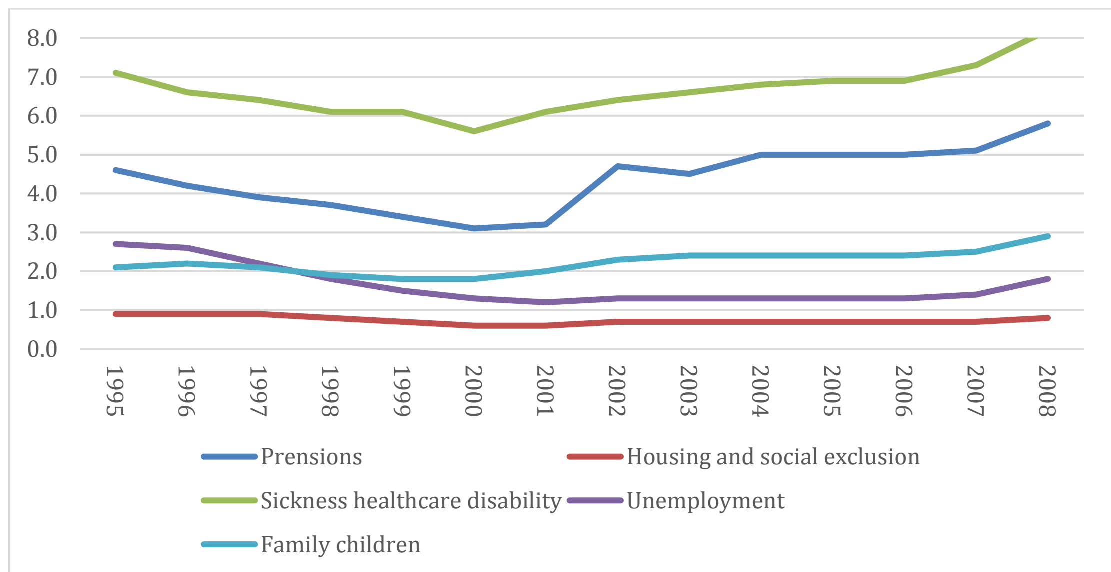
It is out of the scope of this paper to identify all the potential uses of this fiscal space. We are only interested in providing a new insight vis-à-vis the debate of EA and

inequality. In the latter the predominant current narrative is that the link between the two is due to welfare state retrenchment and lower social spending. We thereby dig a bit deeper into the composition of social spending.

3.4.2 The composition of social spending in Ireland and Greece

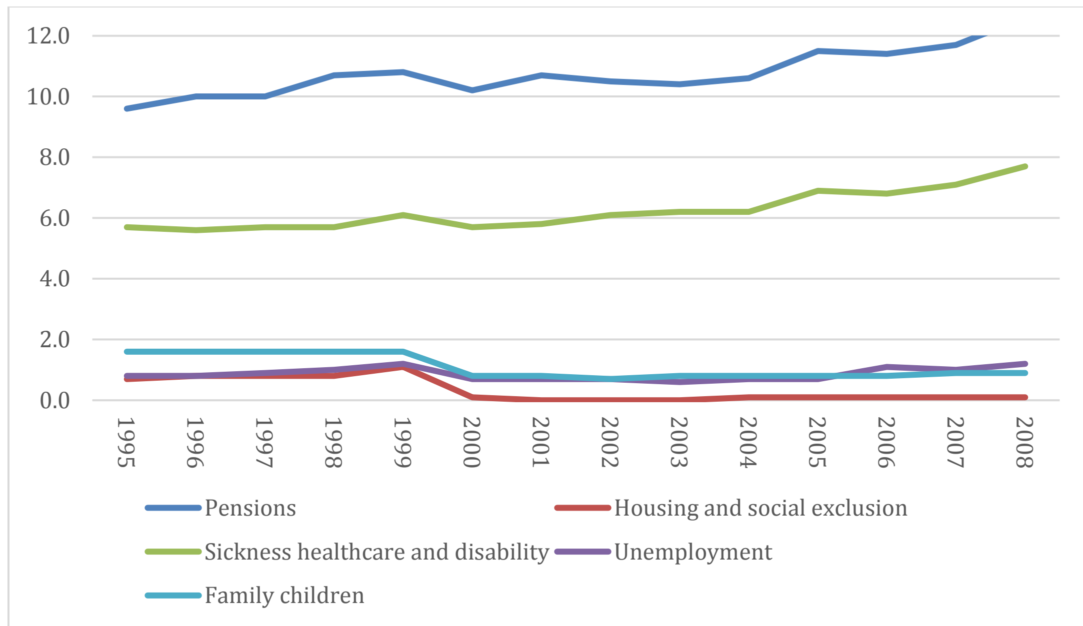
The largest part of fiscal redistribution comes from the expenditure side of the budget (Immervoll et al (2005), Brys et al (2016). While social spending as a percentage of GDP increased for both countries, the redistributive impact of transfers depends not only on their size, but on the transfers' mix and the progressivity of each transfer. Thus, while social protection expenditure has been increasing, it is important to identify the main areas in which social expenditure increased the most during the 2000s.

***Figure 3.6**: Ireland social protection by function, 1995-2008.*



Source: Eurostat.

Figure 3.7: *Greece social protection by function, 1995-2008.*



Source: Eurostat.

In the case of Greece, the most important category among income transfers is old-age benefits. This is the fastest growing category of social spending, and the biggest risk regarding the sustainability of public finances. Government spending on old-age benefits (of which pension payments represent more than 95% of total spending in this category) rose from 9.5% of GDP in 1995 to 12.6% in 2008. A significant rise was also observed during the same period in public expenditure on sickness/healthcare, which rose from 5.7% of GDP in 1995 to 7.7% of GDP in 2008. Spending on pensions was higher in Greece than the EA (12) average in 2008 (12.6 and 11.4, respectively). Hence, other categories of social spending (i.e., disability payments, unemployment benefits, family/children benefits, housing benefits) remained below 2% of GDP during the period of 1995-2008.

In Ireland, while social spending in all categories of social policy declined between 1995 and 2000, social spending rose significantly more rapidly than GDP in the 2000s, with particularly marked increases in pensions and health. In contrast to Greece, family-related transfers (i.e. the universal Child Benefit payment) increased considerably (from 1.8% in 2000 to 2.9% in 2008). In the end of the period under consideration, social spending in all categories was higher in 2008, compared to 1995. However, the most marked increases on income transfers between 2000 and 2008 observed are government spending on old-age benefits, rising from 3.4% of GDP in

1998 to 5.8% in 2008. Despite the fact that old-age spending increased almost 2.5% of GDP, it remained below the EA (12) average (11.4%) and in contrast to Greece, it did not consist of a problem of sustainability for public finance.

Despite these marked differences among the allocation of social spending in these two economies, in both country cases, spending on pensions increased substantially. Yet, our two country cases again differ, since in Ireland spending on old-age benefits was below the EA average. On the contrary, the accession of Greece to the common currency partially depended on the reform of the pension system, given that for the Greek case, expenditure on pensions was a substantial component of public expenditure and above the EA average (Featherstone 2004).

We claim that pensions comprise a representative case to examine whether Greek and Irish governments increased social spending in old-age pensions with re-distributional considerations in mind. Indeed, inequality decomposition studies across advanced economies find that pensions have a high redistributive impact.[10] While we expect increased spending in pensions to have important distributional implications for the elderly, which comprise a sizeable and vulnerable group in the cases of Greece and Ireland, it remains out of the scope of this paper to claim that pensions drove the overall inequality trend in these economies. Other transfers, i.e. family benefits, may have a stronger redistributive impact even if government spending in these transfers rises less than pensions- due to more targeted provision. Indeed, non-pension social transfers are usually concentrated towards the bottom of the distribution to a larger extent than pensions (Mitrakos, 2017).

3.5 Social-spending in old age pension and re-distributional considerations

In most EA member states including Greece and Ireland, as pensions comprised the highest category of social spending, rationalisation of the pension system was thought as the unavoidable indeed a necessary step to enter the EA given Europe's ageing population. Yet pension reforms would have been in national agendas even without

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[10] See for example Guillard et al. (2017) et al for a detailed analysis of the redistributive impact of tax and transfers across 22 economies.

monetary integration (Martin and Ross, 2004). Aging populations and rising dependency ratios are serious problems everywhere and welfare state specialists usually attribute welfare reform exclusively to them. In reality however, demographic trends and monetary integration have crossed paths. Europe's ageing population and the fiscal restraints in place were suggesting that the pie cannot always grow bigger, hence it was expected that the slicing would become more problematic (Featherstone and al. 2001: 463). It was thought that both the budgetary squeezes, necessitated by convergence, and the SGP narrowed government choices regarding pension reform.

Monetary integration was thought to rule out specific options, in particular of incurring new debt. Thus, a rationale for proposals of "paradigmatic reforms" developed from the existing system of a high-cost high-replacement rate public pension, based on social insurance that was topped up with smaller contributory supplementary systems (Martin and Ross, 2004).

However, for the countries of Southern Europe and Ireland, the problem of the pension systems was not only linked only with the long-term sustainability of the system (this was mainly a Greek and not an Irish problem. In Ireland pension spending was below EU average), but also with the inability of both systems to alleviate high poverty and inequality levels among pensioners. In 1995, poverty levels– when poverty among the elderly is measured by the percentage of people aged 65 and over who live below the poverty line of 60 per cent of the median equivalised (disposable) income of the total population– was higher in Ireland and Greece than the EU average (19, 22, and 17 per cent, respectively).

High inequality and poverty among pensioners on the one hand and fiscal sustainability on the other were highly salient issues in both Ireland and Greece. The political saliency of pensions is demonstrated by the fact that reform efforts started twenty years prior to the introduction of the common currency. Starting from Greece, pensioners composed an important part of the electorate and hence governments engaged with the issue having always in mind the potential voting dynamics that may arise. In effect, it appears that in Greece, younger voters are less interested about politics and hence less likely to vote. Conversely, voters over 40 and pensioners appeared to be far more interested in the political discourse of the time and much more willing to vote (Kakepaki 2006 in Greek). Moreover, the Greek pension system

suffered from two main problems in terms of structure and function. Firstly, the system was discretionary, it favoured particular groups while it ignored the basic social needs of large segments of the population. To add insult to injury it was economically unsustainable. This is linked to the fact that it operated as a public, pay-as-you-go, defined-benefit system. It comprised numerous occupational pension funds – 325 in 1997. This extensive fragmentation did not just increase the bureaucratic complexity of the system, but also created the platform for wielding pensions as a tool of electoral politics (Tinios 2013: 119-121).

An effort to redress some of these problems started already from the mid-1970s to the mid-1980s, as the pensions-to-GDP ratio almost doubled. The lowest pensions increased considerably, uninsured old-age persons started receiving a social-assistance benefit, and pensions (along with social security coverage) were granted even to groups that had not paid any contributions (e.g. to Greek repatriates from the former Soviet Union and other Eastern European countries). Yet, the system remained fragmented. Some efforts at improving some of the inequities and inefficiencies of the social welfare system were also made in the early 1990s when Greek public finances were in a deep crisis (Featherstone, 2003). In 1992 the conservative government attempted reform of the pension system (Sioufas 2013: 24 Mitsotakis 2013: 145), with the aim of creating a viable system that would mitigate poverty among the elderly (Sioufas 2013: 24). However, union opposition blocked the reforms (Nea 2004), Sioufas 2013: 22, Featherstone et al. 2001: 469). Subsequently, the final piece of legislation (Law 2084/ 1992) left structural problems unaddressed in the eve of EA accession.

As in Greece, in Ireland the issue of pension reform was of high saliency for political parties and for unions as well. The pension system was comprised of two pillars. The public, first pillar is the state old-age pension: a flat-rate mandatory social insurance pension supplemented by the flat-rate means-tested social assistance pension. The private, second pillar is voluntary and includes occupational pension schemes provided by employers, as well as individual pension arrangements. The overall design of the pension system is consistent with the neoliberal economic policy approach, creating and preserving a strong market for private pensions. Prior to the introduction of the common currency, the system did not have ostensible problems of sustainability.

However, one of the fundamental criticisms of the Irish welfare state especially in the 1990s is related with the weak links between growth and social outcomes. Thus, welfare has been criticised for treating high levels of relative income poverty as being less problematic than their reality. Social spending in Ireland was below the EU average and so was spending on pensions prior to the introduction of the common currency (Powell, 2017). Already since 1986 the Irish state established two independent bodies aiming to coordinate social dialogue vis-à-vis the future reform of the pension system; the Social Welfare Commission and National Pensions Board, while the National Pensions Policy Initiative established in 1996 also shared the above goal. In terms of actual government action and legislation, the first major government motion occurred already in 1990 with the passing of the Pension Act and of its amendments. The 1990 act introduced a wide range of measures, including the minimum funding requirements for pension schemes, preservation of benefits for people who leave their company prior to their retirement age and the establishment of Ireland's major pension-related consultation forum, the Pension Board, which had a strong poverty reduction focus (Hughes and Maher 2016: 95). The claim that during the early 1990s the Irish state and the relevant social partners were invested in grappling with pension reforms is supported by the establishment of numerous consultation bodies and of certain regulatory institutions that would be necessary for the formatting and implementation of any future reform.

Thus, the issue of pension reform and poverty reduction and inequality among the elderly was quite central for Ireland and Greece already from the 1980s. Hence, the respective governments' focus on the field of pension policy is a continuation of a long-term strategy and approach that started already two decades before the countries' accession in the EA.

We argue that when this salient issue of poverty and inequality mitigation among the elderly interacted with monetary integration, additional fiscal space opened up opportunities for reform. Thus, while Fernandez-Villaverde et al (2013) suggest that soft budget constraints led to reform postponement, we argue that, on the contrary, fiscal space can also stimulate pension reforms, which may lead to positive distributional outcomes. In order to investigate this possibility, the next part analyses the pension reforms in the two country cases, and their distributional consequences, in detail.

3.5.1 The case of Greece

As Greece was striving to meet the criteria in order to enter the EA, its access was still partially dependent on the reform of the pension system, given its financial sustainability problems (Featherstone 2004). Moreover, it was a widely held perception among experts during that time that the Maastricht criteria would impose a strong budget constraint that would justify the rationalisation of the pension system (Featherstone et al. 2001:465-466).

The reform that began in 1997 by the Social-democratic government of Costas Simitis was considered very urgent by political and economic experts in Greece and in the rest of Europe. These reforms are considered as one of the well-documented cases of reform failure in the relevant literature. However, what is important to underline for the purposes of this analysis is that despite the fact that this reform is considered a failure, it also marked two important developments which are often elided in the literature: a modernisation rhetoric was used explicitly and in a central way for the field of social policy. This rhetoric was tied with the need to bypass the constant objections of reform losers. Modernization's 'social policy manifesto' was central to a speech given by the Greek prime minister of the time on 19 October 1995 (Simitis, 1995, pp 17-32).

As a result, one of the goals of the government of the time was the attenuation of the generous guarantees for historically privileged occupational groups (especially in the field of pensions), accompanied by the improvement of minimum social benefits. It was clearly recognised that the economic stabilisation and viability of the system did not exclude the more equitable allocation of pensions. In fact the lack of reform was perceived as having significant costs given that it was helping the perpetuation of the previous clientelistic modus operandi (Tinios 2017).

As Simitis claimed, choosing between 'stabilisation or an increase of low pensions' was a false dilemma, borne of a non-rational structure of expenditure. Once the system was reformed, this kind of dilemma would recede (Tinios 2017: 68). Thus, both system sustainability and equal provision were central to the government's vision on pension reform.

The effort to modernize the pension system towards this direction started with the establishment of EKAS, a means-tested cash benefit to help pensioners at risk of state poverty, in 1996. EKAS would be funded by the state budget and distributed via the pension funds, with its main aim being to support low-income recipients of old age and survivors' pensions. Indeed, the number of pensioners at risk of poverty decreased by almost 3 per cent between 2000 and 2002. Given that the benefits were funded exclusively by the state budget, the establishment of EKAS did not provoke the reaction of other special interest groups (Matsaganis 2005: 51). Yet the limits of EKAS soon manifested- due to design faults and bureaucratic problems (Matsaganis 2005: 61). The administrative problems were not only restricted in the policies which has been introduced the first years of the Euro but these were representative of a more general pattern, which reflects problems of administrative capacity of the Greek state (Matsaganis, 2005: 62).

Following the establishment of EKAS the Simitis government started contemplating the wider reform of the pension system. The first step came in 1997, publishing the so-called Spraos Report on the pension system. This report on pensions demonstrated a clear preference for the prolongment of working life (Committee for the examination of economic policy in the long term 1997: 9), while it severely criticised the fragmentation of the pension system. Subsequently, it suggested the vertical unification of pension funds, accompanied by new schemes of financial solidarity between them (Committee for the examination of economic policy in the long term 1997: 9, 19-20).

The report claimed that such a policy reform would have clear redistributive effects in favour of the lower income brackets since it would limit the special subsidies of particular occupational groups and redirect funds towards the general pension schemes. Once again, the elements of modernisation and distributional considerations were taken into account. Complementing this rationale, the experts noted that the state had an obligation to protect all employees equally, and hence, the subsidisation of particular occupational groups should cease (Committee for the examination of economic policy in the long term 1997: 5, 20). The Committee extended this suggestion by arguing that the current contribution pattern should be reversed to the effect of employees working in the sheltered sectors of the economy contributing more (hence lower subsidisation), with the employees in the more competitive sectors

contributing less (hence higher subsidisation) (Committee for the examination of economic policy in the long term 1997: 8).

However, as in the early 1990s, all these proposals faced the fierce defiance of the unions and of the other parliamentary opposition parties. Unions reacted most forcefully to the report. The two largest trade unions in Greece, i.e. ADEDI (the main union for public sector employees) and GSEE (the main union for private sector employees) drew their membership from the labour segments of the economy that were better protected, and hence benefited more from the status quo and especially from the more privileged special pension schemes (Matsaganis 2007: 542, 545). Given that these major unions , that dominated the social dialogue, did not include workers insured in the less beneficial general schemes, i.e. younger workers usually employed by private firms with flexible contracts, women that recently entered the labour force and immigrants with semi-permanent status in the country (Matsaganis 2007: 543-545), union preferences were in favour of sustaining the existing regime. The unions' policy line, whenever faced with questions about the viability of the social insurance system, was that the state had to increase its contribution to the funds in order to cover their ever-rising deficits.

After its victory in the 2000 elections, the incumbent socialist government resumed its effort to reform the system of social security (Kathimerini 2008a). The government plan published in 2001, after the country's accession to the Eurozone, focused on suggesting changes that would secure the economic viability of the system. It proposed a uniform retirement age for men and women at 65, along with longer prerequisite insurance periods for seniority pension eligibility. Moreover, the bill suggested a modest, means-tested increase of the minimum pension for future retirees (Matsaganis 2007:548). Despite the fact that the plan was certainly less radical than the one drafted from the Spraos Committee, its policies would still lead to a more viable and more equitable system. Yet this would be done via the redirection of funds from the special pension schemes to the general ones.

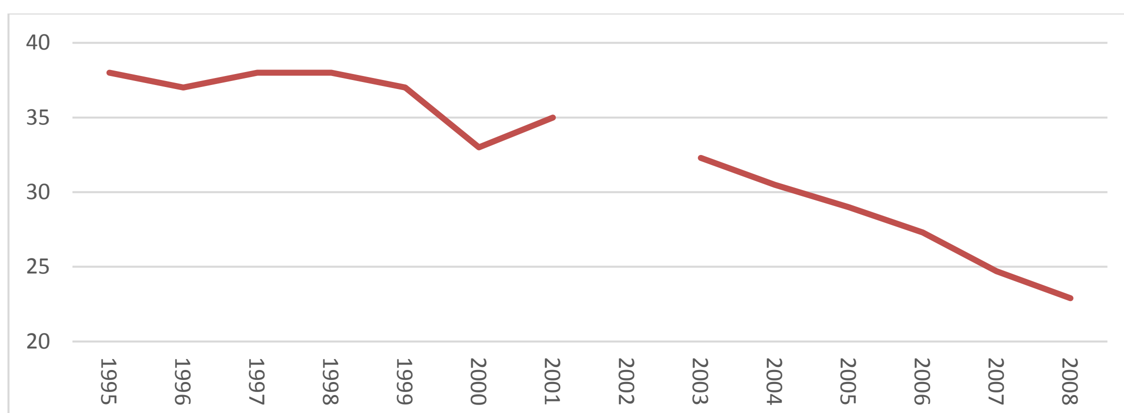
Reacting to this scheme, once again, political parties and social partners mounted heavy opposition to the reform (Matsaganis 2007: 549, Kathimerini a). Only a few days after the government's proposal went public, the unions publicised their opposition and announced a series of strikes.

Following this wave of strikes, the government sought to open a broad, six-month consultation in which the unions took part. During this consultation they provided extensive input on the final legislative proposal (Matsaganis 2007: 548). The final law mirrored a compromise between the unions and the government. The latter succeeded on sustaining and expanding seniority pensions and permitting early retirement for public sector employees in the context of the “hard and arduous” practice, i.e. professions or vocations that entail heavy physical fatigue and accumulated health costs. The latter provision enabled numerous public servants to receive an early and highly beneficial retirement package (Law 3092/02 article 2).

They also managed to secure additional state support for the pension fund of public employees, while the unification of funds of public sector employees would happen only on a voluntary basis (Law 3092/02 article 4). In exchange, the government managed to set a general replacement rate at 70 per cent, while it also managed to reduce the minimum pension at 70 per cent of the minimum wage for future retirees (Law 3092/02 article 3)-. However, it also managed to introduce a low-rate minimum pension for contributors failing to meet the standard requirement of 15 insurance years.

All in all, while the fiscal sustainability of the system remained a major problem and while the unions managed to preserve their benefits and to avert any kind of fund transfer to the general pension schemes, there was also the adoption of policies that were indeed universal yet were also targeted towards groups facing a high risk of poverty and/or social exclusion: the introduction of a pension for the uninsured elderly, as everyone now received some kind of pension. Moreover, there were rises in minimum pensions and in the EKAS. This is mirrored in poverty rates among pensioners for this period, as poverty levels for pensioners decline after 1998.

Figure 3.8: *Poverty among pensioners in Greece.*



Source: Eurostat.

Before turning to inequality indicators, it worth mentioning that the increase of pensions was annual and at the government's discretion. The annual increase was generally progressive, with low pensions increasing more under the euro during the centre-left PASOK government except the year 2000, which is the year prior to the introduction of the common currency. After the 2004 electoral win of New Democracy, pensions spending as a percentage of GDP increased substantially (more than during the Simitis Government) and annual increases in pensions were above inflation but equal for all pension brackets.

Table 3.1: Annual pension increases, Greece, 1999-2008.

<table>
<tr><th>Year</th><th>1999</th><th>2000</th><th>2001</th><th>2002</th><th>2003</th></tr>
<tr><td></td><td>PASOK</td><td>PASOK</td><td>PASOK</td><td>PASOK</td><td>PASOK</td></tr>
<tr><td>CPI</td><td>2.60%</td><td>3.20%</td><td>3.40%</td><td>3.60%</td><td>3%</td></tr>
<tr><td rowspan="4">Increases</td><td>3.9%
(< EUR 733)</td><td rowspan="4">4.00%</td><td>5.5%
(< EUR 352)</td><td>3.5%
(< EUR 400)</td><td>4%
(< EUR 500)</td></tr>
<tr><td>3.4%
(> EUR 733)</td><td>2.75%
(< EUR 587)</td><td>1.5%
(< EUR 620)</td><td>2%
(<EUR 1 000)</td></tr>
<tr><td></td><td>1.4%
(<EUR880)</td><td>0.75%
(<EUR910)</td><td>0%
(>EUR1000)</td></tr>
<tr><td>3.4%
(> EUR 733)</td><td>2.75%
(< EUR 587)</td><td>1.5%
(< EUR 620)</td><td>2%
(<EUR 1 000)</td></tr>
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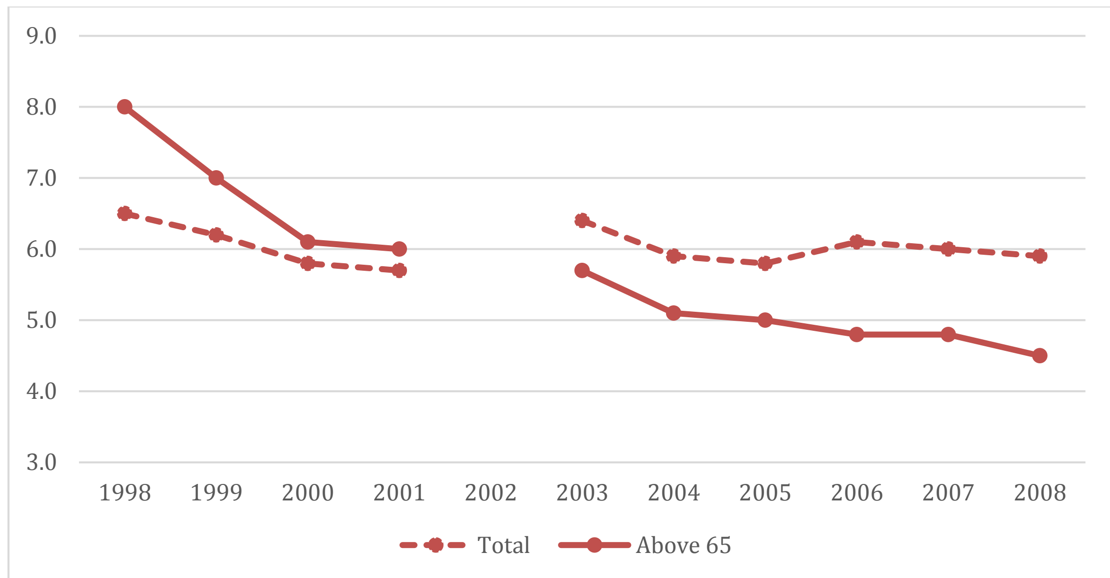
<table>
<tr><th>Year</th><th>2004</th><th>2005</th><th>2006</th><th>20007</th><th>2008</th></tr>
<tr><td></td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td></tr>
<tr><td>CPI</td><td>2.90%</td><td>3.50%</td><td>2.90%</td><td>2.90%</td><td>4.20%</td></tr>
<tr><td rowspan="4">Increases</td><td>5%
(<EUR 500)</td><td rowspan="3">4.00%</td><td rowspan="4">4.00%</td><td rowspan="4">4.00%</td><td>3% from 1/1/08 plus 2% from 1/10/08</td></tr>
<tr><td>3%
(<EUR1 000)</td><td rowspan="3"></td></tr>
<tr><td>0%
(>EUR1000)</td></tr>
<tr><td>3%
(EUR 1 000)</td><td>3.4%
(>EUR733)</td></tr>
</table>

Source: OECD Pension at Glance (2005, 2007, 2009).

The S80/S20 indicator is constructed by dividing the total equivalised disposable income of the top 20 per cent incomes of the elderly by the total equivalised disposable income of the bottom 20 per cent incomes of people aged 65 and over. A higher value of this indicator implies a higher inequality among the elderly. This indicator reveals two major facts: Firstly, in the period prior to EA accession, inequality was higher for the elderly and above the total population; after the introduction of the common currency, inequality was lower for the elderly than the total population (see figure 3.9). As Matsaganis (2007) claims, with the pension system absorbing most of welfare state spending, transfers for the working age population remain low. In other words, the reverse of the coin of over-resourced pensions is under-resourced family unemployment and housing benefits.

Secondly, according to the S80/S20 indicator, inequality among the elderly fell from 1998 onward. Yet, this decline is not continuous, but rather depends on the governments' choice on how progressive would be the annual increases in pensions. More specifically, despite the fact that pension spending as a percentage of GDP increased more from 2004 onwards under the centre-right government of New Democracy, inequality from 2004 to 2008 did not decline that much – since the annual increases in pensions were not always progressive.

Figure 3.9: *Income inequality among total and elderly population, Greece, S80/S20*



Source: Eurostat.

To conclude, our evidence suggests that as the literature claims, the rationalisation of the pension system and its restructuring on a more equitable basis was not realised to the extent of its original intention. While this result would follow the corollary of Fernandez-Villaverde et al. (2013), meaning that the creation of fiscal space and the subsequent softening of budget constraints were the factors leading to reform postponement and further institutional deterioration, two reasons command caution. Firstly, whether it was the euro allowing for this lack of reform is rather unclear. The same opposition dynamics were taking place in the early reform of the 1990s, a period with less budgetary manoeuvre for Greek governments. Unions in that period once again blocked the conservative government's pension plan. Secondly, the above analysis indicates that even in the case of Greece, which is usually considered as the country with the least progress regarding its welfare state restructuring and a laggard in structural reforms, there were clear elements of modernisation during the euro years. This took place in the context of enormous social and political resistance to any serious attempt of pension system recalibration. Most of the government proposals only remained frustrated promises, although some of them did materialize, especially the ones linked to the improvement of minimum social benefits which did not generate reactions by the insiders of the system. Thus, despite the fact that insider privileges remained untouched and the system continued to be highly fragmented, inequality and poverty among the elderly was significantly reduced.

3.5.2 The case of Ireland

The discussion for a significant reform of the Irish pension system had already commenced in 1996 by the "Rainbow Coalition" of Christian democrats, Labour and the progressive left, in association with a permanent independent Committee (the Pension Board) that included representatives of most social partners. The discussion continued into 1997 with the new liberal/conservative coalition government of Fianna Fail and the Progressive Democrats and ended with the publication of a report labelled "Securing Retirement Income". The report suggested significant reforms for both aforementioned pillars of the pension system. The overall reform had as an explicit aim "to ensure adequate provision for retirement income for all" (The Pensions Board 1998: 8). This was motivated by the fact that despite the years of growth, poverty among pensioners was high compared to EU standards.

Hence, it presented a national pension system scheme which especially emphasised strengthening the basic Social Welfare Pension as a means of poverty mitigation (The Pensions Board 1998: 3). Moreover, it suggested that mitigating poverty was not enough and that providing an adequate total retirement income (equal to 50 per cent of gross preretirement income) was crucial (The Pensions Board 1998: 10). Addressing these poverty-related concerns, the Pensions board proposed that the target pension rate should rise from 28.5 to 34 per cent of average industrial earnings (The Pensions Board 1998: 10).

Recognising the fact that pension coverage was unequal between sectors and between full and part-time employees, the Board also noted that the goal should be 70 per cent coverage of the working population above 30, meaning access to supplementary pensions (The Pensions Board 1998: 11). More comprehensive policies were established, e.g. a new type of pension vehicle, the Personal Retirement Savings Account, access of all employees to some kind of supplementary coverage via their employers and equal treatment between full-time, atypical and part-time workers (The Pensions Board 1998: 20, 24). The report was accepted by the government and led it to tabling a pension amendment bill in 2001 with the aim of ensuring that all pensioners have an adequate income in order to live with dignity (Seanad Eireann 2001: 1, 9). The bill included all the major suggestions found in the 1998 report like the establishment of the Personal Retirement Savings Account, which was aiming to

increase coverage to 70 per cent (Seanad Eireann 2001: 3, 5). Furthermore, following the report's suggestions, the government by the end of its term, increased state pensions by 3.7 per cent –still falling short of its initial 34 percent goal (Hick 2009:7).

Both the report and the bill were accepted with little opposition from the other parliamentary parties and the social partners, while it caused little social strife. This should be attributed to the system of "Social Partnership" that was dominant in Ireland at the time. From 1987 onward, the largest trade unions in Ireland were in close cooperation with the government (particularly with Fine Fail) regarding the latter's strategy for wage restraint. Hence the major trade unions ended up usually aligning with government policies (Culpepper and Regan 2014: 736). One can see a similar pattern of inclusive social partnership in the field of pension policy.

The first Social Partnership agreement that embraced such a policy line vis-à-vis pensions was the one published in 1997 (Department of the Taoiseach 1997). Following this agreement, the reform bill included clear and agreed provisions on pension policy. In addition to the social partnership agreement, the responsible body for moulding reform, the Pensions Board, had wide and all-encompassing membership, including representatives of all major trade unions, representatives of the employers and of other professional groups, three nominees from the ministry and departmental representatives (Seanad Eireann 2001: 2). In addition, the consultation before the report was quite long –around 2 years – and wide-reaching, with 143 submissions (Pensions Board 1998: vi). All the above signified sufficient time for public debate on the issue and that the major social partners offered significant input on the formulation of the reform scheme– hence they had little ground to oppose the reform.

The initial success of the reform and the absence of any marked reaction to it enabled the liberal coalition to continue on the same path after its 2002 electoral victory. The two coalition parties announced in their common program for government that they would continue reform of the system with the aim of ensuring adequate life standards for the elderly. The program went as far as to include specific measures: an increase to the basic state pension to 200 euros by 2007, personal pension entitlements for pensioners' spouses and additional options for people of pension age who wish to continue working (An agreed program for Government 2002: 26).

Following these commitments, the Pension Board produced in 2005 the "National Pensions Review", which sought to assess the progress of the reforms that were defined in 1998 (Pensions Board 2005: ii). The report reaffirmed the previous goals regarding the level of the social welfare pensions, the overall retirement income and the desired amount of coverage. It suggested that progress towards their achievement was still inadequate (Pensions Board 2005:4, 26, 32, 34-35). The report did urge the government to step up the efforts to reach these targets (Pensions Board 2005: iv) in view of the fact that the percentage of retired persons under the risk of poverty had risen to 31.0 in 2003 (from 6.0 in 1994) (Pensions Board 2005: 4).

On the front of poverty mitigation, the report noted that coverage and income adequacy among the younger and part-time employees, of which the largest proportion was female, was lower (Pensions Board 2005:44). To that end, the Board proposed more awareness initiatives in order to increase pension awareness among women, while any future changes should aim to close the provision gap and benefit women (Pensions Board 2005: iii, 6,7,44).

Finally, the report recognized that the funding costs of the state pension schemes would increase dramatically in the future and hence some change vis-à-vis funding should be pursued. In order to address this challenge, the board suggested either an increase of state funding and/or the incentivisation of workers in pension age to retire later, while it explicitly opposed any reduction in state pensions (Pensions Board 2005: iii, 7-9). In a follow-up report (Pensions Board 2006), the Board went into more detail about the funding challenges that a mandatory pension system would face. It proposed that "the most appropriate and practical approach to improving the position of pensioners in Ireland would be a combination of an increase in the State pension with a mandatory supplementary system for those at work who are not making supplementary provision." (Pensions Board 2006: 19).

The bill that was introduced by the government in 2007 was taking into account the above reports when it took practical steps to reach the 1998 targets. Hence, it increased the contributory state pensions to 223.30 euros per week and the non-contributory to 212 euros per week, while it also introduced beneficial measures for the spouses and partners of contributory pensioners (Seanad Eireann 2007 a :2). The Bill also increased the qualified adult rate at 200 euros per week, a measure that universally benefited all

qualified adults aged 66 and over, and especially women who did not have an entitlement to a contributory pension in their own right because of home responsibilities (Seanad Eireann 2007a :3). Moreover, it increased the weekly pay for non-contributory widows and widowers at 197.80 euros, along with pay for invalidity pension recipients over 66 (Seanad Eireann 2007a: 10-11). It also ensured that the state pension was paid directly to the qualified adult– a measure with direct and beneficial implications for the pensioners' spouses (Seanad Eireann 2007b: 11).

As it was the case with the previous bill, little opposition was mounted both inside and outside parliament. However, there was a protracted discussion about the tax expenditure on private pensions. It is indeed true that the shift towards private provision does not remove tax burden from the public: tax support for market-based pensions is a frequently ignored part of welfare states (Ebbinghaus and Whiteside 2012: 275). In the case of pensions, tax expenditure on private pensions relative to GNP was almost the same as public expenditure on state pensions in 2006.

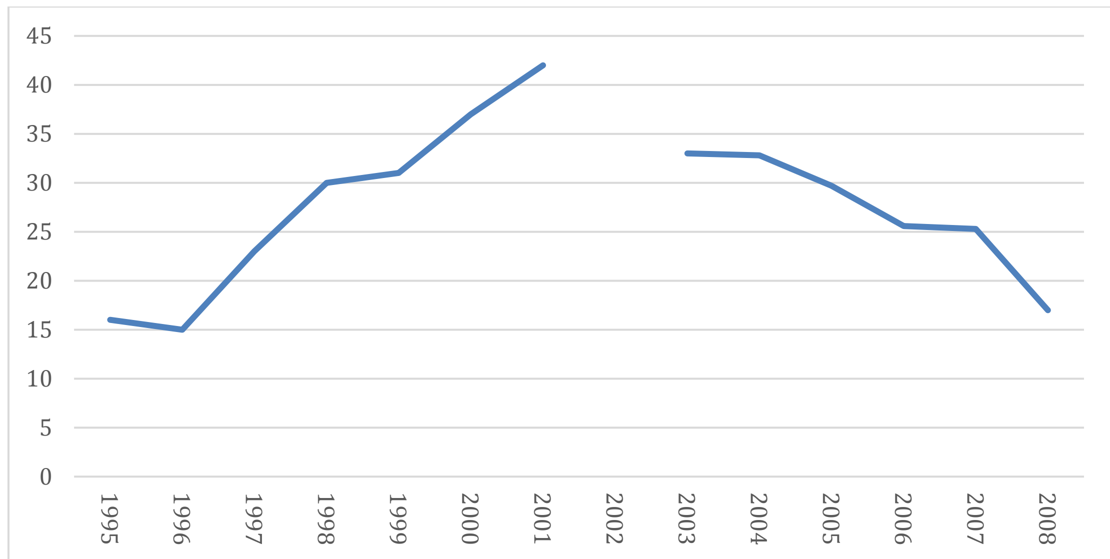
Such criticism was part of the public debate and surfaced during the parliamentary debate of the upcoming 2007 bill. In the words of the Labour politician Róisín Shortfall, "There is effectively a rich man-poor man approach to pensions. The State is subsidising the pensions of the very wealthy. The rate of transfer to the wealthy is approximately 33 times the rate of transfer to a person on the average industrial wage, simply because the better off can afford to stash away more for their pension." The reason that the state supported such tax expenditures was in order to encourage individuals to supplement their Social Welfare pension with private pension arrangements. The government was claiming that these tax relief arrangements aided a significant proportion of the workforce to provide for supplementary pensions. Concretely, it was estimated that over half of those in employment were covered by supplementary pension arrangements.

Thus, despite these concerns, the majority of the opposition parties did not raise any objections against the direction of the reform, but instead vis-à-vis its extent. Hence once again the government managed to include and obtain the agreement of the main social partners during the consultations prior to the introduction of the bill.

Turning to the distributional consequences of these reforms, the poverty mitigation reform agenda that the coalition government adopted was successful. The above

reforms were benefitting, through increasing state pensions, the poor, low and middle earners and individuals who had no previous coverage. After 2001, poverty levels fall substantially among pensioners.

Figure 3.10*: Poverty among pensioners, Ireland.*



Source: Eurostat.

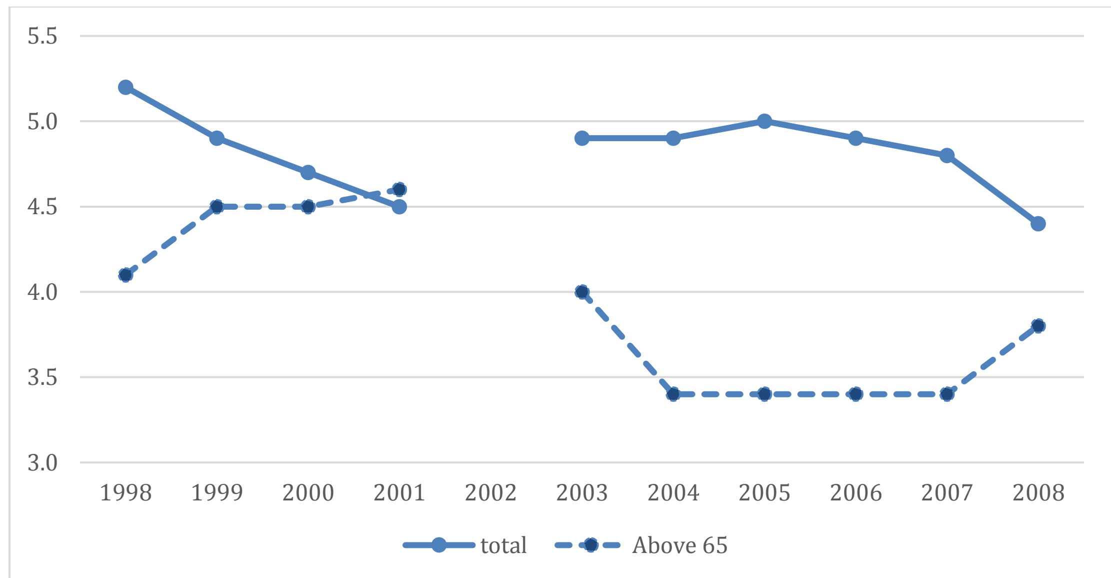
However, turning to inequality trends, the dynamic is more complex. Income inequality among the elderly increases before EA accession. This trend was reversed in the early euro years where inequality among the elderly starts decreasing. However, inequality remains broadly stable for most of the euro-years and it slightly rises after 2007.

Tax expenditure on private pensions relative to GNP was almost the same as public expenditure on state pensions in 1999. The bursting of the dot. com bubble resulted in a significant loss of assets by the Irish pensions industry, and for that period between 2000 and 2004, tax expenditure for private pensions fell while public expenditure on public pensions rose (Hughes and Maher 2016:106-107).

However, tax expenditure for private pensions peaked in 2006 and was not far short from the public support for state pensions. Tax reliefs benefit mainly the pensioners at the top quintile and the huge concentration of tax reliefs on the highest earners is a striking example of upside redistribution. While inequality was stable, as the year's tax expenditure for private pensions was decreasing and was increasing for public pensions, it increased when tax expenditure started increasing. However, inequality

was still lower in 2008 compared to 1998 and the increases in state pensions achieved the goal of poverty mitigation but also of inequality reduction (Hughes and Maher 2016:106-107).

Figure 3.11*: Income inequality among total and elderly population, Ireland, S80/S20*



Source: Eurostat.

To conclude, based on a wide political consensus that the country should address the future systemic challenges of its pension system while its working population is still young and productive and for as long as the economic boom lasted, the liberal coalition government managed to push for the modernisation of the pension system and for the substantial reduction of poverty among the elderly. However, in the case of Ireland, despite the continuing generosity of tax relief for private pensions and the launching of the pension board, coverage still remained below target. Moreover, inequality among the elderly was never in the agenda of the conservative coalition in power, and its reduction in the first years was a side effect of a policy that was clearly aiming at poverty mitigation. This, combined with a fall of tax expenditures on private pensions due to the dot com bubble, led to a reduction of inequality.

To summarize, despite the fact that pension spending increased in both countries, leading to reduction of poverty and inequality among the elderly, there is a fundamental difference on how pensions contribute to the decline of overall inequality. In Ireland, a non-southern country: the combined contribution of the non-pension social transfers in reducing inequality is large and most of the times larger

than the corresponding contribution of pensions (Heady, Mitrakos and Tsakloglou, 2001, Dafermos and Papatheodorou, 2012). However, in Greece pension contribute much more to the reduction of inequality than other transfers and studies confirm that this pension bias led poverty in Greece in recent years to have shifted away from the elderly towards younger couples with children as well as to young workers (Mitrakos, 2017).

3.6 Conclusion

The paper contributes to the literature of the political economy of redistribution and monetary integration. It started with the premise that EA membership was linked with market forces that have been so far elided in the Eurozone-inequality debate. Stemming from that we supported that this allowed governments in peripheral economies to increase social spending. In order to examine in depth the effectiveness of this social expenditure increase – resting both on the composition of social benefits and the degree to which they are targeted towards those who should really need them to them – we focus on Ireland and Greece.

We concentrate on pensions, since pensions' policy is a very a highly contested and politicized area of transfers. We use it in order to provide hard proof of the hypothesis that peripheral governments were not as "feckless" as the literature implies. In both countries, the fiscal space allowed them to realize modernizing elements in their pension reform plans, which subsequently led to lower poverty and inequality. They strived to introduce pension fund reforms that would entail benefits for the elderly who were close to the poverty line. Pension spending increased in a progressive way and outsiders (those not covered from the existing schemes) of the system benefited from this increase even in the unlikely case of Greece.Subsequently, the literature suggesting that the Eurozone entailed only institutional deterioration for certain peripheral countries tends to focus only on an evaluation based on efficiency (fiscal sustainability) and ignores that accession to the EA enabled governments to pursue reforms with positive social outcomes.

Focusing on modernisation as a process, of democratisation around values like equality and social justice, our analysis revealed that even in the case of Greece, which is not known for much progress on its welfare state restructuring, and despite the enormous social and political resistance to any serious attempt of pension system

recalibration, there were clear elements of modernisation during the euro years. Thus, despite the pervasiveness and persistence of insider privileges within the pension system, the establishment and the increase of minimum social benefits had positive distributional consequences for the elderly also among the lower income classes. Moreover, the progressive annual pension increases, especially under the centre-left governments, showed clear re-distributional considerations. In fact it appears that the above reforms were possible because the government could, due to soft budget constraints, maintain almost unharmed the benefits of the groups that were most likely to prevail in a "war of attrition". Hence, the narrow focus of the literature, in fiscal sustainability does not always provide a complete picture of the reform efforts and their societal effects. However, even if one follows the predominant narrative, and defines modernisation as entailing policies of fiscal discipline and structural reforms, we demonstrated that in the case of Greece, this is not mutually exclusive with an effort to modernize the welfare systems on the basis of equality. Moreover, we argued that the government has made an active effort, of making progress on both fronts. While, the effort bear fruits in term of fiscal sustainability, nevertheless the attempt to achieve both outcomes we need a more nuanced narrative in regard to the literature of institutional deterioration.

In the case of Ireland under EA and soft budget constraints, the liberal coalition government managed to achieve a more equitable pension system and to reduce poverty among the elderly substantially. Inequality concerns were not really on the conservative coalition's agenda, however, and the reduction of inequality was rather a side effect of the government's poverty reduction strategy. Tax relief for private pensions continued to benefit the upper part of the distribution. Yet, the increase in state pensions benefited middle and lower income pensioners and this reduced not only poverty but also inequality. At the same the issue of fiscal sustainability, was not a concern since the Irish welfare system has been always criticized for low provision of benefits. Thus, the pension reform was crucial for reducing inequality among the most vulnerable.

Our study sheds light on the debate about inequality in the EA as how it is imperative to consider market forces and their effects on fiscal space. Through this mechanism, budgetary policies were not constrained and disciplined but, on the contrary, set free to realise reform agendas that predated the advent of the euro.

This paper focused on only one particular area of transfers; namely, pensions. A continuing pension bias may lead to intergenerational inequalities and may shift the problem of poverty towards the younger part of the population. However, we have shown that the above mentioned reforms, were reforms which did not benefit existing beneficiaries of the pension system but the ones in need and those not covered from the existing schemes. Hence, they had an equalizing impact: i.e. this was not in case of further entrenching the advantages of an already advantaged social group.

Despite the fact that there was progress in targeting low income pensioners we nevertheless do need to underline that the pension bias still remains one of the characteristics of the Greek welfare state: it thus remains the case more broadly that it is the working age population that remains most vulnerable (Mitrakos, 2017). Thus, it should be also studied how this continuity in pension bias may have affected inter-generational inequalities. Lastly, this effect on intergenerational inequality may be different for a non-Southern state, such as Ireland where the composition of social security is more balanced. Moreover, while these two cases cover a wide spectrum of pension systems and reforms, it would still be desirable to explore the rest of the peripheral countries that experienced a strong convergence in interest rates and high capital inflows. . This would allow the examination of the interaction between market forces that were unleashed with the adoption of the euro, with domestic political responses. Subsequently, we will be able to examine the distributional outcomes that were produced by these responses.

4. Monetary integration and wealth inequality: The housing channel in Italy and Spain

This paper focuses on one of the possible channels via which monetary integration affects inequality – namely the housing market. Although to different extents in different countries, the housing market is strongly influenced by the process of monetary integration, due to interest rate convergence and elimination of exchange risk. Due to these forces, as is well known, housing markets in the Eurozone 'periphery' experienced significant booms. Building on the literature on Varieties of Residential Capitalism and financialisation, this paper focuses on the distributional implications of the housing booms in Italy and Spain. At the point of euro-adoption, both countries were characterised by low mortgage debt as a percentage of GDP and high homeownership. In the euro-years, the two countries started to diverge subsequently, with Spain experiencing high capital inflows, increasing financialisation, and a very frantic housing boom; and Italy maintaining rather modest capital inflows, a quite stringent housing and finance system, but still experienced a housing boom yet less frantic. By employing inequality decomposition techniques, I find that housing wealth inequality mattered in both countries for the evolution of overall wealth inequality tends. However, the analysis suggests that the distributional consequences of the housing channel varied across institutional settings, and Spain which embraced financialisation experienced an increase in housing wealth inequality already from the second phase of the boom. While in Italy, the housing market was less financialised, and the housing boom led to a slight decline of housing wealth inequality.

4.1 Introduction

European monetary integration has often been criticised for being the outcome of a broad elite consensus driven by neoliberal ideas (McNamara, 1998) which benefited mainly capital owners and not the middle classes. The crisis of 2008 has intensified this rhetoric, with politicians and public opinion shifting focus towards the perceived rising inequality and increasing poverty levels inside the Eurozone, especially in the

countries most affected by the crisis, arguably placing the "euro" and the architecture of the EA (euro area) at the forefront of inequality discussions in the public discourse (Bertola, 2010). The introduction of the common currency has led to a fundamental transformation of the participating economies, with variable effects across a number of areas (employment, investment, exports, interest rates, rates of growth, etc.) and ambivalent general equilibrium effects on inequality. Due to the multiplicity of channels via which monetary integration can affect income inequalities (Bertola, 2010), disentangling the direct and overall effects of monetary integration on inequality is particularly challenging.

In response to this, in this paper I look at one particular aspect of inequality (housing wealth) focusing on one of the possible channels – namely the housing market. Although to different extents in different countries, the housing market is strongly influenced by the process of monetary integration, due to two important processes that are strongly linked to the process of monetary integration: interest rate convergence (implying declining, or even negative, real interest rates in 'periphery' countries) and elimination of exchange risk (implying sizeable capital inflows, towards the 'periphery'). Due to these forces, as is well known (Bohle, 2017), housing markets in the Eurozone 'periphery' experienced significant booms, with fast rising demand as well as supply and a rapid expansion of the construction sector.[11] Of course, the extent to which this happened depended on a number of factors, including – as we argue later – the degree to which national governments facilitated the expansion of the housing market by following particular programmes of deregulation of the mortgage market and of financialisation, more generally.

Despite the strong trends seen in the housing markets of the Eurozone economy ever since the introduction of the euro, and despite the importance of housing as a source

[11] As is well known, this housing boom turned into a crash with the advance of the global financial crisis, resulting also in a significant contraction of construction. These developments have been studied extensively elsewhere (i.e. Toledano, 2017) but they are outside the scope of this paper.

of wealth for most households and, in policy terms, for access to housing, the literature has tended to neglect this aspect in its analysis of inequality until recently.[12]

Under these considerations, the purpose of this paper is twofold. On the one hand it falls to examine the influence that the housing boom (associated with the interest rate convergence dynamic instigated by the euro) had on wealth inequalities in countries most affected by these dynamics (the 'Eurozone south') and in particular on inequalities in housing wealth and in housing asset holdings by households. On the other hand, it examines how national policies aiming to liberalise the mortgage and housing markets (including through banking and financial market deregulation) influenced the effect that the dynamic unleashed by interest rate convergence had on housing wealth inequalities. For this purpose, the paper takes an in-depth perspective in analysing the two cases of Italy and Spain. These two countries had, at the point of euro-adoption, low mortgage debt as a percentage of GDP. Soon after their accession to EA, both countries experienced fast declining real interest rates and accelerated housing prices, albeit to different degrees.

On the other hand, the two countries differ markedly in their policy approach to financial and housing market liberalisation – with liberalisation policies in Spain being more drastic and going much further than in Italy. As a result, despite their similar institutional vantage point in the early 2000s, which allowed them to be classified under the same 'variety of residential capitalism' (Schwartz and Seabrooke, 2009), the two countries started to diverge subsequently, with Spain experiencing high capital inflows, increasing financialisation, and a very frantic housing boom; and Italy maintaining rather modest capital inflows, a quite stringent housing and finance system, and a less frantic housing boom. As has been discussed in the literature (Hopkin, 2015), under the process of the institutional membership in the euro area, Spain experienced fast growth, above the EA average (catch-up convergence) and was considered as the "success story" within the Eurozone; while in Italy growth was sluggish already in the first decade of the 2000s. The examination of whether this growth performance may indeed be attributable to the particular path followed in the

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[12] For exceptions see: Atkinson (1983), Dorling (2014), Allegre and Timbeau (2015), Aalbers (2016), Arundel and Ronald (2016).

housing market and the related policies of financialisation and housing market liberalisation goes beyond the scope of this paper. Instead, in this paper we focus on the extent to which these developments link to particular developments with regard to the inter-household distribution of wealth, and of housing wealth in particular.

The remainder of the paper is organised as follows. In the next section the importance of focusing on housing wealth as a key dimension of wealth inequality is explained. In section 2, I give a detailed overview of the housing market developments in the two countries under study in the Eurozone years. In section 3, I present the dataset and the methods. In section 4, I examine the distributional changes in housing wealth in the two countries, using household-level data from the Spanish Survey for Household Finances (EFF) and the Italian Survey on Household Income and Wealth (SHIW) and employing decomposition techniques. I then turn to the role of domestic housing and finance systems (section 5), offering a contextual analysis of how these may have influenced the trajectory of housing and overall wealth inequality seen in the two countries. The last section concludes, drawing some important implications for policy and in particular with regard to the role of actions in managing the distributional pressures instigated by the process of monetary integration.

4.2 Housing and inequality

A small but growing body of scholarly literature in international and comparative political economy has established the centrality of housing finance in contemporary capitalism (Bohle, 2017). Housing absorbs global liquidity, and innovations in housing finance have been considered as one of the main causes of the financial crisis (e.g. Aalbers 2016, Ansell 2014, Schwartz 2009, Schwartz and Seabrooke 2009). Schwartz and Seabrooke (2009) underline that housing and the associated mortgage debt are “the single largest asset in people’s everyday lives and one of the biggest financial assets in most economies” (Schwartz and Seabrooke 2009).

In the Eurozone for example, housing wealth grew from 13.2 trillion euro in 1999 to 24.2 trillion euro in 2006 (Aalbers, 2016). Despite its weight in households’ portfolios, property wealth is usually more equally distributed than other assets such as stocks. This fact has often led scholars to neglect it, as an explicit dimension of inequality. Nonetheless, it is exactly because other assets do not represent a significant source of wealth for the vast majority of the population that they are less significant for the

economic prospects for most of them. Even if housing is not as liquid as other capital, it can still be leveraged and in some cases act as catalysing agent for the accumulation of more capital. In this sense, scholars like Dorling (2014) are arguing for a better understanding of the housing wealth dimension. Piketty's analysis and the subsequent academic debate have put housing in the spotlight. Indeed, recent debates have identified the role of housing as being central in recent wealth dynamics (Rognlie, 2015): when it comes to real outcomes of inequality, housing wealth matters both in the present and, even more so, over the longer term. Recent institutional and socioeconomic developments have further reinforced the role of housing wealth. Common trends are pointing towards an increasing role of homeownership and commodification of housing wealth even in societies where the market has historically played a lesser role (Aalbers, 2016). Housing wealth can be and is used as a financial resource across the life-course providing finances for meeting a range of welfare needs (Lowe et al., 2011). It acts as a store of permanent, as opposed to transitory, income and as a hedge against labour market risk—a form of "self-insurance" against hard times (Ansell, 2014). Being peoples' key asset, housing also creates immediate and different partisan policy effects over tax resistance, preferences for cash in hand over social services, orientations towards inflation and preferences for the party that best protects property or property values regardless of which party that happens to be in power (Schwartz, 2009). Thus housing and housing inequalities can also create structural effects on politics.

Despite this increased focus in the housing wealth dimension, the euro-inequality debate has not taken this angle into account prior to the crisis, and most of the studies focused on the links between monetary integration and income distribution. One potential reason is the lack of wealth data, for most EA countries. The second reason is that it was mainly after the crisis that the distributional effects of monetary policy attracted a lot of attention from policy makers and the public at large. This was due to the exceptional monetary policy measures, and a literature emerged explaining the several channels through which monetary policy potentially affects inequality.[13]

[13] For a detailed analysis see Coibion et al. (2012).

One of the channels works through the real estate markets. In the case of "peripheral" countries the decline of interest rates, which came with Maastricht, should allow households to enter homeownership by stimulating the demand for housing, thereby increasing housing prices. What is particular in the case of the EA is that while the nominal interest rate is set by ECB since 1999, inflation differentials remained, leading to very low real interest rates among some member states (De Grauwe, 2012a). In countries with lower real interest rates, the demand for housing and housing investment is stimulated further.

On the one hand, it is thought that the decline of interest rates should allow households to enter homeownership. Moreover, this house price increase can even make all agents in the economy better off especially in countries where homeownership is widespread also among the poorer households. Recent research challenges this view and suggests that the decline of interest rates, which led to rising housing prices and this, combined with intensified financialisation, exposed less wealthy homeowners to increased risk, and also led to a further concentration of housing stock in the upper part of the distribution through secondary property (Stiglitz, 2012a). That led to diverging housing opportunities as they promote wealth accumulation to housing market insiders while contributing to an increase of barriers in homeownership entry to those without sufficient economic capacity (Arundel, 2016).

The degree of stratification that the connection of interest rates and housing prices produces would depend on series of institutional characteristics of the different economies. Schwartz and Seabrooke (2009) in their work on Varieties of Residential Capitalism (VoRC) focused exactly on that cross-sectional variation, suggesting that the structure of a country's housing systems, "filters differently the recent global trends – acting as prism of secularly declining interest rates, rising house prices and homeownership, integration of global financial markets, and the rise of neoliberal discourses emphasising the self-management of assets and justifying market-driven income and wealth disparities." Schwartz and Seabrooke (2009) classify the housing system based on two dimensions: the owner occupation rates, and the level of mortgage debt relative to GDP, reflecting the degree to which housing finance is considered 'liberal' or 'controlled'. By doing this, Schwartz and Seabrooke (2009) developed four residential capitalism types:

***Table 4.1**: Owner occupation rate and mortgage to GDP ratio.*

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="2">Owner Occupation rate,
average of 1992 and 2002</td></tr>
<tr><td>Low</td><td>High</td></tr>
<tr><td rowspan="2">Mortgages as a % of GDP,
average of 1992 and 2002</td><td>High</td><td><u>Corporatist Market:</u>
DK, NLD, DE</td><td><u>Liberal Market:</u>
USA, UK, CAN, AUS</td></tr>
<tr><td>Low</td><td><u>Statist-developmentalist:</u>
JP, FR, AUT</td><td><u>Catholic-familial:</u>
IT, IRL, SPN, BEL</td></tr>
</table>

Source: Schwartz and Seabrooke (2009:10).

The first, liberal market type is characterised by high levels of owner occupation, mortgage debt and liberal mortgage markets; and contrasts with the statist-developmentalist capitalism with low levels of owner occupation, mortgage debt, and highly controlled mortgage markets. The corporatist-market capitalism has low levels of home ownership but high levels of mortgage debt despite relatively controlled mortgage markets, whereas familial residential capitalism reports very high homeownership levels and low mortgage debt.

According to Schwartz & Seabrooke (2009), this classification of the housing and finance systems directly affects the degree of wealth inequality. More precisely, falling interest rates create strong potential for increased stratification in liberal housing markets. As they argue, in liberal housing markets, where houses are effectively assets, falling interest rates bestow capital gains in housing market insiders. In liberal mortgage markets banks have an incentive to extend as much credit as consumers demand and externalise risk by passing it to investors or this risk is retained by homebuyers as flexible rate loans. Because most people buy houses based on a monthly payment they can afford, falling interest rates mean that people can afford a higher purchase. This boosts housing prices, and conveys windfall gains on housing market insiders (who are usually older established households) while it burdens the new entrants with increased debt. These stratifying effects are muted in countries with less developed housing finance, where banks do not externalise their risks and do not encourage borrowers buying up in the market. This has an effect of dampening housing prices and therefore mitigates stratification by wealth. To summarise, the

impact of international common forces- such as the downward convergence of interest rates- on inequality of housing wealth will be mediated or reinforced by domestic institutional domains and this cross-country heterogeneity which needs to be taken into account in the evaluation of housing wealth inequality outcomes in the Eurozone.

4.3 Italy and Spain: Housing booms under EA

To investigate how the decline of interest rates, which came with EA, affected the housing wealth distribution (and in turn overall wealth inequality trends) this analysis focuses on two similar countries: Italy and Spain. There are some features that set apart housing and finance systems of the Eurozone's "peripheral" countries from the "core" in late 1990s. According to VoRC both Italy and Spain belong to the familial variety of residential capitalism.

Spain and Italy had comparable housing and mortgage markets and similar housing tenure prior to the adoption of the common currency (Burbarelli, 2016). The role of the family in providing housing is central in Italy and Spain, with families helping the younger generation financially in the acquisition of their own homes. Italy is a country of a high homeownership level. Moreover, Italy traditionally did not have a very developed mortgage market. With reference to Italy, in the 1980s and the 1990s, Jappelli and Pagano (1989) and Guiso et al. (1994) have concluded that small size is not due to a low propensity of Italian households to incur debt, but rather due to a backwardness in the development of credit supply.

In Spain, homeownership was among the highest in Europe –almost 80% at the end of the 1990s (Allen, 2009). Prior to the adoption of the common currency, Spain was also one of the countries with a relatively undeveloped mortgage market until the early 2000s. According to data from the European Mortgage Federation (EMF) the outstanding mortgage debt as a percentage of GDP was 23.9% in 1998 in Spain, which is higher than in Italy where it was 7.8% for the same year, but remained low 7compared to the rest of the EU27 countries (32.4%). As Bohle (2017) suggests, they were "debt-free" (below EU average), high homeownership societies (above EU average).

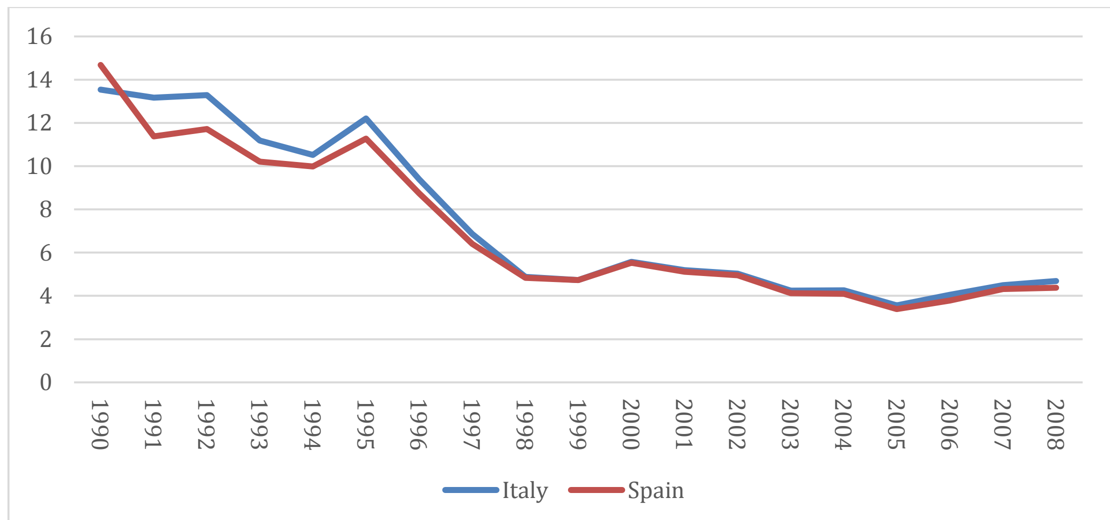
Table 4.2*: Selected characteristics of housing and finance systems in early 2000*

	Homeownership	**Mortgage debt to GDP**	**Mortgage debt per capita**
Italy	80	7.8	1.19
Spain	83	23.9	3.24
EU 27	63.5	32.4	6.20

Source: European Mortgage Federation (2005: 114, 2010: 70f.).

Both countries were exposed to the same change in the international environment due to creation of the monetary union which exposed both countries to a regime of low interest rates (Figure 4.1). However, the two "peripheral" states had a very different experience in terms of growth performance under EA.

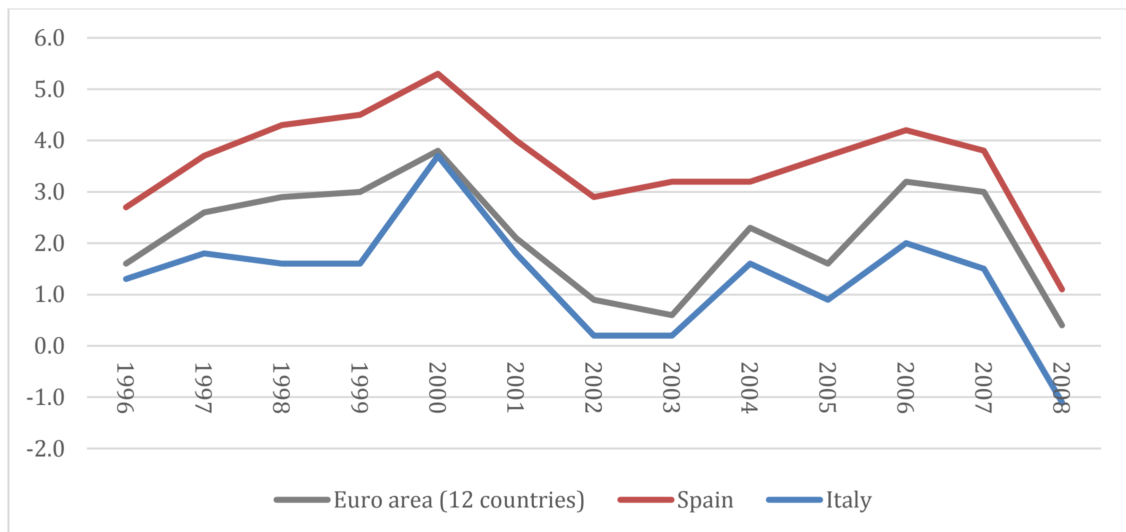
Figure 4.1*: Long term nominal interest rate*



Source: AMECO database.

Indeed, the above EA average growth rates through the 2000s gave Spain the appearance of a dynamic and forward-looking economy while in Italy growth was anaemic. Moreover, income growth under monetary union differed markedly with Spain enjoying consistently high income growth until the crisis, and with Italy experiencing almost stagnant income growth. Capital inflows were lower in Italy compared to Spain. Spain was one of the euro countries with the largest current account deficits on the eve of the crisis and Italy's current account did not move into large deficit prior to the crisis (Perez and Rhodes, 2015).

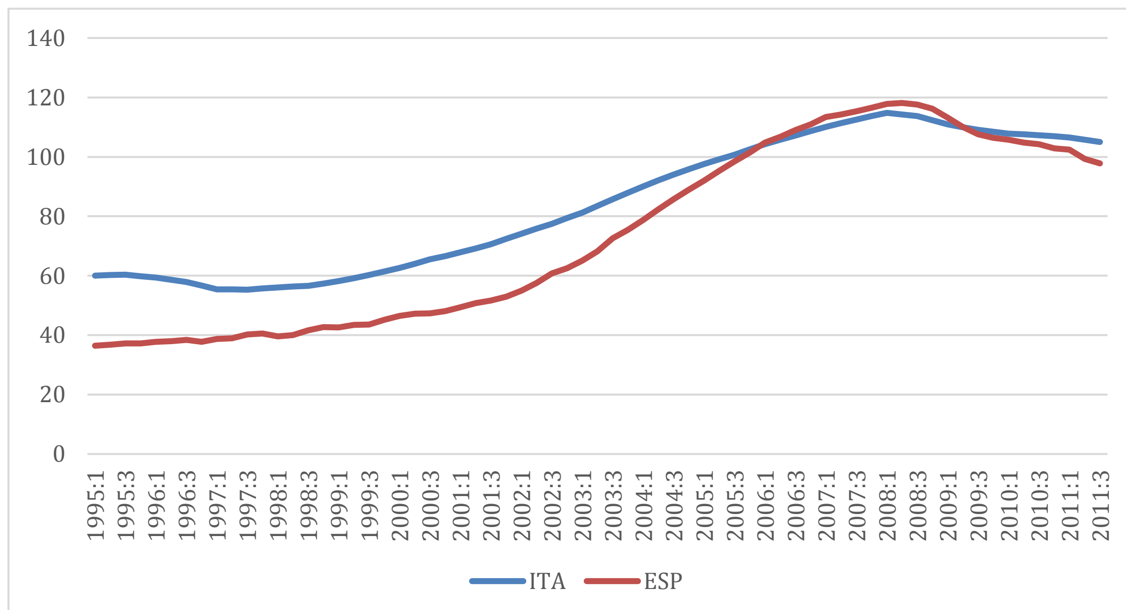
***Figure 4.2**: GDP Growth rate*



Source: Eurostat.

Yet, despite these differences, both countries were exposed to housing and mortgage booms, and busts in the 2000s. In the case of Spain the boom turned into a bubble, but housing prices even in the Italian case increased almost 50 per cent (Figure 4.3).

***Figure 4.3**: Nominal house prices*

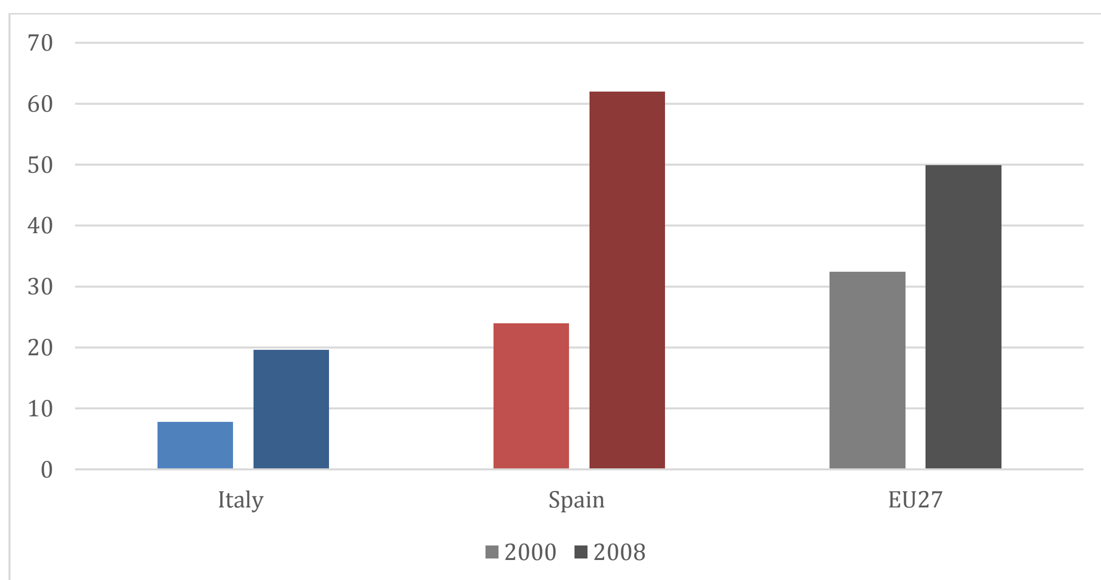


Source: OECD.

Falling interest rates definitely made mortgages more affordable and more appealing even to low and middle-income households and boosted house prices while the elimination of exchange risk made financing of mortgage credit much easier (Mosley and Singer 2009; Schwartz 2009; Kindleberger and Aliber, 2011; Rajan 2011;

Helleiner 2011). According to EMF data, representative interest rates on mortgages were 4.9 in 1998 in Spain and 5.45 in Italy, while in 2005 they were 4.10 and 2.36, respectively (European Mortgage Federation, 2010: 89). Both countries experienced credit growth coinciding with EA participation and after the end of the 1990s the mortgage lending to households grew very fast. According to data derived from the ECB, the average growth rate of loans for house purchase between 1998-2008– which is considered as one of the determinants for the increase of housing prices (e.g. Tsatsaronis and Zhu, 2004; Lecat and Mésonnier 2005) – was 20.3 in Italy and 19.8 per cent in the case of Spain. It has to be noted that the average growth of the rate of loans for house purchase in the euro area was 10.4, putting the two southern economies high in the ranking. The residential mortgage debt as a percentage of GDP increased massively in Spain (from 23.9% in 1999 to 62% in 2008). In Italy, residential mortgage to GDP also increased significantly (from 7.8% in 1999 to 19.6% in 2008) but it remained quite low compared to EU27 standards, which was 49.9% for the same year (Figure 4.4).

***Figure 4.4**: Mortgage debt to GDP*

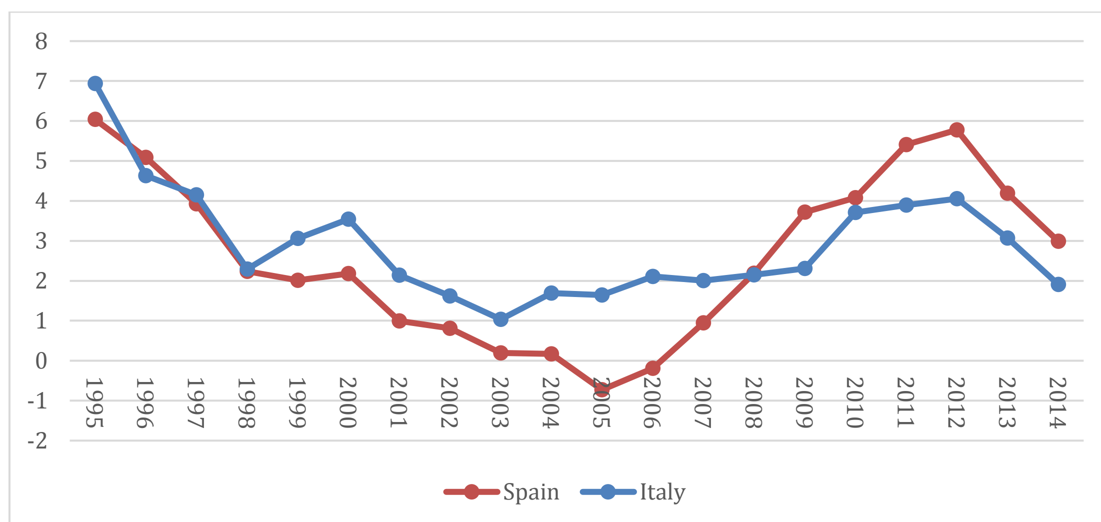


Source: European Mortgage Federation (2010: 70).

Despite this shift to a regime of price stability, inflation differentials remained, leading to very low real interest rates (De Grauwe, 2012a). According to data from Eurostat the average inflation rate between 1999 and 2008 was 3.2 in Spain and 2.4 in Italy. While EA reduced the real cost of capital in both economies, this increase was more pronounced in the case of Spain (Figure 4.5). Thus, as the low real interest rates lead

to housing bubbles which spill over into credit markets, local banks which see the collateral of their housing loans increase are tempted to increase credit, fuelling further the bubble.

***Figure 4.5**: Real long term interest rates*



Source: AMECO database.

The negativity of real interest rates encouraged further investment in housing in Spain. In the case of "stagnant" Italy where interest rates did not move to negative levels, capital inflows were lower, interest rate convergence led to house price increases but housing investment did not increase that much. During the pre-crisis years, the production of the new dwellings in Spain was higher than the sum of the new dwellings in Germany, France and Italy together (Akin et al, 2014). It is often argued that Spain was different because it has a strong demand by foreigners for holiday homes (Alcidi and Gros, 2012). Data from EMF reports that housing starts in Italy remained much lower than in Spain, reaching a peak of 317,391 in 2006 while in Spain they reached 760,179 the same year.

***Table 4.3**: Real gross fixed investment in housing in Spain, annual change in %*

	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Spain	10.9	11.4	10.3	7.5	7.0	9.3	5.9	6.1	6.2	3
Italy	-1	1.4	4.7	1.7	2.5	3.3	2.8	4.9	4.0	0.8

Source: European Mortgage Federation (2010: 96).

Despite a similar institutional vantage point, Spain under EA can be seen as a case of a dynamic economy, open to capital inflows, its housing price boom has been also accompanied by a strong construction boom. Interestingly, despite the fact that Italy's mortgage debt to GDP remained low, the role of the building sector in the economy was not very prominent, capital inflows were modest, and it still experienced an increase in housing prices and mortgage credit.

What is interesting for this analysis, though, is not only to underline how the strong downward convergence of interest rates contributed to the emergence of the housing and credit booms, even in the unlikely case of Italy, but to examine the distributional implications of these different housing booms for housing inequality trends, and in turn, overall wealth inequality trends in these two economies. The next sections turn to an empirical evaluation of housing wealth inequality outcomes.

4.4 Methods

The empirical section aims to answer some key questions: Are the trends moving towards decreasing or increasing housing wealth inequality? How much of the wealth inequality trend is explained by developments in housing wealth? How do different institutional settings explain the evolution of housing inequality trends?

In order to document and quantify the distributional consequences of housing booms, I use data from EFF (Spanish survey form household Finances) and the Italian Survey on Household Income and Wealth (SHIW). Using the information from EFF and the SHIW, I then construct a total wealth dataset.[14] Total gross wealth is defined as the current value of total household assets, and total net wealth as total assets minus the current value of debts, where total assets are the sum of real and financial assets. For both surveys I define net housing wealth as equivalent to the net equity in owner-occupied housing and other real-estate assets: that is the difference between the gross value and the outstanding debts related to the purchase of the main residence, or other real estate. Moreover, I take the household as the unit of observation. The distributions of total wealth for both countries and their main components are computed by weighting each household by either the original sample weights without making any

[14] For a detailed description of the datasets see Appendix 3.

allowance for the household size or composition. I use data, from all surveys available during the focus period (2002, 2005 and 2008 for Spain; and comparatively, 2002, 2006 and 2008 for Italy). In the first empirical part I explore the first two questions by employing the inequality decomposition technique. In the second part, I discuss the third question by looking into the two countries' housing and mortgage markets. I report other inequality indicators besides GINI and provide microeconomic evidence about household housing wealth and its relation with income, homeownership rates per wealth quintile, and I examine whether the observed trends in housing wealth inequality are related to homeownership access or secondary dwelling acquisition.

4.5 Inequality and decomposition

The analysis starts by reporting the evolution of mean net wealth and its components in real terms. The period prior to the crisis in Italy, mean financial wealth decreased but the mean wealth of real assets was on the rise. Overall mean net wealth, experienced an increase of 23% between 2000 and 2008. This suggests that it was mainly the increase in mean real wealth which compensated for the low growth performance of the Italian economy. In Spain mean net wealth was rising sharply between 2002 and 2008. In contrast to Italy, mean financial wealth was also on the rise and mean wealth of real assets increased much more than in the Italian case. Liabilities experienced a significant increase especially compared to Italy. In both countries in the pre-crisis period mean gross housing/net wealth in real terms (2000 prices) increased. However, in the case of Spain the housing boom was more frantic, i.e. gross/net housing equity increased more than in the case of Italy (Table 4.4).

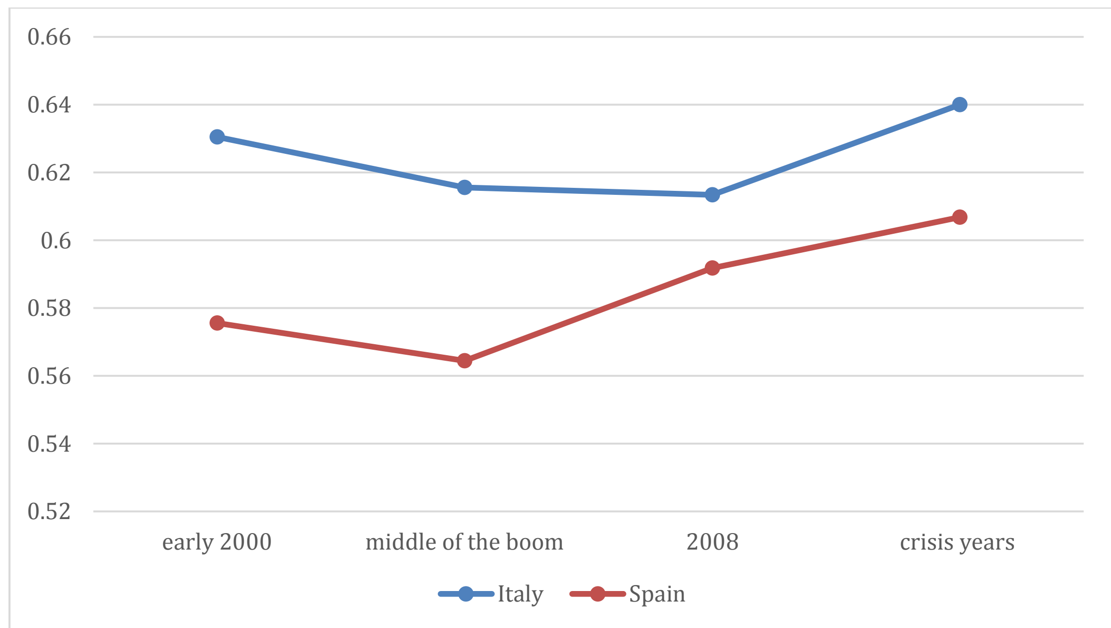
Table 4.4*: Percentage change in mean wealth and its components in real terms (baseline: prices in 2000)*

	Net wealth	**Financial wealth**	**Liabilities**	**Real assets**	**Housing wealth**	**Net housing wealth**
Percentage change in real terms in the pre-crisis years						
Italy (2002-2008)	23	-31	55	28	39	37
Spain (2002-2008)	51	27	86	58	52	56

Source: The author's own calculations based on data from the EFF and the SHIW databases.

The evolution of GINI of net wealth over time shows that since the adoption of the common currency, inequality initially declined in both countries (Figure 4.6). Yet, whereas both countries experienced a rise in wealth inequality during the crisis years, in Spain inequality started rising much earlier, since the middle of the boom. Interestingly, inequality of wealth is higher in Italy and it remains the whole period under consideration

Figure 4.6: *GINI of net worth*



Source: The author's own calculations based on data from the EFF and the SHIW databases.

What is particularly interesting for this analysis is how much housing wealth has contributed to this trend.

In order to show how much of wealth inequality is explained by single wealth sources and more specifically, housing, I decompose the inequality indices to investigate how the different wealth components combine to produce the overall degree of net wealth inequality. We decompose between real estate assets, financial assets and debt. I also report other real assets, but these developments do not particularly concern our analysis, due to their relatively small share in net wealth – compared to real estate assets - and also due to the fact that their concentration remains almost stable in both country cases.

I am using the decomposition of the GINI index proposed by Pyatt, Chen and Fei (1980).[15] They factorised the GINI coefficient (labelled G) of net wealth as follows:

$$\boldsymbol{G} = \sum_{\boldsymbol{k}=1}^{\boldsymbol{n}} \frac{\boldsymbol{\mu_k}}{\boldsymbol{\mu}} \boldsymbol{G_k}\mathbf{R}$$

Where μ is the mean wealth, μk is the mean of wealth component, Gk is the GINI index of wealth component k and R= cov [wk, r(w)]/ cov [wk , r(wk)] is the rank correlation ratio with r(x) being the ranking of households according to variable x. The rank correlation is equal to unity only if r (w) =r (wk), i.e. if households have the same ranking with respect to w and wk. The results of the GINI decomposition are reported in the next tables. The first column presents the percentage share of each wealth component; the second column, the GINI index of each wealth component; the third column, the rank correlation ratio; and the last two columns, the absolute and the percentage contribution of each component to overall wealth inequality. This decomposition analysis will answer the first two questions, namely, whether housing wealth inequality is increasing or decreasing, and how much of the wealth inequality trend is explained by developments in housing wealth.

The decomposition analysis looks at the overall gross housing equity trends. There is a benefit of first looking at housing values, without subtracting mortgages. Net housing equity builds up slowly over the life cycle as the mortgage matures, and that is why it entails a necessary intergenerational inequality element. To make sure that the observed inequality is not a reflection of differences in mortgage stage over the life cycle, we use gross housing equity for this first decomposition exercise.

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[15] Brandolini et al. (2004) also used this technique to decompose wealth inequality for Italy between 1989 and 2000, and Azpitarte (2010) used decomposition techniques for the first wave of 2002 for Spain.

Table 4.5: Decomposition of the GINI Index for Italy

Wealth component	Percentage share in net worth	GINI Index	Rank correlation ratio	Absolute contribution	Percentage contribution
2002					
real estate assets	74%	0.611	0.961	0.436	69.14%
other real assets	12%	0.907	0.847	0.092	14.65%
financial assets	17%	0.809	0.830	0.117	18.58%
debt	-4%	0.924	0.435	-0.015	2.36%
total wealth	100%	0.631	1.000	0.630	100.00%
2006					
real estate assets	82%	0.601	0.971	0.478	77.71%
other real assets	11%	0.913	0.830	0.085	13.75%
financial assets	11%	0.769	0.753	0.065	10.50%
debt	-4%	0.926	0.296	-0.012	1.96%
total wealth	100%	0.616	1.000	0.616	100.00%
2008					
real estate assets	84%	0.593	0.971	0.485	79.00%
other real assets	11%	0.909	0.843	0.082	13.32%
financial assets	10%	0.763	0.754	0.056	9.19%
debt	-5%	0.907	0.219	-0.009	1.51%
total wealth	100%	0.614	1.000	0.782	100.00%

Source: The author’s own calculations based on data from the SHIW database.

For Italy, table 4.5 indicates that inequality of net wealth decreases between 2002 and 2008 (GINI coefficient is decreasing by 3%). The inequality of real estate assets also follows a similar trend as net wealth inequality, and it falls from 0.611 to 0.593 and the percentage share of real estate assets to total net worth increases in the whole period prior to the crisis 2000-2008 (from 74% to 84%) . The proportion of total inequality accounted by housing assets increases from 69% in 2000 to 79% in 2008, as a result of its more equal concentration and its increased share in net worth.

A simple counterfactual exercise for Italy reveals that, ceteris paribus, had the GINI index of real estate assets remained unchanged at 0.611 rather than decreasing at

0.593, net wealth would have shown a GINI index 3.74% higher than its actual value. This shows that real estate assets that increased their share in net wealth and became (slightly) more equally distributed, have contributed to a decrease in overall inequality of net wealth in the period prior to the crisis.

At the same time, the fall in the concentration of financial assets, and their decreased share in net wealth, also contributed to a decrease in overall inequality of net wealth. As a result, if the value of the GINI index of financial assets had been the same in 2008 as in 2000 (i.e. 0.809 instead 0.763), ceteris paribus, the GINI index of net wealth would have been four percentage points above its actual value. The percentage share of debt in net wealth is only slightly increasing (from 4% to 5%) and interestingly in the pre-crisis period its distribution becomes more equal, and the overall percentage contribution of debt to overall net wealth inequality remains stable (2%).

***Table 4.6**: Decomposition of the GINI Index for Spain*

Wealth component	Percentage share in net worth	GINI Index	Rank correlation ratio	Absolute contribution	Percentage contribution
2002					
real estate assets	86.21%	0.517	0.949	0.423	73.53%
other real assets	8.92%	0.958	0.854	0.073	12.67%
financial assets	14.21%	0.802	0.810	0.092	16.03%
debt	-9.35%	0.801	0.171	-0.013	2.23%
total wealth	100.00%	0.576	1.000	0.576	100.00%
2005					
real estate assets	88.11%	0.499	0.945	0.415	73.52%
other real assets	9.91%	0.962	0.876	0.084	14.80%
financial assets	12.22%	0.800	0.800	0.078	13.86%
debt	-10.24%	0.788	0.152	-0.012	2.17%
total wealth	100.00%	0.564	1.000	0.564	100.00%
2008					
real estate assets	88.38%	0.512	0.927	0.419	70.81%
other real assets	11.18%	0.962	0.891	0.096	16.19%
financial assets	12.00%	0.805	0.796	0.077	13.00%
debt	-11.57%	0.798	0.003	0.000	0.05%
total wealth	100.00%	0.592	1.000	0.592	100.00%

Source: The author’s own calculations based on data from the EFF database.

In the case of Spain, inequality of net worth falls in the first phase of the boom and increases from 2005 to 2008. Overall, the increase is 3 percentage points between 2002 and 2008. This is exactly the opposite dynamic from the Italian case. The GINI coefficient of real estate assets follows the same trend as overall net wealth inequality: its distribution becomes more equal (from 0.517 to 0.499) in the first phase of the housing boom, while it increases in between 2005-2008 (0.499 to 0.512). The percentage share of real estate assets in net worth increased slightly from 86% in 2002 to 88% at the end of the boom (2008)

I conduct again the same counterfactual exercise for Spain. If the value of the GINI index of real estate had been the same in 2005 as in 2002 (i.e. 0.517 instead 0.499), the decomposition in table 4.6 suggests that the GINI index of net wealth would have been around 1.5% percentage points above its actual value. In the second phase of the boom ceteris paribus, if the value of the GINI index of real estate had been the same in 2008 as in 2005 (i.e. 0.499 instead 0.512) the GINI index of net wealth would have been around 1.5% percentage points below its actual value.

In contrast to Italy, the percentage share of debt in net wealth increases from 9% to 12% prior to the crisis, and interestingly the distribution becomes more equal. Since the GINI index and the share of financial assets in net worth remains almost stable, we can conclude it is mainly the developments in housing wealth that drive down net wealth inequality in the first and the second phase of the housing boom.

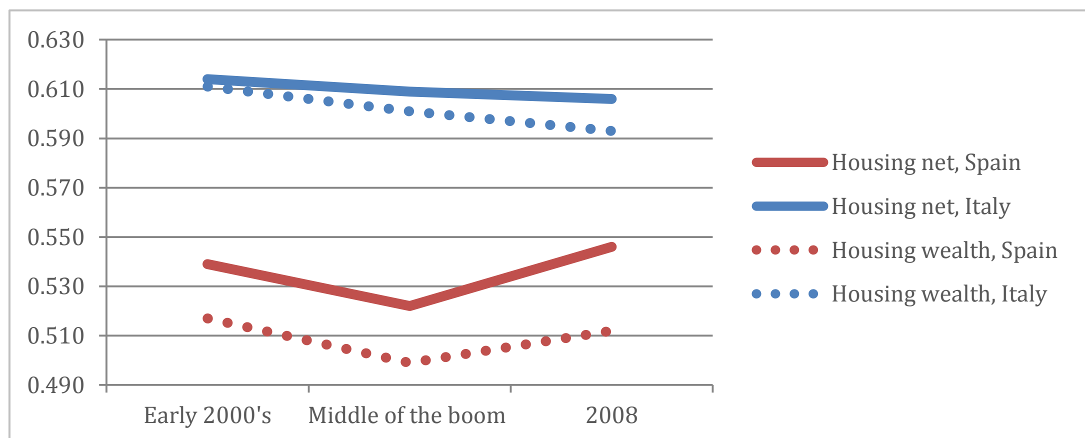
To sum up, the decomposition revealed the role of housing equity seems to be central in wealth dynamics since it the most valuable item in the balance sheet of households while it remains the singular component more equally distributed than all other wealth sources. Real estate assets had an equalising impact in the case of Italy -despite their relatively stable distribution- mainly due an increase of their share in net wealth contributing to a reduction inequality of net wealth. While it was mainly financial assets which drove the overall decreasing trend, housing contributed almost equally to the reduction of overall wealth inequality in the pre-crisis years.

In Spain it was mainly the developments in housing distribution which drove the overall wealth inequality trends. While the share of housing in overall net wealth remained almost stable, it was the developments in the inequality of housing wealth itself which drove the overall net wealth inequality trends. Housing wealth became

initially more equally distributed and this contributed to a decrease in overall net wealth inequality in the early 2000s while in the second phase of the boom, Spain was experiencing an increase in gross housing equity which drove up overall net wealth inequality.

It must be underlined that the decomposition analysis regarded the overall gross housing equity trends. Yet, net housing wealth reflects the current housing wealth of a household. The GINI coefficient of net housing wealth follows the same trends as the one of gross housing wealth; it decreases for the years prior to the crisis for Italy, however this decrease is not substantial (1%). In the Spanish case, the fluctuation in the GINI, when mortgages are subtracted, is almost (-3%) between 2002 and 2005, while there is an increase of (5%) percentage points, between 2005 and 2008 (Figure 4.7).

Figure 4.7: *GINI of housing wealth*



Source: The author's own calculations based on data from the EFF and the SHIW databases.

Given this divergent path it is of value to explore the factors that have contributed towards the different inequality trends in the second phase of the housing boom. As discussed above, the final outcome of the monetary redistributive channel would depend on a variety of institutional characteristics of the different economies. While the rapid expansion of mortgage market in the 2000s in Spain transformed its housing and finance to a liberal one, in Italy fast growth in credit was not adequate to displace its traditional variety of residential capitalism.

4.6 Housing and inequality under EA: The case of Spain and Italy

Building on heterodox analyses of financialisation, Fernandez and Aalbers (2016) argue that within the past one to two decades, a global pool of liquid capital seeking investment opportunities – has been built up. Housing and mortgage debt, which are considered high quality collateral have absorbed an increasing amount of liquidity (Fernandez and Aalbers 2016, Schwartz 2009, Jordá et. al 2014). Fernandez and Aalbers (2016) suggest housing and finance systems have proven to be far more dynamic than the literature of VoRC (Varieties of Residential Capitalism) suggest. They claim that there was an uneven rate of absorption of excess liquidity in the housing market across national models and that the global pool of liquidity in housing markets varies significantly across institutional settings.

For this purpose they look to a wider set of variables[16] than Schwartz and Seabrooke for the late 2000s and identify different trajectories that the countries followed in terms of absorbing finance, since this is an uneven process across countries. Italy belongs to a trajectory which includes CEE countries, some Mediterranean EU member states (Greece, Portugal) and some emerging economies (Brazil, Mexico and Turkey). These countries combine high to very high rates of homeownership (69–96%) with comparatively low to very low cross-border capital flows and a modest financial sector in terms of diversification and size (World Bank, 2009, 2012). The dominance of privately-owned housing stock, mostly free of mortgage debt, means that the housing market has not yet been financialised. However, Spain which was once following this trajectory and also had low private debt levels and cross-border capital flows, transformed radically in the brief period of the late 1990s to the collapse of the bubble. Fernandez and Aalbers put Spain in the same trajectory as Iceland, Ireland, Spain, Canada, Australia, the United Kingdom and the United States, which intertwines high levels of homeownership and high to very high mortgage-to-GDP levels. These countries have large cross border capital flows and, with the exception of Spain, a deep and sophisticated financial sector (World Bank, 2012). According to the mortgage

[16] They look at variables such as fixed capital formation and construction sector employment to show the countries where financialisation led to an increase in stock and the ones that did not. They also use the IMF index the depth of mortgage market.

market index compiled by the IMF, which is a tool to measure institutional differences, the depth of the mortgage market of the two economies is not the same. In 2008, the index was 0.26 in Italy and 0.4 in Spain, revealing that mortgage credit has been more accessible in the latter.

Even before the adoption of the common currency, the FDI-oriented growth strategy of the Spanish governments since the 1980s has made them more sensitive to calls for liberalisation in sectors such as finance. In the Spanish case, the process of financial deregulation, although running initially contrary to the interests of Spanish banks which obtained higher rents from protection, was considered indispensable for attracting capital into the country (Molina and Rhodes, 2007). Moreover, the Spanish market was opened to foreign acquisitions relatively early, with British mortgage lender Abbey National opening in Spain in the early 1990s, and Deutsche Bank acquiring the Banco Zaragozano. Domestic banks feared losing their market share and also increased the availability of the mortgage loans. The increased competition started already prior to the adoption of the common currency. Spain started transforming its housing and finance system the late 1990s. Prior to the adoption of the common currency, Spain's mortgage debt as a percentage of GDP remained lower than the EU average but it accelerated in the euro years.

During his first years as prime minister, Jose Maria Aznar showed an almost obsessive determination to ensure that Spain would be able to join the euro and optimise membership of the Economic and Monetary Union (Powell, 2001). With the advent of the EA, the domestic banking system was able to raise substantial additional resources without any exchange risk. Additionally, due to the perception that real negative interest rates – effecting a reduction in the cost of capital – were understood to be permanent, this led to a perceived need for an increased optimal long run housing stock.

Spain under the EA was indeed successful in attracting foreign direct investment, which transformed Madrid into a major corporate and banking centre (Santos, 2014). According to Rodriguez and Bastillo (2008), 40% of the total FDI was foreign real estate investment. Securitisation was an important source of funding for the Spanish sector, with Spain being the second largest European securitisation market after the UK. Although the Bank of Spain regulated banks relatively tightly, Spain's dual

banking system of private commercial banks and public savings banks – the cajas – played a central role in the development of the bubble (Santos, 2014). The cajas had strong links with regional and local governments, regulated by both national and autonomous community governments, and managed to build unsustainable exposures in the housing market (Santos, 2014).[17]

It is interesting to mention the attitude of the Bank of Spain to the mounting imbalances in the Spanish economy, and more particularly, in the real estate sector. Jaime Caruana, as its Governor between 2000 and 2006, had a distinct attitude towards the housing market. He explicitly denied the existence of any real estate bubble. This led the rank and file of the examiner body of the Bank of Spain to submit a letter to then Deputy Prime Minister and economy minister, Pedro Solbes, alerting that the risks in the Spanish financial sector were much higher than what one could infer from Governor Carauna's speeches (Santos, 2014). The letter precisely pointed out that the Spanish institutions were becoming increasingly dependent on wholesale short-term funding in the euro-market, and as a result they were increasingly exposed to sudden changes in funding conditions – prophetic of what followed some years later.

Overall, the macroeconomic environment, with the support of domestic forces and the political and economic elite of the Spanish banking system, was opened early on and absorbed capital inflows which were oriented to the real estate sector – moving it towards a liberal housing market and an expansion of the existing housing stock. This was also facilitated by the liberalisation of land zoning laws under the Aznar government (Perez and Rhodes, 2015). Moreover, Spain has traditionally offered a standard interest rate deduction. However, a key element stems already from 1985, when the opportunity for mortgage interest rate deduction was extended to second homes. Moreover, the tax reform of 1998 led to the elimination of the taxation of imputed rents and the income tax code which was allowed for the deduction of rentals between 1992 and 1998 was also eliminated. There being an increase in the limits of interest and principal payments deductions are a clear tax advantage to homeownership against its counterpart of renting a house (Meliveo, 2014).

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[17] For a detailed analysis on the governance of the Cajas see Santos (2014).

According to VoRC, liberal housing markets are associated with higher inequality mainly via two mechanisms: house price increases will benefit house price insiders which are usually wealthier households that can use their existing housing stock as collateral to buy property since banks are willing to expand credit. This however would be permitted if there is also an expansion of the housing stock, while fiscal incentives may also contribute to these trends. All these explosive ingredients were in place in Spain. The real cost of capital being very low, capital inflows being high, housing stock increasing and the nature of the country's banking sector allowed both banks and cajas to increasing their loans to real estate developers, construction companies, and mortgages (the latter had more exposure to real estate than did banks).

Secondly, higher housing prices will reduce access to homeownership for low income households which would be mainly burdened with increased debt. In order to identify what these dynamics meant for housing wealth inequality, the distribution of net housing equity (as net value after owned mortgages) is analysed. I use net housing wealth since it reflects best the current housing wealth of a household and also because it is necessary to take into account housing debt in order to capture the differences among the two countries' housing and finance systems.

In Spain the concentration in the top 10 and 1 per cent reveals the same picture as the evolution of the GINI coefficient: there is a decrease in concentration among top housing equity holders between 2002 and 2005. However, between 2005 and 2008 the housing equity concentration increases again to reach higher levels than in 2002. Lastly, in Spain the percentage share held by the bottom 50 per cent remains nearly stable in the period prior to the crisis. As a result, the P90/P50 ratio decreases in the case of Spain between 2002 and 2005 and increases in the second phase of the housing boom to reach higher levels than in 2002. This means that the increase in inequality is driven by the upper and, mainly, the very top part of the distribution.

Table 4.7*: Housing equity concentration and P90/50 Spain*

	2002	2005	2008
Bottom 50%	14.12	14.81	14.17
Top 10	37.6	35.72	38.4
Top 1	9.27	8.81	10.7
P90/P50	3.0	2.7	3.1

Source: The author's own calculations based on data from the EFF database.

Secondly, I recalculate the GINI for the three periods separately for (a) full sample, (b) households with only one house, and (c) households with at least one house (Table 4.8).

Table 4.8*: GINI coefficient in Spain*

	2002	2008
a) GINI index, all	0.53	0.54
b) GINI index, one house	0.38	0.37
c) GINI index, at least one house	0.45	0.47

Source: The author's own calculations based on data from the EFF database.

The GINI for households with one house actually decreases as the GINI index for households that own at least one house increases between 2002 and 2008 (following the trend of overall GINI) demonstrating that indeed multiple ownership has contributed to an increase in housing equity inequality, rather than the price effect. The increase in the difference is small but this may also be due to the fact that the GINI is not a good indicator in capturing the upper part of the distribution. However, this finding is also consistent with the findings of Toledano's analysis (2017) in which she combines different sources (tax records, national accounts, wealth surveys and the capitalisation method), and finds that the composition of secondary housing evolves in a similar manner to the composition of total net housing wealth, with the top 1% rising in its concentration during the years prior to the burst of the bubble, due to the larger increase in secondary dwelling acquisitions (quantity effect). The findings are also consistent with what should be expected in a liberal housing market where top housing equity holders can use their existing housing stock as collateral to acquire multiple housing (Stiglitz, 2012a). Table 4.9 reports the percentage of owners of secondary housing among the top holders of housing equity (1% and 10%). In the

Spanish case, there is a consistent rise in ownership of secondary housing in the top 10 per cent, while there is slight decline in the top 1% between 2002 and 2005, then increasing between 2005-2008, resulting in higher levels at the end of the housing boom than in the early 2000s.

Table 4.9: *Multiple ownership among top housing equity holders in Spain*

	2002	**2008**
More than one house, top 1 %	94%	99%
More than one house, top 10%	78%	85%

Source: The author’s own calculations based on data from the EFF database.

Regarding access to homeownership, the issue of affordability was a salient feature in policy discussions and in the press, extending itself as the dominant theme of the economic policy debate leading up to the general election of 2004. Politicians reacted to this concern by proposing measures directed towards the increase in the supply of housing (Santos, 2014). Looking at the trends in homeownership rates based on the data from EFF (Table 4.10), there is a slight increase in homeownership rates in the Spanish case among the bottom 20 and 50 of the distribution.

Table 4.10: *Homeownership rates among the wealth distribution in Spain*

	2002	**2008**
Homeownership, bottom 50%	66.05	67.80
Homeownership, bottom 20%	21.19	25.11

Source: The author’s own calculations based on data from the EFF database.

The Italian experience was very different under the EA. Interest rates made some contribution to domestic demand but this effect was muted by the need to restrain public sector debt following an initial short post-EA boost (Perez and Rhodes, 2015). Homeownership remained high and the personal tax system also provided incentives to owner occupation, with no taxation in imputed rents and mortgage interest tax relief in the euro years (Hemmelgarn et al. 2011). The effective personal income tax on housing was lower than in Spain (Hemmelgarn et al. 2011). While the decline in nominal interest rates increased housing prices, real interest rates did not move to negative levels, and construction activity remained lower than in the case of Spain. As

mentioned above, the EA allowed banks in Italy and Spain access to “easy money”. Looking at how mortgage lending was funded indeed Italy’s banking systems increasingly depended on wholesale inter-bank funding in the first decade of the euro. However, there was important difference with Spain: in the interbank market, Italian banks borrowed to a more limited extent, and did not use this funding to provide credit to property developers (Quaglia and Royo, 2015). In Italy the dynamic was different, as easy money found its way to government bonds.

It is true that the organisation of the mortgage market has also changed the case of Italy in the 1990s and 2000s. Not only has the external regulation changed in order to adapt to a more ‘European’ banking system, but the internal regulation of the banks also changed. The Amato Act (1990) allowed banks to provide mortgage loans, which in the past was possible only for specialised credit institutions (Quaglia and Royo, 2015). With this reform, Casse in Italy (formerly public saving banks) had been merged with commercial banks and the reform led to a reduction of the involvement of political and local authorities in bank management (Quaglia and Royo, 2015). However, despite these reforms, the sector remained highly politicised and oriented inwards (Hopkin, 2013). It is often discussed in the literature that Italy in the euro-years shut out investors and tried to protect domestic interests (Hopkin, 2013). Prodi’s government coalition that steered Italy’s entry to the Eurozone was not the one that led the country’s accession (Quaglia and Furlong 2009). More than once, Berlusconi underlined that national interests should be protected and expressed support for a more intergovernmental Europe (Quaglia and Furlong 2009). A characteristic example of this protection of national interests in the Italian case was the banking sector.

After the establishment of EA, and the endorsement of the Financial Service Action Plan (FSAP) by the EU, foreign banks tried to enter the Italian market (Hopkin, 2015). The Bank of Italy, under Governor Fazio with the aim of protecting the Italian banks operating in Italy opposed foreign shareholdings and did not authorise any foreign takeover (Quaglia, 2013). In 2005 two proposed takeovers of Italian banks – Banca Nationale del Lavoro by a Spanish group and Banca Bilbao Vizcaya Argentaria; and the other of Banca Antoniana Popolare Veneta (Antonveneta) by ABN Amro – made headlines. In both cases, Governor Fazio blocked the foreign takeover bid, while endorsing counter-bids launched by two Italian financial institutions, Banca Popolare di Lodi and Unipol, respectively. The foreign banks which participated in the failed

takeovers made a complaint to the European Commission. An antitrust enquiry launched by European Competition Commissioner Neelie Kroes was dropped on the grounds of a lack of conclusive evidence. The European Internal Market Commissioner, Charlie McCreevy sent a letter to Governor Fazio in 2005 to state his concerns (Buck, 2005). Eventually, this pressure led to the resignation of Fazio, and the banking competition policy was transferred to a competition authority, independent from the central bank and the banking system of Italy opened up to foreign operators (Aalbers, 2009). It was only after 2005 that the competition in the mortgage market has increased because of the entry of foreign players into the Italian credit market. The new entrants saw providing mortgages to Italians as an attractive growth market and Italian banks also increased their availability of mortgage loans as not to lose their market share. Indeed, changes occurred in Italy's mortgage markets. This resulted in higher possible LTV (loan to value)-ratios and LTI (loan to income)-ratios However, compared to Spain, differences in lending practices to finance homeownership persisted. In 2007 the typical loan to value ratio for a first time house-buyer was 72% in Spain, while it remained lower in Italy at 65%.

Overall, in the case of Italy there have been some changes in its mortgage market but the national model of capitalism was protected by political interventionism until 2003. Pressure from other EU member states, EU bodies and financial markets brought a change of competition policy in the banking sector in Italy only in the 2000s (Quaglia, 2013).

According the VoRC framework, the stratifying effects of house price increases are muted in countries with "less developed" housing finance such as Italy, where banks do not externalise their risks and do not encourage borrowers buying up in the market. Housing equity concentration trends do not fluctuate extensively in the Italian case. In contrast to Spain, concentration among top holders of housing equity in Italy falls slightly in the expansionary period of the euro (Table 4.11). However, the share of housing equity among the bottom also slightly decreases. This is the reason that the P90/P50 ratio remains constant between 2002 and 2008 in the case of Italy.

Table 4.11*: Housing wealth concentration and P90/P50 in Italy*

	2002	2006	2008
Bottom 50%	10.6	8.73	8.96
Top 10%	42.7	41.49	41.43
Top 1 %	11.49	10.37	10.47
P90/P50	3.3	3.4	3.3

Source: The author's own calculations based on data from the SHIW database.

I recalculate the GINI for the three periods separately for (a) full sample (b) households with only one house, and (c) households with at least one house.

Table 4.12*: GINI coefficient in Italy*

	2002	2008
a) GINI index, all	0.61	0.60
b) GINI Index, one house	0.37	0.37
c) GINI Index, at least one house	0.46	0.45

Source: The author's own calculations based on data from the SHIW database.

In contrast to Spain, where the bulk of secondary housing among top deciles contributed to inequality, this seems not to be the case in Italy. Here, the GINI of households with at least one house actually decreases over time, suggesting that the concentration of housing wealth due to multiple ownership did not take place. Regarding the GINI index for the households with one house, it remained stable. This is consistent with the fact that in familial housing and finance systems, the decline of interest rates does not have a strong impact on inequality trends. However, looking at the SHIW data, in Italy – which is traditionally characterised by restricted access to homeownership in lower wealth households – the bottom 20 per cent of wealth distribution does not increase its homeownership levels, which remain close to zero for the whole period of the housing boom while the bottom 50 per cent sees a slight decrease in its homeownership rates. Other studies confirmed that affordability remained out of reach for many low-income households during the boom, in an environment where house prices were high, the mortgage market was more conservative and public provision of housing was limited (Bianchi, 2014).

Table 4.13*: Homeownership rates in Italy*

	2002	**2008**
Homeownership, bottom 50%	42.7%	40.30%
Homeownership, bottom 20%	0%	1%

Source: The author's own calculations based on data from the SHIW databases.

By linking the distribution of income and wealth, I also observe that in the case of Spain, the lowest income quintile benefitted substantially in terms of wealth growth but still less than the top 10 per cent (this may be due to the fact that homeownership was more widespread in Spain among low income households and house prices increased). In the case of Italy the increase in relative terms of housing wealth was very limited for the poorest part of the income distribution but at the same time the increase in the top 10 per cent was not that pronounced (Table 4.14).

Table 4.14*: Housing net wealth, percentage change between 2002-2008, per income quintile*

	1	**2**	**3**	**4**	**5**	**Top 10%**
Italy	15%	33%	43%	37%	45%	34%
Spain	61%	53%	48%	51%	27%	66%

Source: The author's own calculations based on data from the EFF and the SHIW databases.

To conclude, under the EA, transformation of the two countries' housing and finance systems evolved differently. The mismatch between ECB's interest rate, which became very accommodating for rapidly growing Spain, and increased credit availability contributed to the frantic housing boom. Simultaneously, Spain domestically embraced liberalisation quite early and the nature of the banking system allowed banks to channel the flows into the construction and real estate sector, thereby also increasing the housing stock. Italy's experience was different under EA, as the reduction of interest rates increased housing prices but capital inflows remained modest and easy money mainly went to government bonds. Mortgage markets expanded but the national model of capitalism was protected by political interventionism and the country retained its traditional variety of residential capitalism with mortgage market as a percentage of GDP remaining lower than the EU average.

In the Spanish case, the bulk in secondary housing, increased housing concentration, and the share of housing wealth among top housing equity holders. Housing wealth inequality was on the rise in the second half of the boom, while in Italy this was not the case and housing wealth inequality remained almost stable. Nonetheless, differentiated housing market opportunities also arise in the Italian "familial" case, where housing wealth remained more unequally distributed than the case of Spain and low income households did not benefit that much.

The crisis stimulates a new period which entails severe consequences for over-indebted households. These consequences were very clear from 2008 onwards for the case of Spain. With hindsight, it is known that the housing boom turned to a massive bust in the case of Spain, leaving a large number of households to experience negative equity (Fuentes et al., 2013). What needs to underlined is that according to data from the 2011 EFF wave, the number of households which experience negative equity is significantly high in the case of Spain, with 8% of the lowest net worth quartile being under water already in 2011. In the first two trimesters of 2012 alone, 94,500 dwellings were repossessed in the case of Spain (Fuentes et al., 2013). In Italy, the percentage of households with negative equity remained much lower than in the case of Spain (less than 1% in 2012).

4.7 Conclusion and discussion

The aim of this paper is to investigate the impact of currency unification via the wealth distributive monetary channel that operates through housing markets. It focused on two countries that represent "positives and negatives" of what we would expect from two former high-inflation economies, and suggested that the downward convergence of interest rates had distributional effects for both economies despite the differences in their housing and finance systems. Yet, the final distributional outcome of the monetary regime change depended on the interaction between the monetary policy regime changes and national institutional domains.

Therefore, this paper shows how European monetary integration together with domestic institutions shaped the housing market and, in turn, housing inequality trends. The decomposition of wealth inequality revealed that changes in housing equity were important for the overall wealth inequality trends in both economies despite their institutional differences. In the case of Spain it was mainly the

developments in the housing wealth which account for the evolution of overall wealth inequality. On the other hand in Italy it was mainly the decrease in financial wealth which drove down the overall wealth inequality trends but still housing wealth also contributed substantially in the decrease of overall wealth inequality between 2002 and 2008.

Then by building on the literature of housing financialisation and VoRC, it discusses the reasons for these divergent housing inequality trends in the pre-crisis period. In the case of Spain, interest rates were negative, and the increased capital inflows were channelled to construction, which led to a housing and construction boom. The mortgage market was more financialised, and fiscal incentives also underpinned first and second homeownership. The housing and finance system country moved towards a liberal variety of capitalism. Top housing equity holders increased their share in total housing wealth in the second phase of the housing boom, and housing wealth inequality increased due to multiple ownership.

In Italy the effect of interest rates was less marked than in Spain. The growth of capital flows was lower, and interest rates did not move to negative levels. At the same time while politicians and policy makers faced pressure to introduce elements that make housing finance systems liberal, an "inward looking and sclerotic form of crony capitalism" (Hopkin, 2013:10) held Italy to its traditional variety of VoRC, and housing equity concentration trends did not move that much. The country's mortgage market started growing in the end of the 1990s, yet it still remained conservative and construction activity was not excessive. This inhibited the accumulation of housing wealth by the upper part of the distribution. However, more restrictive mortgage markets in combination with rising housing prices did not lead to a broad homeownership expansion. Housing inequality remained higher in Italy than in Spain in the end of the boom and homeownership remained lower for the poorer quartiles. This suggests that the housing boom under a familial housing and finance system did not exacerbate inequalities but it came with the reproduction of the existing inequality patterns in terms of housing wealth.

This paper has shed some light on how the interaction of the euro adoption and the diversity of housing and finance systems affected wealth inequality in the years of the housing booms. The analysis above implies the interest rate channel and the housing

channel contributed to a growth model that lifted almost all boats especially in the case of Spain that embrace fianncialisation (some more than others). This has shifted the balance more towards embracing a financialized growth model. The 'rising tides' even in the unlikely case of Italy, which lifted perhaps not all, but many 'boats' helps us explain why these peripheral countries voluntarily participated in this large-scale monetary experiment, which is a puzzle for those who perceive the euro as being detrimental for middle and lower classes.

However, the long-term effects remain to be examined. Especially the recent crisis might have reverted some of the main developments in housing and inequality as briefly sketched above. Thus, future research needs to expand by way of including such enquiries for the crisis period, focusing on how monetary policy measures interacted with national crisis management to affect wealth inequality. Moreover, the scope of the analysis needs to be extended to countries outside of the Eurozone, since differences in EU integration did not mean that there were no lending and housing booms in countries which did not adopt the euro. More precisely, in hindsight, it known that "*non-EA member states of EU found functional equivalents such as borrowing in foreign currency denominated loans and piggybacked on interest rates set for much less inflation prone countries*" (Bohle, 2017). By expanding the research in terms of time and space, future research would provide policy makers with additional insights on how to deal with this interplay between supranational processes and domestic institutional domains, and subsequently, how it affects wealth inequality. The fact that this interaction may be inconsistent with the preferences of the public, which may have long-term effects in political behaviour and influence the financial stability of the economy, therefore adds more value to such research.

5. Conclusions

This thesis examined the relationship between the adoption of the common currency and economic inequality in the so-called "peripheral" countries. The later became major casualties of the EA crisis. But I will explain below that I see these country crises as self-fulfilling manifestations of the financial crisis (De Grauwe and Yi 2013, Schelkle 2017: ch.6). The years prior to the introduction of the euro created certain vulnerabilities, notably household over indebtedness, asset bubbles and soft budget constraints for governments. But these vulnerabilities did not make bond market attacks inevitable.

The predominant narrative, in the years prior to the introduction of the euro, was that the delegation of monetary policy to an independent central bank with an austerity bias, and the fiscal constraints coming with the EA, would lock countries into a "golden strait jacket" leaving no room for democratic politics and redistributive concerns. After accession to the EA, the Stability and Growth Pact (SGP) proved to be an ineffective constraint, while the ECB's monetary policy rates were seen as too accommodative for the EA 'periphery'. Yet, this misfit of ECB's monetary policy rate, due to inflation differentials, led to new concerns and discussions for a new potential mechanism via which the "euro" could prove to be detrimental for inequality. The increased capital inflows in the 'periphery', which found their way to the real estate markets leading to housing bubbles, and the increasing financialisation of these economies, revived the debate that the EA design favoured capital, top wage earners and home owners over lower income and less wealthy households. Yet, neither the old fears nor the new concerns were clearly reflected in disposable income, wealth or even market income inequality data. Inequality trends do not consistently point upwards, and in some countries of the periphery income and wealth inequality even fell substantially in the pre-crisis years. After establishing this complex evidence, my thesis tries to understand if and how EA membership can account for this unexpected pattern.

My thesis builds on, but also qualifies, recent contributions to the comparative political economy of monetary integration and redistributive politics. There are already a few theoretical contributions, which suggest that the interaction between the EA

architectural design and domestic institutional features of the "periphery" may explain this diversity of trends. Moreover, emphasis has been given so far to the wage-bargaining systems as a major factor of explaining these trends. Hall (2012) and Johnston et al. (2014), provide indirectly an explanation for the surprising finding that there is no uniform trend towards more inequality in the EA. They suggest that this is due to the domestic institutions in domestic demand-led economies. In these countries, the wage setters in sheltered sectors were not subject to a competitive constraint like their exposed sector counterparts nor to an institutional constraint like their sheltered sector counterparts in the EA core. They were able to push for inflationary wage increases that produced adverse consequences for national inflation. However, higher wages and lower returns to capital also led to a reduction in wage and market income inequality. In that sense, the comparative political economist may claim that the decreasing inequality trends in the 'periphery' can be a side effect of the "problematic" institutional design of the EA.

Moreover, while supranational economic forces do matter for inequality, government policy and political choices and domestic institutions also played a role in the final distributional outcome. This thesis claims that it was rather the interaction between market forces, unleashed by euro-adoption, and government policies responding to electoral pressures which explain that inequality of disposable income did not increase or even fall in the cases of the periphery. In contrast to what has been often suggested in the literature, the fiscal space created in the pre-crisis years by the euro adoption did not lead to institutional deterioration in the periphery but it also allowed redistributive policies to take place. Turning to wealth inequality, interest rate convergence, has led to an increasing in housing prices in the peripheral states. Yet, once again different housing and finance systems absorbed this reduction and shaped the final distributional outcome. This proves that again there was room for domestic policy manoeuvre.

The first section presents a synthesis of the findings of the three research papers of the thesis and explains why there is a focus on inequality of disposable income and on wealth inequality. In the second section some of the limitations of the research project in terms of data and methods will be pointed out. The third section explains how the findings of this thesis are linked with the broader debates in political economy. In the fourth section avenues for further research. Lastly, in the final remarks I discuss how

the insights of this thesis can travel beyond the Eurozone and whether they are relevant post-crisis given the changes in EA governance.

5.1 Summary of the results of the three papers

The debate on the euro and inequality was so far dominated by the idea that the loss of monetary and fiscal autonomy would restrain governments' options with negative consequences on inequality outcomes. But the inequality outcomes are too diverse and cannot really support this generalisation. On the contrary, this thesis suggests that there is a crucial factor which was until recently underestimated in the euro-inequality discussion: monetary integration for the countries of the "periphery" unleashed market forces that did not constrain and in some policy areas might even have expanded national governments' degrees of freedom. This phenomenon enabled national politicians to draft and implement policies that would affect and reshape the final distributional outcome in the EA context. The first paper demonstrated that the theoretical impact of the EA on inequality is *a priori* ambiguous, with some channels leading to an increase in inequality, while others to its reduction. By building on the existing literature's "old fears" and "new concerns", it provides policy-relevant and well defined channels, via which EA could potentially affect inequality: the financialisation channel, the competiveness channel, the fiscal channel and the interest rate channel.

The first two channels focus on market income inequality. The first hypothesis is examining whether the downward convergence of interest rates and the elimination of risk-premia boosted intra-euro capital inflows which were channelled to the FIRE sector of the peripheral states, leading to an increase in market income inequality. The second hypothesis is examining whether the impact of EA accession is filtered by wage bargaining systems leading to divergent trends. More specifically, it examines whether EA accession is associated positively with inequality in countries with collective bargaining institutions delivering sheltered sector wage moderation. On the contrary, it tests empirically whether the association between EA accession and inequality is positive in countries without permanent mechanisms to constrain sheltered sector wage growth, in which devaluation is no longer possible, experiencing an increase in wages in the non-tradable sectors. The last two channels are linking EA accession with inequality of disposable income- but predict a different relationship

between EA and inequality. On one hand, I examined whether a negative association between EA membership and levels of welfare state generosity and, in turn, disposable income inequality exist (mainly in SGP–compliant member states). On the other hand I examine whether in the countries where interest rates fell sharply from higher levels, and received high capital inflows, ended up allowing for more accommodating fiscal policies and an increase in social spending, ultimately leading to a decline in disposable income inequality.

The most important finding of this first paper is that post-EA, the evolution of inequality is not always consistent with both concerns expressed and previous theoretical considerations. Empirical analysis provides support for the competiveness channel and the interest rate channel. According to the predictions of comparative political economists, inequality of market income is negatively related to EA accession in domestic demand-driven economies of the EA. Moreover, there is a negative association between EA membership and disposable income inequality, and this effect is significant in countries that experienced a strong downward convergence in interest rates. Both of these results, though, are rather modest. However, the EA effect is more sizable and significant in "peripheral" economies that experience a convergence in interest rates and an increase in capital inflows.

This finding suggests that EA membership prior to the crisis came with market forces that may have operated in an equalising manner in these economies. But since the effect was discernible in the greater equality of disposable income only, it is likely that domestic redistributive policies and politics played a crucial role as well. Building on that finding, the second paper tried to unpack the interest rate channel. It started with the premise that EA membership was linked with market forces that have so far been elided in the Eurozone-inequality debate. The elimination of exchange rate risk attracted capital inflows which led to a decline in interest rates which also lowered the costs of public debt. This led to increasing revenues, providing governments with extra fiscal space. This paper suggested that the existence of fiscal space enabled governments to increase social spending and fund "parametric" changes in welfare state reform which had positive distributional outcomes.

To demonstrate this dynamic, we focus on the case of Greece and Ireland: two ex-high inflation countries, with different welfare states. The latter was compliant with the

EA's fiscal rules while the former was continuously in breach of the fiscal criteria. Despite their differences, both countries increased social spending after EA accession. We focus on one particular area of transfers, notably old age pensions which were a salient redistributive policy even before the adoption of the euro in both countries. This area of social spending recorded the greatest expansion in both countries during the early years of the EA. Then we evaluate the distributional consequences of this increase. We find that fiscal space allowed governments in both Greece and Ireland to fund reforms which benefitted the elderly who were close to the poverty line. The literature suggesting that Eurozone accession entailed only institutional deterioration and reform postponement for certain "peripheral" countries tends to focus only on an evaluation based on efficiency (fiscal sustainability) and ignores that accession to the EA and fiscal space also enabled governments to follow reforms with positive social outcomes. Since pension policy is a very highly contested and politicized area of transfers, I use it in order to provide hard proof of the hypothesis that peripheral governments were not as "feckless" as the literature implies. I explain how even in the case of pensions, which is considered as a very clientalistic area of transfers (especially in the Greek case) pension spending increased in a progressive way and outsiders (those not covered from the existing schemes) of the system were benefiting from this increase even in the unlikely case of Greece. I suggest, that while one may argue that the pension bias continued in the case of Greece, and this may contribute to intergenerational inequality, the reduction of poverty and inequality among elderly was of major significance since in the Greek case since pensioners they were among the most vulnerable parts of the distribution. Research points out that increase in pension spending in Greece, led to a reduction of overall inequality trends. Also despite conventional wisdom, out paper suggests, effort of rationalisation was made from the side of the government. In the case of Ireland, transfers increased also elsewhere i.e. family benefits. Yet, again the increase in pension spending in Ireland targeted the low income pensioners and reduced poverty among the elderly. While the question of intergenerational inequality, is something which needs to be explored - since it seems to be very relevant both for the housing market, but also for the pension case- the two papers emphasized that handouts were not given to insiders of the system in the first years of the euro.

The last paper of this thesis looks again into the interest rate channel, but this time with a focus on wealth distribution. The reason is that although to different extents in different countries, the housing market is strongly influenced by the process of monetary integration, due to interest rate convergence and elimination of exchange risk. Building on the literature on Varieties of Residential Capitalism and financialisation, this paper focuses on the distributional implications of the housing booms in Italy and Spain. Prior to the introduction of the common currency, both countries were characterised by low mortgage debt as a percentage of GDP and high homeownership. In the euro-years, the two countries started to diverge, with Spain experiencing high capital inflows, increasing financialisation, and a frantic housing boom. Meanwhile, Italy maintained rather modest capital inflows and a quite stringent and traditional housing and finance system, but still experienced a housing boom – although a less frantic one. What is interesting for this analysis, though, is not only to underline how the strong downward convergence of interest rates contributed to the emergence of the housing and credit booms, even in the unlikely case of Italy, but to examine the distributional implications of these different housing booms for housing inequality trends. In the case of Spain, interest rates were negative, and the increased capital inflows were channelled to construction, which led to a housing and construction boom. But the distributional consequences of the housing channel varied across institutional settings. Spain, which embraced financialisation and developed a liberal variety of capitalism, experienced an increase in housing wealth inequality already from the second phase of the boom. In Italy, the housing market was less financialised, and the housing boom led to a slight decline of housing wealth inequality.

The next table briefly presents the empirical puzzles of the governing question and the result of each one of the three papers of the thesis.

Table 5.1: *Summary of papers*

Essays on the Euro and Inequality	Paper 1 The Institutional Design of the Eurozone and Income Inequality: Exploring the Linkages	Paper 2 EA and Fiscal space : Redistribution in Greece and Ireland	Paper 3 Monetary Integration and wealth Inequality: The Housing Channel in Italy and Spain
Empirical puzzle	Why does disposable inequality decline in some of the EA member states?	Why is social spending increasing in the EA ‘periphery’?	Why do housing booms caused by interest rate convergence lead to different outcomes in wealth inequality?
Governing questions	Is EA accession related with inequality outcomes? Is there a uniform euro effect across member states?	Does fiscal space lead to reform postponement and institutional deterioration? Are loose budget constraints linked with positive social outcomes and inequality?	What is the impact of EA accession on housing wealth inequality via the housing channel? Do differences in national housing and finance systems affect the distributional outcome?
Result	The most significant result is that EA accession is negatively associated with disposable inequality in EA member states where real interest rates converged from higher levels and which experienced high capital inflows	The fiscal space opened up by low interest rates allowed governments to increase social spending. Soft budget constraints thanks to the surge in capital flows allowed governments to implement ‘parametric’ welfare state reforms that were more redistributive.	The final distributional outcome depends on national housing and finance systems. When the decline of interest rates is absorbed by “liberal” housing and finance systems, then the housing boom is associated with an increase in housing wealth inequality. In traditional familial systems, housing booms led to the reproduction of existing inequality patterns.

The three papers together contribute to the literature EA and inequality in several important ways. First by synthesising the insights of several literatures, it provides a theoretical map which documents well-defined and policy-relevant channels between the EA and inequality. Secondly, this thesis provides empirical evidence of the relevance of these channels. The in-depth case studies allow a closer examination of the interaction between supranational processes and domestic institutional domains contributing to the understanding of a rather complex reality. The identification of the channels has showed that monetary integration is operating through both income and wealth channels. The two case studies point to the importance of looking at different dimensions of inequality and also among different groups, which is relevant for answering the broader question of this thesis, namely, *whether the EA has locked member states in a "golden straitjacket" at the expense of democratic politics?*

Most of the literature focusing on the impact of EA participation on inequality looks at income distribution and there is clearly more attention paid to the flow of income to individuals and households than to their stock of assets or liabilities. One reason for this observation is the lack or the low quality of long-time series wealth data. Another reason for this lack of focus is probably because day-to-day economic life is dominated by income (Hills, 2016). Hence, this study also argues that research on research on households' net worth as created by housing and mortgage markets needs also to be put at the forefront of this debate.

The case studies of Italy and Spain point to the importance of looking at household wealth. Access to credit can determine whether one can afford to buy a house in the catchment area of the most popular state primary and secondary schools. Moreover, people trading down their property can help their children get on or move up the housing ladder and to live parts of the country where there are more work opportunities (Hills, 2016). Along with current income and living standards, the presence or absence of assets represents an important aspect of a household's situation in terms of poverty and exclusion, and housing represents the most widespread form of asset holding in the case of the European 'periphery'. More importantly, housing ownership influences political subjectivities and objective preferences, which are linked with public spending, the level of inflation and the nature of taxation. The characteristics of the housing markets and finance systems have electoral consequences, because, they are linked with voter preferences The institutional feature of housing and finance systems

has important ballot-box consequences similar to those of welfare institutions (Schwartz and Seabrook, 2009).

The case studies of Ireland and Greece contribute to the political economy of re-distribution. By focusing on the relationship between monetary integration, social spending and inequality, it sheds light on the long and ongoing debate about whether and how EA member states' accession to the euro-area has been an important factor restraining welfare state spending (Busemayer and Tober, 2015). The relevant literature suggested that the convergence criteria, during the pre-accession phase, and the SGP, post-accession, would lead to some type of fiscal retrenchment and to a subsequent decline of redistribution. However, we have demonstrated that countries in the 'periphery' not only experienced an increase in redistribution but also in social spending. Moreover, we have provided an explanation of how EA, via the creation fiscal space, can contribute to an increase in social spending. In order to examine the dynamics of this increase, we focused on the case of pension spending and thus on inequality among the elderly. The focus on older persons is a reflection of the fact that, before social transfers, the at-risk-of-poverty rate is quite high among pensioners, but is also chosen because this group makes up a large, and fast-increasing, share of the electorate.

Lastly, the first paper of this thesis, has tried to reconcile two strands of related literatures on the political economy of monetary integration and inequality. The pre-EA inequality literature focused on how the constraints of monetary and fiscal policy would put pressure on member states to reduce welfare spending. During the crisis period, the exact argument is reiterated for the EA "peripheral" countries, i.e. that they had no room for policy manoeuvre. The "programme countries" had to turn to supply-side reforms and internal devaluation in order to achieve the necessary adjustment– a policy mix that has been considered to be detrimental for low income strata. However, for the "good euro area years" the argument shifts and stresses very different mechanisms. While these different angles in the EA inequality debate do not seem to be reconcilable, this thesis argues that there is a common theme binding together these three period: what seems to matter on how the discussion between EA and inequality evolves is how tight the "golden straitjacket" is.

5.2 Limitations: data and methods

The analysis presented in these papers suffers several important limitations. The limitations of this thesis fall under two broad categories: data and methods. To begin, data availability has been one of the major limitations of this thesis. Eurostat measurement methods for inequality have changed, in terms of both definitions and underlying data, roughly at the same time as the EA. To overcome this problem of missing values in paper one, I am using the SWIID dataset, which currently incorporates comparable Gini indices of disposable and market income inequality for 192 countries for as many years as possible from 1960 to the present; the goal of the Standardized World Income Inequality Database (SWIID) is to overcome these limitations. Nonetheless, this dataset does not provide information about the different socioeconomic groups and income groups. Thus, for paper two the data for inequality is drawn from publicly available data from the Eurostat –this is based on ECHP and EU-SILC, despite the break in series. Data on wealth remains even scarcer. The first problem with the data availability is that for testing some of the channels identified in the thesis other measures would have been more relevant had that data been available. As an example: for the financialisation channel the top 1 percent income share would have been useful, however, the lack of annual data does not allow for this. Moreover, while wage dispersion data is available on OECD, these data are not availably annually. Moreover, besides data availability the second problem comes from the measurement of inequality. While Gini coefficient is one of the most commonly used measures in the inequality literature, like any single summary measure of a set of data it cannot capture all aspects that are of interest to researchers. One of its widely reported flaws is that it is supposed to be overly sensitive to changes in the middle of the distribution. With this in mind this thesis tries to bring to light additional perspectives by using different inequality indicators when going in depth into the case studies. .

When it comes to measures of wealth, the data generally suffers from two major shortcomings: limited time series (compared to income data) and lack of cross-country comparability. In paper three data from the Spanish Survey of housing finances is used (EFF) along with the Italian Survey of household income and wealth (SHIW). Survey data are well known to suffer from a tendency of interviewees to underreport their wealth, consciously or otherwise. . A further problem for survey-based wealth

estimates stems from the high concentration of wealth and the low probability of including the wealthiest households in the sample. An important feature of the EFF survey is thus the oversampling of wealthy households: a necessary condition in order to obtain an accurate picture of aggregate wealth, given that an important share of total assets belongs to the richest households. The SHIW data do not benefit from oversampling. Hence, those results will still tend to reflect the imprecise representation of the upper tail of the wealth distribution, and we reiterate the warning to interpret them with caution. The experience to date suggests that sample surveys are unlikely by themselves to provide a fully satisfactory source of information about the size distribution of wealth and income as a whole (Atkinson and Harrison, 1978). Nevertheless, sample surveys are the primary source for wealth and income distribution data (Brandolini et al, 2004) and hence this thesis remains constrained by these wider data issues.

Closely related to these data problems, there are also methodological limitations which need to be taken into account. To begin, the regression analysis in paper one shows basic correlations. Despite the fact that the regression controls for a large number of potential inequality drivers, this analysis cannot strictly prove the existence of a causal relationship between EA accession and inequality. Moreover, the empirical analysis is constrained by the time-series availability of the income inequality measures. While for the regression analysis I use the GINI coefficient to measure inequality market and disposable income inequality , other measures would have been more appropriate for the identification of some of the channels (i.e. for the fiancialisation channel of the top one per cent,). Yet, the lack of annual data did not allow to use these indicators in the empirical exercise of the first paper. Lastly, while the second paper focuses on one area of transfers (pensions), a more complete picture of how fiscal space has been used for redistribution would require the evaluation of the impact of all reforms on tax and transfers policies under the euro. Such a synoptic survey however was beyond the scope of this thesis. Nevertheless it is worth noting that one potential way of doing that would be by using EUROMOD, i.e. a tax-benefit micro simulation model for the European Union that enables researchers and policy analysts to calculate, in a comparable manner, the effects of taxes and benefits on household incomes. However, the break in the time series does not allow for the use of EU-SILC dataset.

5.3 The links to broader political economy debates

Despite the methodological limitations, this thesis contributes to the literature of monetary integration and inequality. It starts, by providing a more nuanced picture in the euro-inequality debate. It is well known that inequality developments, are a result of an interaction between supranational forces and idiosyncratic country factors. The picture is even more complex in a monetary union where monetary policy is centralized, while other policies remain largely in national hands. There are macroeconomic dynamics at work- which start from the interest rate convergence - fiscal space, asset prices movements – which are then filtered by domestic institutional settings. While this thesis has identified various channels of interaction between euro adoptions and inequality outcomes, it concentrates mainly on inequality of housing wealth and inequality of disposable income. The next sections explain in depth the reasons for this selection and how the in depth investigation of the interest rate channel adds to the political economy scholarship.

5.3.1 The new insights to comparative political economy of monetary integration

Most of the comparative political economy literature of monetary integration has been focusing on the different performances of the different variants of capitalism under a single currency. On one hand, CMEs with their centralized unions relied upon export-led economic growth. On the other hand, MMEs with their fragmented trade unions generated economic growth through domestic demand. If one begins from this framework then winners and losers of the EA participation were mainly determined by the labor markets and its institutions.

Yet recently, scholars have pointed out that residential housing and housing finance systems have significant causal consequences on the structure of welfare states, and macroeconomic outcomes. Schwartz and Seabrooke (2009) developed a typology which explains how the housing and finance systems are organized in the different political economies. Moreover, the crisis led comparative and international political economists to explore whether finance is a key causal force for domestic and international economic and political outcomes.

In this thesis, I interrogate all three interlinked debates and identify links between EA and inequality. I explain how interest rate convergence and the elimination of exchange rate risks, increased intra-EA capital These flows found their way to housing and mortgage debt; which is considered as high-quality collateral. While this is a phenomenon which is also taking place outside the EA, it is unquestionable that the build-up of the housing booms has been linked with the lowering (or even negative) interest rates which came with the euro, and the elimination of exchange risk that boosted intra-Eurozone capital inflows (Bohle, 2017). I showed in the thesis that housing and finance systems also matter for inequality outcomes and housing price variations had wealth implications for the political economies of the periphery.

Hence, this thesis adds to the political economy of housing literature. It looks in-depth at how the housing channel operated in Italy and Spain and explains how the decline of interest rates was absorbed by different institutional settings, and how this played out differently in wealth distributions. Spain, which had more a financialized housing system, experienced an increase in inequality with top wealth earners acquiring multiple houses, while in Italy, which remained in its familial variety of capitalism, the distribution of wealth remained almost stable. Moreover, I demonstrate that these varieties are not static (something which has been acknowledged by Schwartz and Seabrook), and that institutions also may change under the impression of capital flows (liberalization of the Spanish mortgage markets etc. - paper 3).

Additionally, I add to the literature of financialisation which suggests that growth in financial sectors and the financial labour force is a crucial determinant of wage disparities and it leads to the concentration of income towards the households that are better off (Flaherty, 2015; Godechot 2016; Kus 2012). I depart form this view and my analysis confirms the analysis of post-Keynesian economists such as Stockhammer and his co-authors (2016), who explained that that the European variant of increasing finacialisation and the corresponding bubble came with moderate increases in real wages, a stable wage dispersion and increases in welfare spending (Stockhammer et al, 2016).

This thesis also adds to the analysis of post-Keynesian economists by providing a clear documentation of two channels via which euro adoption may have led to increased welfare spending and a reduction of inequality. After all, increased capital flows can

have a variety of effects. The literature on financialisation explains how they are linked with housing bubbles. Yet, the Euro experience shows that capital inflows increased tax revenues. Moreover, lower interest rates on public debt can create fiscal space- namely budgetary room for manoeuvre that is determined by financing costs but also the maturity of debt. The political economy literature of public finances, by contrast, tends to stress only the repercussions of easy finance. Yet, this fiscal capacity could actually provide alternatives and room for additional domestic policy-making and even welfare expansion.

All these findings provide new insights into the literature of EA and inequality. Using the case of pensions, for example, we explain that the fiscal space allowed for reforms which aimed at reducing inequality among the elderly. This comes as a surprise since pensions are a very highly contested and politicized area of transfers which traditionally benefits (especially in case of Greece) the insiders of the system. Moreover, in the Irish case, even though public pension provision has traditionally been low, the new fiscal space allowed for the implementation of reforms which reduced poverty among the elderly.

Yet, it needs to be noted that an increase only in pension provision may contribute to intergenerational inequalities. For this reason it is significant that we could also demonstrate that in the case of Ireland transfers also increased elsewhere (e.g. family benefits). In the case of Greece, while the pension bias of the welfare system continued to follow institutional path dependencies, the reduction of poverty and inequality among the elderly was nevertheless of major significance since in the Greek case pensioners were among the most vulnerable parts of the distribution. Also, and against conventional wisdom, our paper suggests that an effort of rationalisation of the pension system was indeed made by the PASOK government.

Finally, my findings suggest that income inequality plays out very differently in different national contexts. Government policy and political choices matter. On the one hand, it seems that the classic left-right divide was less significant that we might presume. In the case of Spain there was a continuity between Aznar (People's Party , PP) and Zapatero (Spanish Socialist Workers' Party, PSOE) in economic policy in relation to the housing bubble and under both governments the issue of affordability was raised. Yet, Aznar, liberalized the land zones, in order to deal with the issue of

affordability (which also benefitted upper classes). In the case of Ireland the conservative coalition government established a consensus and institutionalized a low taxation regime and it was mainly interested on poverty reduction, rather than inequality. In the case of Greece, the center-left government increased spending in pensions in a more progressive way than the center-right and yet regardless of their political orientation, both parties actually had redistributive considerations in mind.

In other words, the methods may have varied but the additional fiscal space enabled governments of varied ideological persuasions to act to reduce inequality. Hence, while I find evidence that political parties do matter, the main contribution of this thesis is how the markets themselves were more permissive than we have tended to think This finding is crucial for advancing our understanding of the tension between deep economic integration and social protection.

5.3.2 The debate on integration and democracy: What have we learned from the four country cases

Especially after the crisis, the argument has been repeatedly made that deep economic integration is not compatible with social protection. This thesis challenges this view. Its in-depth case studies allow us to identify clearly aspects of hyperglobalisation and of social protection that do not undermine one another, and in fact reinforce one another. The Maastricht process and EA accession were considered to be a "golden straitjacket" on very different economies.

However, Rodrik's trilemma is based on the view of the markets as "the rational right-wing foreign direct investor". I find that markets can be much more permissive as long as growth rates are good (high race for yield). The financial markets played a major role for the intra-country redistribution concerns. This thesis supports the claim that that the satisfaction of domestic preferences was not crowded out by the straitjacket as many thought for the euro and there was much more leeway for governments. Market forces, assured by freedom of movement and freedom from exchange rate risks, seized the opportunity for cross-border lending and investment in search for higher yields. As explained in the introduction of this thesis, one of the major long-term reasons why EA membership was considered desirable for "peripheral" candidate countries was the expected effect on interest rates and the cost

of capital. Historically, they had to pay a significant and highly volatile risk premium on top of the borrowing rates compensating lenders for higher inflation, if they wanted to borrow in their own currency. Borrowing in foreign currency, such as US dollars or the D-Mark, exposed them to the risk of a currency crisis triggering insolvency of private borrowers. For public borrowers, the advent of EA made the differentials between yields on government bonds almost disappear. This had a sizeable positive impact on the public finances of countries that were highly indebted, especially where their debt was financed on a short to medium-term basis.

Similarly, prior to the EA, the cost of funds in interbank markets of the 'periphery' was determined by the supply and demand of funds within these countries and the cost of foreign exchange. With the advent of the EA (and prior to the financial crisis), the domestic banking systems were thus able to raise substantial additional resources without any exchange risk and this provided the finance for large continuing investments within a construction boom in both economies. Interest rate convergence decreased the cost of public debt especially for countries like Greece and Italy with high debt levels and the elimination of exchange risk, boosted intra-Eurozone capital inflows for Greece, Ireland, Spain and Portugal (and to a lesser extent, Italy) and led to an expansion of domestic banking leverage and to the inflow of investment capital.

These developments which came with globalisation were not operating at the expense of democratic politics. It has been extensively discussed in the literature that Ireland complied with the rules on budget deficits and debt but institutionalized an unsustainable low tax regime over time (Regan, 2013). This low tax regime was supported by international bodies such as the IMF and the OECD and was welcomed by the financial markets (ibid). The growth of credit markets in Ireland was based on debt-financed consumer spending. This debt in Ireland was mainly based on household mortgages, contributing to the shift from 'State' to 'privatized' Keynesianism. Government policies were very supportive of house-price inflation which would allow households to leverage credit and use it for consumer spending. Irish banks benefited from the ECB's low interest rate policy and borrowed excessively on the interbank money markets. Centre-right governments deregulated finance and mortgage markets and implemented a whole series of tax breaks for property construction (ibid). The outcome was a notably frantic bubble in house prices.

However, as this thesis demonstrates, the housing bubble allowed the government to increase its expenditure. This thesis not only examines what led to the crisis but focuses on this increase in welfare payments and asks whether this increase was progressive. We find that among the transfers that saw the highest increase was pension spending (yet other transfers such as family benefits also increased substantially). For the case of Ireland, one of the major criticisms for its welfare state is that it is almost non-existent and that the fruits of growth are not allocated to and enjoyed by everyone (Powell, 2017). By focusing closely on the case of increases in pension spending, we found that the Irish government not only increased spending but it did so in an equalizing way via a focus on the lower income strata, thus reducing inequality and poverty among the elderly. Despite this increase in welfare spending, the pro-cyclical fiscal stance kept the markets satisfied. The European Commission and international rating agencies never questioned Ireland's fiscal policy regime. We can hence verify the argument that capital flows loosened the straitjacket in the case of Ireland: the demands of foreign investors were in line with the needs of domestic constituencies. It was the growing economy and the redistribution of the growth dividend that ensured a higher yield.

The Spanish case resembles that of Ireland in many ways. The introduction of the euro brought a significant reduction of real interest rates and Spain experienced an asset price (housing) boom in the EA years. This was clearly enabled by cheap credit, not government spending. Spain actually ran a fiscal surplus in 2005, 2006 and 2007 (European Commission, 2010). However, in contrast to Ireland, there is a lot of evidence which indicates that the risks were well understood. The real estate bubble was a much-debated political issue, policy makers discussed in public about the caveats of the bubble, and the research department of the Bank of Spain reported the possible overvaluation in the housing sector already from 2003 (Santos, 2014). There were clear concerns related with the overexposure of the banking sector, particularly in the cajas. Yet there was little done by national governments to address these concerns, and whatever relevant government action was undertaken it always towed the line of what would be also "desired by the markets". A very characteristic example is that in the general election of 2004, two debates with different policy implications emerged. First, there was a popular debate centred on the issue of housing affordability (Santos, 2014). Politicians reacted to this concern by implementing measures which

increased the supply of housing but also putting forward suggestions that exacerbated the speculation in the housing market. A second debate was centred on the detrimental consequences of a potential housing crash. Yet, again very little was done to control the bubble. The concerns about increasing systemic risk were not taken in to account. *Why then the lack of greater political pressure?*

Once again, this thesis shows that this is linked with the fact that capital flows loosened the straitjacket and there were real welfare gains: The massive employment increase in the construction sector reduced income inequality (Perez and Rhodes, 2014). With more than 80 per cent homeownership in Spain during the boom, the middle classes and lower classes observed their housing wealth increasing. Moreover, the banking and FIRE sectors of the economy were hugely benefiting. Hence, again some of the needs of the electorate were satisfied by the capital inflows.

The Greek problem was definitively fiscal, related to government spending and specific to its own national economy. In the case of Greece one can claim that the country was always breaching the SGP and was never under the straitjacket – yet even in the case of Greece there was a tendency of the deficit to converge to 3 per cent. Yet, via the massive reduction on the cost of public debt and the increasing revenues coming from the boom, governments gained room for political and economic manoeuvre. However, our analysis confirms an interesting pattern for Greece: there was some effort to achieve fiscal sustainability even in the euro years during which the country had already guaranteed its membership.

Our analysis in pension reforms and spending clearly shows that there were some attempts to improve public finance under the centre-left government in Greece. If we rethink the Rodrik's trilemma again, even in the unlikely case of Greece, which is commonly accused of being a traditional laggard in terms of fiscal prudence, the intention of reforms was not only to alleviate poverty and inequality but also to rationalise the pension systems, which was of major concern to markets. The institutional framework of the EA entailed a standardized accounting framework that would, in theory, make the member states' public finance accounts far more transparent to the financial markets and to the European institutions. Given that pension spending and pension debt in Greece were considered as unsustainable, both prior and after the country's accession in the EA, they were the major sources of

concern for financial investors (Featherstone and al. 2001: p.465). Yet, domestic interests, as explained in the paper, made these attempts unsuccessful. This was in order not to lose the capital inflows and increased revenues from the boom, which seemed to work as structural funds did in the 1980s 'periphery' countries: they contributed to high levels of growth and worked as a side payment to increase political support for national governments which signed to the EA.

In the case of Italy, the dynamic was different as easy money found its way mainly to government bonds (Hopkin, 2013). Italy's stagnant growth rates were attributed to an inward-looking and sclerotic form of crony capitalism (ibid). A characteristic example of this protection of national interests in the Italian case was the banking sector as discussed in chapter 4. While the government's non-market friendly policies, its focus on national sovereignty, and low growth prospects of the economy all kept capital inflows into Italy more modest, there was some fiscal easing and a mild housing boom did emerge. Italy shut out foreign investors and sought to protect declining domestic industries (Hopkin, 2013). Berlusconi underlined the protection of national interests and expressed support for a more intergovernmental Europe (Furlong and Quaglia, 2009).

Housing prices did go up and again the high percentages of home-ownership led to the increase in the wealth of many households – which, up to an extent, compensated for the low growth performance, and middle classes moreover watched their wealth increase. Moreover, as Hopkin (2015) claims, the Berlusconi government exploited the easing of fiscal pressures after the euro, with interest rates on debt falling sharply, mainly to satisfy his many supporters – small business owners and the self-employed by reducing taxation (Hopkin, 2015). Hence, the case of Italy is rather different – neither does the government embrace the market logic of reform nor, more importantly, does it even try to signal this, the markets are also not rewarding via capital inflows as in the rest of the "peripheral" states. Yet, both the housing boom and fiscal easing – allow for some sort of very modest electorate compensation (increase in housing wealth and lower taxes).

5.4 The generalisability of the channels and the crisis

All country cases seem to share a common element. The capital inflows played a very important role in the euro-inequality story. Although most observers agree that the

initial shock started from the other side of the Atlantic, there are different narratives about the origins of the crisis, which are complementary to each other (Jones, 2015). Most of the interpretations start from the fact that the source of rising economic imbalances between countries in the EMU's core and its periphery stems from the influence of monetary union on nominal interest rates. The increased availability of cheap credit for the private and public sector without exchange rate risk, in turn led to worsening current account balances. Once the confidence of foreigners was lost, the EA member states experienced a crisis on the balance of payments (Hancke, 2013).

What is different among the different strands of the literature, is that each one concentrates on a different agent in the domestic economy. Borrowing from Erik Jones (2015), the explanations of 'household debt' and 'government finances' start from the liberalisation of the capital account that allowed households and governments to borrow more cheaply. In 'household's debt', it was households that did not behave with prudency, and in 'government finances', it was governments that borrowed without responsibility. In 'competitiveness' as discussed above wage negotiators are under the microscope. My thesis builds on the 'sudden stop' interpretation of the crisis. This explanation is not focusing on "who is to blame" for the crisis (Jones, 2015). It rather focuses on the fact that markets have tremendous power in a monetary union (De Grauwe, 2018).

There were countries with sustainable fiscal stances like Ireland and Spain. It is true that even in the case of Greece, governments 'were pretending to do' and markets 'were pretending they made' efforts to boost market confidence. Even more interesting is the case of Italy, where there was a clear inward-looking rhetoric, but capital inflows still eased fiscal constraints. In Rodrik's framework this is an interesting dynamic. The markets' interests were temporality at least 'compatible' with democratic concerns. In other words, the tension described in the trilemma was not all that strong: the growth of the economy and the distribution of the growth dividend were necessary for higher returns on investment. National governments were there to welcome the rising tide, and to make sure it would lift all boats so that electoral support would be strong. In that sense, in the case of the EA, where advanced capitalist states gained credibility it seems that democratic concerns were taken into account by national governments. In the case of Greece and Italy, one can claim that preserving national sovereignty - either by non-compliance or by protecting domestic interests - did not dissuade 'markets'

from rewarding these economies. Interestingly, the vast decline in the cost of public debt and the milder housing booms created benefits for the median voter. Especially, in Spain, Ireland and Greece which experienced financial cycles of increasing duration and magnitude, the 'rising tides' lifted perhaps not all, but many 'boats' (Franks, 2018).

The crisis changed the scenery completely. Investors thought that pulling money out of these economies was the optimal course of action. This led to the realisation of a self-fulfilling prophecy: 'peripheral' countries have become insolvent because investors fear insolvency (Schelkle, 2017). When investors lost confidence in the 'peripheral' countries, they massively sold the government bonds of these countries, pushing interest rates to unsustainably high levels. It is important to underline that the 'sudden stop' does not imply that the introduction of the euro did not contribute to increasing vulnerabilities, such as increasing private debt, housing booms and loose budgetary constraints. Indeed, some of the countries were affected by a loss of competitiveness, irresponsible government finances, or households living beyond their means as explained in detail in the introduction (Jones, 2015). However, these problems were not only found in the 'periphery' but still markets attacked particularly these states. There was a massive outflow of liquidity from these Member states, and hence their governments could not fund or roll over their debt obligations. The fiscal easing stopped and the tax revenues evaporated (De Grauwe, 2012a).

Matthijs (2017) focuses on the crisis period and examines the gradual weakening of democratic processes in the countries of the periphery. He suggests that that EA's response to the crisis did not allow for any real choice in economic policy. It led to opaque and technocratic decision making processes and delivered poor economic results. The periphery seemed to have made concessions in terms of democracy and national sovereignty in the name of monetary integration. It is true that market forces originally pushed these economies to their knees and interest rates on bonds increased to very high levels.

If one concentrates on the first years of the crisis, indeed one may question the relevance of the channels described in this thesis beyond the first years of the boom. The "competitiveness channel" might play in reverse with inequality increasing in the periphery during the crisis as the literature points out and as explained in the first paper

(Matthijs 2016). Southern MMEs had no choice but to respond to the euro crisis by a series of deflationary spending measures and price and wage cuts. These policies intensified recessions and led to widening income inequality. The Northern CMEs were not so much hit by the crisis and by letting their automatic stabilizers kick in, domestic inequality declined (Matthijs 2016). Regarding the fiscal channel, the effect of the tightening of fiscal rules at the supranational level cannot be yet assessed (since it still remains on paper and the new rules which aim at improving budgetary compliance have not been not implemented), but the implementation of austerity programmes may result in the fiscal channel becoming more relevant. Hence, this channel is not expected to play in reverse, but rather for its effect to be magnified since fiscal policies will be further restrained.

Having said that, I consider that the main channel discussed in the thesis, "the interest rate channel" is relevant not just for the period of crisis but also for cases outside the Eurozone, especially if one focuses on the years after the ECB's announcement of OMT (Outright Monetary Transactions). Booms and busts (even if amplified in the EA) are endemic to capitalism, and they do occur even beyond the case of the EA. The crisis was an event comparable to the Great Recession which operated far more widely than within the EA. The ECB's crisis management measures, ultra-low interest rates, and the QE (Quantitative Easing) have actually led some researchers to argue that that fiscal space has been increased due to historically low interest rates. Hence, the interest rate channel seems to be relevant even in periods of extreme hardship.

Thus, the question of how fiscal space is used and under which circumstances it is used for progressive redistribution remains important for understanding the interaction between market forces and democratic politics even during the busts. In fact, the question becomes even more relevant in a period of low growth performance and increasing inequality globally. In this context it is important that international organisations ask critical questions about how much leeway national policymakers have. Moreover, democratic backsliding confirms that re-distributional concerns will remain high in the political agenda. Since booms and busts occur in capitalism, the periods of cyclical upswing can define how a nation should build buffers for the unprotected and the outsiders of system.

Lastly, this thesis documents that national contexts matter even within the peripheral group of countries and government policies are important for the final distributional outcome. One of the main findings of this thesis is that inequality tends to play out very differently in the different national contexts of the periphery. This leads us to explore whether those differences are still relevant for the period of economic hardship. Existing research supports the argument that national contexts matter on how fiscal adjustment in Southern Europe affects economic performance (Monastiriotis, 2017). Research on the period of fiscal adjustment paths of the four Southern Europe members during the Maastricht period reveals that policy choices vary also significantly (Pagoulatos and Blavoukos, 2008).

The housing channel provides an interesting case to investigate whether national contexts matter during the crisis period. To begin with, the 2008 global financial crisis revealed more than anything the importance of housing and asset price bubbles on national economies. Housing bubbles also have important equity implications and sudden increases and declines in housing value can generate progressive or regressive effects for middle and poorer households. However, this thesis argues that domestic policy choices and path dependencies define both the magnitude of the boom but also its distributional consequences. The same holds for the bust: different government responses can lead to different distributional consequences, and effective policies actually prevented evictions and repossessions (Fuentes et al., 2013). In many EU Member states it was strong societal pressure which led governments to implement policies that would tackle the problem of repossessions. This is clearly suggesting that in advanced capitalist states, democratic concerns cannot be abandoned and national policies do matter. Yet, once again these policies differed among member states. As an example, the Irish case was more effective than the Spanish case in preventing mortgage arrears leading to repossessions (Fuentes et al., 2013).

Even in the crisis, inequality trends in the periphery are not similar. Some countries experienced a more modest increase than others (Italy compared to Spain) or even a decrease (in Portugal inequality did fell between 2008 and 2015). Thus, inequality scholars should focus exactly on this interaction between macroeconomic un-equalizing forces and domestic policy responses and analyze together, rather than separately, the global and idiosyncratic country factors. It is the understanding of this

interaction that can provide insights for policy makers and enhance our understanding with regard to the symbioses between capitalism and democracy.

5.5 Future research

This thesis focused on the impact of a unique monetary regime change on inequality outcomes in the EA 'periphery'. Using both empirical analysis and in-depth country cases, it focused on some of the channels of interaction between EA accession and wealth and income inequality outcomes- with a focus on housing and finance systems. It confirmed that housing and finance systems are rather dynamic and not static. However, the reasons why these regime changes are evident or not remained out of the scope of this study. Yet, the examination of the reasons/ driving forces of this change provides avenues for further research.

While most of the literature points to the fact that there is a tendency of these regimes to move towards a more liberal variety, the post-crisis financial regulation can be an opposing force to this dynamic. Hence, a closer look on the path trajectories that housing and finance systems followed in pre-and post-crisis area and the driving forces behind them is a promising path – especially for the literature of political economy of housing and finance systems which is recently gaining momentum. Moreover there are clear tendencies in the literature of political economy to understand heterogeneity in housing inflation. To do so, it is vital to understand dynamics between different domestic institutions i.e. labour market, shaping households' incomes, and the market for mortgages, which shaping households' access to financial resources (Regan, 2013). Future research should focus on how these interactions shape inequality outcomes both on wealth and income distributions. Moreover, while this thesis has looked at the distribution of income and wealth in different country cases the previous section has provided insights of how the housing channel could link the developments in wealth but also in the income distribution. Hence, an additional layer which could be added on the political economy of housing literature is to investigate the links via which second order effects (increase in employment in the construction and real estate sector) it might affect the income distribution.

While this thesis focused on the so called "peripheral" countries- there are countries of the core which also seem to follow up to an extent, similar paths both in terms of housing booms but also in terms of fiscal space expansion. As an example, Belgium

had very high debt as a percentage of GDP, while the Netherlands has experienced a housing boom. Focusing on two countries of the core of the EA and comparing the findings with those of EA 'periphery' countries would also give some interesting insights on whether this core-periphery divide would play a role in the final distributional outcomes.

Moreover, while the second paper of this thesis has focused on one particular area of transfers, namely pensions and their distributional consequences future research would benefit from looking policies and the re-distributional consequences of other transfers and taxes. This would allow obtaining a more complete picture of how governments have used fiscal space. In our study more emphasis was given on the part of transfers – since most of the redistribution happens from the expenditure side of the budget (Immervoll et al. (2005). Yet, this does not mean that taxes have no role. Revenues traditionally need to finance social spending- at least this is what was done traditionally to finance welfare states. Yet, we have seen that in the case of Ireland and Spain tax base did erode, and in the case of Italy and Greece, tax evasion increased substantially under EA. There needs to be closer examination of the distributional consequences of taxation policy during these years.

Finally, while this study has focused on inequality of disposable income and wealth among households, future research should also concentrate to intergenerational inequalities in the Euro-area context. This stems almost naturally from the evidence of this thesis. To begin, inter-generational inequalities are a crucial axis of inequalities today. Housing is central to this perceived inequality: older generations own more housing assets and they typically acquired them when housing was more affordable than it is now. It is also important to identify who won and who lost, from this housing price increase. Younger households who bought houses within the boom may will be more at risk of going underwater in the crisis. However, in the familial type of housing markets in the periphery, families often share the same house which has acted as a safety net for younger people.

Housing isn't the only area in which intra-generational inequality has widened over time. As discussed extensively in paper two of the thesis, in Ireland and Greece before the adoption of the common currency, pensioners have been a vulnerable part of the distribution and pension spending towards low income groups was limited. The

increase in pension spending in a progressive way, allowed for the reduction of poverty among pensioners. However, the focus of the welfare spending only on pensions- especially in the Greek case, could shift the risk of poverty and inequality among younger households and working age population. Hence, there are good reasons to investigate in future research what are the intergenerational distributional consequences of these developments.

Bibliography

Aalbers, M. (2008) ‘The Financialization of Home and the Mortgage Market Crisis’, *Competition & Change*, 12(2), pp. 148–166.

Aalbers, M. (2009) ‘Residential Capitalism in Italy and Netherlands’, in Schwartz, H. M. and Seabrooke, L. *The Politics of Housing Booms and Busts*. Basingstoke: Palgrave McMillan, pp. 146–169.

Aalbers, M. (2016) *The Financialization of Housing: A Political Economy Approach*. New York: Routledge.

Acemoglu, D. and Robinson, J. A. (2000) ‘Political Losers as a Barrier to Economic Development’, *The American Economic Review*, 90(2), pp. 126–130.

Acemoglu, D. Autor D., Dorn D., Hanson G. and Price B. (2016): “Import competition and the great US employment sag of the 2000s”, *Journal of Labor Economics,* vol 34(1), pp. 141–98

Adam, K. and Tzamourani, P. (2015) ‘Distributional consequences of asset price inflation’, *Deutsche Bundesbank Discussion Paper*, No 27/2015.

Agnello, L. and Schuknecht, L. (2011) ‘Booms and Busts in Housing Markets: Determinants and Implications’, *Journal of Housing Economics*, 20, pp. 171–190.

Ahearne, A. and Delgado, J. (2008) ‘A Tale of Two Countries’, *Bruegel Policy Brief*, 2008/04.

Akin, O., Montalvo, J.-G., Villar, J.-G., Peydró, J.-L. and Raya, J. M. (2014) ‘The real estate and credit bubble: evidence from Spain’, *Journal of the Spanish Economic Association*, 5(2-3), pp. 223–243.

Albanesi, S. (2007) ‘Inflation and Inequality’, *Journal of Monetary Economics*, 54(4), pp. 1088–1114.

Alcidi, C., Gros, D. (2012) 'The Spanish hangover', vox.eu (accessed 01 September 2018).

Alesina, A. and Drazen, A. (1991) 'Why are stabilisations delayed?', *The American Economic Review*, 81(5), pp. 1170–1188.

Alesina, A., Ardagna, S. and Galasso V. (2008) 'The Euro and structural reforms', *NBER Working Paper*, 14479.

Allegré, G. and Timbeau, X. (2015) 'Does Housing Wealth Contribute to Wealth Inequality? A Tale of Two New Yorks', *Sciences Po OFCE Briefing Paper*, 9.

Allen, J., Barlow, J., Leal, J., Maloutas, T. and Padovani, L. (eds.) (2004) Housing and Welfare State in Southern Europe. London: Wiley-Blackwell.

Ansell, B. (2014) 'The Political Economy of Ownership: Housing Markets and the Welfare State', *American Political Science Review*, 108(2), pp. 383–402.

Argitis, G. and Pitelis, C. (2001) 'Monetary Policy and the Distribution of Income: Evidence for the United States and the United Kingdom', *Journal of Post Keynesian Economics*, 23(4), pp. 617–638.

Arundel, R. (2016) 'Equity Inequity: Housing Wealth Inequality, Inter and Intra-generational Divergences, and the Rise of Private Landlordism', *Housing, Theory and Society*, 34(2), pp. 176–200.

Arundel, R. and Ronald, R. (2016) 'Parental Co-residence, Shared Living and Emerging Adulthood in Europe: Semi-dependent Housing across Welfare Regime and Housing System Contexts', *Journal of Youth Studies*, 19(7), pp. 885–905.

Assa, J. (2012) 'Financialization and its Consequences, The OECD Experience', *Finance Research*, 1, pp. 35–39.

Atkinson, A. B. (1983) *The Economics of Inequality*. Oxford: Clarendon Press.

Atkinson, A. B. (2015) *Inequality: What Can Be Done?*. Cambridge: Harvard University Press.

Atkinson, A.B. and Harrison, A.J. (1978), Distribution of personal wealth in Britain, Cambridge University Press, Cambridge, UK

Azpitarte, F. (2010) 'The Household Wealth Distribution in Spain: the Role of Housing and Financial Wealth', *Hacienda Publica Española/Revista de Economia Publica*, 94(3), pp. 65–90.

Baccaro, L. and Pontusson, J. (2016) 'Rethinking Comparative Political Economy: The Growth Model Perspective', *Politics & Society*, 44(2), pp. 175–207.

Baldini, M. and Poggio, T. (2014) 'The Italian housing system and the global financial crisis', *Journal of Housing and the Built Environment*, 29(2), pp. 317–334.

Banca d'Italia (2002f.) *Survey on Household Income and Wealth (SHIW) 2002, 2006, 2008*. Rome: Banca d'Italia.

Banco de España (2002f.) *Survey of Household Finances (EFF) 2002, 2005, 2008, 2011, 2014*. Madrid: Banco de España.

Barr, N. (2012) *Economics of the Welfare State*. Oxford: Oxford University Press.

Bean, C. (1998) 'Monetary Policy under EMU', *Oxford Review of Economic Policy*, 14(3), pp. 41–53.

Beck, N. and Katz, J. N. (1995) 'What to Do (and Not to Do) with Time-Series Cross-Section Data', *The American Political Science Review*, 89(3), pp. 634–647.

Beck, N. and Katz, J. N. (2011) 'Modelling Dynamics in Time-Series-Cross-Section Political Economy Data', *Annual Review of Political Science*, 14(1), pp. 331–352.

Beckfield, J. (2005) *The consequences of regional political and economic integration for inequality and the welfare state in Western Europe*. PhD Thesis. Bloomington: Indiana University, USA.

Beckfield, J. (2006) 'European Integration and Income Inequality', *American Sociological Review*, 71(6), pp. 964–985.

Beckfield, J. (2009) 'Remapping inequality in Europe: The net effect of regional integration on total income inequality in the European Union', *International Journal of Comparative Sociology*, 50(5–6), pp. 486–509.

Begg, I. (2003) ‘Complementing EMU: Rethinking Cohesion Policy’, *Oxford Review of Economic Policy*, 19(1), pp. 161–179.

Bertola, G. (2010) ‘Inequality, Integration, and Policy: Issues and Evidence from EMU’, *Journal of Economic Inequality*, 8(3), pp. 345–365.

Bianchi, R. (2014) ‘National Report for Italy’, in ZERP (ed.) *TENLAW: Tenancy Law and Housing Policy in Multilevel Europe*. Bremen: University of Bremen, ZERP.

Blavoukos, S. and Pagoulatos, G. (2008) ‘The Limits of EMU Conditionality: Fiscal Adjustment in Southern Europe’, *Journal of Public Policy*, 28(2), pp. 229–253.

Blyth, M. (2008) ‘The Politics of Compounding Bubbles: The Global Housing Bubble in Comparative Perspective’, *Comparative European Politics*, 6(3), pp. 387–406.

Bohle, D. (2014) ‘Post-Socialist Housing meets Transnational Finance: Foreign Banks, Mortgage Lending, and the Privatization of Welfare in Hungary and Estonia’, *Review of International Political Economy*, 21(4), pp. 913–948.

Bohle, D. (2017) ‘Mortgaging Europe’s periphery’, *LEQS Paper*, No. 124/2017.

Bourguignon, F. (2017) ‘World changes in inequality: an overview of facts, causes, consequences and policies’, *BIS Working Papers*, No. 654.

Bouvet, F. (2010) *EMU and the Dynamics of Regional Per Capita Income Inequality in Europe*. Rohnert Park: Sonoma State University.

Bover, O. (2005) ‘Spanish Survey of Household Finances (EFF): Description, Methods and Preliminary Results’, *Economic Bulletin of the Bank of Spain*, January.

Bover, O., Martínez, C. and Velilla, P. (2005) ‘The Wealth of Spanish Households: a Microeconomic Comparison with the United States, Italy and the United Kingdom’, *Economic Bulletin of the Bank of Spain*, July.

Bradley, D., Ee, H., Moller, S., Nielsen, F. and Stephen, J. (2003) ‘Distribution and redistribution in post-industrial democracies’. World Politics, 55(2), pp. 193–228.

Brandolini, A., Cannari, L., D'Alessio, G. and Faiella, I. (2004) 'Household Wealth Distribution in italy in the 1990s', *Bank of Italy Economic Research Department*.

Brys, B. Perret, S., Thomas, A. and O'Reilly, P. (2016) 'Tax Design for Inclusive Economic Growth', *OECD Taxation Working Papers*, 26.

Buck, T. (2005) 'Italian bank governor denies protectionism', *Financial Times*, 18 February.

Burbarelli, M. (2016) 'The Housing Finance System in Italy and Spain: Why did the Housing Bubble Develop in Italy and not in Spain?', *PIPE Working Paper*, No. 26/2016.

Burda, M. (2013) 'The European debt crisis: How did we get into this mess? How can we get out of it?' *SFB Discussion Paper*, No. 2013–019.

Burgoon, B. (2012). 'Partisan embedding of liberalism: how trade, investment, and immigration affect party support for the welfare state.' *Comparative Political Studies*, *45*(5),pp. 606-635.

Busemeyer, M. R. and Tober, T. (2015) 'European Integration and the Political Economy of Inequality', *European Union Politics*, 16(4), pp. 536–557.

Carbonelli, A., Ramos, X. and Oviedo, M. (2014) 'Spain: What Can We Learn from Past Decreasing Inequalities?' in Salverda, W., Nolan, B., Checchi, D., Marx, I., McKnight, A., Tóth, I. and Werfhorst, G. (eds.) *Changing Inequalities and Societal Impacts in Rich Countries*. Oxford: Oxford University Press.

Case, K. E. and Cook, L. (1989) 'The Distributional Effects of Housing Price Booms: Winners and Losers in Boston, 1980-88', *New England Economic Review*, May, pp. 3–12.

Castles, F. G. (1998) 'The Really Big Trade-Off: Home Ownership and the Welfare State in the New World and the Old', *Acta Politica*, 32, pp. 5–19.

Castles, F. G. and Ferrera, M. (1996) 'Home Ownership and the Welfare State: Is Southern Europe Different?', *South European Society and Politics*, 1(2), pp. 163–185.

Causa, O. and Hermansen, M. (2017) 'Income redistribution through taxes and transfers across OECD countries', *OECD Economics Department Working Papers*, 1453.

Chen, R., Milesi-Ferretti, G. M. and Tressel, T. (2012) 'External Imbalances in the Euro Area', *IMF Working Paper*, WP/12/236.

Claussen, C. A. (2002) 'On the dynamic consistency of Reform and Compensation Schemes, *The Journal of Policy Reform*, 5(3), pp. 133–144.

Cœuré, B. (2013) *Monetary Policy in a Fragmented Word*. Speech at the 41st Economics Conference of the Österreichische Nationalbank, Vienna. 10 June 2013.

Coibion, O., Gorodnichenko, Y., Kueng, L., and Silvia, J. (2012) 'Innocent Bystanders? Monetary Policy and Inequality in the U.S.', *NBER Working Paper*, No. 18170.

Committee for the examination of economic policy in the long term (1997) *Pensions and the Greek Economy: A contribution to the public debate*. Athens: Committee for the examination of economic policy in the long term.

Conefrey, T. Gerald, J. (2009) 'Managing Housing Bubbles in Regional Economies under EMU: Ireland and Spain', *Economic and Social Research Institute (ESRI) Papers*, WP315.

Goldstein A. (2012) ' Revenge of the Managers', American Sociological Review , 77, pp.268–294.

Conley, D. and Gifford, B. (2006) 'Home Ownership, Social Insurance, and the Welfare State', *Sociological Forum*, 21(1), pp. 55–82.

Cowles M., Caprosos J. and Risse T. (2001) *Transforming Europe, Europeanization and Domestic Change*. Ithaca: Cornell University Press.

Crouch, C. (2009) 'Privatised Keynesianism: An unacknowledged policy regime', *The British Journal of Politics and International Relations*, 11(2), pp. 382–399.

Culpepper, P. and Regan, A. (2014) 'Why don't governments need trade unions anymore? The death of social pacts in Ireland and Italy', *Socio-Economic Review*, 12, pp. 723–745.

D'Errico, M., Macchiarelli, C. and Serafini, R. (2015) 'Differently Unequal: Zooming-In on the Distributional Dimensions of the Crisis in Euro Area Countries', *LEQS Paper*, No. 86/2015.

Dauderstädt, M. and Keltek, C. (2011) 'Immeasurable Inequality in the European Union', *Intereconomics*, 2011(1), pp. 44–51.

De Bandt, O., Knetsch, J. P. and Zollino, F. (2010) *Housing Markets in Europe: A Macroeconomic Perspective*. Berlin: Springer.

De Grauwe, P. (2012a) *Economics of Monetary Union*. 9th Edition. Oxford: Oxford University Press.

De Grauwe, P. (2012b) 'In Search of Symmetry in the Eurozone', *CEPS Policy Brief*, 268.

De Grauwe, P. (2013) 'Design Failures in the Eurozone: Can They be Fixed?', *LEQS Paper*, No. 57/2013.

De Grauwe,P. , Ji. Y. (2015) 'Correcting for the Eurozone Design Failures: The Role of the ECB'. *Journal of European Integration*, 37(7), pp 739-754.

De Grauwe, P. and Ji, Y (2013) 'Self-fulfilling crises in the Eurozone: an empirical test. '*Journal of International Money and Finance*, 34. pp. 15-36.

Dellepiane, S., Hardiman, N. and Las Heras, J. (2013) 'Building on Easy Money: The Political Economy of Housing Bubbles in Ireland and Spain', *UDG Geary Institute Discussion Paper*, 2013/18.

Department of the Taoiseach (1997) *Partnership 2000*. Dublin: Department of Taoiseach.

Department of the Taoiseach (2000), *Programme for Prosperity and Fairness*. Dublin: Department of Taoiseach.

Dobbs, R., Lund, S., Koller, T. and Shwayder, A. (2013) 'QE and Ultra-Low Interest Rates: Distributional Effects and Risks', McKinsey Global Institute. Available at: https://www.mckinsey.com/featured-insights/employment-and-growth/qe-and-ultra-low-interest-rates-distributional-effects-and-risks (Accessed: 03 August 2018).

Dølvik, J. E. and Martin, A. (eds.) (2014) *European Social Models From Crisis to Crisis: Employment and Inequality in the Era of Monetary Integration*. Oxford: Oxford University Press.

Dorling, D. (2014) *All That is Solid: How the Great Housing Disaster Defines Our times, and What We Can Do about It*. London: Penguin.

Dyson, K. and Featherstone, K. (1999) *The Road To Maastricht: Negotiating Economic and Monetary Union*. Oxford: Oxford University Press.

Eleftherotipia (2009) 'GSEE asks for the full abolition of the "Petralia" law', *Eleftherotipia*, 30 December 2009 (in Greek).

Epstein, R. (2014). 'Overcoming "Economic Backwardness" in the European Union'. Journal of Common Market Studies, 52 (1), pp. 17–34.

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.

European Central Bank (2003) *Structural Factors in The EU Housing Markets*. Frankfurt am Main: European Central Bank.

European Central Bank (2009) *Housing Finance in the Euro Area*. Frankfurt am Main: European Central Bank.

European Central Bank (2017) 'Conceptual issues surrounding the measurement of fiscal space', *ECB Economic Bulletin*, 2/2017.

European Commission (2000) *The Social Situation in the European Union 1999*. Brussels: European Commission.

European Commission (Accessed: 1 October 2017) *AMECO database: long and short term real and nominal interest rates*. Brussels: European Commission.

European Mortgage Federation (2010) *Hypostat 2009 A Review of Europe's Mortgage and Housing Markets*. Brussels: European Mortgage Federation.

European Mortgage Federation (EMF) (2005) *Hypostat 2004 A Review of Europe's Mortgage and Housing Markets*. Brussels: European Mortgage Federation.

Eurostat (Accessed: 03 August 2018) *Eurostat database: GDP Growth rate, total general government expenditure*. Luxemburg: European Commission.

Eyraud, L., and Wu, T, (2015) 'Playing by the Rules: Reforming Fiscal Governance in Europe', *IMF Working Paper*, 15/67.

Fahey, T., Nolan, B. and Maitre, B. (2004) 'Housing, Poverty and Wealth in Ireland', Research by the Institute of Public Administration and the Combat Poverty Agency. Available at: http://www.combatpoverty.ie/publications/HousingPovertyAndWealthInIreland_2004.pdf (Accessed: 03 August 2018).

Featherstone, K. (2004) 'The political dynamics of external empowerment: the emergence of EMU and the challenge to the European social model', in Martin, A. and Ross, G. (eds.) *Euros and Europeans: Monetary Integration and the European Model of Society*. New York: Cambridge University Press, pp. 226–247.

Featherstone, K. (2004) 'The political dynamics of external empowerment: the emergence of EMU and the challenge to the European social model', in Martin, A. and Ross, G. (eds.) *Euros and Europeans: Monetary Integration and the European Model of Society*. New York: Cambridge University Press, pp. 226–247.

Featherstone, K., Kazamias, G. and Papadimitriou, D. (2001) 'The limits of external empowerment: EMU, technocracy and reform of the Greek pension system', *Political Studies*, 49, pp. 462–480.

Fernandes, S. and Maslauskaite, K. (2013) 'A Social Dimension for EMU: Why and How?', *Notre Europe Jacques Delors Institute Policy Paper*, No. 98.

Fernandez, R. and Aalbers, M. B. (2016) ‘Financialization and Housing: Between Globalization and Varieties of Capitalism’. *Competition & Change*, 20(2), pp. 71–88.

Fernandez, R. and Rodrik, D. (1991) ‘Resistance to Reform: Status Quo Bias in the Presence of Individual- Specific Uncertainty’, *The American Economic Review*, 81(5), pp. 1146–1155.

Fernandez-Villaverde, J., Garicano, L. and Santos, T. (2013) ‘Political Credit Cycles: The Case of the Euro Zone’, *Journal of Economic Perspectives*, 27(3), pp. 145–166.

Ferrera, M. (2005) (ed.) *Welfare state reform in southern Europe: fighting poverty and social exclusion in Italy, Spain, Portugal and Greece*. London: Routledge.

Fianna Fail and the Progressive Democrats (2002) *An agreed programme for government between Fianna Fail and the Progressive Democrats*. Dublin, June 2002.

Flaherty, E. (2015) ‘Top Incomes Under Finance-Driven Capitalism, 1990-2010: Power Resources and Regulatory Orders’, *Socio-Economic Review*, 13, pp. 417–447.

Franks, J., Barkbu, B., Blavy, R., Oman, W. and Schoelermann, H. (2018): ‘Economic Convergence in the Euro Area: Coming Together or Drifting Apart?’, *IMF Working Paper*, 18/10.

Fredriksen, K. (2012) ‘Income Inequality in the European Union’, *OECD Economics Department Working Papers*, 952.

Fuentes, G. C., Etxarri, A. E., Dol, K. and Hoekstra, J. (2013) ‘From Housing Bubble to Repossessions: Spain Compared to Other West European Countries’, *Housing Studies*, 28(8), pp. 1197–1217.

Galbraith, J. K. (1998) ‘With Economic Inequality for All’, *The Nation*, Sep 7–14.

GINI growing inequalities’ impacts (2013) *Country report for Ireland*. Amsterdam: GINI growing inequalities’ impacts.

Glaeser, E. L. and Shapiro, J. M. (2003) ‘The Benefits of the Home Mortgage Interest Deduction’, *Tax Policy and the Economy*, 17, pp. 37–82.

Godechot O. (2016) ‘ Financialization is Marketization! A Study of the Respective Impacts of Various Dimensions of Financialization on the Increase in Global Inequality’, Sociological Science , 3, pp.495–519.

GSEE (2001) ‘The Policy Positions of GSEE on Social Insurance’, *Athens Labour Institute Enhmerwsh*, 69, pp. 2–13 (in Greek).

Guillaud, E., Olckers, M. and Zemmour, M. (2017) *Four levers of redistribution: The impact of tax and transfer systems on inequality reduction*. Working paper. Paris/Lille: University Paris 1 and University Lille 1. (Access: http://www.lisdatacenter.org/wp-content/uploads/s32.pdf)

Guiso, L., Jappelli, T. and Terlizzese, D. (1994) ‘Housing Finance Arrangements, Intergenerational Transfers and Consumption: The Italian Experience’, *Economic Modelling*, 11(2), pp. 145–155.

Gyourko, J. and Tracy, J. (1999) ‘A Look at Real Housing Prices and Incomes: Some Implications for Housing Affordability and Quality’, *Federal Reserve Bank of New York Economic Policy Review*, 5(3), pp. 63–77.

Hacker, J. S. and Pierson, P. (2010) ‘Winner-Take-All Politics: Public Policy, Political Organization, and the Precipitous Rise of Top Incomes in the United States’, *Politics & Society*, 38(2), pp. 152–204.

Hancké, B (2013) ‘Unions, central banks, and EMU’. Oxford: Oxford University

Hall, P. A. (2012) ‘The Economics and Politics of the Euro Crisis’, *German Politics*, 21(4), pp. 355–371.

Hall, P. A. (2014) ‘Varieties of Capitalism and the Euro Crisis’, *West European Politics*, 37(6), pp. 1223–1243.

Hall, P. and Soskice, D. (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.

Heady, C., Mitrakos, T. and Tsakloglou, P. (2001) ‘The distributional impact of social transfers in the European Union: evidence from the ECHP’, *Fiscal Studies*, 22(4), pp. 547–565.

Hein, E. (2011) 'Financialisation, re-distribution and the financial and economic crisis: a Kaleckian perspective', in Njechoi, T., Truger, A., Stockhammer, E. and Onaran, O. (eds.) *Stabilising an Unequal Economy? Public Debt, Financial Regulation and Income distribution*. Marburg: Metropolis.

Helleiner, E. (2011) 'Understanding the 2007-2008 Global Financial Crisis: Lessons for Scholars of International Political Economy', Annual Review of Political Science, (14), pp. 67–87.

Heller, P. (2005) 'Understanding fiscal space', *IMF Policy Discussion Paper*, 05/4.

Hemerijck, A. and Ferrera, M. (2004) 'Welfare reform in the shadow of EMU', in Martin, A. and Ross, G. (eds.) *Euros and Europeans: Monetary Integration and the European Model of Society*. New York: Cambridge University Press, pp. 248–277.

Hemmelgarn, T., Nicodeme, G. and Zangari, E. (2011) 'The Role of Housing Tax Provisions in the 2008 Financial Crisis', *European Commission Taxation Papers*, No. 27.

Hick, R. (2009) 'The social welfare pensions in Ireland: pensioner poverty and gender', *Geary Institute Discussion Paper*, WP/2/09.

Hilbers, P., Banerji, A., Shi, H. and Hoffmaister, A. (2008) 'House Price Developments in Europe: A Comparison', *IMF Working Papers*, 08/211.

Hills, J. (2013), Introduction, in Hills J., Bastagli F., Cowell, F., Howard G., Karagiannaki E., McKnight, A., Wealth in the UK: Distribution, Accumulation and Policy, Oxford University Press, Oxford, UK

Hix, S. and Høyland, B. (2011) *The Political System of the European Union*. 3rd edn. Basingstoke: Palgrave MacMillan.

Holt, J. (2009) 'A Summary of the Primary Causes of the Housing Bubble and the Resulting Credit Crisis: A Non-Technical Paper', *The Journal of Business Inquiry*, 8(1), pp. 120–129.

Hopkin, J. (2013) 'The Trouble with Economic Reform. Understanding the Debt Crisis in Spain and Italy', in Panizza, F. and Philip, G. (eds.) *Moments of Truth:*

The Politics of Financial Crises in Comparative Perspective. London: Routledge, pp. 140–158.

Hopkin, J. (2015) 'The Troubled Southern Periphery: The Euro Crisis in Italy and Spain', in Matthijs, M. and Blyth, M. (eds.) *The Future of the Euro*. Oxford: Oxford University Press, pp. 161–184.

Hopkin, J. (2016) Organized Combat or Structural Advantage? The Politics of Inequality and the Winner-Take-All Economy in the United Kingdom. *Politics & Society*, 44(3), pp. 345–371.

Huber, E. and Stephens, J. D. (2001) *Development and Crisis of the Welfare State*. Chicago: The University of Chicago Press.

Huber, E. and Stephens, J. D. (2014) 'Income Inequality and Redistribution in Post-Industrial Democracies: Demographic, Economic and Political Determinants', *Socio-Economic Review*, 12(2), pp. 245–267.

Huber, E., Huo, J. and Stephens, J. D. (2017) 'Power, Policy, and Top Income Shares', *Socio-Economic Review*, pp. 1–23.

Hughers, G. and Maher, M. (2016) 'Redistribution in the Irish Pension system: upside down?', in Murphy, M. and Dukelow, F. (eds.) *The Irish welfare state in the twenty-first century*. London: Palgrave Macmillan.

Hughes, G. (2016) 'Redistribution in the Irish Pension System: Upside Down?', in Murphy, M. P. and Dukelow, F. (eds.) *The Irish Welfare State in the Twenty-First Century – Challenges and Change*. Basingstoke: Palgrave Macmillan, pp. 93–118.

IMF (2018) 'Assessing fiscal space: an update and stocktaking', *IMF policy paper*.

Immervoll, H. and Richardson, L. (2011) 'Redistribution Policy and Inequality Reduction in OECD Countries: What Has Changed in Two Decades?', *OECD Social, Employment and Migration Working Papers*, 122.

Ioannidis, Y. (2015) 'The political economy of the distributional character of the Greek taxation system (1995–2008)', *Southeast European and Black Sea Studies*, 15(1), pp. 77–96.

Irish Times (1998) 'Proposals receive welcome in principle from all sides', *Irish Times*, 8 May 1998.

Iversen, T., Soskice, D. (2014), Redistribution and the Power of the Advanced Nation State: Government Responses to Rising Inequality, in Dølvik J.-E. and Martin A., eds., *European Social Models From Crisis to Crisis: Employment and Inequality in the Era of Monetary Integration*.

Iversen, T., Soskice, D. and Hope, D. (2016) 'The Eurozone and political economic institutions', *Annual Review of Political Science*, 19, pp. 10.1–10.23.

Jacob Assa. 2012. "Financialization and Its Consequences: The OECD Experience." *Finance Research* ,1(1), pp 35–39.

Jacoby (2014) 'The EU Factor in Fat Times and in Lean: Did the EU Amplify the Boom and Soften the Bust', *Journal of Common Market Studies*, 52 (1). pp. 52–70.

Jappelli, T. and Pagano, M. (1989) 'Consumption and Capital Market Imperfections: An International Comparison.' *American Economic Review*, December 1989, pp. 1088–1105.

Johnston, A. and Regan, A. (2015) 'Taming Global Finance in an Age of Capital? Wage-Setting Institutions' Mitigating Effects on Housing Bubbles', *LEQS Paper*, No. 87/2015.

Johnston, A. and Regan, A. (2016) 'European Monetary Integration and the Incompatibility of National Varieties of Capitalism', *Journal of Common Market Studies*, 54(2), pp. 318–336.

Johnston, A., Hancké, B. and Pant, S. (2014) 'Comparative Institutional Advantage in the European Sovereign Debt Crisis', *Comparative Political Studies*, 47(13), pp. 1771–1800.

Joint Committee of Inquiry into the Banking Crisis (2016) *Report of the Joint Committee of Inquiry into the Banking Crisis*. Dublin: Houses of the Oireachtas.

Jones, E. (2014) *Competitiveness and the European Financial Crisis*. Conference paper presented at the 21st Conference of Europeanists, Washington DC, March 2014.

Jones, E. (2015)' Getting the Story Right: How You Should Choose between Different Interpretations of the European Crisis (And Why You Should Care)', *Journal of European Integration*, 37(7), pp.817-832,

Jordá, Ò, Schularick, M. and Taylor, A. M. (2014) 'The Great Mortgaging: Housing Finance, Crises, and Business Cycles'. *NBER Working Paper*, No. 20501.

Kakepaki, M. (2017) 'Changes of the Greek political culture 1988-2005: from the generation of politiciasation to the generation of indifference', Greek Review of Political Science, 28(1) (in Greek).

Kalemli-Ozcan, S., Papioannou, E. and Peydro, J. (2010) 'What Lies Beneath the Euros's Effect on Financial Integration? Currency Risk, Legal Harmonization or Trade', *Journal of International Economics*, 81(1), pp. 75–88.

Kathimerini (2008a) 'How Simitis lost the state to the unions', *Kathimerini*, 31 May 2008 (in Greek).

Kathimerini (2008b) 'Petralis sticks with Maggina's model', *Kathimerini*, 5 February 2008 (in Greek).

Kemeny, J. (1980) 'Home Ownership and Privatisation', *International Journal of Urban and Regional Research*, 4(3), pp. 372–388.

Kemeny, J. (2005) '"The Really Big Trade-Off" between Home Ownership and Welfare: Castles' Evaluation of the 1980 Thesis, and a Reformulation 25 Years on', *Housing, Theory and Society*, 22(2), pp. 59–75.

Keynes, J. M. (1936) *The General Theory of Employment, Interest and Money*. Chapter 24.

Keynes, J. M. (1973) *The General Theory of Employment, Interest and Money. The Collected Writings of John Maynard Keynes Volume VII*. London: Macmillan.

Kindleberger, C., and Aliber, R. (2011) *Manias, Panics and Crashes: A History of Financial Crises*. Basingstoke: Palgrave Macmillan.

King, P. (2010) *Housing Boom and Bust: Owner Occupation, Government Regulation and the Credit Crunch*. Abingdon-on-Thames: Routledge.

Korpi, W. (2003) 'Welfare-State Regress in Western Europe: Politics, Institutions, Globalization, and Europeanization', *Annual Review of Sociology*, 29(1), pp. 589–609.

Korpi, W (1983) The Democratic Class Struggle. London: Routledge & Kegan Paul

Kus, B. (2012) 'Financialisation and Income Inequality in OECD Nations, 1995-2007', *The Economic and Social Review*, 43, pp. 477–495.

Krippner G. (2005) 'The Financialization of the American Economy', Socio-Economic Review , 3, pp. 173–208.

Krugman, P (2008) "Trade and wages, reconsidered", Brookings Papers on Economic Activity, Spring, pp 103–37.

Kuznets S. (1955) 'Economic Growth and Income Inequality', *American Economic Review*, 65(1), pp. 1–28.

Lane, P. (2012) 'The European Sovereign Debt Crisis', *Journal of Economic Perspectives*, pp. 49–68.

Lapavitsas, C. (2013) 'Profiting without Producing: How Finance Exploits Us All'. London: Verso.

Lapavitsas, C., Kaltenbrunner, A., Lindo, D., Michell, J., Painceira, J. P., Pires, E., Powell, P., Stenfors, A. and Teles, N. (2010) 'Eurozone crisis: beggar thyself and thy neighbour', *Journal of Balkan and Near Eastern Studies*, 12(4), pp. 321–373.

Lecat, R. and J.-S. Mésonnier (2005) 'What Role do Financial Factors Play in House Price Dynamics?', *Banque de France Bulletin Digest*, No. 134.

Lowe, S., Searle, B. and Smith, S. (2011) 'From housing wealth to mortgage debt: the emergence of Britain's asset-shaped welfare state', *Social policy and Society*, 11(1), pp. 105–116.

Lukes, S. (2004) *Power: A Radical View*. Basingstoke: Palgrave McMillan.

Maclennan, D., Muellbauer, J. and Stephens, M. (1998) 'Asymmetries in Housing and Financial Market Institutions and EMU', *Oxford Review of Economic Policy*, 14(3), pp. 54–80.

Martin, A. and Ross, G. (eds.) (2004a) ‘Introduction: EMU and the European Social Model’, in Martin, A. and Ross, G. (eds.) *Euros and Europeans: Monetary Integration and the European Model of Society*. New York: Cambridge University Press, pp. 1–19.

Martin, A. and Ross, G. (eds.) (2004b) ‘Conclusions’, in Martin, A. and Ross, G. (eds.) *Euros and Europeans: Monetary Integration and the European Model of Society*. New York: Cambridge University Press, pp. 309–330.

Martínez Toledano, C. (2017) ‘Housing Bubbles, Offshore Assets and Wealth Inequality in Spain’, *WID.world Working Paper Series*, No. 2017/19.

Marx, I. and Nolan, B. (2012) ‘In-Work Poverty’, *GINI Discussion Papers*, 51.

Matsaganis, M. (2005) ‘Greece: fighting with hands tied behind the back: anti-poverty policy without minimum income’, in Ferrera, M. (ed.) *Welfare state reform in Southern Europe: Fighting poverty and social exclusion in Italy, Spain, Portugal and Greece*. London/New York: Routledge.

Matsaganis, M. (2007) ‘Union structures and pension outcomes in Greece’, *British Journal of Industrial Relations*, 45(3), pp. 537–555.

Matthijs, M. (2016) ‘The Euro’s “Winner-Take-All” Political Economy: Institutional Choices, Policy Drift, and Diverging Patterns of Inequality’, *Politics & Society*, 44(3), pp. 393–422.

Matthijs, M. (2017) ‘Integration at What Price? The Erosion of National Democracy in the Euro Periphery," *Government and Opposition* 52 (2), pp. 266-294.

Mayer, C. J. (1993) ‘Taxes, Income Distribution, and the Real Estate Cycle: Why All Houses Do Not Appreciate at the Same Rate’, *New England Economic Review*, May-June, pp. 39–50.

McNamara, K. (1998) *The Currency of Ideas: Monetary Politics in the European Union*. Ithaca: Cornell University Press.

Meliveo, J. (2014) ‘Tax Incentives and the Housing Bubble: The Spanish Case’, *Universidad Complutense De Madrid Working Paper*.

Milanovic, B. (1994) 'Determinants of Cross-Country Income Inequality: An 'Augmented' Kuznets' Hypothesis', *World Bank Policy Research Working Paper*, No. 1246.

Milanovic, B. (2012) 'Global Income Inequality by the Numbers: in History and Now - an Overview', *World Bank Policy Research Working Paper*, No. 6259.

Milios, J. and Sotiropoulos, D. P. (2010) Crisis of Greece or crisis of the euro? A view from the European 'periphery'', *Journal of Balkan and Near Eastern Studies*, 12(3). pp. 223–240.

Mitsotakis, C. (2013) 'Passing the social insurance bill', in Palaiokrassas, I. (ed.) *Too early for its time: The New Democracy government between 1990-1993*. Athens: Estia (in Greek).

Molina, O. and Rhodes, M. (2007) 'The Political Economy of Adjustment in Mixed Market Economies: A Study in Spain and Italy', in Hancké, B., Rhodes, M. and Thatcher, M. *Beyond Varieties of Capitalism: Conflict Contradictions and Complementarities in the European Economy*. Oxford: Oxford University Press, pp. 223–252.

Monastiriotis, V (2014) '(When) does austerity work? On the conditional link between fiscal austerity and debt sustainability', *Cyprus Economic Policy Review*, 8(1), pp. 71–92.

Mosley, L., and Singer, D. (2009) 'The Global Financial Crisis: Lessons and Opportunities for International Political Economy', International Interactions, 35(4), pp. 420–429.

Murphy, M. P. and Dukelow, F. (2016) (eds.) *The Irish Welfare State in the Twenty-First Century – Challenges and Change*. Basingstoke: Palgrave Macmillan.

Nea (2004) 'Back to Mitsotaki's economic policies', *Nea*, 4 February 2004 (in Greek).

Nickell, S. (2004) 'Poverty and Worklessness in Britain', *Economic Journal*, 114, pp. C1–C25.

Niggle, C. (1989) 'Monetary Policy and Changes in Income Distribution', *Journal of Economic Issues*, 23(3), pp. 809–822.

O'Donnell, O. and Tinios, P. (2003) 'The politics of pension reform: Lessons from public attitudes in Greece', *Political Studies*, 51, pp. 262–281.

Ochsenfeld , F. (2018) 'Mercantilist dualization: the introduction of the euro, redistribution of industry rents, and wage inequality in Germany 1993–2008', *Socio-Economic Review*, 16(3), pp. 499–522.

OECD (2005) *Pensions at a Glance*. Paris: OECD.

OECD (2007) *Pensions at a Glance*. Paris: OECD.

OECD (2008) *Growing Unequal? Income Distribution and Poverty in OECD Countries*, Paris: OECD.

OECD (2009) *Pensions at a Glance*. Paris: OECD.

OECD (2011) *Divided We Stand. Why Inequality Keeps Rising*. Paris: OECD.

OECD (2015) *In It Together: Why Less Inequality Benefits All*. Paris: OECD.

OECD (2016) 'A re-assessment of fiscal space in OECD countries', *OECD Economics Department Working Papers*, 1352.

Panetta, F. (2015). *The Distributional Consequences of Monetary Policy*. Remarks by Mr Fabio Panetta, Deputy Governor of the Bank of Italy, at the Netherlands Bank. Amsterdam. 20 November 2015.

Papatheodorou, C. and Dafermos, Y. (2003) 'What Drives Inequality and Poverty in the EU? Exploring the Impact of Macroeconomic and Institutional Factors', *International Review of Applied Economics*, 27 (1), pp. 1–22.

Perez, S. and Rhodes, M., (2015) 'The Evolution and Crises in Social Models in Italy and Spain', in Dølvik, J. E. and Martin, A. (eds.) *European Social Models from Crisis to Crisis: Employment and Inequality in the Era of Monetary Integration*. Oxford: Oxford University Press, pp. 177–213.

Petralia, F.-P. (2014) *Forty years until now: Events, background deals and protagonists of the metapolitefsi*. Athens: Kastaniotis (in Greek).

Pierson, P. (1996) 'The New Politics of the Welfare State', *World Politics*, 48(2), pp. 143–179.

Pierson, P. (1994) 'Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment.' Cambridge University Press, pp. 213,

Piketty, T. (2014) *Capital in the 21st Century*. Cambridge: Harvard University Press.

Piketty, T. and Saez, E. (2006) 'The Evolution of Top Incomes: A Historical and International Perspective', *American Economic Review*, 96(2), pp. 200–205.

Plümper, T., Troeger, V. E. and Manow. P. (2005) 'Panel Data Analysis in Comparative Politics: Linking Method to Theory', *European Journal of Political Research*, 44(2), pp. 327–354.

Pollard, J. (2009) 'Political Framing in National Housing Systems: Lessons from Real Estate Developers in France and Spain', in Schwartz, H. M. and Seabrooke, L. *The Politics of Housing Booms and Busts*. Basingstoke: Palgrave McMillan, pp. 170–187.

Pontusson, J., Rueda, D. and Way, C. (2002) 'Comparative Political Economy of Wage Distribution: The Role of Partisanship and Labour Market Institutions', *British Journal of Political Science*, 32, pp. 281–308.

Powell, C. (2001) 'Fifteen Years on Spanish Membership in the European Union Revisited', *Centre for European Studies Working Paper*, No. 89.

Powell, F. (2017) *The political economy of the Irish welfare state: Church, state and capital*. Bristol: Policy Press.

Przeworski, A. and Teune, H, (1970) *The Logic of Comparative Social Inquiry*. New York: Wiley-Interscience, John Wiley & Sons, pp. xii, 153.

Pyatt, G., Chen, C.-N and John, F. (1980) 'The Distribution of Income by Factor Components', *Quarterly Journal of Economics*, 95, pp. 451–473.

Quaglia, L. (2009) 'The Response to the Global Financial Turmoil in Italy: 'A Financial System that Does Not Speak English'', *South European Society and Politics*, 14(1), pp. 7–18.

Quaglia, L. (2013) 'The Europeanisation of Macroeconomic Policies and Financial Regulation in Italy', *South European Society and Politics*, 18(2), pp. 159–176.

Quaglia, L. and Furlong, P. (2008) 'Italy in the Eurozone: surviving the first decade', in Dyson, K. (ed.) *European States and the Euro*. Oxford: Oxford University Press, pp. 204–221.

Quaglia, L. and Royo, S. (2015) 'Banks and the Political Economy of the Sovereign Debt Crisis in Italy and Spain', *Review of International Political Economy*, 22(3), pp. 485–507.

Quigley, J. M. and Raphael, S. (2001) 'The Economics of Homelessness: The Evidence from North America', *European Journal of Housing Policy*, 1(3), pp. 323-36.

Rajan, R. G. (2011) *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton: Princeton University Press.

Regan, A. (2013) 'The impact of the eurozone crisis on Irish social partnership: A political economy analysis', *International Labour Office Working Paper*, 49.

Rhodes, M. (1995) 'Subversive Liberalism: Market Integration, Globalization, and the European Welfare State', *Journal of European Public Policy*, 2(3), pp. 384–406.

Rhodes, M. (1996) 'Globalization and West European Welfare States: A Critical Review of Recent Debates', *Journal of European Social Policy*, 6(4), pp. 305–327.

Rizospastis (1997) 'The scenery of consensus', *Rizospastis*, 9 November 1997 (in Greek).

Rizospastis (2009) 'Social insurance: the bible of reversals and deficits', *Rizospastis*, 6 December 2009 (in Greek).

Roberts, A. and Kwon, R. (2017) 'Finance, inequality and the varieties of capitalism in post-industrial democracies', *Socio-Economic Review*, 15(3), pp. 511–538.

Rodriguez, C. and Bastillo, R. (2008), 'Modelling Foreign Real Estate Investment: The Spanish Case', *Journal of Real Estate Finance and Economics*, 41(3), pp. 354–67.

Rodrik, D. (2000) 'How far international economic integration will go?', *Journal of Economic Perspectives*, 14(1), pp. 177–186.

Rodrik, D. (2002) ‘Feasible Globalizations’, *NBER Working Paper*, 9129.

Rodrik, D. (2011), *The Globalization Paradox: Democracy and the Future of the World Economy*, W.W Norton: New York and London.

Rognlie, M. (2014) ‘A Note on Piketty and Diminishing Returns to Capital’, Massachusetts Institute of Technology. Available at: http://gabriel-zucman.eu/files/teaching/Rognlie14.pdf (Accessed: 03 August 2018).

Rognlie, M. (2015) ‘Deciphering the Fall and Rise in the Net Capital Share: Accumulation or Scarcity?’ *Brookings Papers on Economic Activity*, 2015(1), pp. 1–69.

Romer, C. D. and Romer, D. H. (1998) ‘Monetary Policy and the Well-Being of the Poor’, in Federal Reserve Bank of Kansas City (eds.) *Income Inequality Issues and Policy Options*. A symposium sponsored by the Federal Reserve Bank of Kansas City Jackson Hole, Wyoming 27-29 August 1998, pp. 159–201.

Rossi, S. (2013) ‘Financialization and Monetary Union in Europe: The Monetary-Structural Causes of the Euro-Area Crisis’, *Cambridge Journal of Regions, Economy and Society*, 6(3), pp. 381–400.

Rueda, D. and Pontusson, J. (2000) ‘Wage Inequality and Varieties of Capitalism’, *World Politics*, 52(3), pp. 350–383.

Ryner, M. (2015) ‘Europe's ordoliberal iron cage: critical political economy, the euro area crisis and its management’, *Journal of European Public Policy*, 22(2), pp. 275–294.

Salverda, W., Nolan, B., Checchi, D., Marx, I., McKnight, A., Tóth, I. G. and van de Werfhorst, H. (eds.) (2014) *Changing Inequalities in Rich Countries: Analytical and Comparative Perspectives*. Oxford: Oxford University Press.

Santos, T. (2014) ‘Antes del Diluvio: The Spanish Banking System in the First Decade of the Euro’, *Columbia Business School Working Paper*, March 2014.

Scharpf, F. W. (1996) ‘Negative and Positive Integration in the Political Economy of European Welfare State’, in Marks, G., Scharpf, F. W., Schmitter, P. C and Streeck,

W. (eds.) *Governance in the European Union*. London: SAGE Publications, pp. 15–39.

Scharpf, F. W. (1999) *Governing in Europe: Effective and Democratic?*. Oxford: Oxford University Press.

Scharpf, F. W. (2002) 'The European Social Model: Coping with the Challenges of Diversity', *Journal of Common Market Studies*, 40(4), pp. 645–670.

Schelkle, W. (2017) *The Political Economy of Monetary Solidarity: Understanding the Euro Experiment*. Oxford: Oxford University Press.

Schmidt, V. A. (2002) *The Futures of European Capitalism*. Oxford: Oxford University Press.

Schmidt, V. A. and Thatcher, M. (2013) *Resilient Liberalism in Europe's Political Economy*. Cambridge: Cambridge University Press.

Schwartz, H. M. (2009) 'Housing, Global Finance, and American Hegemony: Building Conservative Politics One Brick at a Time', in Schwartz, H. M. and Seabrooke, L. *The Politics of Housing Booms and Busts*. Basingstoke: Palgrave McMillan, pp. 28–51.

Schwartz, H. M. and Seabrooke, L. (2009) *The Politics of Housing Booms and Busts*. Basingstoke: Palgrave McMillan.

Seanad Eireann (2001) *Seanad Eirean debate: Pensions (Amendment) Bill 2001*. Dublin: Seanad Eireann. 4 October 2001.

Seanad Eireann (2007a) *Seanad Eireann debate: Social Welfare Bill 2007: Second Stage*. Dublin: Seanad Eireann. December 2007.

Seanad Eireann (2007b), *Seanad Eireann debate: Social Welfare and Pensions Bill 2007: Second Stage*. Dublin: Seanad Eireann. February 2007.

Shin, T. (2012) 'CEO Compensation and Shareholder Value Orientation among Large U.S. Firms', *The Economic and Social Review*, 43, pp. 535–559.

Shorrocks, A. (1980) 'The Class of Additively Decomposable Inequality Measures', *Econometrica*, 48, pp. 613–625.

Shorrocks, A. F. (1983) 'The Impact of Income Components on the Distribution of Family Incomes', *The Quarterly Journal of Economics*, 98(2), pp. 311–326.

Sioufas, D. (2013) *The social insurance reform between 1990-1993: A life-saving reform for the system of social insurance*. Athens: Sioufas, D. (in Greek) (Access: http://www.sioufas.gr/Vivlio%20Ygeias%202013.pdf).

Solt, F. (2008) 'Economic Inequality and Democratic Political Engagement', *American Journal of Political Science*, 52(1), pp. 48–60.

Solt, F. (2009) 'Standardizing the World Income Inequality Database', *Social Science Quarterly*, 90, pp. 231–242.

Solt, F. (2017) *The SWIID Source Data*. Iowa: University of Ioawa. Available at: https://fsolt.org/blog/2017/07/28/the-swiid-source-data.html (Accessed: 03 August 2018).

Sotiropoulos, A. (2004), The EU's impact on the Greek welfare state: Europeanisation on paper? Journal of European Social Policy, 14:3.

Spanou, C. (2017) 'Modernisation: The End of the External Constraint Approach?' in Economides, S. (ed.) Greece: Modernisation and Europe 20 years on, pp 24-29.

Spilimbergo, A., Londoño, J. L. and Székely, M. (1999) 'Income Distribution, Factor Endowments, and Trade Openness', *Journal of Develpoment Economics*, 59(1), pp. 77–101.

Starr, M. and Bansak, C. (2010) 'Who Pays the Price when Housing Bubbles Burst? Evidence from the American Community Survey', *American University, Department of Economics Working Papers*, 2010–02.

Stiglitz, J. (2012a) *The Price of Inequality*. London: Penguin.

Stiglitz, J. E. (2012b) *The price of inequality: how today's divided society endangers our future*. New York: W.W. Norton & Co.

Stockhammer, E. (2011a) 'Peripheral Europe's Debt and German Wages: The Role of Wage Policy in the Euro Area', *International Journal of Public Policy*, 7(3), pp. 83–96.

Stockhammer, E. (2011b) 'Wage Norms, Capital Accumulation and Unemployment: A Post Keynesian View', *Oxford Review of Economic Policy*, 27(2), pp. 295–311.

Stockhammer, E. (2012). Financialization, income distribution and the crisis. Investigación Económica, 71(279), 39-70.

Stockhammer, E. and Sotiropoulos, D. (2014) 'Rebalancing the Euro Area: The Costs of Internal Devaluation', *Review of Political Economy*, 6(2), pp. 210–223.

Stockhammer, E., Durand, C. and Lis, L. (2016) '*European Growth Models and Working Class Restructuring before the Crisis. An International Post-Keynesian Political Economy Perspective*', Kingston University London.

Suardi, M., (2001) 'EMU and Asymmetries in the Monetary Policy Transmission', *European Commission Economic Papers*, No. 157.

Synaspismos (1997) *Statement by the press office of Synaspismos reacting to the Spraos repot*. Synaspismos. 14 October 1997 (in Greek).

The Pensions Board (1998) *Securing retirement income, National pension policy initiative*. Report of the Pensions Board to the Minister of Social, Community and Family Affairs. May 1998. Dublin: The Pensions Board.

The Pensions Board (2005) *National pensions review*. Report by the Pensions Board to Seamus Brennan TD, Minister for Social and Family Affairs. October 2005. Dublin: The Pensions Board.

The Pensions Board (2006) *Special Savings for retirement*. Report on mandatory system by the Pensions Board to Seamus Brennan TD, Minister of Social and Family Affairs. Dublin: The Pensions Board.

Tinios, P. (2005) 'Pension reform in Greece: 'Reforms by instalments' - A blocked process', *West European Politics*, 28(2), pp. 402–419.

Tinios, P. (2013) 'The Pension merry-go-round', in Kalyvas, S., Pagoulatos, G. and Tsoukas, H. (eds.) *From stagnation to force adjustment: reforms in Greece 1974-2010*. Oxford: Oxford University Press.

Tinios, P. (2017) 'Social Policy, pensions and the legacy of modernisation', in Economides, S. (ed.) Greece: Modernisation and Europe 20 years on , pp 65-72.

Tomaskovic-Devey, D. and Lin, K. (2011) 'Income Dynamics, Economic Rents, and the Financialization of the U.S. Economy', *American Sociological Review*, 76(4), pp. 538–559.

Tsatsaronis, K. and Zhu, H. (2004) 'What Drives Housing Price Dynamics: Cross-Country Evidence', *BIS Quarterly Review*, March 2004.

UNU-WIDER (2017) *World Income Inequality Database (WIID3.4)*. Helsinki: United Nations University.

Vandenbroucke, F. (2012) 'Europe: The Social Challenge Defining the Union's Social Objective is a Necessity Rather Than a Luxury', *Observatoire Social Européen Opinion Paper*, No. 11.

Van der Zwan, N. 'Making sense of financialization' (2014), *Socio-Economic Review*, 12 (1), pp. 99–129,

Volscho, T. W. and Kelly, N. J. (2012) 'The Rise of the Super-Rich Power Resources, Taxes, Financial Markets, and the Dynamics of the Top 1 Percent, 1949 to 2008', *American Sociological Review*, 77(5), pp. 679–699.

Walters, Alan. Sterling in Danger: Economic Consequences of Fixed Exchange Rates. London: Fontana, 1990.

Wallerstein, M. (1999) 'Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies', *American Journal of Political Science*, 43, pp. 649–680.

Wilson, S. E. and Butler, D. M. (2007) 'A Lot More To Do: The Sensitivity of Time-Series Cross-Section Analyses to Simple Alternative Specifications', *Political Analysis*, 15(3), pp. 101–123.

Zalewski, D. and Whalen, C. (2010) 'Financialization and Income Inequality: A Post Keynesian Institutional Analysis', *Journal of Economic Issues*, 44, pp. 757–777.

Appendix 1: Data and Variable Description for Chapter 2

Variable	Variable Description	Source
GINI coefficient of disposable income	The GINI coefficient measures the inequality among levels of disposable income. A GINI coefficient of zero expresses perfect equality, where all values are the same (for example, where everyone has the same income). A GINI coefficient of 1 (or 100%) expresses maximal inequality among values.	Solt, Frederick. 2016. “The Standardized World Income Inequality Database.” *Social Science Quarterly* 97. SWIID Version 6.1, October 2017.
GINI coefficient of market income	The GINI coefficient measures the inequality among levels of market income.	Solt, Frederick. 2016. “The Standardized World Income Inequality Database.” *Social Science Quarterly* 97. SWIID Version 6.1, October 2017
Real GDP Growth	Growth of real GDP, percent change from previous year	Source: OECD (2017), "OECD Economic Outlook No. 101", OECD Economic Outlook: Statistics and Projections (database)

Variable	Variable Description	Source
		(Downloaded: **2017-07-04**).
Unemployment	Annual Average (from 15 to 74 years)	Eurostat, (data accessed November 2017)
Education	Labor force with secondary education is the share of the total labor force that attained or completed secondary education as the highest level of education.	ILO (data accessed October 2017)
Coordination	An indicator from 1-5 capturing the degree, of coordination based on a set of expectations about which institutional features of wage setting arrangements are likely to generate more or less coordination	J. Visser, ICTWSS Data base. Version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. September 2017.

Variable	Variable Description	Source
Union Density	Net union membership as a proportion wage and salary earners in employment (union density).	Armingeon, Klaus, Virginia Wenger, Fiona Wiedemeier, Christian Isler, Laura Knöpfel, David Weisstanner and Sarah Engler. 2017. *Comparative Political Data Set 1960-2016*.
Data used to construct the categories		
FIRE	Gross value added financial insurance and real estate activities as a percentage of GDP (author's calculations from Eurostat)	Eurostat (accessed September 2017)
Nominal long term Interest Rate		Source AMECO : accessed September 2017)

Variable	Variable Description	Source
Inflation	Growth of harmonised consumer price index (CPI), all items, percent change from previous year; used as a measure for inflation.	Source: OECD (2017), "Key short-term indicators", Main Economic Indicators (database) (Downloaded: from Armingeon, Klaus, Virginia Wenger, Fiona Wiedemeier, Christian Isler, Laura Knöpfel, David Weisstanner and Sarah Engler. 2018. *Comparative Political Data Set 1960-2016*. Accessed September 2017
Real long term interest rate	Nominal Long interest rate minus inflation	Author's calculations

Variable	Variable Description	Source
Capital Account balance	The Capital account covers all transactions that involve the receipt or payment of the capital account. It is either expressed as % of GDP	Source Eurostat (accessed May 2018)
Data sources for tables		
Total compensation/hours worked		EU KLEMS Database, March 2007, see Marcel Timmer, Mary O'Mahony & Bart van Ark, The EU KLEMS Growth and Productivity Accounts: An Overview, University of Groningen & University of Birmingham; downloadable at www.euklems.net Accessed (November , 2017)

Variable	Variable Description	Source
Total expenditure on social protection as a percentage of GDP		Eurostat (Accessed November, 2016)

Appendix 2: Databases for Chapter 4

The EFF includes an extensive range of questions to households on their real and financial assets, liabilities, income, expenditure and socioeconomic characteristics. The years that the survey is conducted are 2002, 2005, 2008, and 2011. This means that the waves are capturing the developments prior to and after the eruption of the crisis. The sample used comprises about 6000 households.

The Italian survey on household and Income wealth is conducted every other year. The SHIW began in the 1960s to gather data on the incomes and savings of Italian households' wealth and other aspects of households' economic and financial behaviour. The sample used in the most recent surveys comprises about 8,000 households (20,000 individuals) forming a representative sample.[18]

It needs to be noted that many assets are subjectively evaluated by respondents. For instance, all interviewees in SHIW were asked the following question: *"In your opinion, what price could you ask for the dwelling in which you live (if sold* unoccupied)? In other words, how much is it worth (including any cellar, garage or attic)?" While in the Spanish questionnaire the question is the following "*what is the current value of your home? (i.e. how much would you obtain if you sold it today?).* Similar questions are asked for every piece of real estate, for both surveys. The limits of household surveys are well known, but sample surveys consist the primary source for wealth data in these countries.

Lastly, I acknowledge that regional variations play an important role especially in the Italian case, but the purpose of this analysis is to uncover the macro-level picture of inequality dynamics across Italy and Spain. It is clear that there is geographical heterogeneity in house price developments and capital flows, among regions. However, taking a macro-approach is in itself useful in analysing how spatial variations across regions may result in important macro-level inequalities in housing equity dynamics.

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[18] Participation was voluntary and not remunerated.