ERASMUS UNIVERSITY ROTTERDAM

Erasmus School of Economics
Master Thesis Strategy Economics

From Retirement to Political Dissent: The effect of Pension Reforms on Voting Patterns in Europe's Populist, Extremist and Eurosceptic Parties

Student: Madalena Lopes

660194

Supervisor: Dr. MH Coveney

Second Assessor:

Abstract

Ageing populations are contributing to an increase in the old age dependency ratio in the coming decades, leading many European countries to implement pension reforms. The goal of this thesis is to analyze the often-overlooked effects of increasing the retirement age or cutting pension benefits on voting patterns and political beliefs. Using panel data from the European Social Survey (ESS) gathered between 2002 and 2016, combined with an inventory of pension reforms across 10 countries constructed by Ciani et al. (2022), an OLS regression method examines the effect of proximity to these reforms on votes for populist, far-right, far-left, and/or eurosceptic parties. Main findings of this research are (1) the probability of voting for or feeling closer to populist and far-right parties within 12 months after implementing a pension reform is higher. (2) The likelihood of feeling closer to far-left parties imminent to pension reforms implementation is lower. (3) Voting for or feeling closer to the party in power increases both before and after implementing a pension reform. The findings suggest a rise in right-wing sentiments among European individuals.

Key words: Pension Reform, Populism, Extremism, Euroscepticism, Political Beliefs

Table of Contents

1. Introduction

In last decades, Europe has been experiencing a substantial change in its population's age structure. According to the European Commission (2023), by 2050, the proportion of people over the age of 65 will increase to around 30%, compared to the current 20%, due to low birth rates and increased life expectancy. An older population requires greater needs, and this demographic change has powerful impacts on European economies, care services, rural areas, and labour market. As explained by the OECD (2021), the demographic projections indicate that the old-age to working-age ratio is expected to generate an additional pressure on pension spending, by around 3.5% of GDP between 2017 and 2035. Furthermore, a recent article in The Economist (2023) emphasizes the growing challenge of managing rising public debt as the days of low interest rates are now gone.

Consequently, to cope with the ageing population and its serious impacts, countries are adopting various strategies. One approach is the reform of pension systems to ensure their long-term sustainability and affordability. This can include reducing pension benefits or increasing early and normal retirement ages which are the most common measures adopted in Europe (Martinez & Soto, 2021). European nations are adopting significant reforms aimed at attaining financial sustainability, and its adjustments, that account for social and economic factors, remain necessary to address demographic changes in the coming years (OECD, 2015).

However, the political implication of these reforms cannot be overlooked. Current research suggests a relationship between voting behaviour and economic discontent caused by pension reform policies implemented. Kohli and Arza (2011) emphasize how there is a broader popular dislike against pension retrenchment, and how governments may face political costs when implementing these reforms. Other hypotheses are addressed to explain changes in voting behaviour such as economic insecurity and uncertainty due to recent globalization, automation, and financial crisis such as the one experienced in 2008. Other scholars such as Fetzer (2019), Foster and Frieden (2022), Alesina et al. (2021) explain specifically how austerity measures and fiscal consolidation can influence voting behaviour, and incur political costs, emphasizing the surge for populist sentiment, distrust in European institutions and the surge of extremist parties. Therefore, it is critical to discuss these implications, especially given that the discussion

of implementing pension reforms in Europe has resulted in some discontent among citizens, resulting even in protests and strikes such as the ones in France in the beginning of 2023, when President Emmanuel Macron announced to raise the retirement age from 62 to 64 (The Economist, 2023).

Despite the importance of the issue of economic reasons for the increase in popular dislike, there is few attempts to evaluate whether increasing the retirement age and cutting pension benefits, have had political consequences such as the rise of populism, extremism, and/or Eurosceptic parties over the past years. As a result, the purpose of this study is to investigate this effect by answering the research question:

To what extend does increasing the retirement age and cutting pension benefits influence political beliefs in Europe?

Understanding the potential impact of retirement policies on voting behaviour is important for policymakers responsible for designing and implementing such policies. Raising the retirement age or cutting pension benefits can carry an electoral cost for incumbent governments, since populist sentiments often translate into greater support for alternative parties rather than established and traditional ones (Gidron & Bonikowski, 2013). Moreover, extensive research show that European populist parties share common ideas such as Euroscepticism. According to Mudde and Kaltwasser (2017), throughout the 1990s, right-wing populism emerged as a significant political force in Europe, aiming to address frustrations related to European integration and immigration. Therefore, given the current prominence of immigration and globalization in the European landscape, examining voting patterns in relation to the specific pension reforms, is relevant for European institutions and policymakers to anticipate and explain future electoral outcomes that may have implications for the future of economic and political integration of the European Union.

From a research perspective, this thesis provides three key contributions. First, it adds to the existing research regarding the individual implications of pension reforms, with a particular focus on the impact of increasing the retirement age. Previous studies have suggested that these reforms can negatively affect individual's mental health and physical well-being (De Grip et al., 2011; Falba et al., 2008; Carrino et al., 2018; Simpson et al., 2021). The effects on individual's behaviour, especially voting behaviour, and

political beliefs, are addressed in this study. Second, investigating the relationship between pension reform policies and voting behaviour might help to deepen the understanding of the economic issues that impact political behaviour and shape the electoral outcomes on different countries. Many authors investigate the effect of economic variables such as financial crisis, immigration, and automation in understanding Europe's current wave of populism in Europe, as well as the increase in radical political parties across the ideological spectrum and scepticism towards European integration (Algan et al., 2017; Funke et al., 2016; Rydgren, 2008; Anelli, Colantone, & Stanig, 2019). Finally, this subject contributes to the current research on the implications of austerity measures on election outcomes, namely the possible electoral cost for incumbent governments (Fetzer, 2019; Foster and Frieden, 2022; Alesina et al., 2021). Using the increase in normal retirement age and cut in pension benefits policies, which have been discussed as necessary policies in Europe, this analysis aims to investigate if European citizens perceive these reforms as necessary or if there is a general backlash manifested in voting changes for parties in power.

To address the research question regarding how voting behaviour varies with proximity to pension reforms, this empirical analysis builds upon the methodology and pension reforms inventory provided by Ciani et al. (2022), that combines several existing databases. Their pan-European inventory of enacted pension reforms provides precise information on the month and year, across ten European countries. This dataset is combined with representative individual-level data from the European Social Survey, including variables related to individual's votes and to which party they feel closer to, as well as relevant individual-level controls. For the main analysis, The PopuList dataset developed by Rooduijn et al. (2019) is employed to categorise European parties as populist, radical right, radical left and\or Eurosceptic. This ensures consistent definitions across all parties under investigation. Finally, for the additional analysis on the outcomes of voting or feeling closer to the incumbent party, the Political Data Yearbook (PDYi) is used to collect information on the party in power and changes in government during the relevant sample period.

The findings shed light on the relationship between reform implementation timings and voting behaviour. Specifically, they indicate that populist and far-right parties, experience notable changes in the probability of receiving votes following the enactment of pension reforms. However, the effects on far-left parties show a lower

likelihood of feeling closer to these parties close to implementing pension reforms, compared to other periods. Moreover, voting or feeling closer to a party in power increases before or after implementing a pension reform. The findings suggest that with proximity to pension reforms there is a declining sentiment towards far-left parties, while the right-wing sentiment is rising, becoming increasingly prominent in parties in power across Europe. Also, it becomes evident that pension reforms play a significant role in shaping these trends.

The remaining sections of the paper are organized as follows: Section 1 presents a theoretical framework that explores the implications of implementing pension reforms, the rise of anti-establishment political parties, and reviews relevant literature on the economic drivers of voting behaviour. In Section 3, data sources and variables used in the analysis are described. The empirical strategy is outlined in Section 4, and Section 5 provides the interpretation of the regressions results. Section 6 discusses the main findings of the three different analyses, comparing to existing studies, and limitations are addressed. Finally, section 7 concludes the paper by summarizing implications.

2. Theoretical Framework

2.1. Pension Reforms Implications

This paper firstly contributes to the broad literature on implications of pension reforms. Even though implementing pension reforms have a positive economic impact, it nonetheless presents a challenging reality, leaving citizens uncertain about what will be available to them and when, and may have a substantial influence on their health, behaviour, and political opinions. De Grip et al. (2011) investigates the effects of a substantial reform in the Dutch pension system on the mental health of employees approaching retirement age. The authors use a survey data and administrative records, concentrating on male public sector workers born in 1949 or 1950, finding an alarming decline in mental health among reform-affected workers (individuals born on or after 1st January 1950). Other authors also investigate this issue such as Falba et al. (2008), Carrino et al. (2018), and Simpson et al. (2021), suggesting that psychological and physical well-being is compromised when there are changes in the social security system, an increase in retirement age, or when individuals are working more years than expected.

Regarding policy uncertainty, recent research by Ciani et al. (2022) investigates how expectations about reform policies related to an increase in retirement age and decrease in pension benefits vary with proximity to these reforms, information availability and worker characteristics. For their analysis, the authors gather a total of forty-six pension reforms of ten European countries from 1998 to 2015 and combined them with representative individual-level data on probabilistic expectations about future reform from the Survey on Health, Aging, and Retirement in Europe (SHARE), resulting in a sample period spanning 2004 to 2013. By using an Ordinary Least Squares (OLS) empirical model, the authors find that average expectations that the retirement age will increase or there will be a cut in pension benefits before retirement rise significantly over the sample period, from about 45% in 2004 to nearly 60% in 2013, potentially reflecting worries about public finances in the aftermath of the 2008 economic crash. Furthermore, the study reveals that increasing media coverage of the imminent reforms is associated with higher expectations, and there is observed heterogeneity in information processing and acquisition, resulting in a systematic variation in the effect of information on expectations.

This thesis builds upon the comprehensive inventory of pension reforms conducted by Ciani et al. (2022) work, but the focus is on a different effect of pension reforms: the change in voting behaviour and political beliefs. Pension systems are designed to ensure income security to retirees, yet there are dissenting opinions regarding the reforms and the focus of this analysis is to show that governments may endure political costs and electoral punishment because of unpopular reforms. Kohli and Arza (2011) highlight the prevalent broader popular dislike that is observed against pension retrenchment and emphasize the necessity of addressing these reforms in the broader political economy and public policy framework. The authors explain that pensions are perceived as immovable objects, resulting in a resistance to change among population due to a path dependency that was established by European countries. This implies that a successful and popular social security system was developed, leading citizens to become attached. Many surveys reveal that a significant majority of respondents across all age groups tend to favour the maintenance or expansion of pension benefits, even if respondents are made aware of the need to raise taxes or contributions for the latter to happen, and there is a near-consensus opposition towards the idea of increasing the retirement age (Kohli & Arza, 2011). Europe has shown a significant focus on

implementing the most effective pension reform, given the numerous social and economic factors to consider, but the political implications of these reforms cannot be overlooked.

The ageing population creates a growing pressure for intergenerational transfers from the working-age population to retirees and this can also contribute to the emergence of political backlash against pension reforms. Martinez and Soto (2021) mention that deeper intergenerational inequities can contribute to polarization in political preferences and political fragmentation. Furthermore, the level of financial literacy could serve as another factor contributing to the electoral costs associated with pension reforms. Fornero and Lo Prete (2018) provide evidence that when the level of financial literacy is higher, citizens tend to understand pension reforms since they are less likely to "punish" the governments responsible for implementing such reforms.

A relevant paper by Fetzer (2019) shows an association between exposure of an individual or area to the UK's government austerity-induced welfare reforms in the subsequent rise in support for UK Independence Party (UKIP) and broader individual-level measures of political dissatisfaction. The author uses individual-level data that allows for exploiting within-individual variation in both political preferences as well as exposure to specific benefit cuts and verifies that individuals exposed to various welfare systems reforms experienced distinct and sizeable increases in their tendency to express support for UKIP. Also, it is verified that individuals increasingly perceive that their vote does not have influence, that they "do not have a say in government policy" or that "public officials do not care". Austerity measures might have an effect of political distrust and populist sentiment but there is limited research that explores the effect of growing pension reforms in the rise of populism, far-left and far-right parties, or Eurosceptic parties over the past years in Europe, and this research aims to demonstrate that imminent to pension reforms, individuals' political incliations and voting behaviours vary.

In this manner, this study also contributes to the growing literature that examines the impact of austerity measures or other policy decisions on electoral costs. In particular, the additional analysis of this thesis investigates whether the proximity to reforms influences individual's voting pattern and connection with the party in power.

2.2. The Rise of Anti-establishment Political Parties

Populism originally emerged in Europe at the end of the 19th century in Russia, but only grew into a serious political force in the late 1990s (Mudde & Kaltwasser, 2017). Notable populist events have occurred in recent years such as the surge in support for Marine Le Pen in both the 2012 and 2017 French elections, the 2017 German federal election, in which the Alternative for Germany party emerged as the country's third largest political entity, and the United Kingdom's historic decision to exit the European Union. Some parties such as Podemos in Spain and Syriza in Greece are examples of left-wing populist parties that have had electoral successes. As illustrated in Figure 1, there is a notable surge in non-traditional and radical ideologies in modern European democracies, causing many authors to investigate and trying to understand its concepts, origins, and implications.

Figure 1. Vote shares of Populist, Far-Right, Far-Left and Eurosceptic Parties in Europe (weighted by population size).
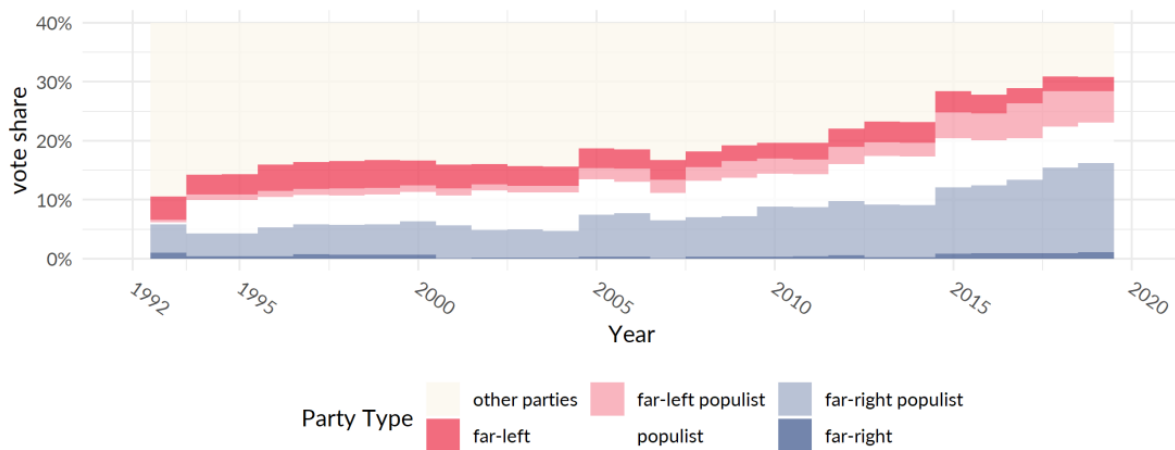
Source: The PopuList www.popu-list.org.

However, defining populism and find an underlying thread that avoids contradictions is difficult due to its diverse application in describing political movements, parties, ideologies, and leaders across geographical and historical settings (Gidron & Bonikowski, 2013). Cas Mudde, an influential author, defined populism as a thin-centered ideology that divides society into two distinct and antagonistic groups: "the pure people" versus "the corrupt elite." While several circumstances, as detailed by different authors,

contribute to the rise of these parties, they all share a set of beliefs characterized by the primacy of popular sovereignty, in which the virtuous general will oppose the moral corruption of privileged people in authority, and it can be found across ideological cleavages spanning the conventional left-right spectrum. Nonetheless, the focus of this thesis is on the consequences of enacting pension reforms, which may lead to a questioning of the established status quo, engaging in a struggle over supremacy and power (Gidron & Bonikowski, 2013).

Arter (2013) further emphasizes that the populism concept is context-dependent, meaning that varies across different political systems and takes different shapes depending on the environment that it occurs. Therefore, as previously stated, populism is not inherently associated with either left or right-wing ideology and most populist actors integrate it with one or more existing ideologies, known as host ideologies Mudde and Kaltwasser (2017). For example, in Europe, a right-wing variant of populism emerged in the 1980s, targeting mostly immigrants and national minorities (Norris, 2005). As a result, most right-wing populist tend to combine populism with nationalist ideologies. In contrast, in Latin American, populism is commonly used to describe the left-wing presidents who blends aspects of populism and socialism (Mudde & Kaltwasser, 2017). According to Foster and Frieden (2022), populism movements range significantly between right and the left, but they all share a common dislike for established mainstream political parties and institutions. Therefore, this analysis includes parties representing radical ideologies across the left-right spectrum, recongnizing the potential influence of pension reforms on the different emergence these parties in Europe.

Finally, it is important to note that populism and Euroscepticism should be understood as different concepts rather than synonyms. Rooduijn et al. (2019) emphasizes that misunderstanding may occur when people confuse populism with nativism and euroscepticism, leading to erroneous conclusions. According to Taggart (2003), euroscepticism is a critical approach towards European integration or expressing scepticism about the European inclusive nature. It is crucial to be careful when conceptualising and categorizing these ideologies. Consequently, to draw accurate conclusions, this thesis does not limit itself to the ordinary understanding of populism. Instead, its focus extends to examine the effect of pension reforms on the different ideologies separately. It recognizes that populism is a thin-centered ideology that may coexist with radical left, radical right, and Eurosceptic ideas, but the presence of these

ideologies in parties does not inevitably define them as populist parties. To achieve this examination, the analysis employs the framework proposed by Rooduijn et al. (2019) which identifies European parties aligned with populism, far-right, far-left and euroscepticism.

2.3. The Economic Triggers

The final contribution of this thesis lies in examining the economic origins of voting behaviour and the emergence of non-established parties, as discussed in the existing literature. A significant body of research links economic drivers, such as economic insecurity, uncertainty and discontent resulting from financial crisis, increased competition from low-wage countries, automation, or the sharp increase in unemployment to explain the recent trends reflected in Figure 1.

Algan et al. (2017) uses regional data across Europe to study the effect of the Great Recession in 2008 on European citizens voting behaviour for populist parties, general trust, and political attitudes. The author by exploring this possible economic root of populism, finds that there is a strong relationship between increases in unemployment that resulted from the crisis and voting for nonmainstream parties, especially populist ones. The authors examine the "left behind" theory, which claims that individuals who experienced job losses or stagnant wages because of the recession express their discontent by voting against the mainstream incumbent party. They even suggest that in areas more exposed to economic shocks, individuals have felt marginalized and have consequently shown increased support for populist parties and distrust in political institutions. Furthermore, Guiso et al. (2017) also use individual-level vote data from several European countries to investigate the demand for and supply of populism. Their focus is on identifying empirically a mechanism of economic insecurity that correlates to increased distrust towards mainstream parties, increasing support for populist parties, and reducing electoral participation. They also show that in reaction to economic stress, parties adjust their agendas to align with voter's preferences. Guriev and Papaioannou (2022), Fetzer (2019), Foster and Frieden (2022), also investigate the role of economic factors in the emergence of populism.

The recent study by Alesina et al. (2021) examines the impact of austerity measures on electoral outcomes, focusing on forecasted measures of fiscal austerity. The analysis highlights the significance of whether austerity is implemented through tax increases or expenditure cut, as well as the ideological leaning of the governing parties. The authors find that tax-based austerity carries substantial electoral costs, particularly for right-leaning governments. However, this electoral cost can be contained if it is implemented during good economic times. Additionally, their findings regarding expenditure-based austerity, such as reductions in pension benefits (which is one focus of this thesis), indicate that its effects vary depending on the governments' ideology. Expenditure cuts tend to be detrimental for left-wing governments but beneficial for right-leaning governments and this asymmetry is larger in good economic times. These disparities in ideologies likely reflect variations in the desired level of government redistribution among voters supporting parties on opposite ends of the political spectrum. Consequently, it is expected that the rise in far-right sentiment is higher than far-left political sentiment in the aftermath of the pension reforms investigated in this thesis.

Furthermore, Funke et al. (2016) examined the political consequences of financial crisis using a large variety of historical data from 20 developed economies including 827 parliamentary elections. Their main finding relevels a significant increase in policy uncertainty after a financial crisis, which is associated by a loss of governments majorities and an increase in polarization. Specifically, people tend to have a strong preference for the political rhetoric of the extreme right and radical right parties. Similarly, additional studies such as Dal Bó et al. (2018), Dehdrari (2022) , Mian et al. (2014) connect the rise in far-right parties in Europe to macroeconomic events and economic distress. Moreover, other research attributes the surge in radical-right votes to immigration scepticism, shocks, and anti-immigration views (Rydgren, 2008); (Knigge, 1998); (Billiet, Meuleman, & Witte, 2014), as well as to increase automation, digitalization and changes in the labour-force in Europe (Anelli, Colantone, & Stanig, 2019); (Gallego, Kurer, & Schoell, 2018); (Milner, 2021).

Foster and Frieden (2017) conducted a study that looked at the link between economic reason and distrust in political institutions across different European countries, as well as different occupational and educational groups. According to the authors the Euro crisis in 2009 led to a loss of confidence in traditional pro-EU parties. They argue that cultural, ideational, and political variables continue to play an important role in

explaining underlying distrust, but economic factors are mainly responsible for the recent decline. Additional research (Dustmann, et al., 2017), (Frieden, 2016) explore the rising scepticism towards the European Union, evaluating differences across age, education, and European countries. It is also investigated the impact of macroeconomic shocks, observing that when economic conditions deteriorate, trust in parliament drops and political support for the EU diminishes. Parallel to this literature, this thesis contributes by investigating whether the rise of populism, far-right, far-left, or Eurosceptic parties in Europe may be related to economic factors, but the focus is on a different economic origin: national government economic policy. Pension reform policies might have an impact on voting behaviour that is associated with economic discontent and can be reflected by the increase in votes for these parties.

The surge of anti-established parties across Europe has been widely attributed to economic issues, as supported by numerous papers. However, it is important to consider social and cultural perspectives when examining voting behaviour. Colantone and Stanig (2019) investigate the relationship between economic shocks and cultural elements in understanding political shifts, arguing that these aspects should be viewed as correlated, rather than incompatible explanations. Some research implies that the rise in populist sentiment is primarily driven by cultural and political backlash against globalization and immigration. Some authors emphasize only the role of cultural drivers to explain the rise in populist parties such as Inglehart and Norris (2016) that emphasize nativism and status threat in explaining the growth of populist parties. According to their study, rapid cultural changes that erode western nation's basic values have a role in the growth of populist sentiments, whereas economic reasons have less significance in driving populism. Furthermore, Mutz (2018) also investigates the "left behind" theory in the context of the 2016 American presidential election of Donald J. Trump, and the author argues that this economic distress did not contribute for Donald Trump's support between 2012 and 2016. Instead, the author argues that Donald Trump's popularity arose from a sense of status threat among traditionally high-status Americans who were opposed to the country's growing ethnic diversity and globalization.

According to Colantone and Stanig (2019) and Margalit (2019), it is problematic to consider economic factors and social attitudes independently in regression models where voting behaviour is the dependent variable due to the highly complex and endogenous relationship between these variables. Economic shocks not only interact with

other economic shocks, but also have an impact in cultural factors, while a cultural or psychological tendencies may negatively affect economic outcomes. Overall, it would be misleading to overstate the significance of economic factors as the sole drivers of political discontent (Margalit, 2019). Nonetheless, available research supports the idea that a variety of economic factors contribute to the rise in support for anti-established parties. Pension reform measures have significant economic consequences for citizens, resulting in economic insecurity and uncertainty, demanding further research of their influence on voting behaviour.

To summarise, pension reforms may have significant implications, not only for individuals' well-being, but also consequences for their behaviours and beliefs. While some authors have explored the effects of these reforms on different age groups and financial literacy abilities, there is limited research on their impact on voting behaviour and political cost. In contrast, a substantial body of literature has examined the influence of austerity measures on political dissatisfaction, resulting in changes in voting patterns and the eventual downfall of some incumbent governments. However, there is a gap on these studies that specifically investigate the effects of retirement age and cutting pension benefits as austerity measures. Furthermore populist, extremist and eurosceptic sentiments are on the rise across Europe and many scholars are trying to figure reasons why. As explanations, cultural values and economic variables have been proposed, but this thesis focuses only on an economic aspect. As a result, this analysis aims to fill these gaps by focusing primarily on the austerity measure associated with pension reforms, which have become increasingly necessary due to ageing population, exploring its effects on the growing support for populist, extremist, and eurosceptic parties. Moreover, this thesis distinguishes itself by assessing not only individual's s reported votes, but also their statements to which parties they feel closer to, which may provide more meaningful and accurate results.

3. Data

3.1. The European Social Survey and other sources

The panel data used in this study is retrieved from the European Social Survey (ESS), a cross-national survey that has been conducted across Europe since its establishment in 2001. The survey employs face-to-face interviews conducted every two years with newly

selected, cross-sectional samples. For this thesis, eight waves spanning the years 2001 and 2017 have been collected. The representative sample consists of individuals from ten European countries: Austria, Belgium, Denmark, France Germany, Italy, Netherlands, Spain, Sweden, and Switzerland. These specific countries were chosen based on the research conducted by Ciani et al. (2022). In total and after removing observations with missing values in the variables used in the main analysis, 75,743 out of 138,025 randomly selected individuals remain, aiming to measure the characteristics, beliefs, and voting behaviour patterns of diverse populations in the different countries.

The main analysis uses two questions asked in the ESS to examine individual-specific voting behaviour:

i. Which party did you vote for in the last [country] national[1] election?
ii. Is there a particular political party you feel closer to[2] than all other parties? Which one?

For each observation concerning these two variables, individuals indicate a party from their respective country. Following that, the PopuList dataset is employed to classify these parties as populist, far-right- far-left and/or eurosceptic. The PopuList is the result of substantial collaboration between academics and journalists, and it includes European parties from thirty-one countries that have won at least one seat or securing at least 2% of the votes in national parliamentary elections since 1989 (Rooduijn et al., 2019). Despite extensive peer-review by more than eighty academics, the authors acknowledge the possibility of disagreement regarding the employed definitions. To ensure consistency, this thesis will exclusively utilize this dataset for all parties throughout the ten European countries under consideration.

Therefore, eight different dummy variables are created that take the value 1 if the party voted for or the party that individuals feel closer to is either populist, in the far-right or far-left spectrum, or eurosceptic in each country, and zero otherwise. Table 1 presents these main outcome variables.

For conducting further analysis that examines the influence of pension reforms on individual's voting patterns and their affinity for the party representing the incumbent

---

[1] This refers to the last election of a country's primary legislative assembly.
[2] Feel closer to is in the sense of the party one most identifies or sympathises with or is most attached to, regardless of how one votes.

governments, a new variable called "party in power" is introduced. This binary variable takes the value 1 when individuals state that they voted for or feel closer to the party currently holding power in their respective country at the time of the interview, and zero otherwise. The information regarding this variable is obtained from the Political Data Yearbook interactive (PDYi).

Table 1. Main Outcome Binary Variables

$V_{Pop_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t voted for a populist party.
$V_{Right_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t voted for a far-right party.
$V_{Left_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t voted for a far-left party
$V_{Euro_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t voted for an eurosceptic party.
$C_{Pop_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t feels closer to a populist party.
$C_{Right_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t feels closer to a far-right party.
$C_{Left_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t feels closer to a far-left party.
$C_{Euro_{ijt}}$	Value 1 if induvial i, at country j, interviewed at time t feels closer to a eurosceptic party.

3.2. Data on Reforms

The country-specific data on pension reforms utilized in this study is sourced from the comprehensive pan-European inventory constructed by Ciani et al. (2022). This inventory covers pension reforms from 1998 to 2015, focusing on adjustments that either increase the retirement age or reduce pension benefits in the various countries. Figure 2 is replicated from Ciani et al. (2022) and provides an overview on the exact date (year and moth) of each reform for every country within the relevant period. Moreover, due to large heterogeneity in the specific details, the authors have omitted from the inventory the precise characteristics of the affected worker groups such as the year of birth, gender, sector of employment, seniority, and contribution. In total, forty-six main reforms implemented across the ten countries, throughout the sample period are included in this analysis. Figure 2 illustrates that most countries implemented pension reforms during the sample period. Countries such as Belgium, Denmark, France, and Spain experienced multiple reforms over time, sometimes in close succession. In contract, countries like

Germany and Switzerland introduced fewer pension reforms, while Sweden, with its system of continuous adjustments, did not introduce any.

Figure 2. Reform's Implementation date, by country and reform type.
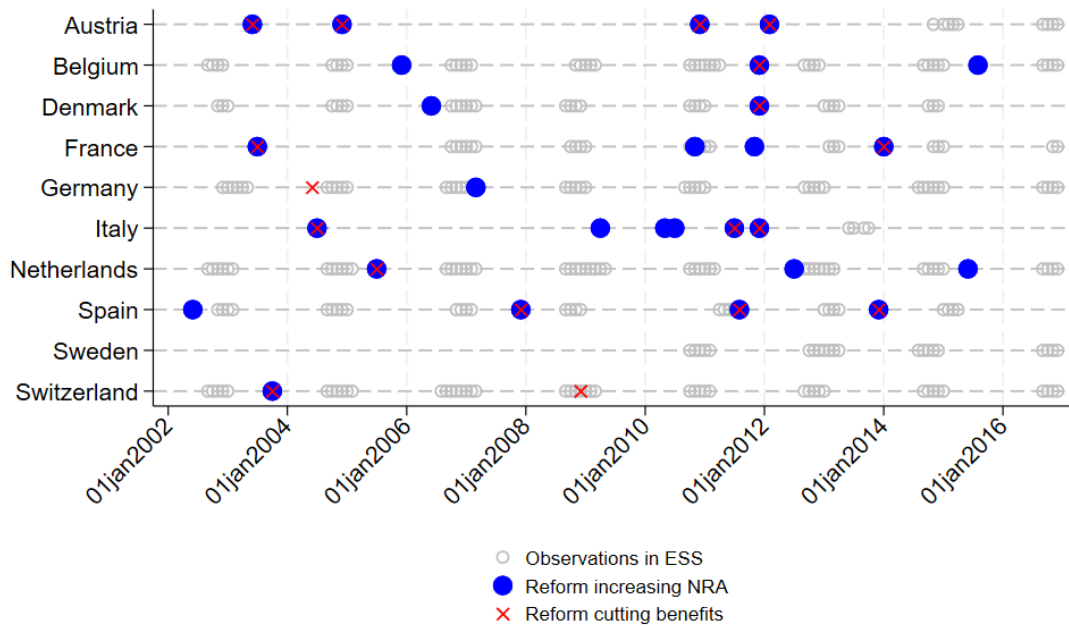
Notes: The data represented in the figure is sourced from Ciani et al (2022). It illustrates the timing of pension reforms implementations in different countries, distinguishing between reforms that increase the normal retirement age and those that reduce pension benefits for individuals. To construct the circles in this figure, cells representing year-moth interviews with fewer than thirty observations are excluded.

The analysis combines the precise dates of pension reforms with the information gathered from the ESS regarding the month and year of each interview, excluding the specific day. Thereby, two indicator functions, denoted as $I(-12, -1)$ and $I(0, 12)$, are created. As elaborated in the next section, these variables indicate whether the individual was interviewed up to 12 months prior to the reform implementation or within 12 months after. Both indicator functions serve as the main explanatory variables for the different outcomes on voting behaviour and political beliefs.

3.3. Macroeconomic control variables

As will be detailed in the next section, this thesis will use a country and time-fixed effects approach to attempt to isolate the effect of pension reforms on political opinions. However, pension reforms are not implemented randomly, and may be correlated with certain macroeconomic conditions that may also influence these political opinions.

To address this issue, several country-specific time-varying macroeconomic indicators are used as control variables, as observed in previous studies that explored implemented policies and individual's behaviour and beliefs (Ciani et al. (2022) and Alesina et al. (2022)). The "unemployment rate" is an indicator that measures the percentage of unemployed individuals in the labour force, adjusted for seasonal fluctuations. The "gross domestic product (GDP) per capita" is based on nominal GDP per capita in US dollars (current PPPs). To align this variable in a similar scale as the rest of the dataset a standardization is applied, given the absence of significant skewness.

The "long-term government bond yields" refer to government bonds maturing in ten years. These yields reflect economic and financial conditions in the European countries, in which a decline indicates caution in the markets and uncertainty about the global economy, while an increase suggests confidence. The "general government gross debt" represents the gross debt of the general government in each European country as a percentage of GDP. This indicator assesses the sustainability of government finances. "General government net lending (+)/net borrowing (−)" consists of the budget balance of governments' income and expenditure, including capital income and capital expenditures. A positive value indicates "Net lending", meaning that governments have a surplus and are providing financial resources to other sectors, while "net borrowing" means that governments have a deficit and require financial resources from other sectors. This indicator is also expressed as a percentage of GDP. The Inflation Rate is measured by the annual growth rate of the GDP implicit deflator, illustrating the rate of price change in the overall economy.

Furthermore, previous research have explored the link between vote share for radical right parties and immigration, finding a strong positive correlation between the two (Stockemer, 2017); (Golder, 2003); (Rydgren & Ruth, 2011)). Also, countries experiencing higher levels of immigration may have a greater need for pension reforms,

as the increased population exert additional pressure on pension spending. Therefore, the analysis also includes total number of immigrants in each country as a control. Similarly to the GDP per capita, this variable exhibit large values and is therefore standardized with a mean of zero and a standard deviation of one.

Table 2. Macroeconomic Control Variables - Summary Statistics

Variables	Mean	Standard Deviation	Min	Max	Observations
Unemployement Rate	7.423	(4.001)	2.924	26.094	75743
GDP per capita	0.000	(1.000)	-2.017	2.412	75743
General Gov.bond yields	2.943	(1.475)	-0.363	5.437	75743
General Gov. debt	57.675	(26.010)	19.381	135.156	73257
General Gov. lending(+)/borrowing(-)	-1.638	(2.531)	-10.956	5.020	74906
Inflation Rate	1.497	(1.065)	-1.265	4.135	75743
Immigration	-0.000	(1.000)	-0.944	4.499	74261

Notes: All variables are reported on an annual basis. GDP per capita (current PPPs) and Immigration are standardized with a mean of zero and a standard deviation of one. Due to unavailability of data, 2486 observations are missing for general government debt in 2016 for Denmark and Netherlands. Similarly, 837 values are missing for general government lending/borrowing in Sweden and 1482 missing values for Immigration in France (2002 to 2004), and Belgium in 2008 and 2009.

Table 2 presents summary statistics for the macroeconomic control variables, each of which is reported on an annual basis. It is important to note that general government debt is missing values for Denmark and Netherlands in 2016, and general government lending/borrowing is missing for Switzerland in the same year. Moreover, there are missing values for Immigration in France in years 2002 to 2004, and Belgium in 2008 and 2009.

These macroeconomic variables are sourced from the replication dataset provided by Ciani et al. (2022), primarily obtained from the OECD and the World Bank. It should be noted that the inflation rate and immigration are not included in Ciani et al. (2022) and are sourced directly from the World Bank and Eurostat, respectively. We consider the mean yearly change of these six specific macroeconomic indicators to understand the deterioration of each national economy, public finances, or macroeconomic shocks which, as explained, can contribute to increased economic discontent and insecurity, potentially impacting voting behaviour, as well as leading to the implementation of pension reforms. Therefore, including these controls is crucial to ensure unbiased results.

3.4. Descriptive Statistics

Table 2 provides important summary statistics for the key variables. Given that individual-level data is being used, the analysis includes several demographic controls such as age, gender, citizenship, health, household size, main activity, marital status, level of education, and household income. The sample size varies due to missing values in the different individual-level characteristics of the analysis across the two different sample outcomes, namely the parties voted for, and the parties individuals feel closer to. Moreover, all answers for the questions that took the value "No answer," "Not applicable," "Don't know", "No party", "Refusal", and "Invalid" for the two main questions were considered as missing values.

Only respondents aged 18 years and above are included in the analysis, since election results and the rise of populist, extremist, and eurosceptic parties are determined by individual's votes. In both samples the mean age is around fifty-four, and there is almost an equal number of male and female respondents. On average, 11.1% of individuals voted for populist parties, 6.3% voted for far-right parties, 7% voted for far-left parties and 13.4% for eurosceptic parties. Regarding parties that individuals feel closer to, almost 12% feel closer to populist parties, 7.4% feel closer to far-right parties, 8.1% feel closer to far-left parties, and 14.5% feel closer to eurosceptic parties.

As for parties in power, on average, about 30% of the respondents voted for parties in power and 26.3% respondents felt closer to a party in power at the time they were interviewed in each country. Furthermore, on average, 16.4% of respondents who claimed to vote for a party were interviewed within 12 months before a reform, and 15.1% claimed to have vote for a party within 12 months after a reform. Regarding individuals who claimed to feel closer to a party, on average, 15.8% were interviewed within 12 months before an implementation of a reform and, on average, 15% were interviewed within 12 months after a reform.

Table 3. Summary Statistics

Variables	Mean		Standard Deviation		Min		Max		Observations	
	Vote	Close to	Vote	Close to	Vote	Close to	Vote	Close to	Vote	Close to
Age	53.553	54.731	(15.874)	(15.780)	18	18	102	102	50801	33398
Male	0.499	0.520	(0.500)	(0.500)	0	0	1	1	50801	33398
Citizenship	0.997	0.998	(0.053)	(0.049)	0	0	1	1	50801	33398
Household Size	2.549	2.510	(1.253)	(1.242)	1	1	12	12	50801	33398
Household's total net income, in deciles	6.375	6.486	(2.546)	(2.558)	1	1	10	10	50801	33398
Legal Marital Status										
Divorced/Sperated	0.117	0.118	(0.321)	(0.323)	0	0	1	1	50801	33398
Married/Cohabiting	0.683	0.686	(0.465)	(0.464)	0	0	1	1	50801	33398
Never Married	0.112	0.104	(0.315)	(0.305)	0	0	1	1	50801	33398
Widowed	0.088	0.091	(0.283)	(0.288)	0	0	1	1	50801	33398
Subjective General Health										
Very Good	0.214	0.222	(0.410)	(0.416)	0	0	1	1	50801	33398
Good	0.480	0.475	(0.500)	(0.499)	0	0	1	1	50801	33398
Fair	0.245	0.242	(0.430)	(0.429)	0	0	1	1	50801	33398
Bad	0.053	0.051	(0.224)	(0.221)	0	0	1	1	50801	33398
Very Bad	0.009	0.009	(0.094)	(0.093)	0	0	1	1	50801	33398
Main activity, last 7 days										
Community or Military Service	0.000	0.000	(0.020)	(0.019)	0	0	1	1	50801	33398
Education	0.018	0.017	(0.133)	(0.131)	0	0	1	1	50801	33398
Paidwork	0.537	0.524	(0.499)	(0.499)	0	0	1	1	50801	33398
Permanently Sick or Disabled	0.025	0.025	(0.157)	(0.157)	0	0	1	1	50801	33398
Retired	0.283	0.307	(0.451)	(0.461)	0	0	1	1	50801	33398
Unemployed	0.136	0.126	(0.343)	(0.332)	0	0	1	1	50801	33398
Level of Education, ES-ISCED										
Primary	0.151	0.145	(0.358)	(0.352)	0	0	1	1	50801	33398
Lower Secundary	0.100	0.094	(0.300)	(0.292)	0	0	1	1	50801	33398
Upper Secondary	0.253	0.276	(0.435)	(0.447)	0	0	1	1	50801	33398
Universit yand more	0.496	0.486	(0.500)	(0.500)	0	0	1	1	50801	33398
Partied Voted for										
Populist	0.109		(0.311)		0		1		50801	
Far-right	0.062		(0.241)		0		1		50801	
Far-left	0.072		(0.258)		0		1		50801	
Eurosceptic	0.133		(0.340)		0		1		50801	
Party in Power	0.300		(0.458)		0		1		50801	
Parties Felt Closer to										
Populist		0.108		(0.311)		0		1		33398
Far-right		0.064		(0.245)		0		1		33398
Far-left		0.085		(0.278)		0		1		33398
Eurosceptic		0.134		(0.341)		0		1		33398
Party in Power		0.270		(0.444)		0		1		33398
I(-12,-1)	0.176	0.165	(0.381)	(0.372)	0	0	1	1	50801	33398
I(0,12)	0.162	0.160	(0.368)	(0.367)	0	0	1	1	50801	33398

Notes: Household size refers to the number of people living regularly as a member of a household. The household's total net income is represented as an ordered categorical variable, indicating an individual's household annual net income with national income categories based on deciles derived from the actual household income range in the given country. The lowest net income category is denoted as number 1 (first decile), while the highest net income category is denoted as number 10 (10th decile). The variables in "Parties Voted For" are a combination of responses from the ESS question, "Which party did you vote for in the last [country] national election", with the ideological definitions provided by the PopuList dataset and with whether the party is the incumbent one according to the Political Data Yearbook interactive (PDYi). The binary variables take the value 1 if the parties that individuals voted for are populist, far-right, far-left, eurosceptic and/or the incumbent party in time t. Similarly, the same approach applies to the variables in "Parties Felt Closer to", which asks individuals the ESS question, "Is there a particular political party you feel closer to than all other parties? Which one?". The indicator I (-12, -1) represents individuals who were interviewed within 12 months before a reform, while I (0,12) indicates individuals who were interviewed within 12 months after a reform or during the month of the reform. The table displays the sample size employed in the main regressions, which considers only county x month cells that contain at least 30 observations, and accounts for missing values in the macroeconomic control variables.

4. Empirical Strategy

4.1. Specifications

The aim of this thesis is to investigate how different voting outcomes change imminent to pension reform policies. More specifically, it looks how votes and identification with populist, far-right, far-left or eurosceptic parties vary before and after the pension reforms. For this purpose, this analysis employs the empirical technique used by Ciani et al. (2022). The indicator functions I $(-12, -1)_{jt}$ is defined as a variable that takes value 1 if individuals in country j at time t (given by year and moth) are interviewed up to 12 months before the reform implementation. Similarly, for interviews performed between the implementation date and up to 12 months after, the indicator functions I $(0, 12)_{jt}$ returns a value of 1. The indicators are mutually exclusive because they are defined relative to the closes reform[3]. These two indicators will be the main explanatory variables for the eight different dependent outcomes and all estimations are done by using ordinary least squares (OLS).

With all this considered, the OLS model, based on Ciani et al. (2022), appears as follows:

$$(1) \ y_{ijt} = \beta_0 + \beta_1 \, I(-12, -1)_{jt} + \beta_2 \, I(0, 12)_{jt} + X'_{ijt}\Theta + Z'_{jt}\Theta + \varphi_t + \lambda_j + \varepsilon_{ijt}$$

Where y_{ijt} refers to one of the outcomes variables listed in table 1, above. $X'_{ijt}\Theta$ refers to a vector of all individual-specific control variables (including age, gender, citizenship, health, household size, main activity, marital status, level of education, and household income). Also, $Z'_{jt}\Theta$ refers to a vector of all country-specific macroeconomic control variables. φ_t denotes time (month x year of interview) fixed effects, and λ_j denotes country fixed effects. Standard errors are clustered at the country x month-of-interview level, which is the level at which the variation in the variables of interest occurs. β_1 and β_2 are the coefficients of interest in equation 1. The estimates detect systematic differences in the outcome variables, up to 12 months before, and within 12 months following the implementation of a pension reform, respectively, holding all else constant,

---

[3] There were 440 observations that were not mutually exclusive. This was due to successive reforms in France, specifically in interviews conducted in December 2010, as well as in January, February, and March 2011. For all the interview dates mentioned, it was applied I $(0, 12)_{jt} = 1$ and I $(-12, -1)_{jt} = 0$.

compared to the reference period, which is all other periods that are more than 1 2 months away from a reform.

For the supplementary analysis of voting behaviour for incumbent governments, the same specification (1) is applied. In this regression, the binary variable party in power is represented by the dependent outcome y_{ijt}. Moreover, for the additional analysis on the effect on political sentiments, the specification (1) is also applied, and y_{ijt} represent the four different outcome variables.

4.2. Identifying Assumptions

Cross-sectional data is used in this empirical strategy, which collects the same information from different individuals on the same observed ten countries at different points of time. In addition, an Ordinary Least Squares model with three dimensions is employed: the individual-level, the country-level, and time-level. Therefore, some important assumptions need to be considered within this framework.

To achieve unbiased estimates and for the zero conditional mean assumption to hold, the error term must be uncorrelated with the explanatory variables. In this analysis, two different countries may experience shocks at the same time, introducing some between variation that does not allow to isolate the concerned main variation. As a result, unobserved time-invariant variables unique to each country and unobservable variables that vary over time but remain constant across countries must be uncorrelated with the proximity of an implementation of a pension reform. To address this concern, the analysis includes both country and time fixed effects, meaning that the identification of β_1 and β_2 parameters is based only on variation in the introduction of reforms within countries, and within month-year across countries. Figure 2 graphically illustrates the abundant variation in the main explanatory variables $I(-12, -1)$ and $I(0, 12)$ over the sample period.

The inclusion of individual fixed effects is the only missing element. As the dataset does not follow the same individuals across waves, there may be some systematic differences between individuals that should be captured to eliminate all between variation. Nevertheless, it is assumed that controlling for age, gender, education, and other individual characteristics that were provided by the ESS is sufficient to adequately capture these differences between individuals. The rationale behind fixed effects is to

eliminate all between variations to focus only on within variation. However, fixed effects do not address time variant sources of bias. Therefore, time-variant country-specific control variables are introduced to account for unobserved time-varying variation in the error term. These macroeconomic control variables influence the outcome variables of voting behaviour and political beliefs, and, if absent, could bias estimates of the proximity of implementation of pension reforms. Therefore, the strict exogeneity assumption is valid, which assures that the model will be unbiased if and only if the unobserved time-variant components are uncorrelated with explanatory variables in any time point.

The coefficients of interest remain unbiased if it does not exist any country specific time-variant unobservables that influence both the timing of pension reforms and political sentiments. The refugee crisis can be considered as a potential cofounding variable in this analysis, as it impacts countries differently, and in different periods. Additionally, the social spending due to refugee's integration may influence the timing of pension reforms. Also, existing research indicate changes in political beliefs, influenced by the refugee crisis in Europe (Brug & Harteveld, 2021). Nonetheless, this analysis aims to address this confounding issue by controlling for immigration, assuming the absence of any other country-specific time-varying unobservable variables.

Furthermore, clustered standard errors are used at country and time unit observation level. This approach accounts for potential serial correlation, and as a result, the effect of the proximity to implementing pension reforms in two different periods are uncorrelated. It is worth noting that there are additional important assumptions regarding the Multiple Linear Regression model. These include the random sampling of individuals from the same population, which is assured by the European Social Survey. Furthermore, the model assumes that large outliers are unlikely and that there is no perfect multicollinearity.

5. Results

5.1. Main Results

Table 4 provides least squares estimates for the specification (1) regarding the sample of individuals who claimed to vote for a party. The columns show the change in the average probability of voting for a populist, far-right, far-left and or eurosceptic party, respectively if the interviews were up to 12 months before a reform (I (-12, -1)) or up to

12 months after a reform (I (0, 12)), compared to all other periods more than 12 months away from a reform, ceteris paribus.

Table 4. Votes and Reforms

	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
	Populist Vote		Far-right Vote		Far-left Vote		Eursceptic Vote	
I(-12,-1)	-0.017**	-0.011	-0.011*	-0.010*	0.000	0.003	-0.017**	-0.011
	(0.007)	(0.007)	(0.006)	(0.006)	(0.005)	(0.004)	(0.009)	(0.008)
I(0,12)	0.009	0.015**	0.013**	0.014***	-0.005	-0.003	0.012*	0.016**
	(0.006)	(0.006)	(0.006)	(0.005)	(0.004)	(0.004)	(0.007)	(0.007)
Unemployement Rate		0.000		0.004*		-0.002		0.002
		(0.003)		(0.002)		(0.001)		(0.003)
GDP per capita		0.001		0.042		-0.015		0.025
		(0.031)		(0.028)		(0.017)		(0.036)
General Gov.bond yield		-0.011		-0.028***		-0.0 ***		-0.031***
		(0.008)		(0.008)		(0.004)		(0.010)
General Gov. debt		0.002***		0.002***		0.001***		0.002***
		(0.000)		(0.000)		(0.000)		(0.001)
General Gov. lending(+)/borrowing(-)		0.002		0.000		-0.002		-0.001
		(0.002)		(0.002)		(0.001)		(0.002)
Inflation Rate		0.012***		0.003		0.006***		0.010***
		(0.004)		(0.003)		(0.002)		(0.004)
Immigration		0.018***		0.029***		0.000		0.019***
		(0.006)		(0.006)		(0.004)		(0.007)
N	50801		50801	50801	50801		50801	
R-sq	0.067	0.068	0.087	0.090	0.047	0.047	0.046	0.047

Notes: Here the outcome variables refer to individuals that claimed to vote for populist, far-right, far-left and/or eurosceptic parties. The dependent variables are probabilities, since each one can take either the value 0 or 1. The main explanatory indicators are I (-12, -1), which is equal to 1 over the 12 months before a reform, and 0 otherwise; and I (0, 12), which is equal to 1 over the 12 months after a reform has been enacted, and 0 otherwise. The pension reforms analysed are the increase in the normal retirement age and the decrease in pension benefits. The table reports least squares estimates, obtained from a sample of individuals aged eighteen or more, and observed in eight different ESS waves. All regressions include a constant, country and time fixed effects, and indicator variables for age, gender, citizenship, health, household size, main activity, marital status, level of education, and household income. N denotes the number of individuals observed. It is only considered country x month cells that contain at least 30 observations. The standards errors in parentheses, are clustered at the country x month-year of interview level (358 groups). * Significant at 10%, ** Significant at 5%, *** Significant at 1%.

It is important to note that the voting results correspond to the party that each individual claims to vote for in the most recent national election. Therefore, the coefficients of I (-12, -1) and I (0, 12) are expected to be significant only if there was an election held between these periods, during which individuals had an opportunity to change their vote. However, in this analysis, the exact timing of elections for each country is unknown. Therefore, throughout the interpretation of the results, it is assumed that these outcomes represent parties people reported they wish/would vote if an election were to take place during the periods close to implementing pension reforms.

Specifications without macroeconomic controls are show in columns (i), (iii), (v), and (vii). Regarding statistically significant results, the probability of voting in a populist party right before a reform implementation is 1.7 percentage points lower, compared to the reference period. For far-right votes, individuals interviewed up to 12 months before a reform, on average, show a lower probability of voting in these parties by 1.1 percentage points, and after a reform is implemented, individuals adjust their beliefs, being the likelihood higher by 1.3 percentage points. The probability of claiming to vote for eurosceptic parties up to 12 months before a reform is, on average, 1.7 percentage points lower. The likelihood once a reform is enacted is higher by 1.2 percentage points, comparing to all other periods more than 12 months away from a reform, ceteris paribus.

The results controlling for macroeconomic variables are also presented in Table 4 in columns (ii), (iv), (vi), and (viii). When these controls are added, the probability of voting for a populist party, following a reform implementation is higher 1.5 percentage points, comparing to the reference period. For far-right votes, individuals interviewed up to 12 months before a reform exhibit a lower probability of voting for such parties by 1 percentage point. However, after a reform is implemented, individuals change their beliefs, and the likelihood of claiming for voting in far-right parties is higher by 1.4 percentage points. In terms of eurosceptic parties, the average probability of voting for these parties, once a reform is enacted, is higher by 1.6 percentage points. The results for the estimates of voting in far-left parties before and following a reform, controlling, and not controlling for macroeconomic variables are not statistically significant.

Table 5. Feeling Closer to and Reforms

	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
	Populist Vote		Far-right Vote		Far-left Vote		Eursceptic Vote	
I(-12,-1)	-0.021***	-0.028***	-0.012*	-0.016**	-0.006	-0.010**	-0.021**	-0.028***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.005)	(0.005)	(0.008)	(0.008)
I(0,12)	0.009	0.011**	0.017***	0.018***	-0.009*	-0.009**	-0.003	0.001
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.008)	(0.007)
Unemployement Rate		0.004		0.005***		-0.003*		-0.003
		(0.002)		(0.002)		(0.002)		(0.003)
GDP per capita		-0.038		-0.017		-0.068***		-0.068**
		(0.025)		(0.025)		(0.018)		(0.034)
General Gov.bond yield		-0.025***		-0.030***		0.003		-0.030***
		(0.008)		(0.008)		(0.006)		(0.010)
General Gov. debt		0.001***		0.001**		0.001***		0.002***
		(0.000)		(0.000)		(0.000)		(0.000)
General Gov. lending(+)/borrowing(-)		0.006***		0.005**		0.001		0.008***
		(0.002)		(0.002)		(0.001)		(0.002)
Inflation Rate		-0.000		-0.002		0.005*		-0.007*
		(0.003)		(0.003)		(0.003)		(0.004)
Immigration		0.009		0.020***		-0.003		0.001
		(0.006)		(0.007)		(0.005)		(0.007)
N	39028		39028		39028		39028	
R-sq	0.081	0.082	0.111	0.113	0.056	0.057	0.071	0.073

Notes: Here the outcome variables refer to individuals that claimed to be feeling closer to populist, far-right, far-left and/or eurosceptic parties. The dependent variables are probabilities, since each one can take either the value 0 or 1. The main explanatory indicators are I(-12,-1), which is equal to 1 over the 12 months before a reform, and 0 otherwise; and I(0, 12), which is equal to 1 over the 12 months after a reform has been enacted, and 0 otherwise. The pension reforms analysed are the increase in the normal retirement age and the decrease in pension benefits. All regressions include a constant, country and time fixed effects, and indicator variables for age, gender, citizenship, health, household size, main activity, marital status, level of education, and household income. N denotes the number of individuals observed. It is only considered country x month cells that contain at least 30 observations. The standards errors in parentheses, are clustered at the country x month-year of interview level (358 groups). * Significant at 10%, ** Significant at 5%, *** Significant at 1%.

Table 5 presents the least squares estimates for model (1), but now focusing on the sample of individuals who expressed feeling closer to a certain party. The analysis is conducted with and without macroeconomic controls, providing valuable insights into the relationship before and after pension reforms implementation and party sentiment, comparing to all other periods, and all else being equal. This outcome allows for more

significant results, as it captures the change in sentiments of feeling closer to a party, regardless of whether a national election took place between the period of implementing pension reforms.

The results without macroeconomic controls are shown in column (i), (iii), (v), and (vii). On average, the change in the probability of feeling closer to a populist party up to 12 months before a reform is 2.1 percentage points lower, compared to all other period more than 12 months away from a reform. Regarding far-right sentiment, individuals interviewed up to 12 months before a reform exhibit a lower probability of feeling closer to these parties by 1.2 percentage points; and after a reform is implemented, the change in the likelihood increases by 1.7 percentage points. Following a reform implementation, the probability of feeling closer to a far-left party is lower by 0.9 percentage points. Regarding eurosceptic parties, the change in the probability of feeling closer is, on average, 2.1 percentage points lower up to 12 months before a reform.

When controlling for macroeconomic variables, the results are more statistically significant as shown in column (ii), (iv), (vi), and (viii). The probability of voting in a populist party up to 12 months before a reform is lower by 2.8 percentage points; and following a reform implementation, it is higher by 1.1 percentage points, comparing to the reference period. For far-right sentiment, individuals interviewed up to 12 months before a reform exhibit a lower probability of feeling closer to such parties by 1.6 percentage points; and after a reform is implemented, the change in the likelihood increases by 1.8 percentage points. The probability of feeling closer to a far-left party up to 12 months before a reform and after a reform is enacted is lower in both periods by around 1 percentage points, comparing to all other periods. In terms of eurosceptic parties, the average probability of feeling closer to these parties after a reform is implemented is 2.9 percentage points lower.

5.2. Party in Power Analysis

An additional analysis is conducted to investigate the impact of proximity to the implementation of pension reforms on two different outcomes: voting for the party in power and feeling closer to the party in power at the time of the interview in each country. This contributes to a better understanding of the possible political cost associated with the increasing the retirement age or cutting pension benefits.

Table 6. Votes and Feeling Closer to Party in Power and Reforms

	(i)	(ii)	(iii)	(iv)
	Vote for Party in Power		Feeling Closer to Party in Power	
I(-12,-1)	0.025**	0.032**	0.004	0.027*
	(0.012)	(0.014)	(0.013)	(0.015)
I(0,12)	0.037***	0.043***	0.031*	0.040***
	(0.014)	(0.014)	(0.016)	(0.015)
Unemployement Rate		-0.006*		-0.016***
		(0.004)		(0.004)
GDP per capita		0.006		-0.017
		(0.050)		(0.053)
General Gov.bond yield		-0.002		0.010
		(0.017)		(0.017)
General Gov. debt		0.003***		-0.000
		(0.001)		(0.001)
General Gov. lending(+)/borrowing(-)		0.003		0.004
		(0.004)		(0.005)
Inflation Rate		-0.000		-0.008
		(0.006)		(0.006)
Immigration		0.041***		0.043***
		(0.012)		(0.015)
N	50801	50801	39028	39028
R-sq	0.061	0.063	0.055	0.061

Notes: Here the outcome variables refer to individuals that claimed to vote for or feeling closer to a party in power. The dependent variables are probabilities, since each one can take either the value 0 or 1. The main explanatory indicators are I (-12, -1), which is equal to 1 over the 12 months before a reform, and 0 otherwise; and I (0, 12), which is equal to 1 over the 12 months after a reform has been enacted, and 0 otherwise. The pension reforms analysed are the increase in the normal retirement age and the decrease in pension benefits. All regressions include a constant, country and time fixed effects, and indicator variables for age, gender, citizenship, health, household size, main activity, marital status, level of education, and household income. N denotes the number of individuals observed. It is only considered country x month cells that contain at least 30 observations. The standards errors in parentheses, are clustered at the country x month-year of interview level (358 groups). * Significant at 10%, ** Significant at 5%, *** Significant at 1%.

Columns (i) and (ii) in Table 6 present the estimated effects on the voting outcome, and column (iii) and (iv) present the estimated effects on the feeling closer to outcome. Without controlling for macroeconomic variables, the change in the probability of voting for the party in power is higher, on average, by 2.5 percentage points before the enactment of a reform, comparing to all other periods more than 12 months away from a reform. Similarly, following a reform, the probability of voting for these parties is higher by 3.7 percentage points. When controlling for macroeconomic variables, the estimates are similar, with the same statistical significance and with the same direction, but higher magnitude. Considering the outcome of feeling closer to the party in power, when controlling for macroeconomic variables, the estimates are statistically significant. The change in the probability of feeling closer to the party in power before the implementation of a reform is higher by 2.7 percentage points. Following a reform, the probability is higher by 4 percentage points compared to the reference period.

5.3. Effect on Political Sentiments

To gain a better understanding of how individual's political sentiments and beliefs are affected beyond voting outcomes, an additional analysis is conducted, collecting five different questions from the European Social Survey, which may have important political implications. The summary statistics of these variables are presented in Table 7.

Table 7. Descriptive Statistics of Additional Outcome Variables

Outcome Variables	Mean	Standard Deviation	Min	Max	Observations
Left-Rght Scale	4.944	(2.093)	0	10	66,601
Trust Polit. Parties	4.057	(2.268)	0	10	60,270
Immigration Bad/Good	5.155	(2.315)	0	10	68,697
SB Equal Society	0.578	(0.494)	0	1	13,426
N	70,058				

Notes: The outcome variables are sourced from the European Social Survey across waves 1 to 8, with exception of the "SB Equal society", that is included in waves 4 and 8. As a result, the sample sizes for each outcome variable vary. Additionally, this table displays the sample size employed in the regression, which considers only country x month cells that contain at least 30 observations, and accounts for missing values in the macroeconomic control variables.

Table 8 illustrates the average changes in the outcome variables during the 12 months preceding the implementation of a pension reform, as well as within the 12 months following a reform, in comparison to all other periods, all else being equal. The

estimates in columns (i), (iii), (v), and (vii), represent the results without considering macroeconomic variables, and the estimates in the remaining columns are controlled for macroeconomic variables.

First, the variable "left-right scale" is examined, which asks individuals to position themselves on the ideology spectrum, where zero represents the left and ten represents the right. The mean of this variable is 4.94, indicating that the average sample falls in the middle of left-right scale, slightly closer to the left spectrum. The number of observations for this question is 66,601, and it is present in all waves of the survey. The estimates for this outcome in Table 8, exhibit that within the 12 months prior a reform, compared to the reference period, there is a statistically significant shift from a mean of 4.94 towards a lower position on the scale (by -0.083), indicating a stronger inclination towards the left spectrum. When controlling for macroeconomic indicators, the results remain similar, maintaining statistical significance at a 1% significance level. The magnitude of this change becomes stronger (-0.106), with individuals positioning themselves, on average, in the value of 4.838 on the scale (4.944 – 0.106). The results after a reform implementation are not statistically significant, exhibiting that the move leftwards disappears entirely after the reforms are enacted.

The question of personal trust in political parties is also considered as an outcome variable. The individuals can rate their level of trust on a scale from 0 (indicating no trust at all) to 10 (indicating complete trust). The mean of this variable is around 4, indicating that, on average, there is not a complete trust in political parties. There are 60,270 individuals observed across eight waves. The estimation results for trust in political parties exhibit that within 12 months before the implementation of a reform, trust in political parties decreases by 0.282 points (or 0.138 when including control variables), relative to a mean value of 4. Once a reform is enacted, the estimates for trust in political parties remain negative: without including control variables, the decline amounts to 0.157 points of the scale between 0 and 10, while with control variables the decrease is 0.093 points. These results indicate that the magnitude of the decline is slightly lower within the 12 months after the reform, emphasizing a substantial decline in trust among individuals before the implementation of the reforms, comparing to all other periods more than 12 months away from a reform.

Additionally, an immigration-related question is included in the analysis, with 68,697 observations and present in all waves. The questions ask individuals to evaluate

whether they perceive immigration to be generally good or bad for the country's economy. Responses range from zero to ten, where zero indicates bad and ten is good for the economy. The average response falls around five, suggesting that individuals are indifferent or uncertain regarding the economic impact of immigration. The estimates for this outcome are statistically significant. Prior to the implementation of a reform, the average value on the scale is 0.094 points lower from the mean value of 5.3, controlling for macroeconomic indicators. Once a reform is enacted, the positive perception of the effect of immigration on the country's economy continues to decrease but with a smaller reduction of 0.083 points. This suggests that individuals perceive immigration as having more negative implication for the economy before the implementation of a reform, comparing to the reference period.

Finally, the additional analysis includes one question that is not asked in all waves, since it is from the rotating module of the Welfare Attitudes from the European Social Survey. The question concerns whether social benefits contribute to a more equal society or not and it is asked in waves 4 and 8, resulting in 13,426 observations. This question examines individuals' perception of social benefits and services, which include health care, pensions, and social security (cash benefits such as sick pay, unemployment benefits, child benefits, etc.). Respondents can answer either "Strongly Agree", "Agree", "Neither agree or disagree", "Disagree", or "Completely Disagree". For better interpretation, the variable was transformed into a binary variable taking the value one if the individual "Strongly Agree" or "Agree", and 0 otherwise. The mean indicates that, on average, 57.8%, agree with the statement. The estimates for this outcome show that within 12 months before a reform is implemented, the change in the probability of agreeing with the statement that social benefits lead to an equal society is statistically significant lower by 82 percentage points (considering macroeconomic indicators). After the enactment of a reform, this likelihood is lower by 46.6 percentage points controlling for macroeconomic controls. These results indicate that from a mean value of 57.8% of agreeing with the statement, individuals interviewed immediate to reform implementations show to highly disagree with the statement.

Table 8. Additional Outcome Variables and Pension Reforms

	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
	Left-Right Scale		Trust Polit. Parties		Immigration Bad/Good		SB Equal Society	
I(-12,-1)	-0.083***	-0.106***	-0.282***	-0.138***	-0.213***	-0.094**	-0.137***	-0.820**
	(0.031)	(0.032)	(0.047)	(0.039)	(0.048)	(0.039)	(0.039)	(0.388)
I(0,12)	-0.003	-0.007	-0.157***	-0.093**	-0.182***	-0.083**	-0.091***	-0.466*
	(0.025)	(0.027)	(0.050)	(0.041)	(0.053)	(0.038)	(0.015)	(0.251)
Unemployement Rate		0.017*		-0.013		-0.026*		0.152*
		(0.010)		(0.014)		(0.015)		(0.087)
GDP per capita		-0.006		0.765***		0.082		0.730**
		(0.131)		(0.186)		(0.178)		(0.347)
General Gov.bond yield		0.083*		-0.113*		0.015		0.073
		(0.043)		(0.061)		(0.064)		(0.045)
General Gov. debt		-0.006***		-0.002		0.004*		0.002
		(0.002)		(0.003)		(0.002)		(0.002)
General Gov. lending(+)/borrowing(-)		0.028***		-0.006		0.064***		-0.122**
		(0.010)		(0.014)		(0.014)		(0.054)
Inflation Rate		-0.044***		-0.023		0.017		0.197*
		(0.016)		(0.024)		(0.018)		(0.101)
Immigration		0.028		0.150***		0.148***		0.155*
		(0.031)		(0.043)		(0.046)		(0.086)
N	66601		60270		68697		13426	
R-sq	0.050	0.051	0.194	0.199	0.134	0.138	0.034	0.034

Notes: Here the outcome variables refer to five different questions sourced from the European Social Survey. The main explanatory indicators are I (-12, -1), which is equal to 1 over the 12 months before a reform, and 0 otherwise; and I (0, 12), which is equal to 1 over the 12 months after a reform has been enacted, and 0 otherwise. The pension reforms analysed are the increase in the normal retirement age and the decrease in pension benefits. The table reports least squares estimates, obtained from a sample of individuals aged eighteen or more. All regressions include a constant, country and time fixed effects, and indicator variables for age, gender, citizenship, health, household size, main activity, marital status, level of education, and household income. N denotes the number of individuals observed. It is only considered country x month cells that contain at least 30 observations. The standards errors in parentheses, are clustered at the country x month-year of interview level (358 groups). * Significant at 10%, ** Significant at 5%, *** Significant at 1%.

6. Discussion

6.1. Main Analysis

This thesis focuses on examining the effects of the proximity to pension reforms that either raise retirement age or reduce pension benefits on individual's voting behaviour and political beliefs. In the main analysis, with eight different outcome variables, important insights are obtained regarding the effects of reform proximity on voting sentiment and on the party that individuals claimed to feel closer to, which can be populist, far-right, far-left, and/or eurosceptic.

The results concerning individuals' voting patterns indicate that populist, far right and eurosceptic parties experience notable changes in the probability of receiving votes imminent to reform implementations. Up to 12 months prior the enactment of a pension reform, the probability of voting for any of these parties is lower. In contrast, immediately after the enactment of a reform, the probability of voting for populist, far right and eurosceptic parties is, on average, higher compared to the reference period. Considering that it is assumed that these outcomes represent parties people reported they wish/would vote if a national election were to take place during the periods close to implementing pension reforms, these findings are still consistent with the theoretical framework. The results suggest that individuals do change their political beliefs and voting sentiments due to implementation of pension reforms. The authors argue that policies introducing cuts in benefits or other type of austerity-induced welfare reforms may contribute to a political discontent, resulting in increased votes for populist, extremist and/or eurosceptic parties.

The results related to votes for far-left parties do not show statistically significance. However, the estimates for feeling closer to far-left parties are statistically significant, indicating a decrease in the probability of feeling closer to these parties imminent to the enactment of a reform, regardless of whether the interview was before or after its implementation. Moreover, significant changes in the probability of feeling closer to either a populist or far-right party are observed, with a lower likelihood before the implementation of the reform, and a higher probability after its implementation. These findings highlight two important points. First, the outcomes for feeling closer to a party and claiming to vote for a party differ, as observed in the case for far-left parties. Therefore, it is relevant to investigate these two different outcomes since individuals may express to vote for one party, while feeling closer to another, which is something to consider if predicting electoral outcomes. Second, the results suggests that post-reform

implementation favours the right extreme and populist political spectrum, while far-left parties experience a weakening.

6.2. Party in Power Analysis

According to similar research, the impact of economic factors and austerity measures on the rise for populism, extremist, and eurosceptic parties, comes with an electoral cost for incumbent parties. To analyse this cost, the party in power analysis is conducted to investigate whether the implementation of a pension reform results in a lower probability of voting for or feeling closer to an incumbent party, compared to all other periods. Surprisingly, both outcome variables exhibit a higher probability before and after the enactment of pension reforms, compared to all other periods. These findings diverge from previous research but, observing the previous results, this analysis implies a shift away from far left, towards centre/right, following the implementation of pension reforms. It suggests that parties in power are positioned in the right/centrum spectrum, and it would be interesting to conduct further research focusing on incumbent parties' ideology.

Along with these findings, it is worth noting the significant change in beliefs observed specifically in far-right parties before and after the enactment of pension reforms, which aligns with Alesina et al. (2021) findings. The author explains that expenditure-based austerity measures, such as cutting pension benefits, tends to elicit more support for far-right parties compared to far-left parties, as observed in this analysis. This observation also supports the notion of a growing far-right sentiment in European countries (Funke et al., 2016; Rydgren, 2008; Knigge, 1998; Billiet, Meuleman, & Witte, 2014), with the increase in retirement age and cutting pension benefits serving as powerful predictors. An examination of the current parties in power across Europe, provide contextual support for these findings. It underlines the presence of right-wing parties in positions of power in most European countries observed in this analysis. For example, the ÖVP in Austria, the Open VLD in Belgium, and the VDD in the Netherlands are incumbent parties with a centre-right political position. In Italy, the party in power Fdi is a populist far-right party, while the Moderate Party in Sweden positioned in the centre-right, maintains an informal right-wing alliance with the right-wing populist party named Sweden Democrats.

Finally, it is important to notice that even after controlling for macroeconomic indicators, the proximity to pension reforms remains a robust predictor of populist, far-right, far-left, and eurosceptic sentiment. These findings suggest that the state of the economy and immigration in each country are important on voting behaviour and anti-establishment sentiment, but implementing pension reforms that increase retirement age or reduce pension benefits appears to also contribute to these sentiments.

6.3. Effect on Political Sentiments

To further explore the right-wing sentiment among European individuals exposed to increase in retirement age or reduction in pension benefits, an additional analysis is conducted using four outcome variables. Regarding the outcome that asks individuals to position themselves on the left-right scale, there is not a statistically significant result that shows an increase for far-right sentiment. However, it is observed that individuals position themselves closer to the left spectrum before a reform, and after the enactment of a reform the move leftwards becomes statistically insignificant. This result is consistent with the main analysis results, that indicates that individuals' positioning on the left-right scale tends to be even closer to the left spectrum before a reform, and after a reform individuals move right.

Previous research show that austerity measures might result in individuals' political dissatisfaction and distrust in political parties. Fetzer (2019) verified that individuals increasingly perceive that their vote does not have influence, that they "do not have a say in government policy" or that "public officials do not care". The findings of this analysis regarding trust in political parties indicate that, on average, individuals decrease their trust in political parties after the enactment of a reform. However, when comparing these results to the period 12 months before the enactment of a reform, the magnitude of the estimate is lower. This suggest that individuals still show some degree of distrust but reduced. Although, these results do not show a great significant distrust in political parties after implementing pension reforms, they are still consistent with the analysis on the party in power, which indicates that individuals feel closer to parties in power following the enactment of reforms, indicating a slight level of trust in political parties.

Regarding the outcome that evaluates the respondent's opinion on immigration effect in the country's economy, it is shown that following a reform, the change on the average result of uncertainty or indifference decreases. This finding suggests that individuals perceive immigration as bad for the economy. Within 12 months before a reform, a similar result is observed. Therefore, the far-right traditional sentiment of perceiving immigration as a challenging competition for scarce jobs and a threat to the economy is present on individuals interviewed close to pension reforms implementation.

Finally, the additional analysis explores individuals' attitudes towards the role of social benefits in creating an equal society. This variable explores if individuals agree or not with social welfare policies that provide social benefits. The findings show that within 12 months before and after the implementation of pension reforms, individuals show a lower probability, on average, of agreeing with the statement. However, following the enactment of a reform, the magnitude of the negative correlation decreases compared to the period before the implementation. Previous research has highlighted that the introduction of austerity welfare policies often leads to a rise in far-right sentiments. Therefore, these results align with existing literature, suggesting that agreeing with this statement and support for social benefits might reflect a rise in right-wing sentiment.

Overall, the question about trust in political parties and the party in power analysis do not show that incumbent governments may face an electoral cost due to a political backlash against pension reforms, but rather a move forward right-wing sentiments in Europe. Even though the question about positioning in the left/right scale do not reflect significantly the increase for support for right-wing parties, the results in table 8 show a move towards a traditional, more reactionary and conservative right-wing sentiments, such as perceiving immigration bad for the economy. Moreover, the main analysis indicates, significantly, that individuals feel closer to far-right parties after implementing pension reforms.

6.4. Limitations and Directions for Further Research

There are some limitations associated with the analysis. First, some countries are excluded from most waves after cleaning the data. Austria, for instance, is only included in waves seven and eight and Italy is only included in wave six. Belgium, Switzerland, Germany, and the Netherlands are included in all waves, but all other countries are

excluded at least from one wave. These gaps might introduce limited statistical power in some results. A further limitation is that although the analysis controls for country and time fixed effects and several macroeconomic variables, some other cofounders may exist causing a problem of endogeneity. If omitted variables have an impact on pension reforms implementation, as well as on voting behaviour or other outcome variables used, the analysis will be biased.

Moreover, as explained by Alesina et al. (2021), politicians when implementing austerity measures expect possible political costs and therefore tend to avoid implementing these policies, when close to elections. Additionally, the contrary might happen as well, and politicians may strategically suggest or implement reforms based on political sentiment to gain electoral votes. Therefore, this analysis might suffer from reverse causality since the change on populist, extremist or eurosceptic sentiments may influence the timing of enacting pension reforms.

This thesis does not conduct any sensitivity analysis. A placebo test in which the analysis is repeated but randomizing the timing of pension reform implementation would investigate whether the observed effects of proximity to pension reforms on individuals' voting behaviour and political beliefs are solely driven by the variation of the specific timing of reforms implemented or if an effect would be observed even with randomly times pension reforms. Moreover, an interesting analysis for further research would be to conduct the same analysis in which the periods before and after the implementation of reforms are broken down into smaller periods, evaluating if the impact on political beliefs and additional outcomes are different.

Finally, an interesting analysis for further research would be to examine the effect of implementing pension reforms on individual's political beliefs, with a particular focus on the "who". Following a similar approach to Alesina et al. (2021), the analysis could explore whether the pension reforms were initiated by left- vs. right- leaning governments. This would help confirm if the observed increase in right-leaning sentiment would still be evident or if different patterns emerge based on the political orientation of the incumbent government.

7. Conclusion

There rise of anti-established parties across Europe has inspired extensive research into their causes, some authors linked it to economic concerns, such as financial crisis, immigration, or austerity measures. This thesis contributes to this understanding by evaluating the effects of pensions reforms, specifically the increase in the retirement age or reduction in pension benefits, on different outcome variables within a 1-month period before and after their implementation.

The main analysis explores individuals' voting behaviour and parties that they claim to be feeling closer to, which may be populist, far-right, far-left and/or eurosceptic. A key finding indicates a higher probability of voting for or feeling closer to a radical right or populist party following the enactment of a pension reform. This suggests that pension reforms do have a significant influence on individuals' voting behaviour, providing insight into the rise of populism and far-right parties across Europe.

Additionally, the results indicate a decrease in feeling closer to far-left parties, while the analysis on the party in power reveals higher probability of voting for and feeling closer to incumbent parties before and after the reforms. These findings suggest a weaking of far-left sentiments and a rise in far-right parties, which may help explain the emergence of far-right parties in power in Europe. The additional analysis further supports the increase of right-wing sentiment resulting from increasing the retirement age or reducing pension benefits, emphasizing the role of these reforms in shaping attitudes towards social benefits and immigration.

Understanding the impact of these retirement policies on voting behaviour is relevant for policymakers involved in the design and implementation of such reforms. It becomes evident that raising the retirement age or cutting pension benefits can carry a political cost for left-wing incumbent governments, while benefiting right-wing parties. Moreover, given the current ageing population, increased immigration, and ongoing globalization in the European landscape, examining voting patterns in relation to specific pension reforms, is relevant for European institutions and policymakers to anticipate and explain future electoral outcomes that may shape the economic and political integration of the European Union.

References

Alesina, A., Ciminelli, G., Furceri, D., & Saponaro, G. (2021). *Austerity and Elections.* International Monetary Fund.

Algan, Y., Guriev, S., Papaioannou, E., & Passari, E. (2017). The European Trust Crisis and the Rise of Populism. In *Brookings Papers on Economic Activity* (pp. 309-400). Johns Hopkins University Press.

Anelli, M., Colantone, I., & Stanig, P. (2019). We Were The Robots: Automation and Voting Behavior in Western Europe. *BAFFI CAREFIN Centre Research Paper* , 2019-115.

Arter, D. (2013). *The Breakthrough of Another West European Populist Radical Right Party? The Case of the True Finns.* Cambridge University Press.

Billiet, J., Meuleman, B., & Witte, H. D. (2014). The relationship between ethnic threat and economic insecurity in times of economic crisis: Analysis of European Social Survey data. *Migration Studies, Volume 2, Issue 2*, 135–161.

Brug, W. v., & Harteveld, E. (2021). The conditional effects of the refugee crisis on immigration attitudes and nationalism. In *European Union Politics* (Vol. 22, pp. 227-247).

Carrino, L., Glaser, K., & Avendano, M. (2018). *Later Pension, Poorer Health? Evidence from the New State Pension Age in the UK.* Harvard Center for Population and Development Studies Working Paper Series.

Ciani, E., Delavande, A., Etheridge, B., & Francesconi, M. (2022). Policy Uncertainty and Information Flows: Evidence from pension reform expectations. *The Economic Journal.*

Colantone, I., & Stanig, P. (2019). The Surge of Economic Nationalism in Western Europe. *Journal of economic perspectives, 33(4),*, 128-51.

Comission, E. (2023). *The Impact of Demographic Change in a changing Environment .* Publications Office of the European Union.

De Grip, A., Lindeboom, M., & Montizaan, R. (2011). *Shattered dreams: The effects of changing the pension system late in the game.* USA: The Economic Journal.

Dehdari, S. H. (2022). Economic Distress and Support for Radical Right Parties—Evidence From Sweden. *Comparative Political Studies*, Vol. 55(2) 191–221.

Dustmann, C., Eichengreen, B., Otten, S., Sapir, A., Tabellini, G., & Zoega, G. (2017). *Europe's Trust Deficit: Causes and Remedies.* London: Centre for Economic Policy Research.

Ernesto Dal Bo, F. F., Folke, O., Persson, T., & Rickne, J. (2018). *Economic Losers and Political Winners:.* Unpublished manuscript, Department of Political Science, UC Berkele.

Falba, T. A., Gallo, W. T., & Sindelar, J. L. (2008). *Work Expectations, Realizations, and Depression in Older Workers.* National Bureau of Economic Research.

Fetzer, T. (2019). *Did Austerity Cause Brexit?* American Economic Association. Retrieved from https://www.jstor.org/stable/10.2307/26807870

Fornero, E., & Prete, A. L. (2018). Voting in the aftermath of a pension reform: the role of financial literacy. In E. Fornero, & A. L. Prete, *Journal of Pension Economics & Finance* (pp. 1-30). Cambridge University Press.

Foster, C., & Frieden, J. (2017). Crisis of trust: Socio-economic determinants of Europeans' confidence in government. *European Union Politics, 18(4)*, 511-535.

Foster, C., & Frieden, J. (2022). *Compensation, Austerity, and Populism: Social Spending and Voting in 17 Western European Countries.* Center for European Studies, Harvard University.

Frieden, J. (2016). *The crisis, the public, and the future of European integration. After the crisis: Reform, recovery, and growth in Europe.*

Gallego, A., Kurer, T., & Schoell, N. (2018). Not So Disruptive after All: How Workplace Digitalization Affects Political Preferences. *Barcelona GSE Working Paper Series Working Paper nº 1063,.*

Gidron, N., & Bonikowski, B. (2013). *Varieties of Populism: Literature Review and Research Agenda.* Working Paper Series, Weatherhead Center for International Affairs, Harvard University, No.13-0004.

Golder, M. (2003). Explaining Variation in the Success of Extreme Right Parties in Western Europe. In *Comparative Political Studies* (pp. 432-66).

Governments are living in a fiscal fantasyland. (2023). *The Economist.*

Guriev, S., & Papaioannou, E. (2022). The political economy of populism. *Journal of Economic Literature*, 753-832.

Knigge, P. (1998). The ecological correlates of right-wing extremism in Western Europe. *European Journal of Political Research volume 34*, 249–279.

Kohli, M., & Arza, C. (2011). Chapter 18 - The Political Economy of Pension Reform in Europe. In C. A. Martin Kohli, *Handbook of Aging and the Social Sciences (Seventh Edition)* (pp. 251-264). Academic Press.

L Guiso, H. H., & Sonno, T. (2017). *Demand and Supply of Populism .* London, UK: Centre for Economic Policy Research.

Manuel Funke; Moritz Schularick; Christoph Trebesch . (2016). *European Economic Review*, 227-260.

Margalit, Y. (2019). Economic Insecurity and the Causes of Populism, Reconsidered. *Journal of Economic Perspectives, 33(4)*, 152-170.

Martinez, S. R., & Soto, M. (2021). *Pension Reforms in Europe. How Far Have We Come and Gones?* International Monetary Fund.

Mian, A., Sufi, A., & Trebbi, F. (2014). Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crises. *AMERICAN ECONOMIC JOURNAL: MACROECONOMICS VOL. 6, NO. 2*, 1-28.

Milner, H. V. (2021). Voting for populism in Europe: Globalization, technological change, and the extreme right. *Comparative Political Studies, 54(13)*, 2286-2320.

Mudde, C., & Kaltwasser, C. R. (2017). Populism: A very short introduction. Oxford University Press.

Norris, P. (2005). *Radical Right: Voters and Parties in the Electoral Market.* Cambridge University Press.

OECD. (2015). *Pensions at a Glance 2015: OECD and G20 Indicators .* Paris: OECD Publishing.

OECD. (2021). *Pensions at a Glance 2021: OECD and G20 Indicators.* Paris: OECD Publishing.

Rooduijn, a., Kessel, S. v., Froio, C., Pirro, A., Lange, S. d., & Taggart, P. (2019). *The PopuList: An Overview of Populist, Far Right, Far Left and Eurosceptic Parties in Europe.* Retrieved from www.popu-list.org

Rydgren, J. (2008). Immigration sceptics, xenophobes or racists? Radical right-wing voting in six West European countries. *European Journal of Political Research*, 737-765.

Rydgren, J., & Ruth, P. (2011). Contextual Explanations of Radical Right-Wing Support in Sweden: Socioeconomic Marginalization, Group Threat, and the Halo Effect. In *Ethnic and Racial Studies* (pp. 711-28).

Simpson, J., Albani, V., Bell, Z., Bambra, C., & Brown, H. (2021). Effects of social security policy reforms on mental health and inequalities: A systematic review of observational studies in high-income countries.

Stockemer, D. (2017). Stockemer, D. (2017). The economic crisis (2009–2013) and electoral support for the radical right in Western Europe—Some new and unexpected findings. In *Social Science Quarterly* (pp. 1536-1553).

Taggart, P. (2003). *A Touchstone of Dissent: Euroscepticism in Contemporary Western European Party Systems.* European Journal of Political Research.

The Economist. (2023, March 11). *France is in a stand-off against Emmanuel Macron's pension reform*. Retrieved from https://www.economist.com/europe/2023/03/09/france-is-in-a-stand-off-against-emmanuel-macrons-pension-reform