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Economically unequal but democratically satisfied?

Income inequality, democratic satisfaction, and the moderating role of education

A Multi-Level Analysis

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III. ABSTRACT

This thesis aims at explaining the way in which income inequality influences assessments of democratic satisfaction. It does so by incorporating insights from recent works on research about satisfaction with democracy. The theories state that despite the rise of income inequality, and the increased discussion on democratic malaise, the levels of democratic satisfaction tend to stay stable. A closer look shows that this stability masks underlying growing divergences in the trends by levels of education, with the higher educated becoming more satisfied, and the satisfaction of the lower educated stagnating. I study this relationship by using a multi-level analysis with data from the European Social Survey and incorporating indicators that are usually not employed in these studies. I find out that, despite income inequality seemingly not influencing democratic satisfaction in general terms, the higher educated citizens show a negative response to higher levels of income inequality, decreasing their democratic satisfaction. These results are unable to explain the satisfaction gap but point out that democratic regimes might be at risk of losing what has become their main source of support.

Keywords: Democratic satisfaction, Income inequality, Education, European Union, Postmaterialism.

1. INTRODUCTION

The study of democratic satisfaction has traditionally been one of the main topics of research for the scholars interested in the empirical measurement of democratic legitimacy. They have reached the conclusion that despite a certain sense of malaise, the levels of democratic satisfaction have remained stable during the past few years, varying alongside economic fluctiations (Norris, 1999:3).

Another trend that has gathered significant attention from the academic community during recent years is that of the rising levels of income inequality that our societies are facing. There has been a significant amount of research aimed at examining the links between this phenomenon and democratic satisfaction (Anderson & Singer, 2008; Andersen, 2012; Goubin, 2018, or Krieckhaus et al, 2014), but to this day, very limited research has inspected the interaction between educational attainment and income inequality levels when giving assessments about democratic satisfaction, and none has checked the relationship in longitudinal terms.

The academic literature that has centred itself on how income inequality relates to democratic satisfaction seemingly concludes that there is a significant negative relationship between levels of income inequality and democratic satisfaction. It also suggests the uniform positive impact of education on democratic satisfaction.

But looking deeper into the existing research, one can find that the apparent stability of democratic satisfaction seems to be masking the fact that the levels of satisfaction are not evenly distributed between citizens with different educational attainment. The satisfaction for the higher educated citizens has grown, whilst that of the lower educated has remained the same or even slightly declined.

Some works, such as Dahlberg & Holmberg (2014) suggest that by incorporating measures of government effectiveness and bureaucratic competence, the effect of Gini becomes irrelevant, although this was not checked with a longitudinal perspective.

My research question is to gauge *how variations in Gini index levels influence assessments of democratic satisfaction, and how do these diverge between different levels of educational attainment*.

The main puzzle this research tackles is that there is no explanation as to why, although the levels of income inequality have been steadily rising, the levels of democratic satisfaction have remained relatively stable. Some research points out that this is becoming a satisfaction gap across educational groups (Aarts et al, 2017:52), which also applies in terms of support towards the European Union (Kuhn et al, 2016:38). For instance, the lower educated, whose levels have stagnated, have been overwhelmingly represented in the recent political populist movements such as Donald Trump's presidential election, the Brexit, and other similar movements in the West (Sandel, 2021:26). Why are the higher educated seemingly still loyal to the democratic norms?

I would argue that the recent developments in our society have put into question the supposedly meritocratic character of our societies. Inequalities have been on the rise during the recent decades, putting into a tension the highly educated individuals, which are subject to a double pressure. On the one hand, it is possible that they take an egocentric perspective, rationalizing that, the democratic system that has rewarded them with economic, and social prestige, might be the most just and desirable (Sandel, 2021:4). This would suggest that the education gap is due to a positive view of income inequality by the educational elites. On the other, they could take instead a sociotropic perspective, judging their society by standards of social justice (Inglehart, 1981:898), blaming the performance of our democracies for generating unequal societies, and therefore be less satisfied with democracy. This would, in turn, suggest that the reason behind this gap must be elsewhere.

This would explain why I want to focus on the moderating role that education has on this relationship, whilst controlling for other factors which have gathered more attention in similar studies, such as the rent of individuals or their political orientation. Choosing data from Europe is interesting, since it has been proven that, despite having suffered a rise of income inequality[1], Europe is the region in the world least affected by it, being in 2022 the only one in which the income share enjoyed by the middle 40% of the distribution is higher than that of the top 10% (WIR, 2022). This makes this research into a least likely case to find a relationship between income inequality and satisfaction with democracy compared with any other world region, assuming that Europeans have other issues which impact on them more strongly.

In order to answer my research question, I use data gathered by the European Social Survey (ESS) since it provides me the widest temporal range for analysis (2002-2018). I complement the data from the ESS with macro-level indicators from the World Bank, and the SWIID inequality database to construct a multi-level data structure which allows me to perform a multi-level data analysis with a longitudinal orientation.

This thesis expands the field from what previous literature tried by researching the relationship not only in a multi-country analysis, but also on a longitudinal level, during a time period of sixteen years, because the first set of studies used data from just one year or did a longitudinal approach finishing almost ten years ago, while not including key variables stated by other authors such as Dahlberg and Holmberg (2014).

From a scientific perspective, my results seem to suggest that although it cannot be confirmed that there is a direct relationship between income inequality and democratic satisfaction, whenever income inequality levels are high, the satisfaction levels of the higher educated drop. This seems to suggest that they take a social orientation when judging their democratic regimes instead of orienting themselves solely on personal benefit. Maybe if income inequality keeps rising, the democratic satisfaction gap could disappear.

The societal impact these findings have suggest that uncertainty is ahead. It could be possible that an increase of income inequality during the next few decades might alienate the higher educated citizens, which are nowadays the main supporters of the democratic establishment. This would confront our democracies with the need to address the economic conditions that produce income inequality. If not, they might be at a greater risk than it might seem.

This thesis will be divided into six different chapters. The first of which is this introduction. Then, the second is a theoretical framework in which I explore the previous literature in order to be able to construct my hypotheses. Followed by the third, which is a methodology chapter aimed at discussing the nature and origins of the data used in my models, and also the

[1] In fact, data shows that the big increase of income inequality in Europe took place between the years 1985 and 2000, during which the income share belonging to the top rent decile grew from the 28 to the 33%, and the income share of the bottom half of the income distribution ladder fell from the 23 to the 20% (Blanchet et al, 2019:37). Regretfully, there is no data from that era, so in this paper I use data from the period right after.

statistical peculiarities of the models I use. After those, the fourth is a results chapter in which I explore the developments of democratic satisfaction and income inequality during the years for which my study spans, and then I present the findings from my statistical analysis and discuss my hypotheses. Subsequently, in the fifth chapter I discuss the results, link them with the theory and studies done previously, and conclude by suggesting future lines of research. Finally, the thesis concludes with the bibliography, followed by the annexes.

2. THEORETICAL FRAMEWORK

The theoretical chapter of the thesis is divided into three different sections. In the first, I will proceed to explain the concept of democratic legitimacy, and how different authors have conceptualized it. Then I will focus on the specific dimension of the concept that I want to capture (satisfaction with the way in which democracy works), and I finish the section with a review over the general research done about it. The following section will explore the theoretical insights on the relationship between economic growth, inequality, and satisfaction with democracy and then review the most relevant literature which examined the relationship empirically. Finally, in the last section I will briefly establish the hypotheses about what relationship I expect to find between the levels of economic inequality and satisfaction with democracy.

2. 1. DEMOCRATIC LEGITIMACY AND SATISFACTION WITH DEMOCRACY

2.1.1 The Eastonian dichotomy

Democratic legitimacy is key for the stability and maintenance of a democratic system (Easton, 1975:435). This issue is relevant both in terms of helping to stabilize modern democracies (Thomassen & Van Ham, 2017:3), but also to fully institutionalize a new democratic regime (Kriesi, 2013:612; Linde & Ekman, 2003:392; Mishler & Rose, 2001:56). Intuitively, it could be assumed that a legitimate regime will produce happier, more involved citizens, and that a regime which lacks legitimacy will produce unhappy citizens critical towards it. But the case is that although in some situations discontent in the population can be expected to generate a change of regime, there have been cases in which a change of the party in government was enough to solve the issue. For example, why did the economic crises of the 1920 decade contribute to the overthrow of German and Italian democracies whilst the same is not true for Southern European countries after the 2008 crisis? How can that be explained at a theoretical level?

Aiming at explaining why those two different outcomes might be derived from similar levels of governmental underperformance, David Easton operationalised the distinction between diffuse and specific political support. Specific support is understood as outcome-oriented and derived from the unmediated utility that the voters get from governmental performance and can be expected to fluctuate greatly over time (Easton, 1975:437) whilst diffuse support, by contrast, is a higher dimension derived from the affinity a certain person has with the ideals behind the institution, what it is supposed to represent, rather by than the results it provides, which makes it more stable and durable in the long term (Easton, 1975:444).

Even if those two dimensions are clearly different, in the long run a lack of specific support derived from a bad governmental performance might translate itself into lower levels of diffuse support (Dahl, 2000:39). This is explained because citizens might not blame individual rulers but the ruling class (Easton, 1975:449), they could even question the regime’s institutions or the principles they are based upon. This possibility showcases the relevance of studying democratic legitimacy and the mechanisms behind its accumulation and diminishment. For this reason, we need ways to carefully assess it (Linde & Ekman, 2003:392). If we were to use the wrong indicators, this could have damaging consequences in the future.

We must agree that neither compliance with the societal norms nor a reluctant acceptance of the impossibility of change by the general population consist of good indicators of the levels of diffuse support (Easton, 1975:453). A total lack of diffuse support would leave to governments only the possibility of enacting laws with universal support or to rely on universal consensus on every issue, causing it to be redundant, or to enact constant and overt coercion, and not even the most tyrannical oligarchy could maintain itself indefinitely by those means (Andeweg & Aarts, 2017:193). Instead, legitimacy is meant to represent a moral conviction in the intrinsic value of the form of government (Easton, 1975:451; Kriesi, 2013:614), which could be strong enough to even make citizens comply by their own accord even if the regime produces negative consequences (Easton, 1975:453). It is clear that democratic governments are therefore meant to rest upon the consent of the citizenry.

In recent years, scholarship has developed this duality between specific and diffuse support to a more complex categorization. Pippa Norris has argued that political support can be shown to three different objects, from the most to the least abstract: The political community, the regime, and the authorities. In terms of the political regime, it is further divided into support for the principles of the regime, its performance, and the institutions out of which it is composed (Norris, 1999:10). All these principles are linked to certain survey questions assumed to be capturing them, with the dimension pertaining to the regime performance being “Satisfaction with the democratic process” (Dalton, 1999:58).

Overall, satisfaction with democracy seems to be located in the intersection between diffuse and specific support, which I consider to be a nice way to understand democratic satisfaction. Because on the one hand, more specific measures of political legitimacy, such as the assessments of individual positions, the parliament, or other institutions of democracy might be prone to partisan judgment. On the other hand, using indicators of a more diffuse type might be undesirable because of possible bias in responses, and also because individuals might differ too much in their definitions of democracy. The fact that satisfaction with democracy still retains an empirical link to reality, to the benefits that the respondent identifies with the regime, gives me an assurance that it gives significant information.

But the item has not been exempted from strong criticisms. Since I think that research must be strongly grounded, I will explain what those criticisms are and address how I solve them during the data chapter of this thesis.

I can now safely say that for this thesis I aim at studying democratic satisfaction, which I define as support, and acceptance of, the current functioning of the regime, neither specific enough to be directed at individual actors nor diffuse enough to be judging democracy as an ideal. This is an important concept, because as we have seen, a continued deficit of it can spill over into a decline in terms of support for the democratic principles of a regime, or other diffuse principles of democratic legitimacy. It is now time to switch focus to what prior researchers have learned studying this concept.

2.1.2. General research on satisfaction with democracy

Although many intellectuals in the past and present have warned about a decline in terms of democratic support in modern democracies, research has been unable to confirm this supposition empirically (Thomassen & Van Ham, 2017:13; Norris, 1999:3).

In the past, economic problems and social developments have always been prophesized to be about to induce a legitimacy crisis in the established democracies, but the polities have been able to absorb the discontent in most cases (Kriesi, 2013:610). In modern times, other theories argue that either globalisation or the epistemic modernisation are likely to induce new declines in democratic legitimacy (Aarts et al, 2017:37). Overall, the consensus of these scholars is that there is seemingly no reason as to be overly concerned about this supposed decline of legitimacy because the average levels of democratic satisfaction have been substantially stable during recent decades (Norris, 1999:3).

Empirical results show instead that it is only certain institutions such as the government or parliament that have lost legitimacy whilst the trend in terms of satisfaction with democracy seems to be of stability around high values[2] with certain fluctuations (Dahl, 2000:35; Van Ham & Thomassen, 2017:31; Kriesi, 2013:618; Dalton, 1999:74-75). The puzzle in need of resolution is not about explaining a supposed lack of satisfaction with democracy, but more precisely which are the exact factors that favour it. In fact, it has been pointed out in research that the evolution of the levels of satisfaction with the way in which democracy works is not uniform neither between nor within countries in Western Europe (Van Ham & Thomassen, 2017:32; Armingeon & Guthmann, 2014:432). As we will see later, certain social groups and countries seem to present lower levels, and others higher ones. There is a lot of variation in need to be explained.

One of the most popular explanations is that levels of democratic satisfaction seem to fluctuate along macro-economic tendencies (Kriesi, 2013:622). These, and more precisely perceptions regarding economic inequality, are my independent variable in this study, and so I will use the next section to see how the literature views their effect in relation to the degree to which the citizens are satisfied with the ways in which their democracies are currently performing.

2.2. CONCEPTUAL DISCUSSION: INCOME INEQUALITY

2.2.1. The Lipset hypothesis: How economy relates to democracy

Generally, it has been argued that one of the most relevant factors correlating with satisfaction with democracy is the economic performance of a given country (McAllister, 1999:201; Kriesi, 2013). Democratic theorists such as Robert A. Dahl contend that economic development is a force that diminishes extreme poverty and the societal conflicts derived from the national rent distribution, whilst also favouring the development of education and the welfare state (Dahl, 2016:192). This in turn, lowers the stake of the economic struggle whilst benefiting those at the bottom. Seemingly, economic development produces citizens satisfied with their democratic governments.

In contrast, an economic crisis of devastating proportions could be expected to generate conflictive political developments in terms of the surge of authoritarian tendencies (Lipset, 1959:70). After all, a collective negative income shock generates a window of opportunity in which the risks of engaging in a revolution diminish substantially (Kotschy & Sunde, 2021:296). Therefore, it has traditionally been one of the most relevant puzzles in political science research to understand how the state of the economy relates to support for democracy. Thankfully, research has advanced enough to produce some interesting answers to it.

Modernisation theory has since long argued that democracy might generate high expectations for the public that, if not fulfilled, might reduce democratic legitimacy in the long term (Lipset, 1959:87; Easton, 1975:445; McAllister, 1999:197).

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[2] I cannot disregard the possibility that this divergence could be explained due to biases caused by social desirability (Bertrand & Mullainathan, 2001:68). After all, democratic citizens are expected to hold democracy dear and might have issue attacking it openly.

One of the biggest ideals of the democratic masses has been not only to lift their own standard of living, but also to reduce inequalities as much as possible (Krieckhaus et al, 2014:140). This is also true from the perspective that traditionally extensions of suffrage which included popular classes made it more likely for *laissez-faire* policies to disappear in favour of regulations protecting the workers (Dahl, 2016:200). Class conflict and the possibility of radical political change was a likely outcome back in those times.

The high levels of diffuse legitimacy accumulated make it unlikely that we see a change of regime. This is because citizens focus on specific aspects of legitimacy, blaming individual actors for economic downturns instead of the system itself (McAllister, 1999:203). Although the average levels of democratic satisfaction have remained fairly stable, we need to study if newer developments can challenge them. It is undeniable than in current societies inequality is on the rise (Piketty, 2014:237), and therefore, it is fair to expect a diminishment in assessments of satisfaction with the way in which democracy works, at least for those who are more affected by it. Maybe the fact that in some research GDP measurements seem to correlate negatively with satisfaction with democracy (McAllister, 1999:197) can be explained by the fact that seemingly much of the societal malaise western countries are currently experiencing cannot be solved by GDP growth by itself but by economic redistribution (Wilkinson & Pickett, 2009:509).

We can assume that the economic assessments made by citizens are quite precise, since there has been research comparing levels of satisfaction with democracy before and after the 2008 crisis, showing a seemingly uniform decline amongst all the citizens (Kriesi, 2013:630; Armingeon & Guthmann, 2014:431). This seems to point out that indeed citizens can moderate their satisfaction with the way in which democracy works in their countries based upon fairly accurate perceptions of the economic context. Especially if the survey design is appropriate (Palmer & Duch, 2000:76). As it will be discussed in the data chapter, the ESS provides an optimal research design.

Taking all this into consideration, it is now time to move on to concretely the ways in which economic inequalities are rising once again in modern societies and what are their negative effects for societies.

2.2.2. Rising inequality in current societies and its consequences

In this paper, I define income inequality as the degree to which earnings in a society are unevenly distributed. This is especially relevant from the perspective of the top income earners who, as research has proven, have gotten a higher share of the economic growth during the past decades.

Before continuing, I must address why I chose income inequality instead of other measures such as wealth inequality. I do so because on the one hand, there are difficulties in assessing the amount of wealth individuals have, especially on the top ladder of the economy. This is reflected in the many offshore tax fraud scandals of the past few decades. On the other hand, already accumulated wealth is a static phenomenon, whilst income inequality points out at the rate in which wealth inequalities grow further apart. An analogy can be made with physics, understanding wealth inequality as speed, and income inequality as the acceleration of speed. This is why, I consider income inequality to be more relevant.

The fact that income inequality has been on the rise during the past few years finds strong support in current research (Eriksson & Simpson, 2012:741; Piketty, 2014:15). As it has been proven in previous research, the general effects of economic inequality tend to promote the rise of social conflict in any type of society, in fact, the literature suggests that if the share of wealth in the hands of the poor is too low, democracy is virtually unable to keep functioning (Jung, & Sunde, 2014). Even if the possibility of a democratic breakdown is far away, it is clear that the interest of the elites should be to guarantee a system capable of including most of the citizens.

In many different fields of study, there has been research proving the negative effects that rising levels of economic inequality can have. For example, societies in which the wealth is not evenly distributed are more likely to suffer from higher levels of violence, lower health for the average citizen, and lower educational performance (Wilkinson & Pickett, 2009:494). Social psychology research also shows that in the years with most inequality, the average societal trust (Wilkinson & Pickett, 2009:496) and the perceived fairness in social interactions diminish, which in turn had its toll on the levels of happiness (Oishi et al, 2011:1097). These results were later shown to be stronger than alternative explanations such at the reduction of levels of income suffered by the most impoverished citizens (Oishi et al, 2011:1098) or controlling for the average income of the societies (Wilkinson & Pickett, 2009:498). The most interesting fact about this is that it seems that some of the problems generated by income inequality affect even the highest percentiles of the income distribution (Wilkinson & Pickett, 2009:505). It might therefore not only be in the interest of the most disadvantaged to tackle this issue.

Turning to the political consequences of economic inequality, research points out the seemingly obvious statement that for a lack of a certain output to be damaging for democratic support, this factor must be salient for the people themselves (Kriesi, 2013:615). Some theorists argue that fighting inequality is one of the biggest objectives of the lower classes in a democracy (Krieckhaus et al, 2014:140). Research seems to indicate that citizens certainly do care about de degrees of inequality, in fact, it is true that not only citizens want more equal societies than the ones they perceive themselves living in, but that the inequality in society is higher than what they perceive it to be (Eriksson & Simpson, 2012:741). If citizens want more equality in their societies, it might be logical to infer that high levels of inequality will influence their assessments of democratic satisfaction. This will be examined in the following subsection.

The distribution of income in an egalitarian society is expected to follow roughly the shape of a diamond, with the biggest proportion being that of a moderate middle class stabilizing politics (Dahl, 2016:193; Lipset, 1959:75). In contrast, societies in which the rent is unequally distributed tend to resemble more an elongated pyramid, with a few wealthy individuals and huge masses of poor citizens (Lipset, 1959:83). This type of society alienates profusely the popular classes by diminishing their political resources in relation to the dominant elite (Dahl, 2016:203). Recent research has shown that effectively, in modern day democracies it can be argued that the richest citizens are over-represented both in descriptive and substantial terms (Gilens & Page, 2014; Carnes & Lupu, 2015; Schakel & Hakhverdian, 2018). This comes to show the negative effects that a skewed distribution of wealth can have for the democracy of any given society.

With conceptual clarifications out of sight, now I will proceed to succinctly review the empirical research I have found in terms of satisfaction with democracy, economic inequality, and similar phenomena.

2.2.3. Relationship between inequality and political support

There has traditionally been a plurality of schools aimed at explaining why citizens vote in the way they do, which can give an idea about what do they value the most in democratic systems. Some authors argue that the position of the individual in a society across the relevant cleavages of conflict is what determines the vote (Anduiza & Bosch, 2017:146). Others argue that this relationship works instead through the political values (ideological position, national identity, postmaterialism…) of an individual, which need not to be homogenous within different social classes (Anduiza & Bosch, 2017:188). For the lens of analysis used in this thesis, I consider that the school which provides the most fitting theory for the egocentric approach is that of the rational voting, which states that individuals vote strategically in terms of the proximity that the parties have with them (Anduiza & Bosch, 2017:232). In this school of thought, a big degree of attention is brought into economic voting, understood as citizens deriving their vote from economic evaluations, for which they blame (or reward) their government (Anduiza & Bosch, 2017:250). In contrast, I consider that the political values approach fits better the sociotropic explanation.

Traditionally, the economic voting theory has distinguished between two types of economic evaluations, the first of which are the egocentric ones, which are characterised by deriving political support from the personal situation of the individual in economic terms. The second kind of evaluations are sociotropic, which means that the citizens are expected to increase or diminish their political support based upon the macro-economic situation of the nation (Anduiza & Bosch, 2017:252). In terms of which is more important to explain satisfaction with the way in which democracy works, there is no consensus in the literature, with some authors arguing that egocentric views are more relevant (Anduiza & Bosch, 2017.251; Magalhaes, 2017) whilst others defend the relevance of sociotropic evaluations (Kriesi, 2013; McAllister, 1999).

Regarding economic inequality, I believe that it is difficult to categorize it as either one, or even as both of them, because in the end even if the position one has on the economic ladder is what can be judged, it logically follows that this position also depends on the country's degree of inequality, combining societal and individual assessments of the national economy. This is why in this thesis I aim at exploring two different mechanisms affecting the relationship between democratic satisfaction and inequality, one based on an egocentric perspective and another following a sociotropic one. I will return to this dichotomy in the following section.

In terms of actual studies, there have been plenty studies focusing either on the levels of income inequality (Anderson & Singer, 2008; Andersen, 2012; Krieckhaus et al, 2014) showing clear and significant correlations between these variables and satisfaction with democracy in the European context. Meaning that, under worse economic performance and higher degrees of income inequality, satisfaction with democracy will tend to be lower.

It has been empirically confirmed that inequality tends to be accompanied by a lack of support for the polity's public institutions and in some cases the full extent of democracy (Goubin, 2018:268). The fact that even in modern democracies it has been shown that losers in elections tend to develop a set of more negative attitudes towards government (Kriesi, 2013:625; Linde & Ekman, 2003:402) indicates that a high degree of polarisation in terms of wealth distribution, which is to be expected after a long period of unaddressed income inequality, might possibly increase the relevance of achieving or maintaining office for certain political groups (Lipset, 1959:84). In other words, the stakes of the democratic game themselves might be higher whenever economic resources are not evenly distributed, fostering social conflict. This seems to be corroborated with research that points out that, at least in the Korean context, political losers remain more satisfied with democracy in conditions of lower income inequality (Han & Chang, 2016).

Turning into what remains debated in terms of the impact of economic performance in satisfaction with the ways in which democracy works, the consensus is that, although some of the studies find that the macro-economic conditions are positively and strongly correlated with assessments of democratic satisfaction (Armingeon & Guthmann, 2014:438), when including measures of quality of governance, the effect of the economy loses statistical significance (Magalhaes, 2017:165).

Regarding the investigations focused on income inequality, we find an almost universal consensus in terms of the negative effect an unequal distribution of the rent has upon democratic satisfaction, even when controlling for factors such as the ideology of the individuals (Anderson & Singer, 2008:28), personal levels of income (Andersen, 2012), or the social class position of the individuals (Krieckhaus et al, 2014:147).

But, as explained previously, these studies do not generally control for measures of government effectiveness, or they are not interested in the interaction effect education might have upon high levels of income inequality. That is why they will be incorporated into this study.

With all this said, now it is finally time to move on to the final section of the theoretical framework, to explore why I consider the additions I wish to make relevant, and to make explicit the expectations I have for my study of satisfaction with democracy and economic inequality.

2.3. MY HYPOTHESES AND EXPECTATIONS

This final section of the theoretical framework aims at explaining and grounding my hypotheses and the mechanisms behind them on a theoretical basis. Later on, in the methods chapter, I will explain which variables I will use to test them and the models by which I will do so.

Before explaining the hypotheses, it is key to take into account that whenever faced with inequality, or with any policy or output seen as a failure by the government, democratic theorists have debated over two possible orientations citizens might take regarding the issue at hand. They could be either expected to increase their participation and support for the regime to address the problem or be alienated and grow cynical towards democracy (Dahl, 2000:39). The first interpretation's validity could be reinforced by the notion that historically, negative income shocks in highly unequal societies tend to produce a democratic quality increase because of the responsiveness of democratic regimes, which seem to address the democratic malfunctioning that caused the crisis (Kotschy & Uwe, 2021:292). But, as we have seen in terms of economic inequality, the second outcome could also be expected, especially by the underprivileged, since they would probably feel as though the institutions are not responsive towards their grievances (Krieckhaus et al, 2014; Goubin, 2018:284), demobilising them emotionally.

The line of thought guiding my first hypothesis is summarised in the figure 1, and it states that I expect a straightforward relationship, the more income inequality, less democratic satisfaction. Democracy is supposedly a regime aimed at, amongst other objectives, reducing class-based and social inequalities in our societies (Krieckhaus et al, 2014:140). Therefore, it could easily be expected that in societies with higher levels of income inequality this promise is not being held, deriving into mass dissatisfaction, and blaming of the system itself, especially if the problem persists over time no matter which political faction is in charge. As seen in previous sections, according to theory, if different sets of elites cannot address a problem, then the citizens are likely to blame the more abstract and structural systemic elements rather than simply the individuals in office (Dahl, 2000:39; Easton, 1975:449).

I think that checking this basic assumption is important, because the consensus on the literature is not universal. As we have previously seen, the average levels of democratic satisfaction tend to remain stable, but their variation follows economic trends (Norris, 1999:3). In terms of economic trends, it seems like the study of the influences of income inequality over democratic satisfaction would benefit from new research. Even though most of the literature focused on income inequality (Anderson & Singer, 2008; Andersen, 2012; Krieckhaus et al, 2014) seems to indicate that the general relationship between income inequality and democratic satisfaction, as I expect, is negative, there is at least one paper, using data from 2008, that finds a positive correlation of income inequality with political trust, once it is controlled by levels of corruption (Van der Meer & Hakhverdian, 2016).

Once all this has been exposed, the first hypothesis examined in the empirical chapter of this thesis can be confidently stated, and that is:

H1: At higher levels of income inequality, satisfaction with democracy will be lower

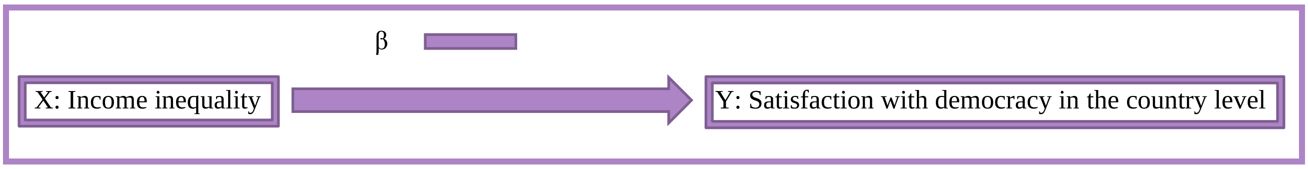

Figure 1: H1. Inequality diminishes satisfaction with democracy. Source: Own elaboration.

Moving into my second hypothesis, as seen in other sections, the literature reviewing income inequality has tried to study the effects of this phenomenon on democratic satisfaction, and how does the inclusion of other variables such as the ideology of the individuals (Anderson & Singer, 2008:28), personal levels of income (Andersen, 2012), the social class position of the individuals (Krieckhaus et al, 2014:147), or measures of corruption or quality of governance (Dahlberg & Holmberg, 2014; Van der Meer & Hakhverdian, 2016; Magalhaes, 2017) moderate the effects of income inequality.

In any case, these studies share the perspective that we cannot assume that all of the social groups will react to the same phenomena in the same way. As previously discussed, research has shown that, for example, citizens with different ideological orientations react in different ways to inequality when giving assessments of democratic satisfaction (Anderson & Singer, 2008). An understudied aspect of the research trying to link perceptions of income inequality to satisfaction with democracy is how do the responses of citizens with different levels of education vary.

The literature has mostly been focused on education as a control variable and not as a central independent variable to explain democratic satisfaction. This might be due to the fact that in most of the research, education seems to be universally positively correlated with levels of democratic satisfaction in the studies mentioned. So, why am I interested in gauging the effects that educational attainment has on judging a democracy with high levels of income inequality, instead of using other variables? There are certain gaps in the literature which suggest me this task is needed.

Recent research points out that the political effects that education has in current societies might be growing in relevance, since it tends to incorporate liberal and progressive values to citizens, changing their worldview and therefore the ways in which they judge their societies (Schakel & Hakhverdian, 2018:462; Sandel, 2021:101).

To understand the mechanisms of the relationship, it is relevant to note the rise of postmaterialism in recent decades. The author who coined the concept, Ronald Inglehart defined postmaterialism as a generational change in values and political priorities, from survival and safety towards more abstract values such as quality of life, a feeling of belonging and the promotion of self-expression (Inglehart, 1981:880). They pursue different objectives in life than previous generations did, whilst also being more favourable to multiculturalism and progressive politics, so it is easy to guess that they will base their democratic satisfaction on different criteria than the manual workers, which have a more traditional value scale.

The fact that the proportion of educated citizens with postmaterialistic views has increased during the past decades is undeniable. It seems that a prolonged economic development has contributed to their rise, and that they might judge governmental performance differently than the rest of the citizens (Aarts et al, 2017:46; Hakhverdian & Mayne, 2012; Hakhverdian et al, 2013). Traditionally, the view of electoral behaviour scholars on education was to see it as an enhancer of cognitive capabilities, and therefore as merely a way to interpret information better (Anduiza & Bosch, 2017:44). This interpretation is in line with the material perspective on education as an indicator for class position in a society in which knowledge has seemingly become the biggest productive force (Lyotard, 1991:6).

Nowadays, in line of these developments, some authors have reached the conclusion that education is no longer a mere proxy for enhanced cognitive capabilities, but that it instils a very concrete worldview upon citizens (Schakel & Hakhverdian, 2018:462). Understood by this perspective, education can be understood as linked to a higher probability of developing a postmaterialistic outlook towards life.

But, in case that there does exist a significative difference in their reaction towards satisfaction with the way in which democracy works in the context of highly unequal societies, can it be assumed that it will be an increase or a diminishment of the levels of satisfaction?

This has to be linked to an empirical observation, that although general levels of satisfaction with democracy have remained relatively stable, there is a clear educational gap, with democratic satisfaction growing for the highly educated but remaining the same, or even dropping, for the lesser educated (Aarts et al, 2017:52). This gap is not clearly explained straightforwardly by theories of either economic globalisation, which would expect a stronger decline of satisfaction amongst the lower educated (Aarts et al, 2017:56) or epistemic modernisation, which would expect a direct negative relationship between satisfaction and education (Aarts et al, 2017:48-9) so newer interpretations need to be found.

Before stating my expectations, I want to briefly review two lines of research about the effects education has on gauging democratic satisfaction: The relationship between education and support for the European Union, and the literature which examines how citizens with different educational attainment react towards corruption in their democracies.

The literature on support for the European Union (Hakhverdian et al, 2013; Kuhn et al, 2016; Kuhn et al, 2017) has explicitly looked at the relationship between political support (in this context, of the European Union), income inequality, and its relationship with the levels of education. Despite being focused on an entity above national governments, I feel the results of these studies can shed light on what to expect in my thesis.

The general result obtained seems to be that since we have data, euroscepticism has not increased in the same way for all social groups during the past decades. Empirical results seem to point out that not only high levels of income inequality have negative consequences for support of the European Union, but that these are more prevalent amongst the least educated citizens (Kuhn et al, 2016:38) and that this relationship has deepened over time (Hakhverdian et al, 2013:532). The theoretical assumption made to explain this finding is that since the European Union is seen as an elitist project without any clear social dimension, then the poor, who are more vulnerable to the risk of modern societies, will be more opposed to it (Kuhn et al, 2016:28). Obviously, the risks of falling into poverty increase in societies with a higher level of income inequality.

It would be interesting to check if a similar relationship can be seen with regards to the relationship between democratic satisfaction with national democracies and levels of education. Prior research has shown tested the difference in judgments of democratic satisfaction in for different ideological groups, where for example those made by individuals on the ideological left seem to be more affected by increasing levels of income inequality than right-wingers (Anderson & Singer, 2008). This might be a similar to the effect expected for education, since the higher educated tend to foster the liberal progressive values of the new left wingers, but still deserves to be cleared up. Especially since there has been research conducted that shows the opposite, that it is right-wing citizens who diminish their democratic satisfaction when confronted to higher levels of income inequality (Van der Meer & Hakhverdian, 2016).

I think that the question about how we should expect higher educated citizens to react to more inequality deserves to be cleared out, because they might judge it based on different mechanisms, which follow two distinct lines of reasoning, as I will expose later.

The studies of satisfaction with the European Union already give an idea about how the relationship might unfold, but it is also relevant to review another line of research. Some scholars have studied the link between linking education and perception of corruption in terms of political trust (Hakhverdian & Mayne, 2012; Van der Meer & Hakhverdian, 2016),

The hypothesis about a divide between education levels seems to also be reinforced, by this literature, which shows that the effect of education in political trust is positive in the case of low levels of corruption, but it turns negative in societies with high levels of corruption (Hakhverdian & Mayne, 2012). A relationship that seems not to be present for citizens with low levels of education.

After having reviewed the literature, now it is time to explicitly state the two lines of reasoning that I consider might be behind the assessments of democracy higher educated individuals make when confronted with a context of high income inequality. One of them, is an egocentric perspective which focuses on the societal position of the higher educated, benefited from income inequality. The other, is a sociotropic perspective which reasons that the higher educated might instead judge democracy according to normative standards of social justice.

In terms of my first interpretation, it would explain that inequality might be the reason behind the democratic satisfaction gap, as levels of satisfaction with democracy seem to have been growing with time for citizens with higher levels of education (Aarts et al, 2017:52) alongside with their levels socio-political trust (Newton, 1999:180). Therefore, the highly educated in a society might be indeed more satisfied with a democracy with higher levels of income inequality. They might rationalise their advantage as justified due to the inferiority of the rest of the population (Sandel, 2021:72; Lipset, 1959:83; Wilkinson & Pickett, 2009:504). This could be an expected reaction of making sense out of a seemingly unjust societal hierarchy. It would not be that the higher educated are the unjustly privileged from an unjust system, but that their hard work gave them what they justly deserved (Sandel, 2021: 77).

In fact, some research has pointed out that support for economic redistribution (which would be logical to be in favour of if one is against income inequality) is dependent on whether the respondent feels that they would be benefited by it (Kuhn et al, 2017). We could expect that the higher educated, with a better societal position, might be less interested in redistribution, and therefore, their democratic satisfaction assessments less affected by the rising income inequality levels.

Reasoning from the other, sociotropic line of thought, it could be expected that the members of the political community with a higher level of sophistication would be appalled by the regime not being able to live up to their democratic expectations of equality and social justice (Easton, 1975:456; Lipset, 1959:79; Piketty, 2014:1). As seen previously, postmaterialist citizens, the bulk of which tend to be the higher educated, are supposed to value more the normative appeal of democracy as fostering values such as freedom or equality rather than the material benefits they might obtain.

The fact that the study of Anderson & Singer (2008) found out that left-wing citizens react negatively to inequality might suggest that the sociotropic approach is certainly strong. This makes me consider the possibility that in moments of huge inequality the most educated citizens might be less satisfied with democracy. This, in turn, would mean that the explanation for the democratic gap would be elsewhere.

There seems to be only one study which considered the interaction between education and income inequality on democratic satisfaction, and it points at a negative interaction effect (Van der Meer & Hakhverdian, 2016), with higher educated citizens growing more critical of their democracies in the context of higher levels of income inequality. But since the study only uses on data from 2008, there is no clear consensus over which of these two mechanisms might be at work in the long run, which is something I want to help solving with this thesis.

Trends at the macro-level seem to suggest that the existence of the education gap in democratic satisfaction, in hand with the rising levels of income inequality, might point towards the higher educated being less critical of income inequality, but this is a hypothesis which has not been checked at the micro-level.

My second hypothesis takes into account this double line of reasoning, therefore it is considers two possible outcomes.

The first, hypothesis 2a, assumes that the higher educated will perceive the egocentric advantages of an unequal society. Research on political legitimacy at the level of the European Union seems to suggest that it is the assessments of legitimacy made by the lower educated those which are substantially more affected by rising levels of income inequality (Kuhn et al, 2016:38). Unequal societies are likely to both generate feelings of hubris and superiority for those on top whilst creating resentment on those at the bottom (Sandel, 2021:25). Translated to democratic satisfaction, the first group would react more negatively towards income inequality than the second.

The hypothesis 2b assumes that on the other hand, higher educated citizens could take a sociotropic view under which they would be inclined to view income inequality negatively. This is the direction pointed at by the literature studying the effects of corruption, showing that education is negatively correlated with democratic satisfaction in contexts of high levels of corruption (Hakhverdian & Mayne, 2012; Van der Meer & Hakhverdian, 2016).

Some of the previous research points out that the higher educated seem to be more capable of evaluating social or economic conditions and judge their democratic satisfaction accordingly. Their seemingly higher degree of sophistication in gathering and interpreting information is a further argument behind H2b. Since income inequality can be also seen as an unfair outcome, this reinforces the likelihood of this interpretation.

As stated with the hypothesis 2a, checking those internal mechanisms might not be easy, but depending on what the results show I will dedicate the discussion section of this thesis to explore what other researchers suggest. Here is how I formulate this hypothesis:

H2: The effect of income inequality on democratic satisfaction will be moderated by the level of education of the individuals. H2a (egocentric hypothesis): The effect of income inequality on democratic satisfaction will be less negative[3] *for the highly educated. H2b (sociotropic hypothesis): The effect of income inequality on democratic satisfaction will be more negative for the highly educated.*

This framing of H2 leaves open the question on what sign will this interaction take, and why would it take one or the other. I answer this with two possible outcomes. In any case, I still expect the relationship between income inequality and satisfaction with democracy to remain negative even if h2a were to be the correct hypothesis.

In the following figures, I will represent the values I expect for the coefficients of both the coefficient of income inequality on satisfaction with democracy (β1), and the value of the interaction term that education has on the relationship (β2).

Starting with the egocentric hypothesis, h2a:

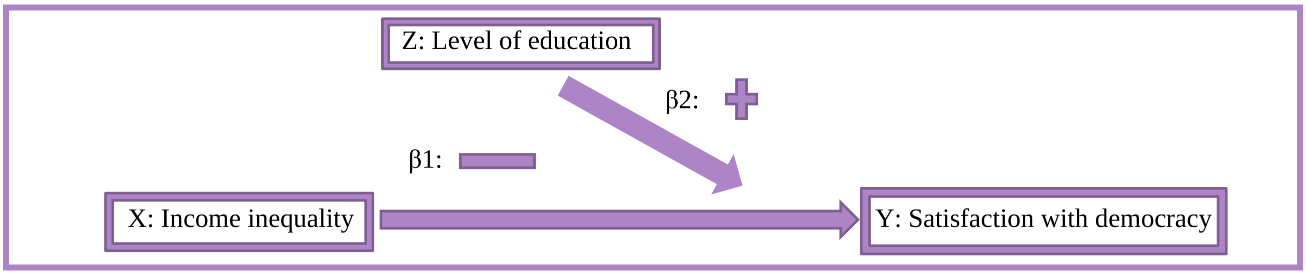

Figure 2: H2a. Education reduces the effect of income inequality in satisfaction with democracy. Source: Own elaboration.

In the figure 2 we can see the graphical example of the relationship for the hypothesis 2a. In this case, I expect a positive interaction effect of the education variable on the main relationship between income inequality and democratic satisfaction. This would mean that the higher educated would react less negatively towards income inequality than other levels of education. I assume that even for the higher educated, the relationship would stay negative, but maybe the results show otherwise.

In the figure 3 I summarize how I expect the mechanism behind the sociotropic hypothesis, h2b to work:

[3] By referring to the coefficient being more or less negative, I mean that I generally expect the effect of income inequality to reduce democratic satisfaction. If its negativity increases, as h2a supposes, then it will reduce democratic satisfaction even further. If the negativity is reduced, following h2b, then the negative effect of income inequality on democratic satisfaction will be reduced.

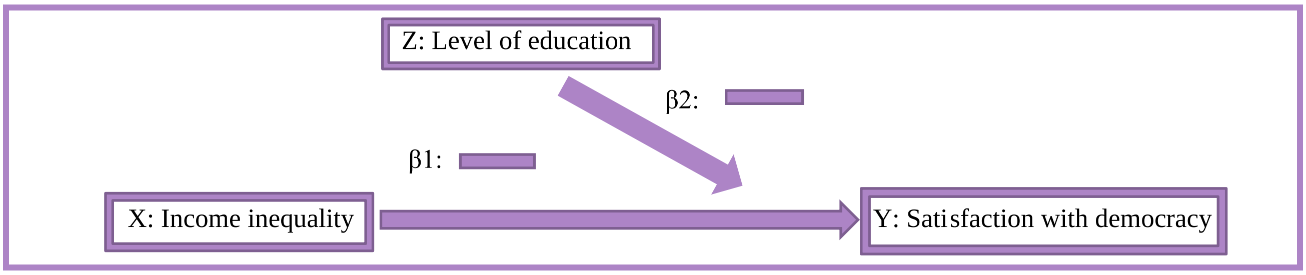

Figure 3: Education increases the negative effect of income inequality on satisfaction with democracy. Source: Own elaboration.

As we can see from the figure, if the sociotropic hypothesis were to be true, the interaction term of education would be negative, which would reinforce the negative relationship between X and Y, making it so that the higher educated respond more critically to higher levels of income inequality.

3. DATA AND METHODS

In this chapter I will first discuss some of the issues and controversies that some authors have levied at the indicator of democratic satisfaction I use. Then, I explain why I think that despite these criticisms I make us of an analytical framework which makes it valid for this research, and then I finally explore the variables included in the analysis, their distribution and the statistical methodology used to infer the relationship between satisfaction with the way in which democracy works in a given country and the level of inequality over time.

3.1. DATA

In this section, I dedicate some space to exploring the criticisms that some authors such as Canache et al (2001) or Linde & Ekman (2003) have levied at the indicator I use to capture democratic satisfaction, and then using the theory of survey response from Zaller (1992) to explain why I consider it a valid indicator. I finish it by going into detail about the country and variables selected for this study and how have I operationalised the latter.

3.1.1. Satisfaction with democracy and the controversy surrounding the concept

Recapitulating from the theory chapter, the concept of interest that this thesis aims at measuring is that of democratic satisfaction. In many surveys in general, and for the European Social Survey in particular, the item used is that of satisfaction with the way in which democracy works in a given country (ESS, 2022).

The usage of the satisfaction with democracy as an item aiming at reflecting a dimension between diffuse and specific legitimacy has been strongly criticized and questioned from different angles by various scholars. One of the biggest challenges faced by the item is that there is no consensus regarding the exact dimension of political legitimacy that it is supposed to capture.

One of the biggest suspicions for items meant to measure satisfaction with democracy is that they might instead measure satisfaction with the works of the current government (Easton, 1975:450) or with the way in which the national democratic system performs (Armingeon & Guthmann, 2014:429). Some authors come to argue that the constant use of the same indicator at least maintains the bias constant and therefore allows the measurement of trends (Andeweg & Aarts, 2017:206; Linde & Ekman, 2003:406). As we can see, there are diverging views in the literature concerning the possible problems regarding the capability of measuring satisfaction with democracy.

Canache et al (2001) are the ones who develop the most elaborated critique of the survey item. Their critical examination on the validity of the item derives from the need to clearly understand its characteristics to guarantee scientifical progress. They contend that the item can have up to five different interpretations, the first three arguing that if the item were to be measuring just one construct it could be gauging either support for the incumbent's performance, for the political authorities as a whole, or for democracy as an ideal form of government (Canache et al, 2001:507-509), and the other two consist in one which defends that it is an acceptably ambiguous concept with the benefit of longitudinal continuity or that the ambiguity that comes with it makes it unable to be an object of scientific study (Canache et al, 2001:510). The perspective posed is one that states that validity in scientific terms needs an item to clearly measure one construct for scholars to be able to draw meaningful inferences (Canache et al, 2001:512). If the interpretation of the item varies across national and temporal boundaries, then the item measures assessments of different concepts, rendering it virtually useless.

The authors develop a factor analysis to check which of the interpretations is the correct one and the results seem to point at their most negative interpretation, because the interpretations seem to vary individually according to the education level of respondents, and contextually depending on the country, which makes them disregard the item and call for scholars to stop using it (Canache et al, 2001:525). The criticisms seem fairly solid and substantial, so what can justify the continued usage of a seemingly irredeemable indicator?

My argument against this criticism consists in that concepts in social science research have no universal meaning, instead, they depend on the context. Democracy itself can mean different things to different people, depending on the regional and individual background (Kriesi, 2013:619). In empirical research it has been also proven to be the case that different societal groups tend to have trouble giving accurate depictions of also other concepts such as political ideologies (Bauer et al, 2016:553) or economic conditions[4] (Armingeon & Guthmann, 2014:429; Palmer & Duch, 2000:75). Not even the notion of what constitutes optimal governance is universally accepted (Dahlberg & Holmberg, 2014:515). I think that precisely this variation in meaning is what gives strength to survey research and helps us find and explain why this variation happens.

In any case, it must be noted that satisfaction with the way in which democracy works is an item that has been, and continues to be, widely used in research (Dalton, 1999; Anderson & Singer, 2008; Dahlberg & Holmberg, 2014; Kriesi, 2013; Armingeon & Guthmann, 2014; Van Der Meer & Hakhverdian, 2016; Magalhaes, 2017). As this indicates, the item has given important insights into how democratic satisfaction functions, so at least from a pragmatic point of view, it remains valid. The next subsections will aim at giving substantial arguments for its validity.

My argument is that these criticisms interpret survey responses as reflections of pre-existing orientations of affinity towards a certain concept, a view that has trouble reconciling itself with many of the problems in social science surveying (Zaller & Feldman, 1992:579). With a different perspective in terms of survey data analyses, the item itself can be reinterpreted as an indicator not only of democratic support but also of the saliency of certain topics which individual citizens might consider on a certain context to judge democracy. I will use the next subsection to develop this idea, and to examine the validity of the item comparing it with others and to criteria exposed by scholars dedicated to survey analyses.

3.1.2. Why use satisfaction with democracy? The three zallerian axioms of survey response

In this subsection I will briefly examine the usual biases that survey research is argued to carry and explaining why I consider that my research is taking them into account to the best of my ability.

There are several criticisms which can be levied to question both the internal and the external validity of causal inferences and the knowledge derived from survey questions. By centring my research on the use of data on values of satisfaction

[4] Even in the case of economic conditions or income inequality, some authors argue that many studies ask the questions in a wrong way. If they are asked clear questions, the answers given will be closer to reality (Eriksson & Simpson, 2012:744).

with democracy from the same survey I can, if not eliminate, at least maintain constant the biases derived from survey design.

Not only the relevance of the item satisfaction with the way in which democracy works, but broadly the concept of political support itself, depends on the capabilities of citizens to establish a causal chain between the current situation and the action of the political authorities or the system (Easton, 1975:438; Kriesi, 2013:615; Mishler & Rose, 2001:52). Without this, the ways in which we perform social science by analysing mass surveys would be meaningless.

In terms of judging the adequacy of the item itself to comprehension by respondents, there has been research evaluating the type of items which make respondents use the most cognitive capability in terms of processing it (Lenzner et al, 2011). This issue is relevant for the topic at hand because it has been shown that the difficulties arise for all types of survey question, and also it can be easily inferred that lower educated respondents would take more issue with reading difficulties (Lenzner et al, 2011:370). Since this is not the topic of the thesis, I will succinctly say that out of all the criteria established by these authors as statistically significant[5] the one which seems to me more relevant is that of the usage of vague or imprecise terms. But including just one of them should not be something grave enough to fully disregard the validity of the satisfaction with democracy item.

These notions complement those which have been traditionally critiques, ranging from the ignorance or plain cognitive incapability of the citizens (Easton, 1975:439) and especially the fact that some indicators might not be optimal to measure the attitudes which we aim to gauge (Easton, 1975:443). The vagueness of the term can make one interpret, from a different perspective, that satisfaction with democracy implies that there should be a benchmark with which to compare the actual performance, and that omitting reference to any basis of comparison can lead to unvaluable results (Canache et al, 2001:511; Linde & Ekman, 2003:395). We would not know if citizens were evaluating the performance of their democracies by comparing them with a prior regime, to moral standards or to their economic position. But are we really unable to infer valid information because of this?

Before explaining the theoretical interpretation I make, I want to state that it can be fairly assumed that the assessments given by the citizenry about not only the distribution of income, but also many other complex phenomena, can be quite accurate if correctly surveyed and also if the phenomena are salient enough for them to usually think about it (Eriksson & Simpson, 2012:744; Lenzner et al, 2011:371; Zaller & Feldman, 1992:597).

Despite this, thanks to the work by Zaller & Feldman (1992) I can consider that the vagueness that stems from the open formulation of the item can be interpreted as a further source of variation out of which I am able to infer valid knowledge. Their theoretical argument can be summarized in the three big axioms they elaborate.

The first of them is the ambivalence axiom, stating that respondents tend to have conflicting values and considerations which depending on the context can make them answer (or interpret) questions in diverging ways (Zaller & Feldman, 1992:585). This helps to explain seemingly random variation because the individuals might give different answers depending if they base them on their social, economic, or cultural values. The second is the response axiom, stating that

[5] Which include the usage of low-frequency words, vague or imprecise terms, vague or ambiguous noun phrases, complex syntactical or logical structures, and low syntactic redundancy (Lenzner et al, 2011:367).

the answer from the individual will depend on what first comes to their mind, complemented by the third, the accessibility axiom, which explains that it is more likely that the recently thought considerations are more likely to be the ones taken into account (Zaller & Feldman, 1992:586). This last axiom makes me question whether contextual characteristics, such as a corruption scandal or an economic crisis might prime respondents into answering vague questions about democracy using them as a benchmark.

By interpreting, as they do, poll results as a balance of different considerations rather than as the measurement of true attitudes Zaller & Feldman (1992:613) can reconcile the social sciences with the fact that individuals do not share the same definitions of aspects such as democracy (Kriesi, 2013:619) or political orientations (Bauer et al, 2016:553). As such, we can make sense of the diversity of values within and between populations across different time points.

If I interpret then satisfaction with the way in which democracy works as an item with a meaning that is dependent on considerations coming from the accessibility axiom, then, with certain caution, I can take into account results from studies addressing elements close to it in the continuum made by Norris, such as support for authorities or the government, and infer expectations for my study. Because if some items are likely to influence variation in these items, then they can be expected to also affect satisfaction with the way in which democracy works in one's country.

With this out of the way, it is now time to go into detail about the cases selected and the variables used in the analysis.

3.1.3. Survey data and the country selection

It is well known that the selection of cases in cross-national studies can be subject of various biases, some of which hard to control for due to the need to choose between a limited number of datasets (Hug, 2003:256). In the case of this thesis, I must rely on data gathered by other authors since gathering it myself is virtually impossible due to the obvious constraints in terms of time and budget.

The survey used for this thesis comes from the European Social Survey, which consists of an academically-oriented effort to gather data every two years on most countries at the European level in order to rigorously follow the evolution of trends, attitudes, and measure social change across the region (ESS, 2022).

The fact that other authors have relied on data from the ESS to either perform or replicate their analyses in robustness checks (Anderson & Singer, 2008; Hakhverdian & Mayne, 2012; Van Der Meer & Hakhverdian, 2016; Magalhaes, 2017; Goubin, 2018) gives me confidence that the data is reliable enough so that it will not be a problem challenging the validity of my results.

For this investigation, I have decided to make use of the countries currently pertaining to the European Union from which there is data in the ESS. I believe that this selection of countries helps because they present enough variance between themselves, because in the EU we can find countries with high and relatively low levels of education, countries with different traditions in terms of policy and welfare states, and that followed different paths of economic development.

But having enough diversity on a sample of study is not the only relevant criteria. In the research field of comparative politics, it is of key importance to have enough statistical variance alongside cases that are sufficiently linked so that they are able to be compared. I believe that the fact that the countries have the common linkage of being part of the European Union gives them a common regional and political context by which cross-national comparative research is possible.

The countries and years for which data was available are shown in table A1 (available in the annex), with the crosses signalling for which years of the survey there was data collected in a given country, since not all of the countries were present in every one of the 9 waves of the ESS.

As it can be seen from the table, I have decided to include in the analysis all of the countries which at the moment of its elaboration are members of the European Union (European Union, 2022) except for Malta and Romania, for whom data was not available for any round of the ESS. This leaves out countries such as the United Kingdom, which ceased to be a member of the EU, and other countries for which there is ESS data, but who are not members of the European Union, such as Iceland, Israel, Norway, Russia, Switzerland, Turkey, and Ukraine.

Another caveat to this selection is that for some of the first rounds of the survey, countries such as Slovenia or Croatia were not yet members of the Union. But since admission towards the EU is a long and complex process which requires several economic and political criteria (EU, 2022), countries take on reforms during several years before officially joining. It can therefore be assumed that data from two or four years before the official admission is still valid, because if the EU accepted them as members, then their governance must have already met EU standards.

In total, only 12 out of the 25 countries present data for all 9 waves of the survey, but all of the 25 were present in at least two waves. In total, the data I have gathered amounts to 174 country-year observations, and a total of 328,400 individual observations nested within them, something which permits enough variance to conduct a multi-level analysis, as I will develop on the methods subsection.

3.1.4. The main variables

In this and the following subsection I will perform a basic descriptive analysis of the variables which I include in this thesis. First, I explain how the ESS presents them on their surveys, or how did I collect them in the case that they were not present there. Then, I comment on their evolution though time (when relevant) for all of the sample of countries during the 9 waves of the ESS, and then I elaborate and comment tables with some descriptive data of interest.

In regard to the dependent variable of analysis, democratic satisfaction, I have used the variable from the ESS measuring democratic satisfaction, which asks the respondents: "*And on the whole, how satisfied are you with the way democracy works in [country]?*". The values from this variable range from a minimum of 0, which signals that the respondent is extremely dissatisfied, to a maximum of 10, which signals extreme satisfaction with how their democracy is performing. (ESS, 2022).

My data, spanning on a total of 174 country-year observations, has a substantial degree of variability. The smallest average value of democratic satisfaction was found in the year 2008 at Bulgaria, with an average of only 2.42 points, meaning that the vast majority of the citizens heavily disapproved the functioning of their democratic regime. On the other hand, we can find the highest value in the Denmark from 2006, whose average was of a 7.45, the most satisfied citizens in all of my sample.

In order to measure data on my independent variable, income inequality, I decided to use values of the Gini Index, which is defined as a statistical measure employed in order to measure the proportionality followed by the income distribution in a country. It has a value of 0 for perfectly unequal distributions (where a fraction of the population would own all the income) and a value of 100 for a perfectly proportional income distribution (International Labour Organization, 2016:138). Although this measurement has been criticised due to it not being specific enough (Piketty, 2014:243), the fact that it has been widely used in research (Anderson & Singer, 2008; Wilkinson & Pickett, 2009; Oishi et al, 2011; Andersen, 2012; Dahlberg & Holmberg, 2014; Krieckhaus et al, 2014; Kuhn et al, 2016; Van Der Meer & Hakhverdian, 2016; Magalhaes, 2017; Goubin, 2018; Kotschy & Sunde, 2021), alongside the comparability it provides leads me to use it as my independent variable.

I have taken the GINI index values for the country-year observations from the SWIID database (Solt, 2022), which has been considered as the best one in terms of measurement and coverage (Solt, 2016). In terms of the data collected there, I tried to get all my data from the same source of origin, Eurostat, when possible. The data I prioritized were calculated in terms of disposable income, which accounted for household size via an equivalence scale elaborated by the OECD called "OECD modified" (OECD, 2022), which takes into account the fact that due to economy of scale, the needs of, for example, a household of four individuals, are smaller than those of four individuals living on their own. Therefore, this equivalence scale takes into account the variation of the economic needs of households with a different composition.

For the observations in which I did not find the Eurostat data (14 out of the 174 total observations) I used either measures with the same formula made by other actors, such as the nation's official statistics department, amongst others, or Eurostat observations from one year before or after. We can find substantial variation in this measure, from the GINI index value of 21.9 presented by Slovenia in 2002, to the 40.8 of Bulgaria in 2018. In terms of variability, we can see that there is a lot of divergence in our sample, because the mean value is of 29.21, while one standard deviation from this mean is of 3.89 points.

Finally, regarding educational attainment, I have chosen the variable measuring educational attainment coded into standardised categories from the ESS. Even though it is already harmonised into 5 categories, I have recoded them in order to make the analysis easier. The values 0 and 55, which meant that the respondent either did not answer, or that their education was not possible to standardize, are treated as missing values. Then, I recode values 1 and 2, which are lower secondary education completed or less into value 0, lower educated; I recoded value 3, higher education completed, into the category 1, middle educated; and finally, values 4-5 which consist in post-secondary education, tertiary or not, which I recode into value 2, higher educated.

Macro variables	Minimal values	Maximum values	Mean value	Standard deviation
Democratic satisfaction	0	10	5.08	2.21
GINI index	21.9	40.8	29.06	3.9
Education level	0	2	0.98	0.78

Table 1: Dependent and independent variables and their values. Source: Own elaboration with data from the ESS (2022) and the SWIID (Solt, 2022).

As we can see at the table 1, the mean value of democratic satisfaction shows that the citizens of the EU seem to have been either quite critical or apathic towards the functioning of their democratic systems, with their assessment amounting to a mean of a 5.08, barely approving the performance of democracy in their own countries. The fact that the standard deviation is as high as 2.21 means that we can find in the sample significant numbers of citizens that have strong feelings towards their democracies' performance, either in favour (7.29) or against (2.87) it, but it would be less likely to find more extreme views.

In terms of the GINI index, the mean value is of 29.06 points, with a standard deviation of 3.9 points, we can then expect a decent amount of variation, with many countries around the 25.16 points in the scale, and others with 32.96. As we have seen previously, there most radical values are slightly above the 20 points or slightly above the 40, meaning that there seems to be no big outliers in the sample.

3.1.5. Controls

In this subsection, I will explain the control variables that are part of the analysis. First, I will focus on the macro-level controls and then I will shift focus to the micro-level ones.

Some studies seem to point towards the direction that it is factors such as corruption which explain the most variance in terms of democratic satisfaction, instead of my object of study, income inequality (Hakhverdian & Mayne, 2012). But more recent research indicates instead that items relating to the general quality of governance of a given polity explain satisfaction with democracy better than the levels of corruption a country faces (Van der Meer & Hakhverdian, 2016; Dahlberg & Holmberg, 2014; Magalhaes, 2017). This is why I will incorporate in the final model of the research as a control a measure not of corruption but of quality of governance (Dahlberg & Holmberg, 2014). In fact, data from the European Social Survey has shown that seemingly what citizens themselves value the most about living in a democratic regime is the equal treatment by the judicial system (Andeweg & Aarts, 2017:204). Therefore, it is fair to assume that the efficiency in which democracy works can strongly influence the assessments of democratic satisfaction of individual citizens.

An interesting factor coming from the literature examining the influence of measurements of quality of governance and economic performance on democratic satisfaction shows that the latter is more relevant in societies where the former is low (Magalhaes, 2017:166). As we have seen earlier, the linkage between economic inequality and happiness seems to work through a diminishment in levels of social trust and perceived fairness (Oishi et al, 2011:1098). This is not as high a stretch as it might seem, because for example previous research in terms of political trust has found an interesting interaction effect between inequality and the benefits of perceived public responsiveness by which the effects on the latter on trust disappear in the context of high levels of inequality (Goubin, 2018:283). We will soon come to see if that reasoning can be extended further, by testing how do the difference in education level affect the assessments of satisfaction in contexts of high inequality If these suspicions prove true, I will discuss them in the final section of the thesis.

Dahlberg and Holmberg (2014) find that the government effectiveness index developed by the World Bank seems to correlate more strongly with democratic satisfaction than corruption itself or other indicators measuring quality of governance. This is why I have decided to use it instead of any other measure of quality of governance.

The Government Effectiveness index, elaborated by the World Bank (World Bank, 2022), as used by Dahlberg and Holmberg (2014) is constructed via surveys to national experts, the population of the countries, and cross-national surveys made by non-governmental organisations which measure the capability of implementing policies, the quality of public services and their independence from the political powers, and the government's credibility to implement and maintain policies, amongst other factors (Dahlberg & Holmberg, 2014:525). Its values run from a minimum of -2.5 to a maximum of 2.5. I will recode them to values from 0 to 5 for easier analysis. The values I find on the data showcase a high degree of variation, with the minimum value being the 2.44 points scored by Bulgaria in 2006, which can be contrasted with the 4.81 points that Denmark achieved in 2004. An important remark is that virtually no country scored ever under the 2.5 points, something which is to be expected since the countries I analyse are European modern democracies.

In my models I would need to control explicitly for both measures of sociotropic and egocentric economic assessments. The former will be a macro variable, and the latter will be located at the micro-level. In terms of the state of the national economy, even if some studies seem to point that their effect is non-significant compared to that of inequality (Anderson & Singer, 2008) I still believe it is needed to account for them so that there is as little omitted variable bias as possible. To reflect this, I will use GDP per capita estimates from the World Bank (World Bank, 2022) to keep consistency in sources.

The usage of per capita data instead of absolute GDP is meant to account for the size and population of the country, giving the analysis a higher accuracy. This is why I collect data on the GDP per capita, PPP (calculated at current international dollars), because this measure accounts for not only the population of a given country, but also for the price differences between countries (World Bank, 2022). With this measure, we obtain quite a substantial level of variance, with the minimal value being the observation of 11,408.1 $ from Bulgaria in 2006, contrasted with the highest value of 84,555.6 $ from Ireland in 2018. We can also contrast countries which faced economic stagnation and hardships such as Greece with others which had an incredible growth such as Ireland.

In terms of the viability of using this indicator comparing countries with seemingly huge differences in economic development, authors in the past have warned about including on the same multi-level modelling countries from the former Western and Eastern blocks together, due to the fact that the huge economic differences would make it unwise to perform it (Andersen, 2012:394)[6]. Examining the data from the World Bank (2022) I have corroborated that the levels of growth of the former Eastern bloc countries have been so large that their current per capita GDP PPP at the year 2018 surpass the values of most Western countries in 2002. This is why I believe in the validity of including them all under the same model.

One last national control I considered including was the age of democracy, because it has been suggested that on newer democracies economic fluctuations might be more relevant for public opinion than in the established ones (McAllister, 1999:188; Kriesi, 2013:626). It is also logical to assume that citizens might be more critical because the diffuse legitimacy of the regime in a new democracy is not solid enough. I wanted to use Huntington's work in waves of democratisation (Huntington, 1991:14). But since, as I will explore in the methods subsection, I grouped the time and country levels of analysis into one of country-years, time invariant categories such as these had become unfit for the analysis. But this is not a problem since the variation is explained by the model thanks to the method.

[6] In the case of this study, he used per capita GDP and the highest value of a former actually existing socialist country (Slovenia, 10,836 $) was quite under the lowest value of a western country (Spain, 14,813 $).

Macro variables	Minimal values	Maximum values	Mean value	Standard deviation
Government effectiveness index	2.44	4.81	3.77	0.54
GDP per capita	11,408.1	84,555.6	33,932.58	11,780.96

Table 2: Control variables at the macro-level and their values. Source: Own elaboration with data from World Bank (2022) and others.

As we can see in table 2, the values of the government effectiveness index can span from 0 to 5. The fact that the mean of the country-year observations is of 3.77 shows that the governments are quite effective and well above the middle of the theoretical scales. This is proof that most of the sampled governments are strong democracies. A standard deviation of just 0.54 points means that barely any of the 174 observations can be expected to be under a value of 3.

In regard to the GDP per capita, we can observe a mean value of 33,932.58 $. alongside a standard deviation of 11,780.96 $. This shows that on average, there is a substantial degree of variation. Especially if we compare the values of the former eastern bloc countries in the early 2000s with those of the western countries in 2018. But still, there is a gradual interval of values, as shown by the relatively moderate standard deviation value.

Moving on to the controls at the micro-level, these are the usual included in this type of research. I will include controls specifically chosen for their relationship with the main variables of analysis alongside common sociodemographic indicators.

First, I wish to include a control of the ideology of the respondents on a classical left to right scale. On the ESS this is reflected in the ideological self-placement variable, which asks the surveyed: "*In politics people sometimes talk of 'left' and 'right'. Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?*", this question takes a minimal value of 0 which means far left and a maximum of 10 if the respondent identifies him or herself with the radical right.

Another quite straightforward variable is the gender of the respondent, which asks whether the respondent identifies themselves as male or female. The values are categorized as 1 if male and 2 if female, but for analytical purposes I will recode it so that male is signalled as 0, the reference category, and female is converted to the value 1.

In terms of the respondent's age, the ESS asks for the birthdate of the surveyed individuals, and then calculates their current age at the moment of answering the questionnaire. During the nine rounds of the ESS there were some curious cases in both ends of the age spectrum. We could find a significant percentage of respondents aged 17 or younger, with the minimum age being 13. On the other end, the oldest respondent was 114 years old. This is why I have modified the variable to include only respondents aged 18 or over. This implies that I discard the 3.07% of the respondents but being so young they would have probably given unreliable answers. A bit more arbitrarily, I decided to discard all the surveys made to individuals aged 101 or over, since on the one hand their proportion was very small (only 14 individuals), and on the other it could be assumed that their extremely advanced age might have led them to being unable to give accurate answers.

The egocentric economic evaluations are best summarized by the variable measuring satisfaction with the household's income, which asks of the respondents to place themselves on a four point scale: "*Which of the descriptions on this card comes closest to how you feel about your household's income nowadays?*", the values range from 1 if the person considers their household income to be enough to live comfortably, 2 if the respondents believe they can cope with it, 3 in the case that they find difficulties to live with their current income level, and 4 if they consider that it is very difficult to manage to live with it. I believe that asking for this subjective perception is better than to ask for the income itself, since individuals might be more inclined to hide that information for reasons of mistrust to the interviewer or because of social stigma. The values of the variable will be recoded from their original 1 to 4 scale to a new scale from 0 to 3.

Another valuable variable usually included in these analysis is that of religiosity, which asks the respondent to situate him or herself over an eleven point scale: "*Regardless of whether you belong to a particular religion, how religious would you say you are?*". The scale takes the value of 0 is the person is not at all religious and 10 if they consider themselves to be very religious. Including it might be of value, but in modern societies the importance of religion as such is diminishing, and also the variable has the problem of not distinguishing between minoritarian or majoritarian religions on the country, amongst others. I believe that using the ideological self-placement we can assume that most of the variance of the religiosity variable will be accounted for.

Macro variables	Minimal values	Maximum values	Mean value	Standard deviation
Ideological position	0	10	5.08	2.21
Gender	0	1	0.54	0.5
Age	18	100	49.59	17.96
Income evaluation	0	3	1.07	0.86

Table 3: Control variables at the micro-level and their values. Source: Own elaboration with data from the ESS (2022).

In the table 3 we can have some information regarding the distribution of the values from the control variables located at the micro-level. In terms of the ideological orientation of the surveyed individuals, we can see that in the sample the mean is slightly above the middle value, at 5.08, this would give the idea that the sample could be overwhelmingly consisting of individuals with a centrist political orientation, but the fact that the standard deviation is of 2.21 points of magnitude, this means that the number of individuals with clear right wing views (around 7-8) and those from the left (2-3) is not insignificant.

Moving on to the gender of the individuals pertaining to the sample, there is not much to say, there is almost a fifty percent split between males and females. The fact that the mean is 0.04 points above the 0.5 mark means that we can see a slightly higher number of females in the database.

In respect to the age of the respondents, we can see that the mean age of 49.59 years indicates that I am working with a sample slightly older than the median age in the European Union, which was of 38.4 years at 2001 (right before the start of the ESS) and was of 43.9 in 2020 (Eurostat, 2021). In any case, a standard deviation of 17.96 years indicates that individuals significatively older and younger were also present in the study.

Finally, if we look into the income evaluations made by the respondents, we can see that, maybe surprisingly, a big majority of the sample considers that their personal income, is enough to go by without facing significant difficulties, because the average value is of 1.07[7] in the scale. The fact that the standard deviation amounts to 0.86 implies that there is a big number of individuals in the sample who consider that they have more than enough income to live easily, while there might be a decent number finding minor difficulties in living. The portion of individuals who identify themselves as living under very poor circumstances is very minor.

3.2. METHODS

3.2.1. Multi-level modelling: Individual observations nested in time and countries

The data I am analysing on this paper has some special qualities which need to be briefly discussed before performing the analysis as such. The fact is that my individual observations, the citizens being surveyed by the ESS, were taken across a group of countries during a set of years. This means that it is a nested data structure because individuals belong to the years and the countries in which the survey was conducted.

In nested data models, we find certain variables which vary on the individual level, in this case for example those measuring democratic satisfaction and ideological orientation. But other variables remain on the contextual level and vary depending on the country and the year of the observation, such as the values of the Gini index or the government effectiveness indicator. This means that for all the individuals belonging to a certain country-year the values of these variables will be exactly the same.

The nested character of the data makes it impossible to perform a regular regression model, because one of its key assumptions, the independent error assumption, is violated. This is because the values of the dependent variable of study, democratic satisfaction, are quite similar for individuals belonging to the same group, resulting in high intra-class correlation values. Not taking this into account usually means the risk of finding biased coefficients and rejecting null hypotheses when in fact there is no statistically significant relationship. The multi-level nature of the data is also special because not only does it consist of individuals nested in countries, but also nested in time points, needing to account for many sorts of bias that can question the validity of the results.

But not everything are problems with this type of data structure. The positive side is that, by using both countries and time points I can use a substantially higher number of observations than if I only did analyse one round of the survey or a simple time-series over just one country. It also means that I can test effects pertaining to the macro-level, enriching the analysis even further. But the statistical issues previously mentioned need to be accounted for, and that is why I will use a statistical model capable of dealing with them.

This is why for this thesis I will apply a random effects approach in order to account for both the within country-years and the between country-years variance. In order to simplify the statistical analysis, I will transform the three levels of nested data into two. One at the individual level, and another at the country-year level, being able to explain 3 types of higher

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[7] I know that since it is an ordinal variable the mean and the standard deviation de not seem to be of value, but if we interpret it, it points out that the most frequent observations in the dataset seem to be enough to live without much difficulty.

level variance, between different countries (For example: Belgium vs Netherlands), and over time (France 2002 vs France 2008).

3.2.2. The models of the analysis and their formulas

In order to check the validity of my hypotheses, I aim at conducting the nested analysis parsimoniously, starting first with an empty model to check the grand mean alongside the levels of variance we may find in both levels of the analysis, the individual and the contextual (country-year). Then, I will include a model by which I study the effects of all my variables, and finally I include on a last model the interaction effects between education and the Gini index. The formulas I elaborate for the models will be inspired by the works of Steenbergen & Jones (2002) and Hakhverdian & Mayne (2012).

First, my empty model will be structured according to this formula:

$$\text{DemocraticSatisfaction}_{ij} = \beta_{00} + \nu_j + \varepsilon_{ij}$$

Figure 4: Formula for the empty model. Source: Own elaboration.

In this formula, the "ij" letters mean that the values of the coefficients are calculated either by reference to the individual level "i", the contextual level "j" or both at the same time. "β_{00}" represents what's known as the grand mean, or the average value of democratic satisfaction across all countries and individuals, while "ν_j" represents the variance found in the macro-level, and "ε_{ij}" is the variance at the individual level. One way to contrast the performance of both levels will be to check how much of the variance they are able to account for.

This is why my second model will focus on the effect that micro-level variables have, alongside Gini levels, on democratic satisfaction, following this formula:

$$\text{Democratic satisfaction}_{ij} = \beta_{00} + \beta_1\ \text{Ideology}_{ij} + \beta_2\ \text{Gender}_{ij} + \beta_3\ \text{Age}_{ij} + \beta_4\ \text{IncomeSatisfaction}_{ij} + \beta_5\ \text{Education}_{ij} + \beta_6\ \text{Gini}_j$$

Figure 5: Formula for the second model. Source: Own elaboration.

Then, my third model, including the country-year level variables will follow this formula:

$$\text{Democratic satisfaction}_{ij} = \beta_{00} + \beta_1\ \text{Ideology}_{ij} + \beta_2\ \text{Gender}_{ij} + \beta_3\ \text{Age}_{ij} + \beta_4\ \text{IncomeSatisfaction}_{ij} + \beta_5\ \text{Education}_{ij} + \beta_6\ \text{Gini}_j + \beta_7\ \text{GDP/C}_j + \beta_3\ \text{GovernmentEffectivenessIndex}_j\ \nu_j + \varepsilon_{ij}$$

Figure 6: Formula for the third model. Source: Own elaboration.

With this additional step, I incorporate the different variables of the analysis at both micro and macro levels. As it can be seen, some of the variables (ij) vary both between individuals and country-years, whilst other variables (j) vary depending on the context.

Finally, this is how the fourth model will be constructed:

$$\text{DemocraticSatisfaction}_{ij} = \beta_{00} + \beta_1\ \text{Ideology}_{ij} + \beta_2\ \text{Gender}_{ij} + \beta_3\ \text{Age}_{ij} + \beta_4\ \text{IncomeSatisfaction}_{ij} + \beta_5\ \text{Education}_{ij} + \beta_6\ \text{EducationxGini}_{ij} + \beta_7\ \text{Gini}_j + \beta_8\ \text{GDP/C}_j + \beta_9\ \text{GovernmentEffectivenessIndex}_j\ \nu_j + \varepsilon_{ij}$$

Figure 7: Formula for the fourth model. Source: Own elaboration.

This fourth model incorporates an additional factor, which is the interaction between the level of education of a given individual and the Gini value presented by the country-year to which they belong. That is why they are categorized as “ij”, since their value varies both according to the individual and the contextual levels. I expect this model to be the one which explain the most variance at both levels.

To finish the section, I will also incorporate an additional model which, as a robustness check will be aimed at accounting all the country-level variance by including country dummies (the effects of which will not be shown at the table). This will allow me to look at the temporal effects that my variables have and see if there are interesting changes.

4. RESULTS

In this section of the thesis, I will firstly do a descriptive analysis of the evolution of both satisfaction with democracy, and the levels of income inequality during the years by which my data spans (2002-2018). I will analyse the average values for all of the sample, then the average values for every country, and finally I will briefly comment the trends in the evolution of the values for all countries by year to see if I can find some regional patterns or outliers.

In the final section of this chapter, I will apply my regression models and use their results to confirm or reject my hypotheses. The implications of these results for my theory will be explored during the final chapter of the thesis, the discussion.

4.1. THE EVOLUTION OF DEMOCRATIC SATISFACTION IN THE SAMPLE

The theoretical consensus over democratic satisfaction is that the values of the indicator have not varied substantially during the past few decades (Kriesi, 2013; Andeweg & Aarts, 2017). This is why to start the results I wanted to study the evolution of the average values of this indicator for all of the sample during the 9 waves of the ESS, spanning for a total of 16 years.

Figure 8: Evolution of the average values of democratic satisfaction during the years sampled. Source: own elaboration with data from the ESS (2022).

As it can be seen from figure 8, the average values of democratic satisfaction have remained relatively constant during the years for which this study spans. It is significant to note that the highest values of the sample are from the first three waves of the ESS, moving between 5.43 and 5.3. Although there was a clear decline during the hardest years of the economic crisis of 2008, falling to the lowest average value of 4.69 points, the levels recovered slightly after 2012, showing a seemingly slight increase trend until they rose up to 5.21 in 2018, but they did not reach the levels from the period 2002-2006, with a decline of 0.22 points respect the values of the year 2002.

Overall, it seems that the citizens from the EU are not enthusiastic about the performance of their democracies, but neither are they heavily dissatisfied because the average values only failed to reach the approval during 2008 and 2010. As noted earlier, this pattern might suggest that there is indeed a correlation between democratic satisfaction and economic conditions, as scholars have noted previously (McAllister, 1999:201; Kriesi, 2013).

To gain a view on the regional differences, I will now proceed to explore the average values for each country in terms of satisfaction with democracy:

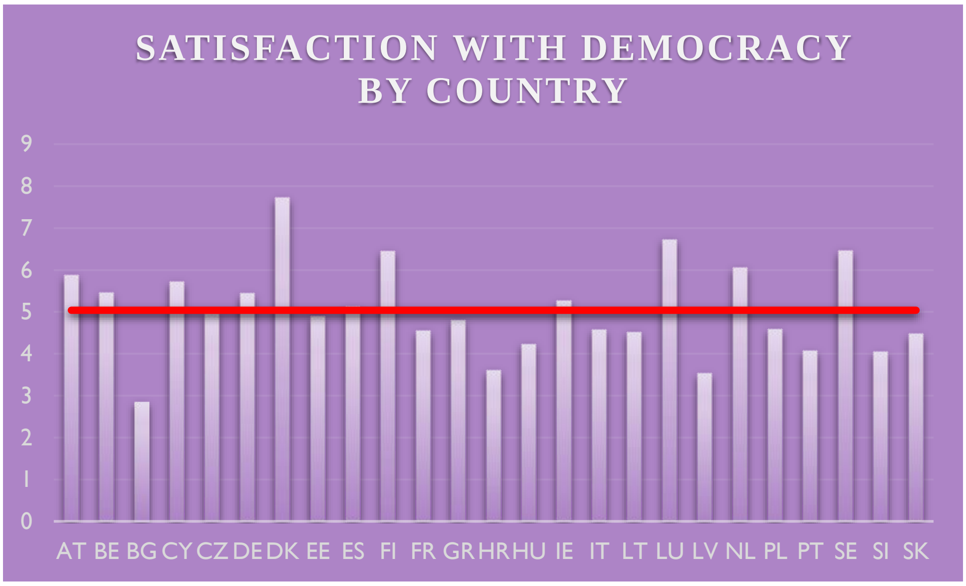

Figure 9: Average values of satisfaction with democracy for the sampled countries. The country labels follow the abbreviations used by the ESS (2022). Source: Own elaboration using data from the SWIID (Solt, 2022).

Here we can see a graph that shows on the one hand the values of satisfaction with democracy in every country of the sample, whilst on the other hand providing the average values. In the graph, as in figure 8, we do not see a substantial degree of variance, with most countries being close to the average of 5, despite a few seemingly being outliers.

Looking for regional trends, it can be seen that the countries whose average remains below 4 are Croatia, Latvia, and especially Bulgaria, with an average of less than 3. In contrast, the countries with a satisfaction above 6 are The Netherlands, Sweden, Finland, and especially Denmark, which is closer to 8 than 7.

This points out that rich Northern European countries seem to enjoy democracy more than the poor Eastern European ones, but besides these cases, the rest of the countries move between values of 4.5 and 5.5, with countries as different as Germany, the Check Republic, or Spain sharing very similar values. This seems to suggest that the regional trends are not that significant in this case.

4.2. THE EVOLUTION OF INCOME INEQUALITY IN THE SAMPLE

Income inequality has been steadily on the rise internationally ever since the end of the Keynesian economic paradigm in the seventies (Piketty, 2014:138). I regret that the data provided by the ESS cannot capture the evolution of democratic satisfaction since then, to see an even longer evolution. But the data I have already provides quite a deal of variance. As we can see in the figure 10, there has been an increase in income inequality since the year 2002, when the first round of the ESS was conducted.

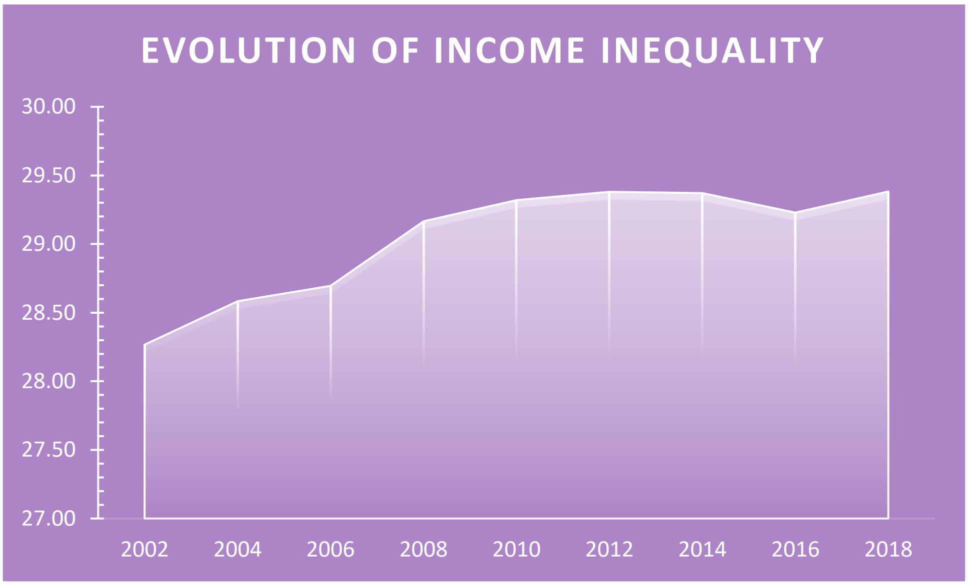

Figure 10: Evolution of income inequality during the years sampled. Source: Own elaboration using data from the SWIID (Solt, 2022).

We can see from this graph, which shows the average Gini index for the countries present on each wave, that inequality has been on the rise during this time period. We go from an average value of 28.27 in 2002 to an increase of 1.11 points in the value for 2018, 29.38. The most significant increase happened between 2002 and 2008, after which there was little growth until 2012. From 2012 until 2016 there was a slight decrease in values, which got countered by a slight increase from 2016 to 2018.

To understand the impact of this increase of 1.11 points, it is better to take a comparative perspective, I have been unable to find data at the level of the European Union prior to the years in my sample, but data from a recent paper which states that from the year 1820 to 1910, global income inequality in terms of the Gini Index rose for 12 points starting on a value of 60, until one of 72. In the year 2000, it was still 72, decreasing to 67 in the year 2020 (Chancel & Piketty, 2021:42). That is to say that the changes faced by Europe, even if it's a shorter period, have been lesser than the impact of the industrial revolution times. Comparing with more recent data from the World Bank (2022) we can see for example that the US levels of inequality, grew virtually the same during the same years, going from a value of 40.4 in 2002 to one of 41.4 in 2018. Despite the similar growth in inequality, we can also see that inequality in Europe is indeed substantially lower than in other regions.

Now, it would be interesting to learn more about how income inequality was distributed in average between the countries in the sample of study during the years sampled.

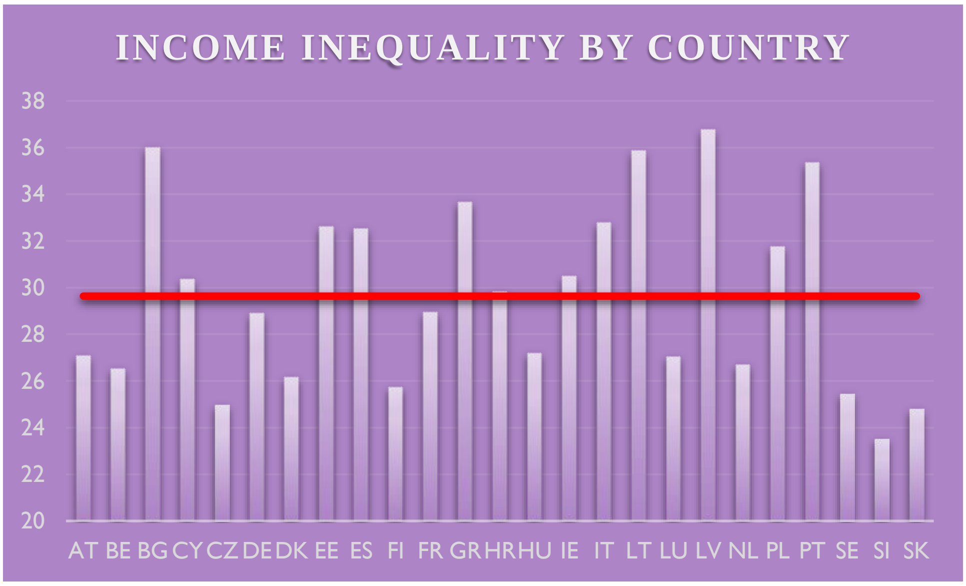

Figure 11: Average values of income inequality for the sampled countries. The country labels follow the abbreviations used by the ESS (2022). Source: Own elaboration using data from the SWIID (Solt, 2022).

In terms of the average data per country we can see quite a higher level of variation than was the case for democratic satisfaction. There are lots of countries quite far away from the average value of 29.64 in the Gini index, which suggests the existence of regional trends.

Examining the countries with the highest levels of income inequality, they seem to be either Eastern European, such as Portugal, Spain, Italy, or Greece; or Eastern European, like Estonia, Lithuania, Poland, or Latvia, which present values between 34 and 37 points in the scale. Contrasting them with the countries with the lesser levels of income inequality, we see some expected northern countries such as Sweden, Denmark, or Finland, but the surprise is that a few Eastern European countries also manage to have very low Gini values, such as Slovenia, Slovakia, or Czechia, having values around the 24 points.

Closer to the centre we can observe a few countries from different regions, such as Cyprus, Croatia, Germany, or France. Overall, the results seem here to suggest regional variation, but not of a very strong kind.

In terms of the relation between both variables, it could be cautiously said that there seems to be some parallels in form of an inverse relationship. Looking at the temporal dimension, the increase of income inequality between the years 2006 and 2012 seems to parallel the decline of democratic satisfaction. Comparing the graphs of the average values for the nations, it also seems that most countries with high levels of democratic satisfaction show low levels of income inequality, and vice versa.

But in order to firmly confirm this relationship, only the application of a statistical multilevel analysis will allow to cast aside the suspicion of a spurious relationship or an ecological fallacy.

4.3. THE STATISTICAL ANALYSIS: CHECKING THE HYPOTHESES

Having finished the descriptive analyses, in this section I proceed to check my hypotheses via the elaboration of the following three random intercept multi-level regression models. I have presented them together in the following table:

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
	b	b	b	b
	(SD)	(SD)	(SD)	(SD)
Constant	5.16***	5.05	0.63	-0.02
	(0.81)	(0.07)	(0.65)	(0.66)
Individual level variables				
Ideology		0.11***	0.11***	0.11***
		(0.00)	(0.00)	(0.00)
Gender		-0.11***	-0.11***	-0.10***
		(0.01)	(0.01)	(0.00)
Age		-0.00*	-0.00*	-0.00**
		(0.00)	(0.00)	(0.00)
Personal income satisfaction		-0.44***	-0.43***	-0.44***
		(0.01)	(0.01)	(0.01)
Education (ref=Low)				
Middle		0.01	0.01	0.78***
		(0.01)	(0.01)	(0.09)
High		0.26***	0.26***	1.36***
		(0.01)	(0.01)	(0.09)
Education X Gini				
Middle educated X Gini				-0.03***
				(0.00)
Higher educated X Gini				-0.04***
				(0.00)
Country-year level variables				
Gini index			-0.00	0.02
			(0.01)	(0.01)
GDP/C PPP			0.00º	0.00º
			(0.00)	(0.00)
Government Effectiveness Index			1.14***	1.14***
			(0.12)	(0.12)
Random-effects parameters				
Variance micro-level	4.98	4.77	4.77	4.76
Variance macro-level	1.12	0.85	0.36	0.36
Observations	260,779	260,779	260,779	260,779

Table 4: Random intercept models of satisfaction with democracy. Abbreviatures: b = coefficient, SE = standard error, °p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001. Source: Own elaboration with data from the ESS and others.

To start commenting the regression results, first I want to briefly point out that all the individual level variables reach statistical significance and present values which do not differ significatively from those found in studies using a similar methodology, as I will comment later. In terms of the contextual level variables, it can be seen how the two economic variables are not as good as the procedural variable, the Government effectiveness index, when it comes to predicting democratic satisfaction.

In terms of the total amount of explained variance, it can be seen that my models manage to reduce a portion of the individual-level variance while they hugely reduce the macro-level one. If in the empty model the variance left to explain was of 1.12 at the macro-level, and of 4.98 at the micro-level, then by the fourth model, those levels got reduced to 0.36 and 4.76, respectively.

Moving on to my hypotheses, as it can be seen from the second model, I must reject my first hypothesis in favour of the null hypothesis, since I could not confirm a statistically significant effect of the Gini index values on democratic satisfaction (β=-0.00, p=.672). These results seem to confirm the theories stating that individuals base their democratic satisfaction more on procedural variables, such as the Government effectiveness index, rather than on economic outcomes, in order to check this possible finding, I will replicate the third model in the robustness checks section in order to confirm that is the reason as to why the effect of the Gini index is not statistically significant.

When it comes to addressing the effect of education on its own at predicting democratic satisfaction, it is positive and significant for the higher educated (β=0.26, p=.000), although the effect for the middle educated fails to reach statistical significance (β=0.01, p=.647), when we do not take into account the interaction effect with the Gini index values. This is not surprising, since it seems to be universally accepted in the literature that education has a positive effect (Anderson & Singer, 2008; Andersen, 2012; Armingeon & Guthmann, 2014; Krieckhaus et al, 2014; Van Der Meer & Hakhverdian, 2016; Magalhaes, 2017).

Moving into how the interaction with the Gini index values affect the relationship, addressing my second hypothesis by the fourth model, I can say that it can be satisfactorily confirmed, in its b variant, although I cannot find a significant effect for the lower educated (β=0.02, p=.226)[8] the effects of education (now understood as in a context with economic equality) grow in coefficient and significance for both the middle (β=0.78, p=.000), and the higher educated (β=1.36, p=.000). When we account for the interaction with the levels of income inequality, the results show that in contexts of a higher Gini index value, the negative effect of income inequality in satisfaction with democracy decreases for both the middle (β=-0.03, p=.000), and the higher educated (β=-0.04, p=.000). This makes me confirm my sociotropic hypothesis, H2b, and is in line with the results previously obtained by Van Der Meer & Hakhverdian (2016:102).

Going into my individual level controls[9], some of the results found are certainly interesting when compared with what other authors have found in their research previously.

In respect to my ideological variable, it was found that it significantly predicted democratic satisfaction (β=0.11, p=.000) and that the right-wing citizens tend to be more democratically satisfied. This is in line with the results obtained by Anderson & Singer (2008), and Magalhaes (2017), contrasting with Krieckhaus et al (2014), who found that left-wing

[8] It is important to note that in models 3 and 4, which include the interaction effect between Gini and education, the coefficient designating Gini now describes the values corresponding to the effect Gini levels have for the lower educated.

[9] For the sake of simplicity, in terms of the control variables I will only report the results from the fourth model, since they do not substantially vary from what was found neither at the second, not at the third model.

individuals tend to be more satisfied with democracy, but maybe this divergence is due to the fact that these authors controlled also for the class position of the individuals.

Moving onto gender, my results show that women tend to be significatively less satisfied with democracy than men do (β=-0.10, p=000), this is in accordance with all of the studies I have found, pointing to the conclusion that women are less satisfied with democracy than men.

In terms of the age of the respondents, I found that their age significantly predicted their satisfaction with the way in which democracy works in their country (β=-0.00, p=.001). In respect to this control, there seems to be no consensus on the literature, with some authors finding, in line with my results, that the effect of age is negative (Anderson & Singer, 2008; Armingeon & Guthmann, 2014 & Magalhaes, 2017), and others suggesting that the effect is positive (Andersen, 2012; Krieckhaus et al, 2014 & Van Der Meer & Hakhverdian, 2016).

For the last of the individual controls, I have found that satisfaction with personal income is able to significatively predict democratic satisfaction (β=-0.44, p=.000) meaning that individuals that feel like the income from their household is not enough to live by will be less satisfied with democracy. No other study that I found used this exact indicator, but the consensus seems to be that whether objective measures of income (Anderson & Singer, 2008; Andersen, 2012 & Krieckhaus et al, 2014) or subjective assessments of the national economy (Armingeon & Guthmann, 2014) democratic satisfaction is positively correlated with favourable assessments of the economy.

Starting with my contextual control variables, I found that the GDP per capita based on purchasing power parity significantly predicted satisfaction with democracy (β=0.00, p=.062). This result is in line with the ones obtained with authors that used the variable and found a significant effect (Andersen, 2012 & Krieckhaus et al, 2014). But it also shows that it does not reach the usual criteria for significance ($p<0.05$), pointing again at the possibility that the Government effectiveness index accounts for its effect too.

Finally, moving onto the effects the government effectiveness index had, the variable was able to significantly predict democratic satisfaction (β=1.14, p=.000), which is in line with the results obtained by Holmberg (2014) and confirm the predictive strength of the item.

Once H2b has been confirmed, I consider it to be of interest to plot the relationship between Gini index values and democratic satisfaction for the different levels of education on a visual scale.

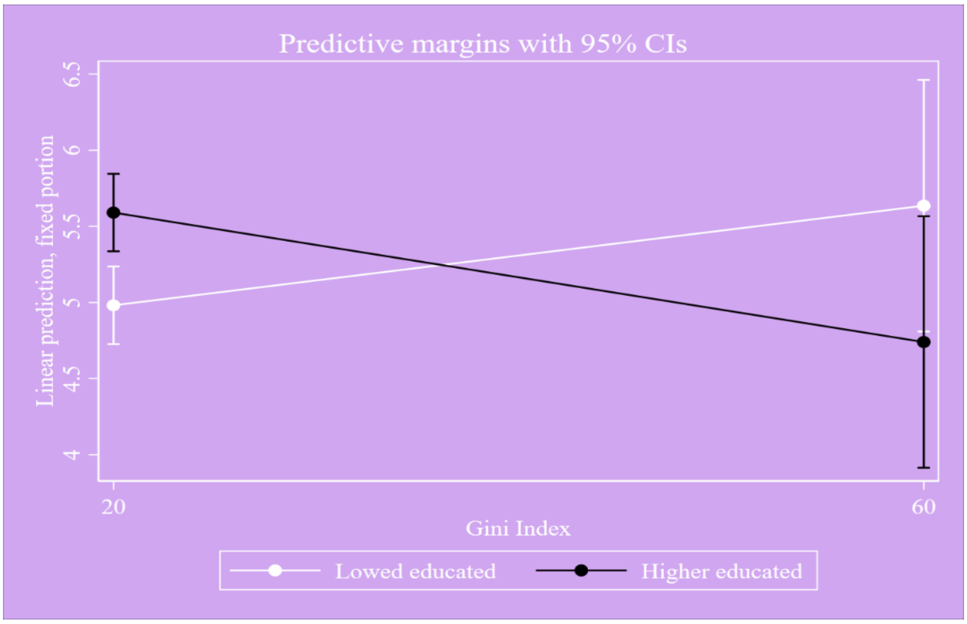

Figure 12: Democratic satisfaction by Gini values and education levels. Source: Own elaboration with data from the ESS and others.

To elaborate my twelfth figure, I decided to use the results derived from my fourth model, and to incorporate only the prediction for Gini values in between 20, which is slightly under the value of 21.9, the minimal I found in my sample of country-years, and with a maximum of 60, that is similar to the value of inequality in the globe, as shown by Chancel & Piketty (2021:42). It is also relevant to note that the values in the middle of the graph, 40, are quite close to the current levels of income inequality in the USA (World Bank, 2022).

I decided on the need to choose an interval on Gini because it would enhance the logical interpretation of the results, because the theoretical limits of the index, 0 and 100, are virtually impossible to be found in reality, because in the first case it would imply a society where all the rents are absolutely equal, and the second would imply absolute inequality of income distribution, both being logical impossibilities.

For the sake of simplicity, since the lines for the middle and the higher educated followed virtually the same trend, to achieve additional clarity I decided to include only the higher, and the lower educated in the graph. In any case, a graph following the full interval, and including all of the three educational attainment categories is available in the annex (figure A1).

When interpreting the results of the graph, it is important to note that the values for the lower educated segment did not reach statistical significance in the regression (β=0.02, p=.226) meaning that the results regarding the lower educated must not be taken to be certain, leaving them at the graph only as reference.

In terms of the higher educated citizens, it can be seen that in a context of low income inequality (20 points on the Gini index) their average levels of democratic satisfaction can be expected to fluctuate between 5.3 and 5.8 points on the ten points scale, with a certainty interval of 95%. Moving onto a context of high income inequality, the average value decreases until barely above the 4.5 points, but the margin of error increases substantially (probably due to the fact that in my sample there were no countries with such high levels of income inequality).

The trend that the higher educated citizens show towards lower democratic satisfaction once inequality increases shows indeed how sensitive they are to income inequality, decreasing enough to be lower than the average values for the lower educated citizens.

4.4. ROBUSTNESS CHECKS

In this final section, I wish to perform three different robustness checks to my analyses, on the first place, a test of multicollinearity, subsequently, a statistical model without incorporating the Government effectiveness index in order to see its influence on the values of my economic variables, and lastly, another multilevel regression incorporating country dummies so that the country-level variance is accounted for, and the data shows only the effects of the variables over time.

Checking whether or not the variables used gave issues of multicollinearity, which would signify that two or more of the values of the variables are too dependent on one another (Thompson et al, 2017:83). One technique usually used in these contexts is that of the variance inflation factor (VIF), which gives a value for every variable used, if these values are above 10, then it is highly likely that there is multicollinearity (Thompson et al, 2017:84). I obtained a mean VIF value of 1.28, with none of my individual variables going beyond a VIF of 2, this means that multicollinearity is not a concern for the validity of my regression results.

Now, moving onto the two additional regressions found in table 5:

Variables	Robustness Model 1	Robustness Model 2
	b (SD)	b (SD)
Constant	5.45***	1.69
	(0.53)	(1.40)
Individual level variables		
Ideology	0.11***	0.11***
	(0.00)	(0.00)
Gender	-0.10***	-0.10***
	(0.01)	(0.01)
Age	-0.00*	-0.00**
	(0.00)	(0.00)
Personal income satisfaction	-0.43***	-0.44***
	(0.01)	(0.01)
Education (ref=Low)		
Middle	0.00	0.79***
	(0.01)	(0.09)
High	0.28***	1.36***
	(0.01)	(0.09)
Education X Gini		
Middle educated X Gini		-0.03***
		(0.00)
Higher educated X Gini		-0.04***
		(0.00)
Country-year level variables		
Gini index	-0.06***	-0.01
	(0.02)	(0.02)
GDP/C PPP	0.00***	0.00**
	(0.00)	(0.00)
Government Effectiveness Index		0.91***
		(0.24)
Random-effects parameters		
Variance micro-level	4.77	4.76
Variance macro-level	0.57	0.17
Observations	260,779	260,779

Table 5: Robustness check models of satisfaction with democracy. Abbreviatures: b = coefficient, SE = standard error, °p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001. Source: Own elaboration with data from the ESS and others

I will proceed to comment the substantial implications of the models one by one, suffice to say that I will not comment every coefficient, only those which are relevantly altered from the previous models.

In terms of the Robustness model 1, it can be seen that the absence of the Government effectiveness index does not only affect substantially the values presented by the Gini index, but also those presented by the other economic variable, the GDP.

After the exclusion of the measure of government effectiveness, the effect of the Gini index values on satisfaction with democracy becomes statistically significant, and its impact negatively correlated (β=-0.06, p=.000), this is in line with the literature on Gini and democratic satisfaction which did not include any measure of procedural fairness, corruption, or Government effectiveness (Anderson & Singer, 2008; Andersen, 2012; Krieckhaus et al, 2014). It can also be observed that the significance of the GDP variable upon democratic satisfaction increases as well (β=0.00, p=.000), reinforcing the notion that the apparent influence of the economy might mask assessments on procedural fairness (Dahlberg & Holmberg, 2014). As it will be discussed in the final chapter, this has relevant implications for the study of the influence that economic conditions have upon democratic satisfaction.

But these results do not invalidate the possibility that income inequality might have an indirect effect upon bureaucratic performance, in fact, we can assume that higher degrees of inequality could erode the universalistic norms in a given administration (Lipset, 1959:84) and this in turn would consist in an indirect influence leading towards lower levels of democratic satisfaction. In fact, performing a correlation analysis between both variables, shows that they are significatively and negatively correlated by the value -0.5069. This means that we can expect that whenever income inequality is high in a given country, then their quality of governance, measured by the government effectiveness index, will be lower.

Lastly, it is time to discuss the implications of the second robustness model. The first surprising effect that can be found is that the effectiveness of the Government effectiveness index is slightly reduced (β=0.91, p=.000). This, alongside the fact that the significance of the GDP variable (β=0.00, p=.010) gives a strong support to the traditional thesis of the studies relating democratic satisfaction and the economy, which argue that the evolution of democratic satisfaction tends to follow economic trends (Norris, 1999:3). In terms of variation on education, or the control variables at the individual level, the values on this robustness check model do not differ substantially from those found in the original models of the analysis.

Having commented on the results from every variable briefly, the substantial implications they have will be discussed during the discussion, where I will explore the theoretical implication these findings have, and the further lines of research they open.

5. DISCUSSION

The final chapter of the thesis is structured aiming at first reflecting upon the main insights it adds to the field of studying democratic satisfaction, then I discuss their relationship with previous knowledge, and finally I consider what future lines of research might be interesting to follow.

5.1. CONTRIBUTIONS OF MY STUDY

This study is not the first to deal with assessments of democratic satisfaction. There is already a significant amount of literature that has replicated similar analyses in different contexts. That is why I decided to try applying a methodology of study in this field that I did not see replicated elsewhere: A longitudinal multi-level analysis linking Gini index values, and levels of education to democratic satisfaction values. As explained previously, I feel this study was innovative because almost no author previously checked the interaction between Gini index levels and educational attainment in the field of democratic satisfaction, and also many analyses did not cover recent data on income inequality, and none seems to have applied such a longitudinal perspective.

Now I will go into detail with the interesting incorporations that this thesis has done to the literature, section by section.

Before elaborating the statistical models or choosing the variables to use, I started my theoretical framework by studying the classics in terms of the study of political legitimacy and the influence of the economic factors in the ways in which the citizens judge their democracies, such as Dahl (2000, 2016), Easton (1975) or Lipset (1959). Once I finished with them, I moved into more recent literature which sought to elaborate further upon Easton’s concepts of diffuse and specific legitimacy. Dalton (1999) specified that democratic satisfaction, as an indicator, reflected a dimension of political support in between the Eastonian dichotomy.

After having read a plurality of works dealing with the issue of the influence that economic conditions in general, and specifically income inequality have upon democratic satisfaction and societal happiness, I concluded that there were enough studies proving or disproving the effects of the Gini index on democratic satisfaction, but none that made full use of the statistical databases that are available currently, therefore I moved into the elaboration of my hypotheses.

In order to construct them, I got inspiration from different gaps that I found in the democratic satisfaction literature. On the one hand, this literature found that despite a relative stability of the average values of democratic satisfaction during recent decades, the satisfaction levels were increasing for the highly educated citizens, whilst remaining stable or even decreasing for those with low educational attainment (Aarts et al, 2017). With the knowledge about the rising levels of income inequality, I aimed at linking both phenomena with the idea that the higher educated citizens might be more satisfied with democracy in contexts of high income inequality, thus explaining, at least partially, this democratic gap.

In the data and methods chapter, I explained why I chose satisfaction with the way in which democracy works as the dependent variable for the study. It is an indicator that, as I explained, faced strong criticisms due to its lack of clarity and ambiguity of interpretation (Canache et al, 2001). After having read all these criticisms, I could not continue without addressing them and just base my choice upon data availability and the fact that it is an indicator used in a multitude of research (Anderson & Singer, 2008; Dahlberg & Holmberg, 2014; Kriesi, 2013; Armingeon & Guthmann, 2014; Van Der Meer & Hakhverdian, 2016; Magalhaes, 2017). This is why I reviewed literature on survey design, and interpretation, and indicator construction (Zaller & Feldman, 1992; Bertrand & Mullainathan, 2001 & Bauer et al, 2017) and concluded the validity of the item.

Then, I started gathering my variables from the ESS (2022) and other sources such as Solt (2022) or The World Bank (2022), I decided to incorporate to my analysis a set of countries from the ESS belonging to the EU. The fact that during these past few years, the economic growth of the Eastern European nations has put them on pair with earlier values of the GDP of Western European ones has also helped me in incorporating them to the regression models, bypassing the impossibility to do so that Andersen (2012) faced.

The control variables I selected included some of the generally used in these types of studies such as gender, the GDP, or the age of the respondents, but besides those, I have also included a variable which is not common to find in studies of democratic satisfaction, and that is the government effectiveness index from The World Bank (2022), which Holmberg & Dahlberg (2014) have proven to have a stronger effect on democratic satisfaction than other variables previously included such as corruption.

My results can confirm the tendency of the democratic satisfaction to closely follow economic trends, and also to not vary substantially, neither during time nor between countries. On the other hand, the values of the Gini index have slowly but steadily risen during the period of the study, and I could confirm that there is a substantially higher degree of variation between countries.

In terms of the regression results, I am unable to confirm my first hypothesis, due to the strong effects of the inclusion of the Government effectiveness index, as the robustness tests confirmed. But in terms of my second hypothesis, I could confirm that there is an interaction effect between education and Gini values when assessing democratic satisfaction. In fact, it seems that the higher educated citizens take a negative reaction to rising income inequalities, perhaps because they take a sociotropic perspective on the issue.

The substantial implications that I can derive from these findings will be discussed in the next section, in which I will comment the scientifical, and social implications of the results that both hypotheses showed in the analysis.

5.2. IMPLICATIONS FOR THE STUDY OF DEMOCRATIC LEGITIMACY

To start commenting the implications derived from my results, I will comment what I am able to derive from the failure to accept the first hypothesis of my thesis. Not only did I find in the main analysis that the effect Government effectiveness has upon satisfaction with democracy is significant and substantially higher than the coefficients presented by the economic variables, but the robustness checks confirmed that it accounted for the effects of income inequality over democratic satisfaction.

In terms of the scientific relevance, this confirms the thesis defended by authors such as Dahlberg & Holmberg (2014) that the effects the economy has upon satisfaction with democracy are smaller than what the literature has generally assumed.

But, as my robustness checks show, in the longitudinal sense, the effect of government effectiveness gets slightly reduced in favour of the economic variables. Which means that for longitudinal analyses, both types of variables seem to be valid.

Turning into the societal impact this finding has, starting with the possible explanations behind the correlation seen in the analyses between income inequality and the lack of a competent bureaucracy, the recent book from Michael Sandel (2021) suggests that during the recent decades, the rise of the meritocratic rhetoric has contributed to eroding the common good in our societies. Because if everyone internalised that their success is their own doing, that whoever landed on top deserves their recognition in terms of social prestige and an increased income, and whoever fell to the bottom simply did not deserve better, then there is no reason as to treat them equally fairly as citizens in a democratic sense.

This might come hand in hand with another intake from the literature that argues that unequal societies tend to generate and legitimate an incompetent and corrupt bureaucracy (Lipset, 1959:84), which would in turn dialectically influence more political, income, and wealth inequalities for the future.

If these theses were to be confirmed, it could give a reason as to why unequal societies tend to generate unfair governance structures, which would in turn legitimize and reinforce the unequal rent distribution in a vicious circle. An increase of inequalities and unfairness might affect our democracies in two very distinct ways, as it will be discussed by the end of this section.

Moving onto the scientific implications derived from my second hypothesis, my regressions show that my hypothesis 2 was right, there is a significant difference in the way that different levels of education react towards different values of the Gini index when judging the performance of their democracies. More precisely, I rejected my h2a, the egocentric hypothesis in favour of h2b, the sociotropic hypothesis, due to the fact that the satisfaction with democracy of the higher educated citizens drops significantly in the context of high income inequality.

These results confirm the increasing relevance of education in our current societies because other studies already pointed to the important role that it has in terms of assessing corruption in a society (Van der Meer & Hakhverdian, 2016). In this thesis, it has been proven that educational attainment does also interact with the Gini levels, which reinforces the notion that education nowadays does not only imply a larger capability for processing information, but also a different set of values, more critical of society (Schakel & Hakhverdian, 2018:462).

The reasons as to why do they react in this way could be due to my interpretation that they take a sociotropic perspective, judging on a normative basis that unequal societies are neither fair nor desirable. But my results could also be explained by the intake from social psychology that high inequality has also damaging consequences for the life quality of the citizens pertaining to the higher percentiles of income (Wilkinson & Pickett, 2009:505). This might be due to the increased risk on security that inequality might produce, to the reduced economic activity that an unequal society might contribute to, or to other factors altogether.

Moving onto the theories of the democratic satisfaction gap, the scientific implications are that my research is unable to explain why it exists. But what it can in fact suggest about the theories of the democratic satisfaction gap between different levels of education (Aarts et al, 2017) visualized in the figure 12, is that this gap might be in risk of disappearing in the future, since it seems that higher educated citizens react more strongly not only to higher levels of income inequality, but also to the perception of high levels of corruption, as Van der Meer & Hakhverdian (2016) point out.

The disappearance of the education satisfaction gap would be a reason to celebrate if it meant that the satisfaction of the lower educated is rising to meet the higher levels that the citizens with a high attainment have, but in fact it seems that it is the other way around: Everyone is growing more dissatisfied with democracy.

If we take a negative perspective, if societies keep growing to be unequal, we can expect an erosion of more diffuse levels of legitimacy, as it is nowadays the case with international institutions like the European Union. Because recent political developments show that the lower educated citizens are already feeling alienated from the system, and that in response they vote anti-establishment political platforms or policies, such as Brexit, or the radical populist parties in different western countries (Sandel, 2021:26). If the higher educated followed the same tendency, by voting for anti-establishment political groups, democracy would be at risk, in the same way as if they were to grow cynical and stop participating as much as they currently do. As it has been traditionally defended, a democratic regime can only survive economic crises with the explicit support of the population (Dahl, 2016:181).

But there are some reasons to be optimistic, it could also possibly be that, if the higher educated take a normative perspective, they might grow motivated to argue in favour of political change. Previous studies argued that whenever there has been an income shock to a democratic regime, in many occasions an increase on democratic quality followed (Kotschy & Sunde, 2021:296). This is easier to understand if the history of our democracies is taken into account, it must be remembered that one century ago, the economy already generated vast inequalities amongst social classes, but instead of opting for revolutionary change, most democracies were able to regulate the market mechanisms and provide measures of social security via the welfare state programmes (Dahl, 2016:200).

Only time will provide an answer to these questions, so the final section of this thesis will aim at suggesting what can be done in new research.

5.3. FUTURE LINES OF RESEARCH

In this final section, I want to reflect upon the weaknesses of my research, since the strengths have been already addressed on the first section of this chapter, and the future research aims that I derived from them.

First of all, the fact that it is the first time that I have constructed a multi-level model of this kind, made me cautious about the types of variables to include and the statistical strategy to follow. In order to simplify the statistical models and to reduce the possible complications found in the way, I decided to employ a two level model grouping the individuals in country-years, instead of opting for a three level composition of individuals nested in countries, and in years.

The simplification this model brings has the counterpart of me conflating some of the regional and temporal variance, and to ignore the fact that country-years are still also nested in countries. Which leaves some clustering in the data that is not accounted for. In future models, this should be addressed with more complex methods. I also feel that in future models, more individual and macro-level controls could also be included, although noting the fact that multicollinearity issues could arise. One example at the micro-level could be whether the individual is employed or not, and to which sector. Because in our modern economies it is very relevant to note if an individual has a stable occupation following traditional *fordist* logics of production, or rather *post-fordist* occupations, which tend to be unstable in terms of both employment conditions and income (Jessop, 1996). In terms of macro-level variables, there is both other variables such as inflation, or measures of corruption, that might shed additional light on democratic satisfaction.

Moving onto an interesting future research that builds upon the findings I have made, as stated during the introduction, this research has aimed to be an example of a least likely scenario to find a relationship between levels of income inequality and democratic satisfaction. This still leaves the door open to find a stronger relationship in contexts with more variation and higher levels of income inequality. The lack of data for many regions challenges this idea, but a strong contender for future research should be the USA, because in that context, the average levels of income inequality double the ones found in Europe (World Bank, 2022).

Comparative research has proven that European citizens, contrasting with US nationals, tend to blame the misfortune or success of individuals to societal forces beyond their control rather than to the effort put by individuals themselves. This mentality is argued to be favourable to the creation and reinforcement of societal bonds and solidarity (Sandel, 2021:74). Maybe this could be the reasoning behind as to why do the middle and higher educated individuals feel less satisfied with the ways in which their democracies work in the context of high levels of income inequality. Following this line of thought, highly educated citizens might be more sensitive towards an unjust distribution of wealth, even if they might be benefitted by it.

Taking these factors together, we might expect that in the US it could be found that income inequality might be more likely to influence assessments of democratic satisfaction, and that maybe due to the mentality of the “American Dream” the educated individuals of the country would not be as influenced by higher levels of income inequality as the European ones seem to be. In any case, if the American higher educated elites were to react like the European ones do, then we could expect, *ceteris paribus*, their satisfaction to be around 0.5 points minor, following the logic of figure 12.

It is also relevant to note that in this thesis, the exact mechanisms behind the relationship of education, Gini, and democratic satisfaction were not checked. The meaning of the negative relationship might differ substantially depending on them, as well as to know whether it inclines the citizens to passive cynicism or to an active, progressive role in trying to improve democracy.

Overall, this thesis has been a challenging endeavour, and I am satisfied that I was able to contribute to the knowledge gathering about a topic as relevant as democratic satisfaction. I believe that it is societally relevant to keep investigating the impact that the deteriorating social security networks in our current societies to understand the growing sense of alienation that the population is suffering, and the risk they imply, with the rise of populist political alternatives.

This type of research is what our political leaders need in these days, where the rhetoric and market-oriented policies of the traditional parties seems to grow more disconnected from what the *demos* demands.

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IV. ANNEXES

Country/Year	2002	2004	2006	2008	2010	2012	2014	2016	2018
Austria	x	x	x				x	x	x
Belgium	x	x	x	x	x	x	x	x	x
Bulgaria			x	x	x	x			x
Croatia				x	x				x
Cyprus			x	x	x	x			x
Czechia	x	x		x	x	x	x	x	x
Denmark	x	x	x	x	x	x	x		x
Estonia		x	x	x	x	x	x	x	x
Finland	x	x	x	x	x	x	x	x	x
France	x	x	x	x	x	x	x	x	x
Germany	x	x	x	x	x	x	x	x	x
Greece	x	x		x	x				
Hungary	x	x	x	x	x	x	x	x	x
Ireland	x	x	x	x	x	x	x	x	x
Italy	x					x		x	x
Latvia				x					x
Lithuania					x	x	x	x	x
Luxembourg	x	x							
Netherlands	x	x	x	x	x	x	x	x	x
Poland	x	x	x	x	x	x	x	x	x
Portugal	x	x	x	x	x	x	x	x	x
Slovakia		x	x	x	x	x			x
Slovenia	x	x	x	x	x	x	x	x	x
Spain	x	x	x	x	x	x	x	x	x
Sweden	x	x	x	x	x	x	x	x	x

Table A1: Country-year observations from which data is available, source: Own elaboration with data from the ESS (2022).

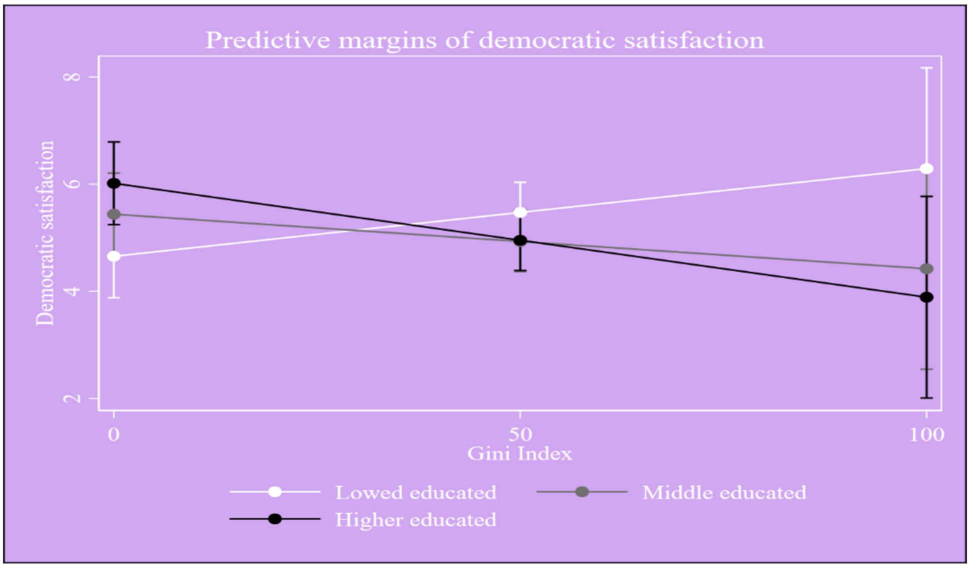

Figure A1: Predictive margins of democratic satisfaction for all education levels, from Gini values 0 to 100. Source: Own elaboration with data from the ESS (2022) and others.