

# Income Inequality and its Effects on Satisfaction with Democracy

A multilevel Analysis of 29 European countries

Ingeborg Sivertstøl



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Department of Comparative Politics  
University of Bergen

## Abstract

Rising levels of income inequality is one of the greatest challenges that advanced democracies face today. Thus, providing knowledge on how income inequality affects the democratic regime is a crucial task for both scholars and policy makers. Likewise, understanding how democracies backslide or break down, is important for our understanding of advanced democracy today. This thesis contributes to this area by examining to what extent income inequality, by studying both subjective and objective measures, affects satisfaction with democracy. The scholarly literature largely applies objective measures, such as the GINI index, when studying the effects of income inequality on democracy and democratic satisfaction. I argue that subjective inequality is an important additional measurement to more broadly understand the effects, as it involves how citizens perceive income inequality, rather than the actual level.

My argument is that greater income inequality makes citizens less satisfied with the democratic regime. By this, democratic legitimacy, and the very existence of democracy regime, is harmed. I test this argument by conducting a multilevel analysis of 29 countries in Europe (N=49519). The results show that higher levels of both subjective and objective measures of income inequality are associated with lower levels of democratic satisfaction. Moreover, I find that both individual level, as well as country level income inequality, are important in explaining satisfaction with democracy. The results are to a large extent consistent with theoretical expectations.

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# 1 Introduction

## 1.1 Research Question

Income inequality has been rising substantially during the last decades and is one of the greatest challenges facing advanced democracies today (Piketty 2014; Stiglitz 2015). The gap between the rich and poor has come to be the defining challenge of our time as it has reached a point higher than ever (Dabla-Norris 2015, 4). In the last decades, citizens' income in developed Western countries has either stagnated or declined. This is the situation despite significant economic growth, which has come to mainly benefit the top ten percent of the population, and largely the top one percent (Inglehart and Norris 2016, 10).

Scholars have to a large extent demonstrated the negative political consequences that income inequality poses to democratic regimes. It has been shown to depress political engagement and interest among citizens (Solt 2008), increase political cynicism and mistrust (Dotti Sani and Magistro 2016; Rothstein and Uslaner 2005), intensify distributional conflicts (Boix 2003; Acemoglu and Robinson 2001), as well as intensify conflicts of winners and losers of globalization (Kriesi 2020), increase economic insecurity among citizens, and to play a crucial role in the rise of anti-democratic populist parties throughout Europe (Inglehart and Norris 2017; Stoetzer et al. 2021). Karl (2000, 156) argues that: "Where income inequality is greatest, people are more willing to accept authoritarian rule, less likely to be satisfied with the way democracy works, less trusting of their political institutions, and more willing to violate human rights".

Income inequality is a subject of particular relevance with regard to the legitimacy and survival of democracy. Among political scientists, it is conventional wisdom that a stable and persistent democracy is dependent on citizens who support the principles of democracy, and who are satisfied with the functioning of democracy (Linde and Ekman 2003, 392). Thus, satisfaction with democracy is crucial for the survival of a democratic regime. Low levels of democratic support are a severe threat to the existence of a democracy because its legitimacy depends on how citizens assess the democratic regime (Lipset 1959).

Robert Dahl (1971, 103) expresses that persistent inequality leads to "resentments and frustrations which weakens allegiance to the regime". Democracy is vulnerable when the

government becomes unattractive to its citizens (Luo and Przeworski 2019, 6), and Foa and Mounk (2017) argue that the rising levels of democratic dissatisfaction seen today, is a sign of a larger trend of democratic backsliding.

As inequality is one of the greatest challenges facing advanced democracies today, it is of vital importance to understand how it potentially come to affect democracy, more specifically citizens' satisfaction with democracy, and thus the very existence of the regime. The need to further investigate this subject is of crucial importance, and the rising levels of income inequality makes it even more critical.

By conducting a cross-national multilevel analysis of 29 European countries, this thesis seeks to examine the relationship between income inequality and satisfaction with democracy. I seek to understand this effect by applying both actual income inequality (objective inequality), and citizens' own perception of inequality (subjective inequality).

Based on this, the research question for this thesis will be the following:

*To what extent does income inequality, both subjective and objective, affect satisfaction with democracy?*

## 1.2 Why Study Income Inequality on Satisfaction with Democracy?

The motivation behind this research question is rooted in the rising levels of income inequality and the threat it poses on the democratic regime. Perhaps no other concepts are of such vital importance to policy makers and scholars, as democracy (Coppedge et al. 2011, 247). Providing knowledge on how democracies emerge, backslide, and break down is crucial for our understanding of democracy.

Linz and Stepan (1996, 15) point out that a democracy is consolidated when it has become “the only game in town”. This implies that when consolidated, democracy has come to be a one-way-street where a majority of the citizens believe that democracy is the best way of governing, and support for non-democratic alternatives is minimal (Linz and Stepan 1996, 16). Some decades ago, Fukuyama argued that liberal democracy represents the “end point of mankind's



ideological evolution” and “the final form of human government” (Fukuyama 1992, xi, cited in Karolewski 2021, 303).

However, Foa and Mounk (2017, 9) put forward that democracy “might not be a one-way street after all”. A vast number of scholars argue that there exists a global trend of democratic backsliding (Foa and Mounk 2017; Bermeo 2016; Bauer and Backer 2020).

Previously, democracies broke down through coup d'états, revolutions, or external interventions. One could set an exact date to when democracy broke down. Today, however, democracies gradually diminish from within its very institutions, and it happens in legitimate forms (Bermeo 2016, 6).

Foa and Mounk (2017, 10) argue that dissatisfaction with democracy may serve as an early warning sign of democratic deconsolidation and that “the core aspects of liberal democracy have become less likely to persist into the future”. They (2017) argue that citizens in Western democracies are increasingly becoming more dissatisfied with democracy. They claim that citizens “have become more cynical about the value of democracy as a political system, less hopeful that anything they do might influence public policy, and more willing to express support for authoritarian alternatives” (Foa and Mounk 2016, 7). Inglehart (2016, 19-20) agrees to the claim that citizens’ support for democracy has eroded during the past two decades, at the same time as support for non-democratic alternatives has increased.

Traditionally, the focus on regime change has been on the transitioning from non-democracy to democracy. However, I align with several scholars that the assumption that a consolidated democracy is safe, needs further scrutiny. It is crucial for scholars and policy makers to identify early warning signs of democratic backsliding. A core question is: under which conditions do legitimacy and democratic support erode? At the same time as scholars point to decreasing levels of democratic support, income inequality has increased to higher levels than ever. This makes it important to explore the relationship between democratic support and inequality.

Across OECD countries the average share of disposable income that is earned by the top 10 percent is around ten times higher than the income of the bottom 10 percent (Stoetzer et al. 2021, 1). Most of the democratic societies have witnessed a rapid increase in income inequality over the past decades (Piketty 2014; Stoetzer et al. 2021). As wealth becomes concentrated in

the hands of the few, the economic conditions for the rest of the citizens have stagnated or declined (Erikson 2015, 12; Inglehart and Norris 2017, 449). Stiglitz (2015, 381) describes that there has been “a hollowing out of the middle class”, and with this: as the rich get richer, it happens on the cost of the middle class, and especially the poor (Hyde 2020, 915).

Equality between citizens is a democratic ideal and serves as a basis for a well-functioning democracy (Dahl 1971). Stiglitz (2015, 391) points out that an economically divided democracy does not function well, because income inequality naturally translates into political inequality. As this thesis sought to demonstrate, political power and political powerlessness both emerge from inequality (Pearce 2014, 93). Income inequality brings about great economic, social, and political costs to democratic societies. Put simply, it changes the rules of the game. Rising levels of income inequality represent a threat to democracies because it put a challenge to their very existence.

In sum, under the mentioned circumstances of rising levels of inequality, understanding how it may affect citizens’ attitudes towards democracy continues to be a crucial task to investigate for social scientists.

### 1.3 Contributions

This thesis contributes to the literature by raising awareness to both scholars and policy makers of the potential threats the democratic regime faces. Much research has been dedicated to investigating how economic and political challenges impact Europeans attitudes towards democracy. However, Ferrín and Kriesi (2016, 2) argue that there are still much to discover. According to Bermeo (2016, 5) there is a lack of systematic comparative work in order to understand *how* democracies break down. Political scientists have devoted much attention to economic and institutional correlations, rather than studying choices and choosers, Bermeo argues. I hope to contribute to filling this gap.

My intention is to investigate different theoretical perspectives on the relationship between income inequality and citizens’ satisfaction with democracy. Income inequality varies greatly between countries, and even among countries at similar levels of economic development

(Gornick and Jäntti 2013, 1). Likewise, citizens' attitudes towards democracy vary to a great deal between as well as within countries.

This thesis attempts to explain how income inequality effects satisfaction with democracy at both the individual level as well as the national level. Furthermore, national inequality is expected to determine the effect of individual income inequality. By this, a multilevel cross-country analysis provides a fruitful approach.

Moreover, this study tests the effect of both subjective and objective income inequality. A great deal of studies on the effect of income inequality rely on objective measures of income inequality, as being the national level of inequality, measured by the GINI index. However, several scholars have put forward the need of including citizens' own perceptions of income inequality when studying this issue (Gimpelson and Treisman 2018; Wu and Chang 2019). A more precise understanding of the relationship between income inequality and satisfaction with democracy involves a subjective measure of inequality (Gimpelson and Treisman 2018, 27). Moreover, as Wu and Chang (2019, 1478) argue, there exists a lack of micro-level evidence on the effects of inequality on democratic support.

Although several studies have investigated subjective measures (Kang 2015; Gimpelson and Treisman 2018; Wu and Chang 2019; Muhtadi and Warburton 2020), such studies are, after my knowledge, still scarce, and I notice a lack of empirical studies on this matter. Based on this, this study intends to contribute to the literature by examining the effects of both subjective and objective measures of inequality on satisfaction with democracy. I believe this is the most fruitful approach to fully understand this relationship.

Finally, this study will apply multiple imputation techniques on the individual level missing data. This is considered advantageous because this thesis focuses upon income, and the income variable contains a relatively high number of missing data (19.5 percent). By using multiple imputation methods, a more valid and proper study is performed.

## 1.4 Key Findings

In this thesis I find that both higher levels of objective and subjective income inequality are associated with lower levels of satisfaction with democracy. The key findings can be summarized as follows:

- 1) Richer citizens are more satisfied with democracy compared to poorer citizens.
- 2) Citizens perceiving that income inequality is large are more likely to be dissatisfied with democracy.
- 3) Likewise, if the objective income inequality level, measured by the GINI index, is high, democratic satisfaction tends to decrease.
- 4) Lastly, I do not find that the individual level effect of income on satisfaction with democracy is conditioned by country level income inequality.

In sum, the findings of this thesis are in line with the theoretical assumptions presented in chapter 2, except from the cross-level effect.

## 1.5 Structure of the Thesis

This thesis proceeds in the following way. In chapter 2, concepts, the theoretical framework as well as the empirical literature will be presented. In the end of this chapter, I present the empirical hypotheses. Chapter 3 addresses the data and measurement used in the analysis, and chapter 4 present and discuss the analytic strategy and methods. In chapter 5, the findings and results from the analysis will be presented and further discussed in chapter 6. Lastly, the thesis ends with chapter 7, where the research question as well as the formulated hypotheses will be discussed with regards to the theoretical expectations.

## 2 Theory and Previous Empirical Findings

### 2.1 Theoretical Framework

The theory chapter presents *four* different theoretical perspectives on the relationship between subjective and objective income inequality, and satisfaction with democracy. The theoretical framework argues that higher levels of both individual level and country level income inequality, decrease citizens' satisfaction with democracy. Moreover, country level income inequality is theoretically expected to condition the effect of individual level income inequality on satisfaction with democracy.

The overall four theoretical perspectives that are to be presented are:

- 1) The Relative Power Theory and the Schattschneider Hypothesis
- 2) The distributional conflict
- 3) The Economic Insecurity Thesis
- 4) Relative deprivation and resources to participate in politics

The outline of this chapter is as follows: first I will present some key concepts. It is crucial to understand 1) what a democracy is, 2) what satisfaction with democracy is and 3) what income inequality is. The four theoretical perspectives are then presented, followed by the subchapter on previous empirical findings. Finally, four empirically testable hypotheses are presented.

### 2.2 Defining Democracy

Robert A. Dahl (1971, 2) defines democracy to be “a political system one of the characteristics of which is the quality of being completely or almost completely responsive to all its citizens”. This implies that the government pays attention to the needs and desires of all its citizens, and that the citizens are regarded as political equals (Dahl 1971, 1).

The origin of the word *democracy* comes from the Greek words *demos* and *kratos*, meaning “people” and “rule” (Møller and Skaaning 2013, 2). How to define democracy is debated among scholars. However, it seems to be a consensus that democracy is, as a core principle, a system in which the power lies with the people. Democracy has complex demands (Sen 1999, 9). The right to vote and respect for the election result is of vital importance in a democratic regime.

Respect for legal entitlements, access to uncensored media and the protection of liberties and freedoms are also essential components (Sen 1999, 10).

Whereas some scholars advocate a maximal definition of democracy with several attributes (Dahl 1971, Mainwaring et al. 2007), others adopt a minimal definition with fewer entities (Schumpeter 2010, Boix et al. 2012, Przeworski et al. 2000). Joseph A. Schumpeter defines democracy in a minimal conception to be a system with an “institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people’s vote’ (Schumpeter 2010, 241). The presence of free and fair elections is a critical element for a regime to be democratic. This definition is about elections and nothing more. In accordance with Schumpeter, Przeworski et al. (2000, 19) define democracy in a minimalist stance to be “a regime in which government offices are filled by contested elections”.

However, other scholars assert that there is more to democracy than free and fair elections. Complex definitions often contain a more idealistic point of departure. In this regard democracy may include *liberté, égalité, fraternité*<sup>1</sup>, where civil liberties and system transparency are guaranteed (Huntington 1991, 9). Dahl operates with a complex definition which includes eight institutional guarantees such as freedom of expression, freedom to form and join organizations and alternative sources of information. Dahl (1971, 3-4) emphasizes that there is a great variation among regimes to what extent these institutional guarantees are present, both historically and today. As Møller and Skaaning (2013, 7-8) point out, all contemporary democracies conduct elections. However, there prevails an extensive diversity to the extent of which democracies respect liberties and the rule of law.

No democratic institution existed on a national level in the West in the year of 1750, whereas in the 1900 they occurred in several states. As this century was coming to an end, an increasing number of states had developed democratic institutions gradually, through what is known as the three waves of democratization. Put simply, a country undergoes democratization when transitioning from nondemocracy to democracy (Huntington 1991, 13-15). A vast majority of Western countries democratized in the period of 1828-1926 and are characterized as *first wave*

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<sup>1</sup> «Liberty», «equality», «fraternity».

*democracies*<sup>2</sup>. The first wave of democratization had its origins in the American and French revolutions (Huntington 1991, 16). However, the first wave was followed by a reverse wave where some of the democratized countries reverted to nondemocracies. As Huntington (1991, 15) points out, “history is messy and political changes do not sort themselves into neat historical boxes (...) History is also not unidirectional”. This illustrates that the history of democracy and democratization is not straightforward, but rather complex and turbulent.

The dependent variable of this study is not democracy, but satisfaction with democracy. Therefore, I do not intend to go further into the conceptual and definitional discussion of democracy. For this thesis, a basic understanding of democracy which now has been presented is to be considered sufficient.

### 2.2.1 Conceptualizing Satisfaction with Democracy

As Gerring (2012, 119) points out, “no social science concept can hope to be truly universal”. This means that concepts may “get in the way of clear understanding” (Gerring 2012, 113) when it is not precise what the concept entails. Hence, a conceptualization of *satisfaction with democracy* is considered crucial for this study.

Satisfaction with democracy is a commonly used indicator for democratic support. However, the item is highly disputed among scholars. Some scholars (Canache et al. 2001) will argue that satisfaction with democracy should not be included at all in any survey, while others (Anderson and Guillory 1997, Clarke et al. 1993, Wagner et al. 2003) justify the use of it.

When studying satisfaction with democracy, a starting point is the seminal work of David Easton (1975) who distinguishes between *specific* and *diffuse* support. Specific support is performance based and illustrates whether citizens are satisfied with the current political authorities. It is “object-specific” because it is directed towards the everyday actions, decisions and policies carried out by the authorities (Easton 1975, 436-437). Whereas specific support evaluates the performance of the authorities, diffuse support refers to the evaluation of the

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<sup>2</sup> This applies to the following countries: Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, United Kingdom, and the United States (Huntington 1991, 14-16).

regime as a whole. Diffuse support emerges from both socialization as well as experiences in life and is therefore more durable compared to specific support. On the other hand, specific support may fluctuate because it changes in accordance with replacements within the political authorities (Easton 1975, 444-446).

According to Linde and Ekman, (2003, 391) *satisfaction with the way democracy works* should not be used to measure support for the principles of democracy. Rather, they argue that this indicator shows support for how the democratic regime works in practice. It is also problematic because it is not evident what satisfaction with democracy actually measures. Their argument is that dissatisfaction with the way democracy works not necessarily entails that people prefer an authoritarian alternative.

Going even further, Canache et al. (2001, 525) suggest that satisfaction with democracy should not be used at all because it suffers from “fatal flaws” and that the item is “inherently ambiguous”. In accordance with Linde and Ekman, they argue that it is impossible to know what is being measured because it is uncertain how respondents perceive satisfaction with democracy (Canache et al. 2001, 525).

Meanwhile, some scholars take a more pragmatic position in the debate when arguing that the level of ambiguity is acceptable (Clarke et al. 1993, Wagner et al. 2003) Wagner et al. (2003, 6) consider satisfaction with democracy to be a useful summary indicator to measure “what democracy should look like, and the way it works”. As they point out, citizens vary in both the way they assess democracy, as well as what they evaluate when they think of democracy.

Clarke et al. (1993, 1003) argue that satisfaction with democracy “provides a useful overall summary measure of satisfaction with existing democratic political systems”. It follows from this view that when respondents are asked about their satisfaction with *how democracy works in [country]* they do so with a reference to several aspects such as their community, the political system, and the incumbent authority (Canache et al. 2001, 509). Lockerbie, (1993, 282-283) on the other hand, argues that this question clearly asks the respondents to assess the regime, and not the incumbent party. He argues that dissatisfied respondents are synonymous with dissatisfaction with the regime.



Satisfaction with democracy as an item has frequently been used as a measure of system support (Anderson and Guillory 1997, Klingemann 1999, Clarke et al. 1993). In light of the Eastonian framework, Anderson and Guillory (1997, 70) state that it is challenging to make a strict distinction between citizens diffuse and specific support because the two items are found to be highly correlated. Moreover, Fuchs (1993, in Anderson and Guillory 1997, 70) argues that this distinction is first and foremost useful at a conceptual level, rather than in empirical research.

An additional note is the argument of Inglehart (2003, 51) that respondents tend to be consistent when answering questions regarding democracy because “people who support democracy on one indicator, tend to support democracy on other indicators”.

Klingemann (1999) finds that satisfaction with democratic practice is aligned with higher levels of support for democracy as a form of government. Thus, dissatisfaction with the democratic practice could eventually lead to an erosion of democracy. This is in line with Lipset’s (1959) argument, that the legitimacy of a democratic regime is much influenced by the performance of the regime.

Every individual has its own perception of what a democracy is, and what the concept contains. How democracy is understood varies not only between countries, but also between individuals living in the same country. It is also important to point out that there are great variations in the structure of democratic regimes and how they function, which again may affect citizens’ attitudes towards democracy. Gerring (2012, 120) notes that democracy carries multiple meanings, and there will always be respondents who understand the concept differently from the definition introduced by scholars.

Given the state of the above presented debate, I argue that the question *how satisfied are you with the way democracy works in [country]* serves as the best indicator for system support in this thesis notwithstanding its ambiguity, and will therefore be applied in this study. Ambiguity will also be present if distinguishing between specific and diffuse support because scholars will not know how respondents interpret the survey questions.

## 2.3 The Concept of Income Inequality

Income inequality is the main explanatory variable in this thesis. Some remarks on the concept are therefore necessary.

Income is defined as the total amount of money received either through *wage earnings* (such as wages, salaries, bonuses, other labor related earnings, and state benefits) or *capital* (such as rent, dividends, income related to owning land, real estate and so on) (Piketty 2014, 23). This is a common definition of income, also shared by Atkinson (2015, 30), and Gornick and Jäntti (2013, 7). In this thesis income is measured at the household level, meaning that the earnings of everyone in one household are added together. A person with low income might live together with a person with high income, and thus, their total income is what must be considered (Atkinson 2015, 30).

Income inequality is defined as the uneven distribution of income among households (Wu and Chang 2019, 1477). Coulter (2019, 3) defines inequality in the income distribution as follows: “Distribution is defined as the division of units among components of a social system. Inequality is defined as variation in that division”. *Units* refer to income, and *components* might be individuals, households, or social groups. If all components have the same number of units, the distribution is equal. If the components do not possess the same number of units, the social system is characterized by inequality (Coulter 2019, 4).

In this thesis, income inequality at the national level refers to household’s income gap among citizens within a country. The most used measurement of income inequality is the GINI index, which is being applied in this thesis. The operationalization and measurement of both income and income inequality is further discussed in the data and measurement chapter.

## 2.4 Income Inequality in Democracies

The theoretical argument of this thesis is that higher levels of income inequality have a negative effect on satisfaction with democracy. In other words, income inequality creates discontent with the democratic regime among the public. Therefore, an understanding of how income inequality affects democratic regimes is seen compulsory. The idea that income inequality is harmful to democracy has been much elaborated in previous literature. Political scientists widely assume

that high levels of income inequality have negative consequences for politics and public policy in democracies.

Democracy is highly associated with the ideal of equality. Principles of equality and fairness play an important role in scholarly debates on the quality of democratic life. It has long been theorized by political scientists that a relatively equal distribution of economic resources ensures a decent functioning of democracy. The assumption that all human beings are born equal emerged in the eighteenth century as a philosophical reaction to the prevailing idea that rank and stratifications between individuals was a result of natural differences (Pearce 2014, 91).

Conceptually, democracy is inevitably linked to the ideal of equality. However, in reality democracies comply with this ideal very differently, but the gap between reality and democratic ideal is largest in unequal societies (Schäfer 2013, 142).

In the dataset used in this study, the European Social Survey's ninth wave (2018), exactly 50 percent of the respondents (N= 49 519) *agree* or *strongly agree* that “a society is fair when income and wealth are equally distributed among all people”. Around 70 percent believe that everyone should be treated equally and have equal opportunities in life. Around 75 percent *strongly agree* or *agree* that the government should take measures to reduce differences in income levels. These are not variables used for this study, but it leaves us with the impression that equality is important for the respondents in their democratic European societies.

Dahl (1998, 65) expresses that democracies are founded upon moral judgements, which he refers to as the principle of *intrinsic equality*. Humans intend to express themselves in how things *should be*. Human beings ought to believe that everyone have equal opportunities in life, such as liberty, happiness and other goods and interests (Dahl 1998, 65). Further, this intrinsic equality is believed to lie within decision-making, as when the government arrives at decisions, the interest of every individual is given equal consideration.

However, it is far from self-evident that all human beings are created equally. According to Dahl (1998, 63), inequality exists everywhere we look around in our society, and it occurs to be “the natural condition of humankind”. Inequality in democratic governing can take various forms, such as in opportunities to vote, speak, and participate in the policy sphere. If

individuals, or even entire groups, are deprived of an equal voice, the risk of not being given equal attention in public policies are relatively high. As Dahl (1998, 76) notes: “If you have no voice, who will speak up for you?”. Dahl points to the history in illustrating his point. The emergence of democracy was a result of the dissatisfaction among “nobles and burghers” in being arbitrary governed, and without consent, by the monarchs. The citizens demanded the right to participate in governing the society. Likewise, centuries later, the middle class experienced that their interests were ignored, and thus demanded them and eventually achieved them (Dahl 1998, 77).

Inequality, as being opposed to equality, is rooted in some philosophical fundamental questions about values and norms. It raises questions such as: *does inequality matter? Is inequality problematic? Can inequality be justified?* Piketty underlines in his seminal book *Capital in the Twenty-First Century*, that he has no interest in denouncing inequality or capitalism, because “inequalities are not in themselves a problem as long as they are justified, that is, “founded only upon common utility”, as article 1 of the 1789 Declaration of the Rights of Man and the Citizen proclaims” (Piketty 2014, 40).

Unequal distribution to the means of the production is a fundamental argument of Karl Marx. By highlighting the concept of exploitation, Marx argued that inequality between classes is unjust (Pearce 2014, 91). Tocqueville argued that the level of inequality was the best predictor for the democratic stability as well as the quality of democracy (Soci et al. 2015, 13). As inequality rises, democratic institutions meet difficulties of a proper functioning, and gets unstable. This exacerbates if the government does not act to reduce the level of inequality, Tocqueville argued (Karl 2000, 154).

Income inequality depresses several aspects of a democratic regime, such as citizens’ interest in politics, willingness to participate in politics or participation in elections (Solt 2008, 48). Moreover, income inequality generates higher levels of corruption as it creates mistrust between the citizens. Corruption will again exacerbate inequality leading to conflicts over redistribution and social welfare policies (Rothstein and Uslaner 2005). Another negative consequence of income inequality is that it reduces economic growth because the pressure for redistribution that increases with income inequality discourages investment (Bénabou 1996, 16; Dabla-Norris 2015, 9). Moreover, income inequality hinders poverty reduction, and make countries less able to tackle poverty problems as well as making a greater proportion of the population vulnerable

to poverty (Dabla-Norris 2015, 9). Similarly, Karl relates high levels of inequality to higher levels of poverty in a country. As Karl (2000, 153) puts it, a high degree of skewed economic distributions in a country means that “the poor face greater barriers to escaping their deprivation because, first, extreme inequalities reduce growth and, second, the alleviation of poverty becomes less responsive to the growth that occur”. Karl further exemplifies her point with Latin-America’s growth of GDP by almost 6 percent in real terms between 1990 and 1995. In the same period, the number of extremely and moderate poor increased from 1.5 to 5 million people. Hence, the increase of poverty was the result of the unequal distribution of wealth and income, Karl argues (2000, 153-154).

As this thesis highlights, democratic regimes are dependent on democratic support for legitimacy in order to persist. The sustainability of democratic legitimacy is under severe threat if a significant number of citizens are dissatisfied with the democracy. Legitimacy means that the democratic system is regarded as the best option for the society. Lipset (1963, 77-78) argues that “A crisis of legitimacy is a crisis of change”.

Karl exemplifies the relationship between inequality and legitimacy by pointing to the large difference in democratic support between Uruguay (80 percent support) and Brazil (50 percent support). Uruguay is a relatively equal country, while Brazil is the most unequal country in the region of South America (Karl 2000, 155-156). Karl argues that when democratic institutions fail to function properly, the legitimacy among citizens weakens. He states: “Where income inequality is greatest, people are more willing to accept authoritarian rule, less likely to be satisfied with the way democracy works, less trusting of their political institutions, and more willing to violate human rights” (Karl 2000, 156).

## 2.5 The Interrelations of Economic and Political Power

Understanding how political and economic power are related is important because it demonstrates how differences in income give power advantages or disadvantages in the political sphere. Understanding how the power balance becomes skewed is important in understanding attitudes towards the democracy.

The concepts of *power* and *influence* are often used interchangeably by scholars. Both power and influence are relational. This means that it occurs between individuals. For power to exist, there must be conflicts of interests between two or several persons or groups (Bachrach and Baratz 1970, 17-19). According to Bachrach and Baratz (1970, 24), a power relation exists when 1) there are conflicts over values or interests between person A and B, and 2) B accepts A's wishes because B is anxious that A will deprive him with something that B values more than those achieved with noncompliance. However, when one person *influences* another person, he makes the person change his mind without addressing any threats of a kind (Bachrach and Baratz 1970, 30). Thus, power and influence are very similar but differ to some extent in their exercise of power. This thesis focuses upon the concept of power.

Economic and political power are interrelated. Thus, economic circumstances such as income inequality is consequential for democratic processes as the political representation and power relations are being distorted (Donovan and Karp 2017, 472). According to Pearce (2014, 93) both political power and political powerlessness emerge from inequality. This was the case in traditional societies and persisted throughout the development of modern democracies. As Pearce (2014, 93) points out, when political contestation, as being a core element in democracies, expanded in the developing world, political and economic power were already closely interrelated.

The interconnectedness of political and economic power is much put forward by Dahl. Dahl (1971, 82) states that inequalities in the distribution of income, wealth, and status are equivalent to the inequalities in political resources. With political resources he means the allocation of resources "with which an actor can influence the behavior of other actors in at least some circumstances". A vast amount of different political resources has shown itself throughout history: weapons, money, wealth, income, status, honor, information, education, legal standing, votes, to mention some (Dahl 1998, 177).

Dahl illustrates his point by referring to the agrarian societies, where economic and political power are closely interrelated: "the well-off are well-off in all these respects [knowledge, wealth, income, status, and political power] while the badly-off – who are the bulk of the population in many agrarian societies – are badly-off in all respects" (Dahl 1971, 82). As the agrarian society industrializes, it leads to higher levels of equality. However, inequality does not eradicate. Dahl compares the agrarian society to a free farmer society where the latter

illustrates a higher degree of equal distribution of resources and thus the exercise of power. Dahl demonstrates his point by showing that the most unequal countries, measured by the GINI index, tend to be non-democracies (or non-polyarchies, in Dahlian terms<sup>3</sup>), while the most equal societies are inclusive democracies (Dahl 1971, 83).

Dahl (1971, 103-104) summarizes his argument by explaining that in a democracy, inequality increases the probability that hegemony will replace competitive politics. This is because inequality in the distribution of political resources “is likely to generate resentments and frustrations which weaken allegiance to the regime” (Dahl 1971, 103). However, as Dahl points out, democracies with high degrees of inequality might still manage to survive for two reasons. First, when demands for greater equality occur, the regime might obtain support among the deprived group of people by responding to some of their demands. This will not reduce the objective inequality in itself, but instead reduce feelings of relative deprivation. Second, (Dahl 1971, 104) as long as a significant proportion of the worse-off group does not demand equality or regime change, the regime manage to survive despite its high levels of inequality.

Democracies function within economic systems where the economic resources that exist are divided between citizens by market forces. Markets generate inequality, and according to Przeworski (2010) this is an important barrier to why democracies struggle to reach equality between its citizens. Przeworski argues that democracies in fact are incapable to generate equality in the socioeconomic sphere. Rather, democracies can only secure equality by law. As Przeworski (2010, 74) argues, political equality by law is equality only in the eyes of the state and not in the reality between individuals. This equality by law is undermined by *social* inequality and the actual relation between the citizens. Even if all human beings were born equal, they become unequal in the society, as the society generates differences between them, Przeworski argues (2010, 72).

Przeworski illustrates his point by a game of basketball. In the game, there are two teams playing under perfect universalistic rules assessed by an impartial referee. However, in one of the teams all the players are seven feet tall, whereas the other team consists of players being

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<sup>3</sup> Dahl restricted the term «democracy» for an ideal regime type and argues that no regime in the world could be recognized as fully democratized. Regime types that are close to being democracies, Dahl named “polyarchies”. Polyarchies are relatively (but incompletely) democratized regimes and are both highly inclusive and enjoys high levels of public contestation (Dahl 1971, 8).

only five feet tall. Although the rules of the game treats everyone equally, the result of the game is predetermined because of the resources that the players hold (Przeworski 2010, 92).

Applied to the democratic case: democracy only functions as a mechanism that treats all citizens equally by law. This means that democracy only sets the rules of the game. However, as Przeworski (2010, 92) states: “when unequal individuals are treated equally, their influence over collective decisions is still unequal”.

The relationship between political and economic power is what Stiglitz (2015) describes by illustrating the example of politics of America, in his article *The Price of Inequality: How Today's Divided Society Endangers Our Future*. He argues that the American politics is not to be understood as “one person, one vote” but rather “one dollar, one vote” (Stiglitz 2015, 391). Stiglitz describes it as a vicious circle, not only seen in America, but also in other countries where income is concentrated:

“with the rich having more and more influence, they write the rules of the political game to give them more power and influence, which means economic inequality gets even more translated into political inequality, and the political inequality gets translated into even more economic inequality” (Stiglitz 2015, 391).

This is in line with Inglehart and Norris (2017, 450) who argue that the rich top elite are able to form policies in accordance with their own interests, which further amplifies the concentration of wealth. Goodin and Dryzek (1980, 275) similarly argue that the idea of “one man, one vote” is “simply a legal fiction”. This means that some people count much more than others considering political participation and power. The author’s point is further outlined in chapter 2.6 on the Relative Power Theory.

### 2.5.1 Clientelism and Patronage

According to Pearce (2014, 93), income inequality generates different mechanisms or structures for people to execute political power. Clientelism and patronage networks are examples of such political power structures. Clientelism is a power exchange relationship between a *patron* (a rich protector) and a *client* (a poor being protected). The rich provide goods that the poor are in need of in exchange for their loyalty or favors. In example, in agrarian societies, farmers



(clients) are protected by giving their loyalty to landowners (patrons). In modern societies, actors within political parties mobilize voters based on a patron-client relationship (Østerud 2007, 129, 204). Such networks reflect differentials in both power and income among individuals and groups, and is both a result of, and further entrenches, the structures of inequality (Pearce 2014, 93). This is important to highlight because it demonstrates how differences in economic power change the political organizational structures and, thus political power between richer and poorer citizens.

So far, the aim of this chapter has been to argue from a theoretical point of view that political power is determined by economic power. How this affects satisfaction with democracy will be examined in the next section.

## 2.6 The Relative Power Theory

Income inequality is highly related to the distribution of power between individuals, as demonstrated. In accordance with Dahl's argumentation regarding the interconnectedness of economic and political power, the Relative Power Theory provides a continuation of this theoretical argument.

The Relative Power Theory holds that as income and wealth are more concentrated, this leads to political power being more concentrated (Goodin and Dryzek 1980). In short, this power imbalance leads the richer elite to have more power and influence over politics compared to their fellow citizens. This leads citizens into not being represented in the public policies, leaving them with a feeling of deprivation. Thus, frustration and dissatisfaction with the democratic system are spread among them.

In accordance with conventional wisdom, citizens decide whether they should involve in politics based on a subjective assessment of their own efficacy in doing so (Goodin and Dryzek 1980, 273). Individuals who believe they are able to influence politics tend to participate to a large extent, whereas individuals who regard themselves as incapable tend to withdraw from political participation. Goodin and Dryzek (1980) argue that this subjective assessment is a way of rational thinking: individuals who believe they lack political influence are rational when thinking that political participation is "a waste of time", because they will lose. Citizens who are rewarded by the system, will also have a positive attitude towards the system that has treated

them well. These individuals will favor the institutions and norms within the system, such as political participation (Goodin and Dryzek 1980, 275). Similarly, the worse-off will not bother to engage in political matters, as it is not worth the effort.

The authors argue that there is a positive relationship between socio-economic status and political participation. The more economic power a person holds, the greater competitor he will be. His economic resources enable him to outbid other citizens for goods that both needs. In example, in a situation of bidding over scarce resources, the richer a person is, the worse-off the other person(s) will be in the bidding round. The market power of the rich gives them the advantage of outbidding the other(s), over commodities that everyone equally desire (Goodin and Dryzek 1980, 276-277).

Goodin and Dryzek (1980, 277) compare the political market with the labor market. When strict meritocratic criteria decide who gets a job, it is rational not to apply if many better-qualified persons are applying for the same job. This is because the chances of getting the job are almost non-existent if one is not as qualified as the other applicants. Likewise, applying is worth it if one is better-off than their competitors. In this way, relative power between citizens shapes the labor market. Accordingly, in political markets, these “merits” will be economic power. The relative resources will determine the political outcome. More political resources and higher socio-economic status increase the relative chance of both having political demands fulfilled as well as being satisfied with the result (Goodin and Dryzek 1980, 277-278). Put in other words, political participation is more rational for those who are relatively rich, compared to the less advantaged. The power advantage of the rich, and the powerlessness of the less advantaged, is what lays the ground of the political landscape. Under more egalitarian conditions, all people are expected to participate more fully in politics. Put differently, as inequality increases, the gap between different households enlarges. This will make it more difficult to compete with the well-off in the political market. Goodin and Dryzek (1980, 292) sum up their model of political participation as rational action by the words: “Don’t play if you can’t win”.

### 2.6.1 The Schattschneider Hypothesis

Schattschneider (1975) underscores that in order to understand democracy, one needs to understand political organization, and the relation between political organization and conflict.

This is because politics is about conflicts, and without understanding what the struggle is about, understanding politics becomes impossible. Likewise, Lipset (1963, 83) points out that democratic regimes exist with the constant threat of group conflict. Schattschneider (1975, 2) argues that: “At the root of all politics is the universal language of conflict”. “If a fight starts, watch the crowd, because the crowd plays the decisive role” (Schattschneider 1975, 3).

In his seminal classic book, *The Semisovereign People*, Schattschneider (1975) argues that the low political participation in the United States was the result of economic inequality. This has come to be known as the Schattschneider’s hypothesis. Schattschneider argued that because of the high level of economic inequality, which caused a massive nonvoting in U.S. elections, the democracy was at stake. This struggle was no longer concerning *the right to vote*, but rather *the organization of politics*, meaning the right to organize and the value of the votes (Schattschneider 1975, 100).

Schattschneider noted in the sixties that about forty million adult citizens did not vote in presidential elections in the United States (while 60 million voted). The reasons behind this fact must be examined because voting perhaps is the most crucial part of the democratic political system, Schattschneider argues. The American democracy was facing a turning point, and he described the situation to be the “sickness of democracy” (Schattschneider 1975, 102).

It is a profoundly characteristic among the attitudes of the well-off that the political nonparticipation of the well-off is due to their ignorance for politics. This attitude is often used to justify why the worse-off are excluded, and do not engage in politics (Schattschneider 1975, 102). However, as Schattschneider (1975, 102) argues, inequality is what causes this suppression. The part of the population that are the least involved with politics, are the most convinced that also the system is biased. Schattschneider (1975, 102) argues that their absence is a result of the suppression of the political alternatives that reflect the interests of the well-off people. The forty million that did not vote was the poorest, least well-established, and least educated part of the population.

By this, Schattschneider (1975, 103-104) underlines that electoral participation cannot be viewed in isolation. Rather, electoral participation reflects a comprehensive political organization of the socio-economic realities of the people. Moreover, there are reasons to believe that the political sphere is divided in accordance with the economic sphere.

The political system is divided between those who have relatively more resources, and those who have relatively less. The former group participates in the election, while the latter is the nonvoters. Those who vote are characterized by being motivated by the economic system (Schattschneider 1975, 105). The better-off will use their economic resources to dominate and form politics in accordance with their own interest, leaving behind the interests of the nonvoters. The political system is now preoccupied by the cleavages within the voter group, and this is something that happens invisibly and away from people's awareness. Put in other words, the worse-off citizens are depressed from being included in forming politics: "an underpaid bank clerk may be greatly excited by the prospect by economic advancement, while a scrubwoman working in the same bank may be demoralized and frustrated" (Schattschneider 1975, 105).

Solt (2010, 287) states that higher levels of inequality make the rich people in a greater position to set the political agenda, and further exclude debates addressing the needs of the poorer citizens. The result is declining electoral participation especially among poorer citizens. Such a condition is what Schattschneider (1975, 105) calls the bias of the system, and what Bachrach and Baratz (1970, 8) characterize as holding power: "to the extent that a person or group – consciously or unconsciously – creates or reinforces barriers to the public airing of policy conflicts.

Similarly, the paradox that the political influence of the rich seems to count more than the poor in government policy, is what Erikson (2015, 27) refers to as the "upper-class bias". The influence of the rich reaches beyond their relative minority, while the influence of the poorer falls beyond their relatively large mass. This is amplified by the fact that poor diminish their influence by for example not voting or not showing attention to politics. Another point is that the rich have a greater access to information and news about politics compared to the poor. Thus, the rich are more knowledgeable about politics and therefore exerts greater political influence (Erikson 2015, 20).

### 2.6.2 Relative Deprivation

Relative deprivation is closely related to both the Relative Power Theory and the Schattschneider Hypothesis. Understanding relative deprivation is important in this thesis to understand how both objective and subjective inequality affect satisfaction with democracy,

because it involves how individuals view their own situation in comparison to others. How individuals view their own situation compared to others is expected to affect both their perceiving of inequality as well as democracy.

Runciman defines that a person is relative deprived of X when:

“(i) he does not have X, (ii) he sees some other person or persons, which may include himself at some previous or expected time, as having X (whether or not this is or will be in fact the case), (iii) he wants X, and (iv) he sees it as feasible that he should have X” (1966, 10, cited in Yitzhaki 1979, 321).

Whether or not a citizen is satisfied with her or his current economic situation, depends on how they view their situation in comparison to a reference group. Relative deprivation is seen important to this thesis because it reflects upon why citizens might develop feelings of being treated unfairly. Income inequality increases the risks of income deprivation relative to other citizens in the society (Stoetzer et al. 2021, 5). Citizens tend to get frustrated when comparing themselves to those who are better-off.

As argued by Inglehart and Norris (2017, 449), compared to decades ago there are higher demands today on what can be considered an acceptable standard of living. At the same time, the real income of the working class has stagnated in the developed countries. Decades ago, a family was doing well when being able to put food on the table. At that time, having a car was considered a luxury. Today, however, being able to feed your family and owning a car is considered a minimal standard of living in richer countries. The working class knows that the vast economic growth has come to benefit the elite, and therefore they feel “shut out from the benefits of growth” (Inglehart and Norris 2017, 449). Moreover, the globalization of media makes citizens more exposed to sensationalistic and celebrity-focus television or news which portrays extreme wealth. This will generate feelings of relative deprivation as this broaden the reference group that citizens compare them to (Gimpelson and Treisman 2018, 50). By this, the material expectations and demands by the citizens have increased, at the same time as their income has stagnated. Thus, feelings of relative deprivation occur as the economic elite has become richer.

Another point to make is that Inglehart and Norris (2017, 450) argue that “inequality reflects the balance of political power between elites and mass”. Today, the economic gains come to

benefit those on the top rather than the masses. According to Inglehart and Norris (2017, 450), the economic conflict has changed from being between the working class and the middle class, to be between the top one percent and the remaining 99 percent. This illustrates that the economic conflict has changed to occur between the rich and the poor, in the sense that the *poor* are considered the *masses*. The poor are not necessarily poor, but poor relative to the rich elite.

Furthermore, as the income gap widens this is expected to affect citizens' resources (such as time and money) to participate in politics. Greater inequality means less resources to the poor, whereas the rich get more resources (Solt 2008, 49-50).

By this, whether individual level income interacts with income inequality at the national level, is crucial to explore. As income inequality is expected to increase feelings of relative deprivation and lack of resources to participate in politics, the effect of income inequality should strengthen the effect of income at the individual level.

## 2.7 The Distributional Conflict

Understanding the distributional conflict is essential for understanding how increasing levels of income inequality affects citizens' satisfaction with democracy. Conflict over redistribution is perhaps the most fundamental conflict between the rich and the poor, and therefore, the distributional conflict is considered important in shaping either satisfaction or dissatisfaction towards the democratic regime.

### 2.7.1 Government Intervention

As previously put forward in this thesis, market forces, as being the economic sphere in which democracies operate, generate inequalities. Capitalism is an important factor in creating skewed distribution of both political and economic resources and power. Consequently, Dahl (1998, 178) argues that: "citizens are not political equals – far from it – and thus the moral foundation of democracy, political equality among citizens, is seriously violated". Dahl (1998, 174) further explains that a capitalist economy cannot be completely self-regulating, as this would seriously harm some or many people to the extent that they will demand government intervention in the market and thus redistribution. Lack of government intervention in market-led economies will

lead to higher levels of inequality, which will cause conditions such as unemployment, impoverishment, and persistent poverty (Dahl 2006, 65-66).

At least since Aristotle, the idea that a high concentration of economic resources intensify class conflict and democratic instability has been promoted (Kaufman 2009, 359). Political scientists, such as both Marx and Weber, have been engaged in how economic classes, social status, and political power serve as preconditions for class conflict (Coulter 2019, 2).

Acemoglu and Robinson (2006, 19) argue that individuals act rationally, which contains that they act according to their preferences. In this case, individuals will always be motivated by higher income, as individuals always will prefer more income to less. As citizens and actors are motivated by economy, their belief and acts are determined by their self-interest. This means that these citizens and actors will come to put their own economic interest first and have little or no interest in the good of other people (Dahl 1998, 174). Because of this, the need of a government redistributive intervention in the market is crucial to prevent the emergence of high levels of inequalities, and to secure a decent degree of equality among its citizens. This is in the interest of any democracy.

Dahl (1998, 176) points out that no democracy exists without government intervention in the market-capitalist economy. This state intervention consists of people or actors that induce various measurements to rearrange the distribution of resources, for example through collecting taxes. However, when the government intervene in the market, conflicts of interests between classes emerge, a so-called distributional conflict. As the economic gap between the rich and the poor widens, this conflict intensifies (Wu and Chang 2019, 1478). According to Soci et al. (2015, 13), larger income differences tend to yield larger social distances, and thus, social stratification becomes more notable. As they point out, social distances between the groups of the population can be enormous, and result in social exclusion. Divisions between different groups become visible in every aspect of society: “in consumption sphere, in health and housing conditions, in access to education and to labor market, and in the social-relation network” (Soci et al. 2015, 13). Hence, the attractiveness of the democratic institutions that exist to protect its citizens, is being harmed.

### 2.7.2 Democratization

Within the distributional conflict argument, the literature on democratization provides useful theoretical assumptions for this thesis as it regards the level of inequality as a decisive determinant to whether a country 1) democratizes, 2) persists as a democracy, and 3) consolidates. The conflict over redistribution plays a key role regarding democratization, democracy, and consolidation.

Two influential political economy books are particularly essential in theorizing the relationship between income inequality and the establishment and survival of democracy: *Democracy and Redistribution* by Boix (2003) and *Economic Origins of Dictatorship and Democracy* (2006), by Acemoglu and Robinson. The conflict on redistribution is at the core of their arguments, and both argue that income inequality is negatively correlated with democracy. High levels of income inequality are incompatible with democracy.

From the logic of self-interest, poorer citizens have an incentive to call for redistribution by taxing the rich, whereas the rich have an incentive to oppose redistribution. In a democracy, the tax rate is decided by the median income citizen. This is referred to as *the median voter theorem*, proposed by Meltzer and Richard (1981). The logic of this theory is that citizens with an income below the median income will support higher taxes and more redistribution, whereas citizens with an income above the median income, will desire lower taxes and redistribution (Meltzer and Richard 1981, 924). By this, the demand for redistribution will increase when the median income falls below that of the mean. Because the poor are more numerous, the median voter is to be considered poor, Acemoglu and Robinson (2001, 940) argue. This is also in line with Lipset's (1963, 63) argument that since citizens' position in the stratification system is relative, the lower classes will always reward political parties or organizations which favor more redistribution, regardless of the country's wealth.

Acemoglu and Robinson (2006) argue that when inequality increases, so does the democratic burden on the rich citizens because citizens demand for redistribution increase. This will in turn make repression more attractive to the rich elite because repression is less costly compared to paying higher levels of taxes. Moreover, higher levels of inequality will lead to social unrest (Acemoglu and Robinson 2000, 1168), because citizens will gain more from revolting, and



starting a revolution, than staying suppressed. Because of this, Acemoglu and Robinson (2006, 36-37) argue that higher levels of inequality will discourage democratization.

Acemoglu and Robinson (2006, 37) propose an inverted U-shaped model to explain the relationship between inequality and democracy. In countries with middle levels of inequality the citizens are not completely satisfied with status quo, whereas the elites are not against democracy to the extent that they will use violence to prevent it. It is under these circumstances, with middle levels of inequality, that democracies are most likely to occur according to Acemoglu and Robinson (2006).

In contrast, in equal societies with low levels of inequality citizens will not start a revolution because economic resources are already to some extent equally distributed. In this situation, citizens will not gain much from taking to the streets demanding more redistribution. This may explain why equal states with rapidly growing economies such as South Korea and Taiwan, became democracies late. On the other hand, in South Africa (before the collapse of the apartheid regime) with its high levels of income inequality, citizens had much to gain when attempting to change the system to the better. At the same time, the elite had a lot to lose because the current regime took care of their interests whereas a democratic regime would place a burden on them through redistribution. Hence, regimes with high levels of inequality are more likely to become a repressive non-democracy because the elite has too much to lose if not repressing the citizens' demands (Acemoglu and Robinson 2006, 37). Because redistribution lies at the heart of democracy, inequality affects the chances of democracies to consolidate. This is because redistribution places the burden of democracy on the elite, and therefore higher levels of inequality destabilize democracies.

To sum up the arguments of Acemoglu and Robinson, undemocratic egalitarian societies are stable because people are more or less satisfied with status quo. In contrast, societies with high levels of inequality make democracy threatening to the elite to such an extent that they are willing to use repression or even violence to avoid democracy.

According to Boix (2003, 10), individuals support the political system which maximizes their disposable income. In Boix' (2003) seminal book, he predicts that increasing levels of economic equality increases the chances of democracy. This is because the rich citizens' disposable income in a democratic system surpasses their cost of repression. Put differently, rich citizens

will accept democracy when it is a cheaper alternative than the cost of maintaining a non-democratic regime (Boix 2003, 32). At low levels of inequality, redistributive pressure from below on the well-off diminish, and the distributional conflict between the classes decreases. This makes the tax burdens acceptable to the elite.

At high levels of inequality, Boix (2003) argues that the pressure for redistribution from below intensify, and the risk of revolution or civil war increases, as Acemoglu and Robinson similarly argue. The poor tend to rebel to obtain a more even distribution of resources across the society. The more unequal distribution of resources, the greater redistributive pressure of the masses, which entails higher level of taxes. Under circumstances of high inequality, the rich are less likely to accept the demand of redistribution, because the redistributive cost will be high (Boix 2003, 33-34). Compared to Acemoglu and Robinson, Boix suggests a linear relationship between inequality and democratization. The more equal the society, the better the prospects of democratization. Democratization, Boix argue, can only occur at high levels of equality and low levels of inequality.

Like Boix and Acemoglu and Robinson, Houle (2009, 597) argues that inequality increases the risk of backsliding from democracy to dictatorship because redistribution in democratic regimes is costly for the elites. Therefore, it is in the elite's economic interest to wage coups in democratic regimes due to the cost of redistribution. Houle (2009, 606) argues that inequality does not affect the process of democratization, only the consolidation of democracy.

As demonstrated, income inequality intensifies the conflict over redistribution. Higher levels of inequality lead to stronger demands for redistribution. Because these demands are costly to the rich, defined by the citizens above the median income, democratic regimes may backslide under conditions of higher levels of inequality because dissatisfaction becomes widespread and conflict over redistribution intensifies. According to Alesina and Perotti (1994, 362):

“A large group of impoverished citizens, facing a small and very rich group of well-off individuals, is likely to become dissatisfied with the existing socioeconomic status quo and demand radical changes. As a result, mass violence and illegal seizures of power are more likely the more unequal the distribution of income is”.

At higher levels of inequality, the rich have stronger incentives to hinder redistribution, and likewise, the poor have stronger incentives to demand redistribution. As the rich have both the

economic and the political power, and by this manage to oppose demands for redistribution, dissatisfaction among citizens increases, and intensifies.

## 2.8 The Economic Insecurity Thesis: Divisions Between Winners and Losers

I now move on to the last theoretical argument. The literature on populism provides useful theoretical arguments for this thesis. In 1990, populist parties received around 10 percent of the votes in democracies, whereas they received around 25 percent of the votes in 2016 (Stoetzer et al. 2021, 1). During the last two decades, parties led by authoritarian leaders have become more popular. These parties have gained legislative seats as well as holding power (Inglehart and Norris 2016, 6). Inglehart and Norris (2016, 5) exemplify the phenomenon of populism with the 2016 presidential election campaign in the United States. They raise the question of how a polarizing figure such as Donald Trump could get such a massive support. According to Foa and Mounk (2017), Americans are not just dissatisfied with the regime performance, but liberal democracy in itself. This is part of a global trend, according to Foa and Mounk (2017, 5). As the author's point out, two-fifth of the respondents in a 2015 survey in France, believed that France should be “put in the hands of an authoritarian government free from democratic constraints” (Foa and Mounk 2017, 7). Foa and Mounk (2017, 8) argue that these signs call into question what political scientists supposedly have expressed as when liberal democracies are “consolidated”, they are safe.

The electoral success of populist parties and the general support for populist movements is, according to Inglehart and Norris (2016, 9-10) explained by both 1) the *supply-side*, emphasizing strategic appeals of party leaders and political parties, and 2) the *demand-side*: citizens attitudes, values, and opinions<sup>4</sup>.

Populism emphasizes ordinary people (as the silent majority) over the “corrupt” establishment (elite). It is related to resentment and dissatisfaction of existing authorities, that be big banks, the media, or the rich elite (Inglehart and Norris 2016, 6). In this way, it relates to what the thesis earlier has elaborated on: inequality leads to skewed political and economic power

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<sup>4</sup> Inglehart and Norris (2016, 9-10) divide the explanations for the electoral success of populist parties originally into three categories: (i) the institutional rules of the game regulating the market for party competition, (ii) the supply-side, and (iii) the demand side.

relations and structures, in which the better-off enjoy the political power whereas the worse-off are left behind. In this situation, the supply-side might use strategic appeals to citizens who are left behind to capture their vote, while the demand-side support their policy because of their resentments and dissatisfaction over the current establishment. Put in other words, populist parties know how to take advantage of the latent dissatisfaction that exists within the population. Muhtadi and Warbuton (2020, 35-36) argue similarly to Inglehart and Norris, that the increased popularity of illiberal figures such as Trump in the United States or Duterte in the Philippines, in addition to the rise of right-wing parties in Europe, demonstrate how politicians manage to mobilize citizens' feelings of economic grievance and democratic dissatisfaction.

The Economic Insecurity Thesis explains the rise of populism as a result of growing income inequality. As Inglehart and Norris (2016, 12) explain, income inequality generates: “grievances among the losers from global markets, disaffection with mainstream center-left parties, and loss of faith in the capacity of the mainstream parties to respond to these concerns”. Income inequality, and its rising levels throughout the West, has led to economic insecurity and social deprivation among the “left-behinds”, which has led to increasing dissatisfaction among citizens (Inglehart and Norris 2016, 2). Considering increasing levels of income inequality, Inglehart and Norris argue that mass support for populism reflects whether citizens are economically secure or insecure. This means whether you are a winner or loser in of the market, which has come to reward the better-off. When citizens experience a sense of economic insecurity it fuels in-group solidarity and the rejection of outsiders. This is related to what Rothstein and Uslaner (2005) call generalized trust, which is highlighted more in the following subchapter.

### 2.8.1 Generalized Trust

A mechanism which relates inequality to dissatisfaction is generalized trust. Rothstein and Uslaner (2005) argue that social trust emerges from equality. More equal countries such as the Nordic countries, have a history of less state repression and more trustworthy governments. Greater equality is characterized by having more inclusive welfare programs, and more *generalized trust* between citizens (Rothstein and Uslaner 2005, 44). Generalized trust is important for the stability of democratic regimes as it generates more solidarity across classes and mitigate conflict.

Generalized trust is what connects people who differ from one another in terms of economic or cultural differences and interests. It reflects a concern for others, especially citizens with fewer resources. Often in societies, the rich and poor citizens lack a “shared fate” (Rothstein and Uslaner 2005, 45-46). They might live next to each other but still live completely separated lives without any interaction. Each group embraces their own interests and view the demands of the other group as conflicting. The poor becomes the “enemies” of the rich, and vice versa. Rothstein and Uslaner (2005) point at how inequality harms generalized trust between people in a society. When the income inequality becomes higher, generalized trust reduces, while *particularized trust* is high. Particularized trust is in-group trust. Rothstein and Uslaner (2005, 46) put it simply: “Society is seen as a zero-sum game between conflicting groups”.

The harming of generalized trust is a consequence of increasing levels of inequality, and the subsequent conflict that rises between rich and poor. The rejection of outsiders and the lack of a shared fate is conflict-creating and thus expected to generate frustration with the status quo.

## 2.9 Subjective Inequality

Lastly, this chapter focuses upon subjective inequality meaning how individuals perceive the level of income inequality in their own country, as being a determinant for their attitude towards democracy. Citizens experience and assess inequalities in their democratic societies. As pointed out, equality is an ideal of democracy, and is valued among a majority of the respondents in this study’s sample (N=49 519). In example, 75 percent *strongly agrees* or *agrees* that the government should take measures to reduce differences in income levels, by implementing redistribution. However, citizens perceive the fairness of the level of inequality differently. This is value-oriented, as some citizens will argue that high inequality is fair, while other will argue that high inequality is unfair. However, subjective inequality in this thesis is solely understood as what the respondent *believes* the level of income inequality actually is in their country.

Gimpelson and Treisman (2018) present a critique to theories concerning conflicts and political participation, as amongst others have been presented in this thesis. They argue that this is because such theories suppose that all citizens know their interest and act accordingly. That be by voting, rebelling, or resisting democracy (Gimpelson and Treisman 2018, 50). Gimpelson and Treisman (2018, 27) point out in their study: “perceived inequality—not the actual level—correlates strongly with demand for redistribution and reported conflict between rich and poor”.

They argue that demands for redistribution increase with perceived levels of inequality. First, citizens must be aware of the inequality level, and second, they react according to their feeling of their deprivation or unjust treatment. Yet, as Gimpelson and Treisman (2018, 49) point out, inequality is difficult to measure. They criticize scholars for addressing macro-level variables on inequality assuming that individuals are aware of the level of inequality in their society. Therefore, an inconsistency between theoretical arguments and empirical findings are present, according to Gimpelson and Treisman (2018, 28).

Wu and Chang (2019, 1479) argue that if levels of inequality are high, poorer citizens might not foster resentments towards the rich elite, if they *think* that the level of inequality is low. Similarly, some citizens might think that inequality is high, but still be fair and thus support democracy even if inequality levels are high (Wu and Chang 2019, 1480). The fact that people experience inequality differently needs to be taken into consideration. In this way, they argue that using only objective measures of inequality is insufficient. Dahl (1971, 88) notes that: “If inequalities foster resentments, then resentments over inequality must exist”. According to Dahl (1971), citizens perceive inequality as unjust, as well as believing that governments or elites are causing the injustice. Hence, a negative perception of inequality will lead to democratic dissatisfaction.

Subjective inequality follows the similar theoretical assumption as objective inequality. Thus, citizens that believe that income inequality is high, are presumed to hold lower satisfaction with democracy. Including a subjective measure on inequality in this study will provide a more comprehensive understanding of the effects income inequality has on satisfaction with democracy. Put differently, the measure will serve as a quality assurance of the relationship between income inequality and satisfaction with democracy and will increase the validity of the study.

## 2.10 Previous Empirical Findings

Cross-national studies have previously found that income inequality harms the longevity of democratic regimes and increases the probability of instability (Boix 2003; Acemoglu and Robinson 2006; Houle 2006). Studies focusing on income inequality report that greater inequality increases public mistrust (Jordahl 2007; Rothstein and Uslaner 2005; Dotti Sani and

Magistro 2016), decreases electoral participation (Boix 2003; Solt 2008), depresses political engagement (Solt 2008), and fuels the support for populist and anti-establishment movements (Inglehart and Norris 2016).

The literature on the relationship between income inequality and satisfaction with democracy is of great variety, and it shows conflicting results. The idea that income inequality undermines democratic support is not new. Several scholars find that income inequality is negatively correlated with citizens' democratic support, meaning that when inequality is high, citizens tend to be more dissatisfied with democracy (Andersen and Singer 2008; Andersen 2012; Kriekhaus et al. 2014; Kang 2015; Soci et al. 2015; Wu and Chang 2019). Studies have also shown that lower income and unemployment increases the chances of being politically dissatisfied (Bernauer and Vatter 2012).

Kriekhaus et al. (2014, 139) argue that the current studies on democratic support will highly benefit from including the effect of national level of income inequality. The authors demonstrate that higher levels of inequality reduce democratic support among all social classes. The results are robust, and inequality is shown to be the largest determinant of democratic support in their study. Likewise, Soci et al. (2015) find that higher levels of income inequality have a negative impact on citizens' satisfaction with democracy when studying a single country, the UK, in a long run perspective (1974-2009). However, they also find a positive impact on citizens' political engagement and their intention to vote as income inequality rises. This contradicts the theoretical assumptions presented in this thesis.

Andersen (2012) conducts a cross-national multilevel analysis on 35 modern democracies to explore the relationship between economic and political conditions and democratic support. He finds that income inequality matters more than the effect of economic development. Moreover, he demonstrates a positive relationship between household income and democratic support in most countries.

Wu and Chu (2007) investigate both the effects of distributions of household income, and different measures of national income inequality rates, on satisfaction with democracy. They find that citizens belonging to the upper and lower quintile tend to be less satisfied with democracy. Middle income holders are most satisfied. As they argue, this is because middle income groups want to put more taxes on the rich but setting too high taxes might fall back on

themselves. Further, they are worried that a too good welfare program might remove the poor's incentives to work (Wu and Chu 2017, 7). The poor and the rich end up dissatisfied because neither of them get their desired political outcome, they argue.

### **Relative Power Theory**

In their seminal article on rational participation and the Relative Power Theory, Goodin and Dryzek (1980) demonstrate a negative relationship between income inequality and voter turnout in elections. Likewise, in Solt's (2008) study on economic inequality and democratic political engagement, he finds, by conducting a cross-national analysis of advanced industrial democracies, that greater inequality increases the relative political power of the wealthy. In situations where economic resources are distributed more evenly, political power is also distributed more evenly in which poorer citizens are more interested and involved in politics (Solt 2008, 58). This is in line with the relative power theory. Solt describes: "Greater economic inequality increasingly stacks the deck of democracy in favor of the richest citizens, and as a result, most everyone else is more likely to conclude that politics is simply not a game worth playing" (Solt 2008, 58). However, Brady (2004) finds the opposite effect, that increasing levels of inequality encourages poorer citizens to be political engaged. More equal societies on the other hand, will lead to greater policy consensus and thus less engaged citizens.

In Solt's study from 2010, he tests the Schattschneider hypothesis on whether economic inequality depresses electoral participation. By investigating variation in inequality across countries and over time using a multilevel analysis, Solt finds that citizens living in countries with higher levels of income inequality are less likely to cast a vote during elections. Moreover, Solt finds that income inequality increases income bias in favor of the rich in the electorate, and by this he finds support for the Schattschneider hypothesis. Solt (2010, 289) points out that when studying the effect of income inequality on citizens' probability to vote, different elections in different contexts, as well as individual-level factors must be considered.

### **Redistribution and Democratization**

Empirical studies on the relationship between inequality and democracy show mixed results. By conducting a dynamic probit analysis using data from 116 countries between 1960 and 2000, Houle (2009) finds that high levels of inequality increase the likelihood of a regime backsliding from democracy to dictatorship. At the same time, he finds that democratic regimes with low



levels of inequality are close to being immune from democratic breakdown (Houle 2009, 615). Houle also finds that inequality does not harm democratization.

In his cross-sectional work, Boix (2003) finds a negative relationship between inequality, measured by the GINI coefficient, and democracy. Higher levels of economic equality are shown to bolster the changes of both democratic transition and stability of democratic regimes (Boix 2003, 91-92). However, Kaufman (2009) calls into question the simplification of the assumptions put forward by Acemoglu and Robinson, and Boix. As he argues, a wide gap between the rich and the poor has not posed a threat to democratic stability in recent decades. This, he exemplifies by showing that Chile in the early 2000s had the highest GINI score in the region, but democratic transition since its beginning in 1990 has proven to be a success story. Moreover, the GINI increased in the period when democratic governments were introduced (Kaufman 2009, 361-362). This illustrates contradictions in the literature on inequality and democracy.

### **Economic Insecurity Thesis**

Inglehart and Norris (2016) investigate the rise of populist parties in the West, by focusing on the economic insecurity thesis and the inequality perspective. By pooling data from six European Social Survey waves (2002-2014), covering 32 countries, they find that the development and rising levels of income inequality is directly linked with rising mass support for populism. This is due to the divisions between winners and losers from global markets, and the economic insecurity among citizens that fosters a vulnerability and rejection of outsiders.

In the same vein, Stoetzer et al. (2021) demonstrate, by using data from European Social Survey and the Standardized World Income Database for the period 2002-2016, that income inequality plays a crucial role for the electoral success of populist parties across Europe. This, they argue, is because rising levels of income inequality leads to four consequences: a rise of economic insecurity, social disintegration, reduced trust in political elites and social identity shifts. These theoretical mechanisms demonstrate why the rise of populist parties has happened parallel to the rise of income inequality in Europe.

Based on World Value Survey data, Foa and Mounk (2017) demonstrate that citizens are becoming more dissatisfied to the democratic system, and that this effect is stronger among

younger cohorts. However, their paper has been criticized for not distinguishing between the United States and Europe, and their cases for being cherry-picked (Kriesi 2020, 242).

Based on data from European Social Survey (Round 6), Kriesi (2020, 242) finds that support for democracy is “alive and well in Europe”. Satisfactions with democracy are highest across the Nordic countries compared to the rest of Europe. At the same time, Kriesi acknowledges that democratic dissatisfaction is widespread in Europe. The origins of this dissatisfaction, he argues, is to be 1) a lack of responsiveness of the political system to the demands of the citizens which are linked to the conflict of winners and losers of globalization and the economic system, and 2) the performance failures of party governments. The bad performance of the economy after the Great Recession made citizens more dissatisfied with the way democracy works (Kriesi 2020, 246-247).

Dotti Sani and Magistro (2016) argue that social and economic inequalities are interrelated and demonstrate that increasing levels of income inequality increases political cynicism in Europe. The scholars argue that the economic crisis of 2008/2009 in Europe caused declining levels of trust in democratic institutions not only in Europe, but worldwide. They find that the declining levels of trust was highest among citizens with lower socio-economic strata.

Roodujin (2018, 351) argues that the populist voter does not exist. By studying the electorates of 15 populist parties from 11 Western European countries, he finds that voters of populist parties do not always consist of “losers of globalization”. In fact, the voters have very little in common, he argues. However, the rise of populist parties is to a large extent shaped by the demand side of the electoral market, which is important to acknowledge in scholarly literature, Roodujin (2018, 353) argues.

### **Winner-Loser Gap**

Moreover, there is a large amount of empirical literature on the winner-loser gap and democratic satisfaction. Anderson and Guillory (1997) find that those citizens who voted for the losing side in an election (belonging to a minority) are more dissatisfied with the way democracy works than those who voted for the winning side (belonging to a majority). With this, the authors demonstrate how democratic institutions might shape citizens’ satisfaction with democracy. Han and Chang (2016) study this further and explore the effects of income inequality on electoral winners and losers’ satisfaction with democracy and find that “the gap

in satisfaction with democracy between electoral winners and losers widens as income inequality increases” (Han and Chang 2016, 85).

### **Subjective Inequality**

In conducting probit and OLS regressions using data from the International Social Survey Project (ISSP) Gimpelson and Treisman (2018) explore the effects of objective (GINI Index) and subjective inequality on citizens demands for redistribution and class conflict. They find that the effect of perceived inequality is highly significant: where citizens believed that inequality was high, citizens were more in favor of redistribution. Furthermore, the effect of perceived inequality was two to three times larger than the effect of objective inequality when analyzing the effect of inequality on class tension. In contrast, Gimpelson and Treisman (2018, 42-43) find that higher levels of objective inequality were related to lower demand for redistribution. In this way, their findings are in accordance with the assumptions on a distributional conflict emerging from rising inequality levels. However, they only find this to exist at the subjective level, and not the objective level.

Kang (2015) finds a negative effect between inequality and satisfaction with democracy in South Korea by indicating that citizens’ concerns about inequality is what causes their dissatisfaction with democracy. Kang conducts a case study on South Korea where satisfaction with democracy has eroded at the same time as the government has shown weakness in dealing with the rising inequality level. Kang (2015, 503) points out that when inequality increased in Korea, citizens’ concerns about inequality increased accordingly.

More recently, Wu and Chang (2019) demonstrate the same effect by investigating the relationship between income inequality and support for democracy in East Asia and Latin America. Wu and Chang (2019, 1476) argue that the low support for democracy undermines the stability of democratic regimes. The authors use data from 28 democracies during 2013 and 2015, and to measure income inequality they use objective as well as subjective indicators. They (2019, 1454) demonstrate that the subjective measures provided a better explanation of democratic dissatisfaction than the GINI Index.

More recently, Muhtadi and Warburton (2020) seek to investigate both objective and subjective measures of income inequality and democratic support in Indonesia and find that Indonesians who believe that socio-economic inequality in Indonesia is unjust, hold more negative

democratic attitudes. Additionally, they find that Indonesians belonging to the political opposition view Indonesia as more unjust, compared to supporters of the incumbent president.

## 2.11 Summary and Hypotheses

As this theory chapter has illustrated, there exist several reasons why rising levels of income inequality are expected to decrease citizens' satisfaction with democracy. Different theoretical perspectives have been highlighted in this chapter. The theoretical argument is to be constructed into four divisions. I will summarize these four divisions and the related mechanisms that link both objective and subjective income inequality to satisfaction with democracy.

### **1: The Relative Power Theory and The Schattschneider hypothesis**

First, economic and political power are interrelated. A concentration of income leads to a concentration of political power, and by this, political power is determined by economic power. Put differently, economic power enables richer citizens to dominate the political sphere. This is at the core of the Relative Power Theory. In the same line, the Schattschneider Hypothesis proposes that income inequality gives rise to a political system preoccupied with the interests of the better-off whereas the worse-off are left behind in politics. The interests of a relative minority are taken care of, while the interests of a relative majority become neglected.

Consequently, political participation erodes among the worse-off citizens. And by this, dissatisfaction with democracy is believed to increase among them.

### **2: The Distributional Conflict**

Second, increasing levels of income inequality are likely to intensify political conflicts within the population, perhaps most importantly the distributional conflict between rich and poor. As redistribution lies at the core of a democratic society, the demand for redistribution among the citizens below the median income increases as inequality rises. When inequality is low poorer citizens have little to gain from demanding or revolting for more redistribution. However, when inequality is high, demands for redistribution rise accordingly and the poor have less to lose by revolting. On the other side, the rich gain from preventing these redistributive demands because the cost of redistribution is high. Higher levels of income inequality are likely to increase the risk of backsliding from democracy to dictatorship because the rich will fight back on demands for redistribution. By this, conflicts intensify and dissatisfaction with status quo becomes more widespread, and so does social unrest and instability.

### **3: The Economic Insecurity Thesis**

Income inequality increases economic insecurity among the “losers of the market”, meaning the worse-off. This economic insecurity fuels particularized trust (in-group solidarity), and harms generalized trust (between group solidarity). From this, hostility and conflicts between groups arise, especially between rich and poor. This economic insecurity leads more citizens into frustration and supporting populist parties that hold anti-democratic values and beliefs.

### **4: Relative Deprivation and Resources to Participate**

Relative deprivation involves how individuals compare themselves to others. Feelings of relative deprivation among the worse-off are expected to intensify in societies where income inequality is higher. Put differently, a lower-income citizen in a context of higher income inequality is expected to feel more deprived compared to a low-income citizen in a context of lower income inequality. Moreover, when inequality rises, poor individuals get less resources such as time and money to participate and engage in political matters, whereas the rich receive more of these resources. An individual's income is therefore expected to be dependent on the level of national income inequality. The theoretical argument is that national income inequality conditions the relationship between personal income and satisfaction with democracy.

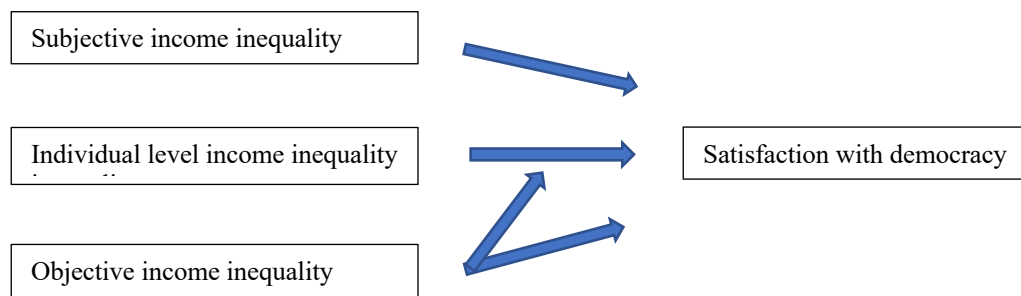
**By this, the formulated hypotheses for this study are as follows:**

*H1* Poorer citizens are less satisfied with democracy than richer citizens.

*H2* Citizens perceiving a higher level of income inequality are less satisfied with democracy.

*H3* Citizens living in countries with higher levels of income inequality are less satisfied with democracy.

*H4* The level of national income inequality conditions the effect of citizens' income on satisfaction with democracy.



**Figure 2.1.** The theoretical relationship between income inequality and satisfaction with democracy.

## 2.12 Control Variables

The determinants of citizens' satisfaction with democracy tend to be complex. Previous research has focused upon individuals' characteristics, and aspects of their contexts as important for their satisfaction with democracy. Thus, controlling for alternative explanatory variables is crucial for this analysis because leaving out relevant explanatory variables could potentially leave the study into wrong conclusions. The control variables included at the individual level are education, age, gender, trust, and political interest. At the country level I include economy (GDP), corruption, and electoral system.

### 2.12.1 Individual Level Variables

#### 2.12.1.1 Education

Education is one of the most acknowledged determinants of political attitudes and behavior, and it is believed to have a positive and strong influence on satisfaction with democracy (Norris 2011, 129-131). Citizens with higher education tend to be more interested in politics, which again works as a motivation to seek out information. They have the formal skills which enables them to understand the flood of information covered for example by different media outlets. Higher education is also associated with political participation because the educational system provides citizens with organizational skills, which again give them the confidence that they can influence politics (Norris 2011, 130-131; Monsivàis-Carrillo and Ramos 2020, 3-4). It is expected that higher levels of education yield higher levels of democratic satisfaction.

Several studies have found that higher levels of education lead to more satisfaction with democracy (Schäfer 2013; Kriekhaus et al. 2014; Soci et al. 2015). However, studies have also

found a negative effect between education and satisfaction with democracy (Farrell and McAllister 2006; Monsivàis-Carrillo and Ramos 2020).

#### *2.12.1.2 Age*

Foa and Mounk (2017, 6) argue that among Americans, younger cohorts are more dissatisfied with democracy compared to those born before World War II. In fact, Foa and Mounk express concern about what they call “a striking generation gap” in attitudes towards democracy. In the same direction, Norris (2011, 127) demonstrates in her analysis that older citizens are more satisfied with democratic performance. This is similar to the findings of several studies (Kriekhaus et al. 2014; Soci et al. 2015).

However, modernization theory suggests that the younger generation is more satisfied with democracy compared to the older generation. This is because the postwar generation could take survival for granted due to economic growth. Being able to take survival for granted makes the younger more open minded and positive towards minorities, which is in line with democratic values and principles. Insecurity, however, has the opposite effect because it makes people protective of their limited resources (Inglehart and Norris 2017, 443). Studies have also found a negative relationship between age and democratic support (Donovan and Karp 2017). A non-linear relationship between age and satisfaction with democracy is also demonstrated, which means that younger and older generations are more satisfied, compared to the middle-aged citizens (Schäfer 2013).

#### *2.12.1.3 Gender*

Men are found to hold more positive aspirations and to be more satisfied with democratic principles. One explanation to this is that women are less engaged with politics compared to men (Solt 2008, 52). Historically, women were excluded from the political sphere. In addition, traditional gender roles have led men to a larger extent into competitive electoral politics than women. This “system of stratification” between men and women has led to the oppression in which men have more power and greater privilege than women (Williams et al. 2021, 2-3). Moreover, women are often characterized by having a lower degree of material well-being, and a more economic insecure position. The lack of women in higher political offices also makes them feel left behind from the political system. Because of this, women are more likely to have negative attitudes towards democracy (Oakes 2002, 160-163). Several studies find that men

hold more positive aspirations towards democracy (Solt 2008; Schäfer 2013; Kriekhaus et al. 2014).

#### *2.12.1.4 Trust*

Higher levels of both social and political trust are related to higher levels of satisfaction with democracy. This is because trust enhances social cooperation, civic engagement, and empathy for fellow citizens (Zmerli and Newton 2008, 706-707; Gilley 2006, 50). Trust is an important foundation of democratic societies. Trust between citizens (social trust) generates a peaceful, stable and efficient democracy as citizens cooperate more effectively and are more rewarded for participating and engaging in political affairs (Zmerli and Newton 2008, 707). Moreover, confidence in the functions and workings of democratic institutions (political trust) such as the government, the parliament, courts, and political parties are likely to result in higher levels of satisfaction with democracy (Zmerli et al. 2007, 35-57). Several studies have revealed this evidence (Zmerli and Newton 2008; Kriekhaus et al. 2014). In this thesis I will control for political trust, more specifically trust in parliament.

#### *2.12.1.5 Political Interest*

Satisfaction with democracy is often described to be a result of political participation and interest, as this thesis already has touched upon. The more engaged citizens are in politics, the more likely they are to hold positive attitudes towards the system (Gilley 2006, 50). This is argued to be because it leads to participation in political events and processes, electoral voting, and the possibility to influence collective-decision-making, which again enhances the overall well-being of the democracy (Chang 2018, 3). Being interested and participating in politics are shown to result in higher satisfaction with democracy (Schäfer 2013; Kriekhaus et al. 2014).

### *2.12.2 Country Level Variables*

#### *2.12.2.1 GDP*

The conditions of a stable democracy have largely been considered to be a result of economic development and performance through the Gross Domestic Product (GDP). This indicator is perceived to reflect upon the health of democracy. It is a well-established and long-standing argument within political science that economic development and modernization is the key to democracy (Lipset, 1959; Przeworski et al. 2000). Citizens, with their values and attitudes, is



at the core of this claim. As modernization leads to better educated and well-off citizens, democratic values expand among them, which eventually leads to a demand for democracy.

According to Inglehart (2003, 51), economic success seems to make democratic institutions more legitimate. High economic levels of a country are expected to increase the overall well-being of the citizens.

The literature on economic voting addresses that countries' economic performance is strongly related to citizens' governmental support. By doing a pooled time-series analysis of Western democracies, Clarke et al. (1993) find that economic growth is positively correlated with satisfaction with democracy. Wagner et al. (2009) find the same result. Christmann and Torcal (2017) study the relationship between economic performance and satisfaction with democracy in Spain. As they note, in 2005, around 80 percent of the Spanish population were satisfied with democracy. In 2015, this democratic support had dropped to the critical level of less than 20 percent. They further argue that Spain suffered from the economic crisis and recession starting in 2008, and find that economic performance (GDP) is a major determinant in explaining decline in satisfaction with democracy in Spain during this period.

Schäfer (2013) points out that satisfaction with democracy is unevenly distributed across the 25 European countries he studies. Schäfer (2013, 12) demonstrates the important effect of GDP in shaping this imbalance in democratic attitudes, because the more affluent a country the more content with democracy its citizens will be. In poorer countries, he finds that dissatisfaction is widespread, such as for example in Ukraine.

#### *2.12.2.2 Corruption*

Corruption subverts fairness and equality as the rule of law is not adopted properly. Where corruption is more widespread citizens become more disappointed with parties and the electoral process. This generates disillusion and dissatisfaction with the functioning of democracy (Donovan and Karp 2017, 472-473). Moreover, where corruption is high, citizens are more likely to believe that the poor are treated unfairly by the governmental institutions which makes citizens skeptical to the people who rule the country. Corruption harms the generalized trust in the society, and a corrupt society is to a large extent characterized by patron-client relationships (Uslaner and Rothstein 2005, 53-56). Economic resources are generally transferred from the

public to the elite, meaning that less money is spent on public expenditures. As a consequence, wages reduce (Uslaner and Rothstein 2005, 53-54).

Wagner et al. (2009) find that lower levels of corruption are associated with higher levels of democratic satisfaction. Corruption is applied as a control variable in their study, and it demonstrates a huge effect. A one-point increase of corruption increases average satisfaction with democracy to the level of one full standard deviation (Wagner et al. 2009, 36).

Several scholars find a negative robust effect between corruption and satisfaction with democracy (Clausen et al. 2011; Donovan and Karp 2017). Clausen et al. (2011) find that corruption erodes confidence in public institutions which again leads citizens with low confidence to low participation in politics. Moreover, the scholars show that low-confidence-citizens are more tolerant to the use violence to achieve their political aspirations. Perceptions and concerns of corruption have also been demonstrated to affect democratic legitimacy negatively (Linde and Erlingsson 2011).

### 2.12.2.3 Electoral System

Institutional settings such as the electoral system has also proven to affect satisfaction with democracy. Scholars suggest that an electoral context of either *proportional representation system* or *majoritarian systems* is considered important when citizens evaluate democracy (Anderson and Guillory 1997).

Ljiphart (1999, 15-16) points out that majoritarian election systems are characterized by competition and conflict. Such a system is not associated with pluralism but concentrates power in the hands of the majority. A majoritarian understanding of democracy means that the majority should rule, and minorities should oppose (Ljiphart 1999, 30). By this, a government-opposition pattern is shown in such systems. On the other hand, a proportional representation system, also known as the consensus model, power is characterized by a representation of the multiplicity of interest groups and the plurality of the society. It emphasizes consensus instead of opposition, which again leads to inclusiveness. The aim of the proportional system is to divide the parliamentary seats proportionally in accordance with the votes which the parties receive (Ljiphart 1999, 32-36). In this way, by preventing political conflicts and being more inclusive, proportional representation systems are expected to yield more satisfaction with democracy.

Anderson and Guillory (1997, 66) argue that satisfaction with democracy is influenced by whether citizens belong to the political majority or not. How democratic institutions treat citizens that belong to either the majority or the minority affects citizens' attitudes towards democracy. Anderson and Guillory (1997) both argue and find support in their study that losers of elections in proportional representation systems are more satisfied with democracy than citizens losing elections in majoritarian systems. They provide evidence of a positive relationship between proportional systems and democratic satisfaction.

However, Donovan and Karp (2017, 482-483) find that the important effects of electoral system on satisfaction with democracy are “washed out” when accounted for inequality and corruption. The authors argue that this is because the presence of corruption and inequality is more visible and immediate to the citizens which mean that these effects trigger perceptions on democracy much stronger than the perceptions of the electoral system.

### 3 Data and Measurement

This chapter will first introduce the dataset and the sample used in the analysis. Further, the dependent variable, the explanatory variables, and the control variables are presented, including their measurements and possible implications.

#### 3.1 Dataset and Sample

The individual level data for this study derives from European Social Survey's (ESS) ninth wave from 2018. This dataset consists of N=49 519 respondents from 29 countries. ESS data provides extensive information on Europeans' values, attitudes, and beliefs. ESS conducts Computer-Assisted Personal Interviews (CAPI), which entails that the interviewer meets the respondents face-to-face. To ensure high survey standard and minimizing nonresponse bias, ESS sets a minimum response rate to 70 percent in all countries. Moreover, ESS secures a nonresponse bias by balancing participation between different subgroups of the population, such as rich and poor (ESS 2021) which increases the validity of the data. The dataset is drawn from random sampling, where each person in the population has an equal probability of being selected. However, a shortcoming of the level 1 observations might be that perhaps none of the respondents belong to the top one percent, or even the top ten percent. Although respondents belong to the 10<sup>th</sup> decile (the richest 10 percent of the sample), they might still be far away from the top one or ten percent of the population.

The contextual data come from Eurostat (GINI and GDP), Transparency International (corruption), and the Comparative Political Data Set (CPDS III) (electoral system).

The data sample is the following European countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechia, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Croatia, Hungary, Ireland, Iceland, Italy, Lithuania, Latvia, Montenegro, Netherlands, Norway, Poland, Portugal, Serbia, Sweden, Slovenia, and Slovakia.

To study the impact of inequality on satisfaction with democracy, I focus exclusively on well-established democratic countries in Europe. A note to make is that according to Freedom House,

all countries in the dataset were in 2018 characterized as *free*, except Montenegro which was characterized as *partly free*<sup>5</sup>. However, I do not exclude Montenegro from the dataset.

### 3.2 The Dependent Variable

Satisfaction with democracy is this study's dependent variable and is measured with the following question: *And on the whole, how satisfied are you with the way democracy works in [country]?* The variable is measured using an 11-point scale, where 0 is extremely dissatisfied and 10 is extremely satisfied. See figure 3.1 for the frequency distribution of the dependent variable in each country.

The advantage of using an 11-point scale when measuring satisfaction with democracy is that the respondents have more choices compared to the standard four-point scale (Norris 2011, 89). Such a detailed measurement scale will highlight the details and nuances in respondents' attitudes which in overall terms strengthen the reliability of the results.

Since the dependent variable is a categorical variable (ordinal), also referred to as a non-metrical variable, it is recommended to treat it as continuous in the analysis if the variable contains more than six values (Midtbø 2007, 33). This is the case for my dependent variable, and I will therefore treat the variable as continuous.

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<sup>5</sup> However, three of the countries in the sample, namely Hungary, Montenegro, and Serbia, are today characterized as *partly free* by Freedom House.



**Figure 3.1.** Frequency distribution on the dependent variable (swd) in each country<sup>6</sup>.

### 3.3 Explanatory Variables

#### 3.3.1 Income

As this study examines how income inequality affects satisfaction with democracy, one of the pertinent explanatory variables are individuals' economic position. I am interested in poorer citizens relative to the richer citizens. For this reason, a person's income is the point of reference, and is measured by the household's total net income after tax and compulsory deductions. The definition of income used by ESS, is the same as used in this thesis: income from all sources, wage earnings and capital.

The variable is distributed into ten equal deciles, meaning that the variable runs from the 1<sup>st</sup> decile, which constitutes the poorest part of the population, to the 10<sup>th</sup> decile, the richest part of the population. The income variable is characterized by having a relatively large number of nonresponses. With 19.5 percent missing data, it has by far the largest percentage of missing

<sup>6</sup> Country codes: AT=Austria, BE=Belgium, BG=Bulgaria, CH=Switzerland, CY=Cyprus, CZ=Czechia, DE=Germany, DK=Denmark, EE=Estonia, ES=Spain, FI=Finland, FR=France, GB=United Kingdom, HR=Croatia, HU=Hungary, IE=Ireland, IS=Iceland, IT=Italy, LT=Lithuania, LV=Latvia, ME=Montenegro, NL=Netherlands, NO=Norway, PL=Poland, PT=Portugal, RS=Serbia, SE=Sweden, SI=Slovenia, SK=Slovakia.

values in the dataset. Since this is one important variable in this analysis, the method of multiple imputation will be applied. This method will be further discussed in chapter 4.

### 3.3.2 Subjective Inequality: Differences in Wealth

Subjective inequality is measured using the following question: *In your opinion, are differences in wealth in [country] unfairly small, fair, or unfairly large?*

The variable is a 9-point scale ranging from 1, *small, extremely unfair*, to 9, *large, extremely unfair*. This means that when respondents are located at the lower end of the scale, they perceive that differences in wealth are small (high equality), while respondents located at the higher end of the scale perceive that differences in wealth are large (high inequality). This variable is that it involves the moral judgement of the wealth distribution, meaning that the respondent also expresses whether this wealth distribution is fair or not. This means that when respondents rate 1 on the scale, they perceive inequality to be low, but unfairly low. Likewise, 10 means large, but unfairly large. This thesis takes only the respondent's rating of inequality into consideration when applying the variable. However, a drawback might be that respondents tend to rate their moral judgement instead of their perception of the inequality level.

The variable is treated as continuous.

### 3.3.3 Objective Inequality: GINI Index

In any discussion of inequality, data availability and the quality of the data are of concern because this reflects upon the whole study's reliability and validity. Previous studies on income inequality have been suffering from scarce and unreliable income data (Teorell 2010, 60). There are several conditions that makes it challenging to measure income inequality. Income inequality may be based on either individuals' income or household income. The choice of definition will have a great impact on the results of the study. Informal and unregistered earnings may also represent a problem when measuring income inequality. However, this is primarily a challenge in less developed countries (Pearce 2014, 94).

As mentioned earlier in this thesis, income inequality will be measured on the household level. The GINI coefficient is based on equivalized household disposable income. When income is *equivalized*, it means that the number of household members, as well as household composition,

is taken into account. This is important because income is relative to household size and composition. Put differently, this means that “not all spending has to be increased per person” (Atkinson 2015, 31). A household of one person needs one fridge, whereas a household of four people are not in need of four fridges. Eurostat uses the modified OECD scale as the equalization factor, which weights 1 to the first adult in the household and 0.5 for any other adults, and 0.3 for each child (ESS, 2018). *Disposable* income refers to income after taxes.

The GINI coefficient measures the level of income inequality in a country. It is the most popular indicator among scholars when measuring inequality at the national level. The GINI coefficient measures inequality by comparing cumulative shares of the population, from the poorest to the richest, to the cumulative share of the income that they receive (ESS 2021). This is referred to as the Lorenz curve. If all incomes were the same, the Lorenz curve would be complete diagonal, representing perfect equality. The GINI coefficient is defined to be the area between the Lorenz curve and the perfect line of equality, divided by the area of the whole triangle (See figure 3.2) (Atkinson 2015, 310-311). The GINI coefficient varies between 0 and 1, where 0 means perfect equality and 1 means perfect inequality indicating that one household has all the income. As the Lorenz curve moves further away from the perfect equality line, and the bow of the curve enlarges, the more the GINI coefficient reduces. Pearce (2014, 95) points out that countries with high income inequality typically have a score between 0.50 and 0.70. In the ESS-dataset applied in this analysis, the highest score is 0.39 (Bulgaria), indicating that no country has an especially high degree of inequality. The data is compiled from Eurostat.

Piketty (2014, 333) argues that the GINI coefficient raises several problems. He explains that it is not ideal to measure a multidimensional reality such as inequality, using an unidimensional index. As he points out, GINI is problematic because it does not distinguish between the different dimensions of inequality such as income from labor versus income from capital.

However, Sitthiyot and Holasut (2020, 2) argue that the GINI index is fruitful to apply because the income distribution is summarized into a single measurement, and by this allows for comparison of many countries with different population sizes.

This is in accordance with Jordahl (2007, 8), who argues that among the different measurements of inequality that exists, the GINI coefficient serves to be a decent option because it incorporates the entire distribution of income. Other measures of income inequality might only capture



certain parts of the income distribution. As he points out: “the existence of a small group of people with very high incomes is very different from a situation with a wide gap between the poor and the middle class”.

In addition, compared to other indexes, the GINI coefficient is more sensitive to the changes in the middle of the income distribution (Solt 2020, 1184; Jordahl 2007, 8), which is considered positive. This thesis does not distinguish between the different dimensions of income inequality when studying its effect on satisfaction with democracy. Rather, it studies the concept of income inequality, as being the uneven distribution of income among households. Therefore, I argue that the GINI coefficient is the most suitable and precise measure of income inequality for this study.

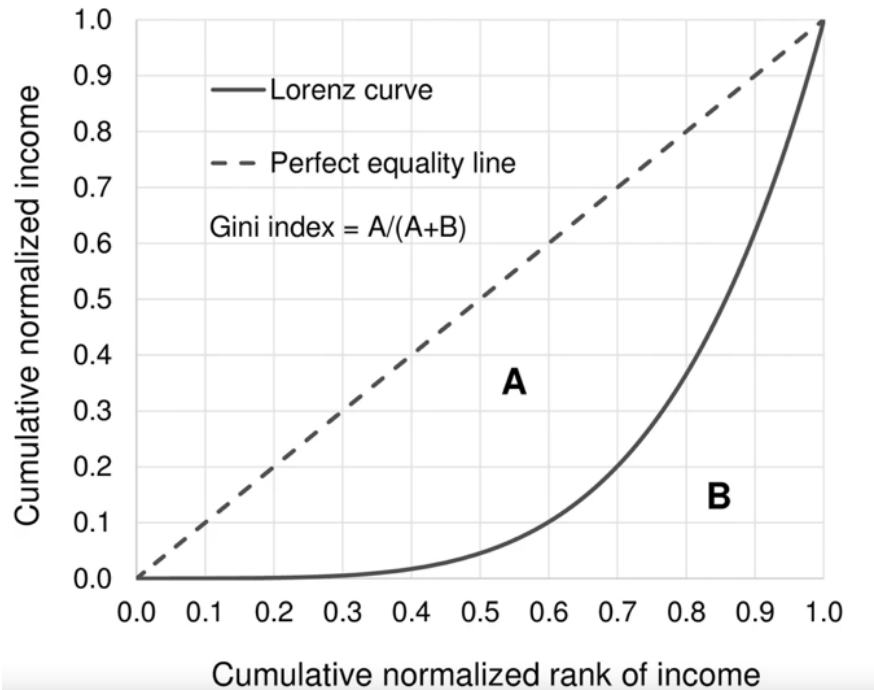


Figure 3.2. Lorenzo curve (Sitthiyot and Holasut 2020, 2).

### 3.4 Control Variables

#### 3.4.1 Education

The education variable measures the number of years a respondent has completed full-time education. The minimum value is 0, and the maximum value is 60. The mean is 12.96 years, and the median is 12 years.

#### 3.4.2 Age

The age variable measures a respondent's age and goes from 15-90 years.

#### 3.4.3 Gender

The gender variable measures a respondent's gender and is a dichotomy where 0 is woman and 1 is man.

#### 3.4.4 Trust

Trust measures to what degree a respondent has trust in the parliament, which is a core democratic institution. The variable goes from 0-10, where 0 indicates no trust at all, whereas 10 means complete trust.

#### 3.4.5 Political Interest

The variable of political interest measures to what degree a respondent is interested in politics. The scale ranges from 1-4 where 1 is not interested at all, and 4 is very interested.

#### 3.4.6 GDP per Capita

The variable of the national economic level is measured by Gross Domestic product (GDP) per capita, at current market prices – in Euro per inhabitant 2018. To calculate GDP, GDP per head is estimated by the aggregate of production divided by the size of the population (ESS 2021). The data is compiled from Eurostat.

#### 3.4.7 Corruption

The variable of corruption measures the degree to which corruption is perceived to exist among public officials and politicians within countries. It is an aggregated indicator ranking countries in their degree of corruption, and the scale ranges from 42-88. The data is compiled from Transparency International's Corruptions Perceptions Index (TI-CPI). Higher levels on the scale indicate lower levels of corruption, and lower levels on the scale indicate higher levels of corruption. Corruption is defined as: "acts in which the power of public office is used for personal gain in a manner that contravenes the rules of the game" (Jain 2001, 73).

### 3.4.8 Electoral System

The variable of electoral system measures whether a country has a majoritarian system, meaning single member district (SMD), or proportional representation (PR). The score of 0 means SMD, and 1 indicates PR. The dataset originally separates the variable into a third category, *modified proportional representation*. However, I created a dummy treating modified proportional representation as proportional representation.

### 3.5 Descriptive Statistics

Variable	Scoring	Mean	St. Dev.	Min.	Max.	NA's
Satisfaction with democracy	11-point scale 0=extremely dissatisfied, 10=extremely satisfied	5.26	2.57	0	10	1830
Income	10-point decile scale. 1 <sup>st</sup> decile= poorest 10 <sup>th</sup> decile=richest	5.24	2.78	1	10	9654
Differences in wealth	9-point scale 1=small, 9=large	6.05	2.38	1	9	3371
GINI	0-1 0=perfect equality 1=perfect inequality	0.29	4.36	0.20	0.39	-
<b>Controls:</b>						
Education	0-60 years	12.96	4.16	0	60	708
Age	15-90 years	51.07	18.64	15	90	222
Gender	0=woman 1=man	0	0.49	0	1	-
Trust	11-point scale 0=no trust at all 10=	4.52	2.66	0	10	1144
Political interest	4-point scale 1=not at all interested 4=very interested	2.33	0.92	1	4	98
GDP	6100-69700 (in €)	29812	17523.07	6100	69700	4607
Corruption	42-88	67.8	13.73	42	88	3243
Electoral system	0-1 0=Single member district (SMD) 1=Proportional representation (PR)	0.95	0.21	0	1	3243

**Table 3.1.** Descriptive statistics of all the variables in the analysis.

## 4 Method

This chapter concentrates on the methods that will be applied to analyze the data. The primary method is multilevel linear regression complemented with the method of multiple imputation of missing data. These methods are applied to investigate the research question: *To what extent does income inequality, both subjective and objective, affect satisfaction with democracy?* – and the hypothesis and variables which are summarized in table 4.1.

	Hypothesis	Variables
<i>Individual level</i>	<b>H1</b> Poorer citizens are less satisfied with democracy than richer citizens.	<ul style="list-style-type: none"> <li>• Respondent’s income</li> </ul>
	<b>H2</b> Citizens perceiving a higher level of income inequality are less satisfied with democracy.	<ul style="list-style-type: none"> <li>• Respondent’s perception of inequality</li> </ul>
<i>Country level</i>	<b>H3</b> Citizens living in countries with higher levels of income inequality are less satisfied with democracy.	<ul style="list-style-type: none"> <li>• Country’s level of inequality: GINI</li> </ul>
<i>Cross level</i>	<b>H4</b> The level of national inequality conditions the effect of citizens income on satisfaction with democracy.	<ul style="list-style-type: none"> <li>• Respondent’s income x GINI</li> </ul>

**Table 4.1.** Hypotheses table.

### 4.1 Multilevel Modeling (MLM)

#### 4.1.1 A Hierarchical Data Structure

This study follows the assumption in line with political science research, namely that individuals are influenced by their surroundings and the context that they live in, which means that their attitudes are shaped in a social and economic context (Hox 2010, 1). Multilevel research takes into account that individuals are nested within a group or a system which all constitute separate levels of a hierarchical system. The data structure of this thesis thus becomes hierarchical, as citizens’ satisfaction with democracy is expected to be influenced and explained by inequality at two levels, namely the individual and the country level. By applying multilevel

methods, the effects of the respective levels are estimated separately as well as together. This is advantageous because it allows for a more in-depth research and understanding of the variable under scrutiny, and to what extent inequality actually affects citizens' satisfaction with democracy.

One of the most important assumptions of estimating regression models using regular ordinary least squares (OLS) is that observations are independent from one another (Flora 2018, 164). This means that respondents' attitudes are shaped regardless of each other when the independent variables are accounted for (Finch et al. 2014, 23). Using a regular regression model on a hierarchical data structure would therefore violate this assumption and result in incorrect conclusions, because observations in a hierarchical data structure is nonindependent. The data is nonindependent because the respondents are clustered within groups (Hox and Maas 2005, 785; Flora 2018, 163), which in this study is countries. Being nonindependent means that individuals who are clustered within the same group (country) are more likely to hold similar attitudes, and to differ in attitudes compared to other groups. Put differently, whereas intragroup attitudes are similar, intergroup attitudes tend to differ. According to Finch et al. (2014, 24), this is a reasonable assumption to make since in satisfaction surveys for example, respondents' level of satisfaction will be based exclusively on experiences within their group. This might result in an attitude-correlation within countries. Multilevel modeling takes into account such data dependencies and is therefore the preferred method to handle the hierarchical data structure of this study. Conducting a regular OLS-regression, and to ignore the hierarchical data structure, would mean that the within-country correlation that exists would have brought about incorrect standard errors resulting in a Type 1 error for the parameters (Steenbergen and Jones 2002, 219; Finch et al. 2014, 28).

Furthermore, by performing multilevel modeling, I avoid potential problems such as *ecological fallacy*, or *atomistic fallacy*. Ecological fallacy means that conclusions at one level are drawn from another level. Atomistic fallacy means that conclusions of a whole group are made based exclusively on individual-level relations (Flora 2018, 167). As multilevel modeling analyses the hierarchical levels simultaneously, such problems are avoided.

#### 4.1.2 Motivations for Applying Multilevel Modeling

As the theory chapter has illustrated, citizens' satisfaction with democracy are driven by both individual-level (subjective inequality, and control variables) and contextual-level (objective inequality, and control variables) characteristics. The theoretical motivation for applying multilevel modeling is present because citizens' satisfaction with democracy is theoretically and empirically proven to be shaped by a multilevel reality.

The statistical motivation for using multilevel modeling is grounded in the nonindependence of the data structure. In multilevel data structures, the correlation between the observations is called intra-class correlation (Steenbergen and Jones 2002, 220). The intra-class correlation coefficient (ICC) measures to what degree observations are correlated within groups. The coefficient ranging from 0 to 1 indicates to what extent there is variation within and/or between countries. An ICC=0 means that there is no variation between countries, and ICC=1 means that there is variation between countries but no within-country variation (Finch et al. 2014, 24). A score of 1 would mean that for example all Italians answered the same with regards to satisfaction with democracy, meaning that they are equal in their level of satisfaction. At the same time, their answers would be different from the satisfaction level in for example Spain. In short, a higher ICC score illustrates greater intercountry variation. As Christophersen (2018, 111) puts it, ICC expresses how similar two randomly chosen respondents from the same country are. Multilevel modeling takes intergroup variation into account.

Some scholars argue that there should be a threshold of the ICC coefficient to justify the application of multilevel analysis. In example, Thomas and Heck (2001, 526) argue that in situations where the observations are almost completely independent ( $ICC < .05$ ), the need to adjust for the data clustering is nearly not present and traditional multiple regression analysis will provide accurate estimates. Likewise, Christophersen (2018, 111) argues that the same threshold should be the guiding rule of when to apply multilevel regression. However, he acknowledges that independent of the ICC score, multilevel modeling is relevant to secure a correct number of freedom degrees at the contextual level. Some scholars argue that if ICC is close to zero, there are still benefits of using multilevel modeling (Hayes 2006, 394). Nezlek (2008, 856-857) argues that multilevel modeling should be applied if the data is hierarchical regardless of the ICC score. He claims that scholars hold a dangerous assumption when avoiding multilevel modeling at low ICC scores. This is because no intergroup variation is not

to be understood as similarity across all groups. Assuming this may lead to inappropriate estimates (Nezlek 2008, 857).

However, to conclude, as the ICC score increases the use of multilevel modeling should be encouraged accordingly. In this study, the ICC score on the dependent variable is .193, which is considered a relatively large score.

#### 4.1.3 Multilevel Linear Regression and its Assumptions

Since this study's dependent variable, *satisfaction with democracy*, is treated as a continuous variable, a multilevel linear regression must be applied. In example, if the dependent variable instead was dichotomized, a logistic regression would have been the preferred method, not linear.

A linear regression model describes the relationship between a dependent variable and the explanatory variables by estimating the best-fitting linear line (Hox and Maas 2005, 785). In addition to the key assumption of linear multilevel regression models, that the first level observations are nonindependent, there are other premises that need to be present when executing multilevel modeling techniques for the results to be estimated properly. Many of these underlying assumptions are similar to regular OLS-regression, such as normally distributed residual terms (also referred to as *normality*), linear relationships, and homoscedasticity (Maas and Hox 2004, 428).

The assumption of a normal distribution of the residual terms characterizes a symmetrical bell-curve distribution above the mean and the absence of extreme values (outliers) (Midtbø 2016, 114-115). Non-normality might yield biases in the standard errors at both levels, and smaller confidence intervals for the estimates (Dedrick et al. 2009, 77). Thus, the validity of the results is weakened.

A linear relationship contains that x affects y in a linear way, and if not, the equation applied will result in a misspecification of the model under estimation (Thrane 2017, 87; Finch et al 2014, 3-4).

Homoscedasticity, also referred to as *homogeneity of variance*, reflects the assumption that the error variance is similar (or constant) across all observations, no matter the value for X (Flora 2018, 21, 30). If this assumption is violated, heteroscedasticity occurs meaning that the error variance is unevenly spread across the regression line (Midtbø 2016, 106).

Another assumption is that the errors for the second level estimate are assumed to be independent from the first level residuals. Furthermore, that the second level residuals (the random intercept and slopes) are independent of one another between clusters (countries) (Finch et al. 2014, 37).

Additionally, a key assumption within multilevel modeling is the absence of multicollinearity. A problem of multicollinearity simply occurs when an explanatory variable is strongly correlated with one or more of the other explanatory variables. A perfect multicollinearity means that one explanatory variable is a combination of two or more of the other explanatory variables (Christophersen 2018, 77). When such correlations arise, this indicates substantial redundancy and creates several problems. Regression coefficients might change from positive to negative (or vice versa), the standard errors get unstable, and the explanatory power of the model becomes low (Flora 2018, 81; Finch et al. 2014, 9). Thus, it is recommended to inspect the bivariate correlations among the variables in the data before proceeding the analysis. This is done by using the variance inflation factor (VIF)<sup>7</sup>. A concern should arise if the VIF score reaches  $< .75$  (Flora 2018, 81), or as Finch et al. (2014, 9) argue,  $< .5$  or  $.10$ . In this study, the VIF test indicates that there is no problem of multicollinearity. The result from the test is shown in appendix A, table A.1. In the interaction model, a high VIF score occurs, but this is expected since GINI\*income is a combination of the two constituent variables, and thus highly correlated with each other.

Moreover, the sample size is of importance when applying a multilevel method. When using regular OLS-regression, the sample size exclusively exists at one level. In multilevel regression, however, two sample sizes need to be taken into account: the sample at the individual level (number of respondents), and the number of observations at the second level (Bickel 2007, 276). Within political science there exists a statistical advice that the number of observations at the second level should be 30/30 (Kreft 1996; Christophersen 2018; Hox 2010), meaning that

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<sup>7</sup> Formula of VIF:  $VIF = 1/(1 - R_j^2)$  (Christophersen 2018, 76).



per 30 groups, there should be 30 individuals per group. Bickel (2007, 272) argues that a relatively small number such as 20-30 observations at the second level is problematic because significance tests and estimations of confidence intervals at the second level are based upon “a dangerously low number of cases”. Maas and Hox (2002) conduct a large simulation study of 27000 datasets, and their simulation results show that the variance components and standard errors are biased downwards if there is a small sample size (less than 50) at the second level. However, some simulation studies show that multilevel modeling is justified using a fewer number of level 2 observations. McNeish and Stapleton (2016, 312) illustrate that multilevel modeling shows the potential of performing well and yield reasonable estimates with as little as ten clusters in some scenarios.

Hox (2010, 235) argues that to be safe, striving for at least 30 groups with 30 individuals per group should be a fine rule for researchers. In this thesis, 29 countries constitute the sample in the second level, and around 50.000 individuals make up the sample at level 1. Therefore, the assumption of a satisfactory sample size is not considered violated.

A last point to make is the assumption of including all relevant explanatory variables in the study. As Kellstedt and Whitten point out (2018, 57), the social reality is multivariate, not bivariate. This means that multiple factors are at play in changing the conditions at the dependent variable. Social reality consists of probabilistic relationships meaning that the effect on a dependent variable will most probably happen, but not with certainty. If dealing with certainty, referred to as deterministic relationships, this has to do with physical laws like Newton’s laws of motion (Kellstedt and Whitten 2018, 58). In this regard, including and controlling for possible other relationships between X and Y, is crucial. Put differently, when studying whether income inequality affects satisfaction with democracy, an assumption for multilevel regression is that other potential confounding variables are controlled for. In worst case, not fulfilling this assumption means that inferences on the relationship between inequality and satisfaction with democracy is likely to be understood incorrectly. As previously mentioned in the theory section of this thesis, I have included a set of alternative explanatory variables in the analysis. However, one can never be sure whether some key variables are left out.

#### 4.1.4 Model Specification

When analyzing nested data where ingroup homogeneity is present, it is likely that intercepts and slopes will vary from group to group (Bickel 2007, 180). Random coefficient regression is therefore preferred to fixed coefficient regressions, which will be the preferred model techniques in this study. I will present the estimated models for each hypothesis.

The first model to specify is a *random intercept multilevel model*. In this model, the intercept varies across countries, while the slope is constant<sup>8</sup>. It takes the assumption that the effect of X on Y is similar across countries (Flora 2018, 179). Put differently, in the multilevel regression of income inequality on satisfaction with democracy, the intercepts will vary across countries, but the slope is expected to be similar across all countries. This is because income inequality is expected to affect satisfaction with democracy negatively across all countries.

As pointed out earlier in this chapter, ICC measures to what extent there exists intergroup variation in the dependent variable, meaning whether citizens' satisfaction with democracy varies between countries. However, it does not provide information on whether the effect of income inequality on satisfaction with democracy varies between countries. This is considered important information for this thesis because theoretically, I hypothesize that the effect of citizens' income on satisfaction with democracy varies according to the level of national income inequality. A first step in finding out this information is to specify a random slope model. In a *random slope multilevel model*, the intercept, as well as the slope, are allowed to vary (Flora 2018, 185)<sup>9</sup>. This provides the possibility of estimating the effect of personal income for each country.

One step further lies the *interaction model*. An interaction model is applied in order to understand *why* the effect of income on satisfaction with democracy varies across countries, which theoretically is because of the variety in levels of national income inequality in the different countries (H4). An interaction effect occurs when the impact of a variable X on Y depends on the value of Z (Midtbø 2016, 136; Finch et al. 2014, 52). An interaction effect is not the same as the effect of X on Y controlled for Z, but rather the effect of X on Y as a function of Z. This is what the interaction model estimates and will be applied for testing H4.

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<sup>8</sup> The syntax of a random intercept in R, is as follows: ( $\sim 1 \mid \text{country}$ ). 1 is the intercept.

<sup>9</sup> The syntax of a random slope in R, is as follows: ( $\text{swd} \mid \text{country}$ ). Swd is the dependent variable.

#### 4.1.5 Model Fit Information

Models are created in analyses to provide approximations of the reality (Burnham and Anderson 2004, 262) A core question is how one finds the model that fits the reality *best*, and how to justify that model. The purpose of this chapter is to explore this question.

In regular regression models, the explained variation of a model fit is measured using  $R^2$ . Explained variance expresses how much of the variation in the dependent variable that can be explained by the variance of one or more independent variables in the regression. The explained variance of the dependent variable is divided by the total variance (Midtbø 2007, 87; 2012, 103). Explained variance has been generalized in various ways in multilevel modeling. However, Gelman and Pardoe (2006, 245) argue that it suffers from limitations in these cases, such as dependence on the variation in the sample which makes comparison between the levels difficult. Moreover, they argue that it lacks accuracy in model comparison compared to other measures such as Akaike Information Criterion (AIC). One of the most common measures applied to model fit comparison in multilevel modeling are AIC and Bayesian Information Criterion (BIC), which is also being applied in this study. Unlike  $R^2$ , AIC and BIC are non-standardized and are used exclusively for model fit comparison (Midtbø 2016, 103). Model fit comparison means that models are being preferred or not preferred to one another, as a change in AIC or BIC values arises.

AIC measures how well a model fits the data and is formally written:  $AIC = D + 2q$ .

A model's deviance  $D$  is added to the number of estimated parameters (variables)  $q$  times 2 (Flora 2018, 200). As the deviation reduces, AIC reduces accordingly, and this indicates a better model fit. The model with the lowest AIC value fits the data best. Put differently, higher values indicate that the model does not fit as well compared to models with lower values. This means that the explanatory power of the model with lowest AIC value provides the best explanation for citizens' satisfaction with democracy. However, AIC penalizes model complexity. Models containing fewer variables will in this way naturally hold lower AIC values compared to more complex models with many variables. As model fit improves, this improvement will eventually become trivial (Flora 2018, 201). Therefore, AIC prefers more sparse models when more and more variables are added which do little to explain the data under scrutiny. A rule of thumb in assessing model fit is that a reduction of the AIC value of 2-10 gives some support for a model

over another model, while a reduction of AIC value  $> 10$  means strong support (Burnham and Anderson 2004, 271; Midtbø 2016, 103-104).

BIC is a similar measure to AIC and is formally written  $BIC = D + qlnN$ . Except of multiplying the number of estimated parameters by 2, the deviance  $D$  is added with the estimated parameters  $q$ , and the number of observations  $N$  (Flora 2018, 200; Hox 2010, 50). While AIC only penalizes on the basis of the number of variables, BIC also includes the sample size in its punishment. By this, BIC prefers even smaller models than AIC (Christophersen 2018, 112).

In sum, AIC and BIC serve as the measure of explained variation in this study because these indexes prove to be the most fruitful fit model information criterions in multilevel modeling.

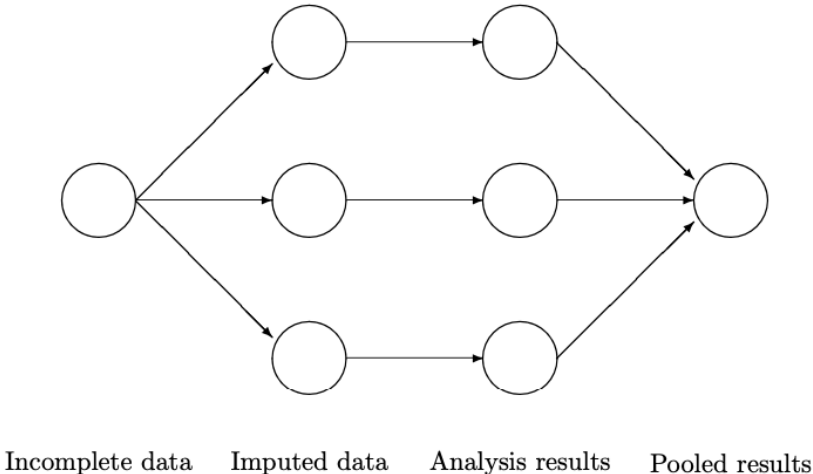
## 4.2 Multiple Imputation Method (MIM)

In this chapter, the handling of the missing data in the dataset is reviewed and discussed upon. Most datasets possess a relative number of missing values because some respondents do not answer certain questions for different reasons. The unobserved data decrease the sample size and may lead to invalid conclusions (Kleinke et al. 2020, 23). Because of this, in this study, I *do not* rely upon the most common practice within political science research, namely deleting all missing values from the dataset. This is a practice referred to as *listwise deletion*. As van Buuren (2012, 6) points out, listwise deletion is used by scholars without any further mentioning or discussion of its potential problems.

Instead, I apply the method of multiple imputation (MI), which is described by scholars to be an advanced, powerful, and widely applied tool for statisticians in compensating for data missingness. The MI method, which was introduced by the statistician Donald B. Rubin in the 1970s, is a simulation procedure in which the missing values are replaced with estimations from the observed data (Kleinke et al. 2020, 9; Madley-Dowd et al. 2019, 25, 63). It is a preferable method over listwise deletion because it utilizes the unobserved data, as well as reflecting uncertainty about imputed values. By this, MI provides more valid estimates of standard errors and the overall inferences to be made (Lall 2016, 417-418).

The MI process involves three steps: imputation, analysis, and pooling. First, a distribution specification is made in accordance with the observed data (the imputation model). From this posterior predictive distribution,  $M$  plausible copies (imputations) are drawn which replace every missing value. By this, it creates  $m > 1$  complete datasets, which then are analyzed separately by an analysis software. Lastly, the results from the analysis are pooled by the pooling rule referred to as Rubin’s rules (Madley-Dowd et al. 2019, 63; Audigier et al. 2018, 161; van Buuren 2012, 16).

The number of imputed datasets  $M$ ’s are similar for the observed data but differ in the imputed values. The scope of these differences reflects the uncertainty of the missing values that are being imputed (van Buuren 2012, 16). This is a strength of MI, as it reproduces uncertainty. Put differently, uncertainty means that the unobserved values that are estimated are balanced within a range of predictions from the observed data. If this range of predictions is large (more variation), MI will draw plausible values in a larger sense and thus generate more uncertainty, compared to if the range of predictions is small. If the range is smaller, the confidence of the predicted value is higher. Thus, the uncertainty in the unobserved values is expressed in the variation of the missing values. Figure 4.1 illustrates the three main steps in multiple imputation.



**Figure 4.1.** The main steps of multiple imputation (van Buuren 2012, 17).

An assumption to consider when performing MI is the missing pattern, meaning the underlying reason for the respondents not to answer certain questions. It needs to be assessed whether the missing data is random or not.

Rubin developed a threefold categorization in which missing data occurs, also known as response mechanisms or missing data mechanisms (van Buuren 2012, 6). These are i) missing completely at random (MCAR), ii) missing at random (MAR), and iii) missing not at random (MNAR). When data is MCAR, the probability of missingness is independent of both the observed and the unobserved data. This means that the missing data occurs by coincidence, and there is no underlying structural reason behind the fact that some respondents do not answer certain questions (Madley-Dowd et al. 2019, 63; van Buuren 2012, 7). However, MCAR is often unrealistic in datasets. In MAR, missingness depends on the observed data exclusively, and is independent of unobserved data. This is the most common and realistic pattern of missing values, and the MAR assumption is often the point of departure when conducting MI (van Buuren 2012, 7). MNAR represents the probability that missingness has complex reasons, most often unknown and difficult to recognize. It occurs when the probability of missing values depends partly on the observed data and partly on the unobserved data (van Buuren 2012, 7; Madley-Dowd 2019, 63).

The specific MI approach applied in this study is multiple imputations by chained equations (mice), which is an algorithm that relies on the three-step process elaborated in the beginning of this chapter<sup>10</sup>. On this occasion, some choices for this current analysis need to be done: 1) the missing pattern, 2) the number of variables, 3) the number of imputed datasets, and 4) whether the imputations results seem plausible or not.

With regards to the missing pattern, Madley-Dowd et al. (2019) argue that for MI to be valid, the data must be MAR, and the specification of the analysis and imputation models must be correct. In their simulations study, Madley-Dowd et al. (2019, 69) provide evidence that MI reduces bias and improves efficacy under MAR conditions. Moreover, they argue that the use

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<sup>10</sup> In addition, predictive mean matching (pmm) will be applied for all continuous variables, after recommendations from van Buuren (2012, 68-70). This is considered a good overall imputation method (van Buuren and Groothuis-Oudshoorn 2011, 18)

of MI for analysis of MAR data should be applied regardless of the proportion of missingness, and even when it's low. Whether data is MAR or MNAR is not easy to conclude on, because there may always exist some unknown reasons for respondents when not answering certain questions. From the theoretical assumptions in this thesis, the probability that the missing data depends on the observed data seems plausible. By this, for example respondents that reply "don't know" or "no answer" in the satisfaction with democracy question is structural related to either their age, gender, education, or income. One possible reason might be that respondents who lack education are reluctant to rate their satisfaction with democracy, because they feel a lack of information or knowledge on how to "judge" the democracy. Likewise, as argued in chapter 2, respondents might not be aware of the actual inequality level in their country<sup>11</sup>. Thus, such respondents experience a difficulty or reluctance in assessing whether the difference in wealth is fair, as they are not aware of how wealth is distributed. This might be a result of low education, age, or income. In the income variable, which contains 20 percent of missingness, it is expected that younger respondents with for example lower education, and women are more reluctant to disclose their income, because they are more likely to have lower income. Because of this, they are in some way ashamed to reveal their income.

By this, with a certain reservation, I expect that the missing pattern is MAR as I cannot be sure whether some of the missingness is caused by unknown reasons from unobserved data.

Second, the number of variables added are important. Van Buuren (2012, 124) argue that a rule of thumb should be to include as many relevant variables as possible. Especially in a MAR assumption, if variables predictive of the missing values are left out of the MI model, the imputations will be incorrect (Murray 2018, 147). Since this study contains relatively few individual level variables, all variables related to nonresponse are added. The gender variable does not suffer from nonresponse but is still important to add because nonresponse in other variables might be dependent on the gender variable. An example could be that women are more reluctant to disclose their income, compared to men.

Third, the number of multiply imputed datasets  $M$  is crucial to decide upon. The literature is somewhat contradictory in this area. Theoretically, it is preferable to use a higher number of  $M$ 's (between 20-100  $M$ 's), while another advice is to set a low number of  $M$ 's for moderate

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<sup>11</sup> The missingness on the subjective inequality variable is 7 percent.

missingness (3-5  $M$ 's) (van Buuren 2012, 49-50). Lall (2016, 426) points out that the number of models should be approximately equal to the percentage of missing data in the dataset. As mentioned, 20 percent is missing in the individual level variable of interest, income, which is not a small number. In other variables, the missingness ranges between 0 and 9 percent. Based on this,  $M = 20$  is chosen for this analysis.

Lastly, according to van Buuren (2012, 146-147), one of the best ways to study the plausibility of imputations is to compare the observed and imputed data. Regarding whether the algorithm has converged or not, there exists no straightforward method for assessing this (van Buuren 2012, 142). However, the most fruitful approach according to van Buuren (2012, 142) is to plot the mean and variance of the imputations and inspect whether the different streams freely intermingle with one another. This is called a *convergence diagnosis* and will be applied for robust checking, in addition to calculating the Rhat-value. Listwise deletion is also performed in order to check whether such an analysis yields different results compared to a regression analysis with MI. These diagnosis procedures are further discussed in chapter 5.

### 4.3 Chapter Summary

This chapter has highlighted the methods used in this study. That is multilevel modeling that handles hierarchical data structures, and its key assumptions have been put forward. The specification involves three models: random intercept model, random slope model and interaction model. Moreover, the explained variance of model fit applied is AIC and BIC. Finally, multiple imputation is used to handle the missing data.

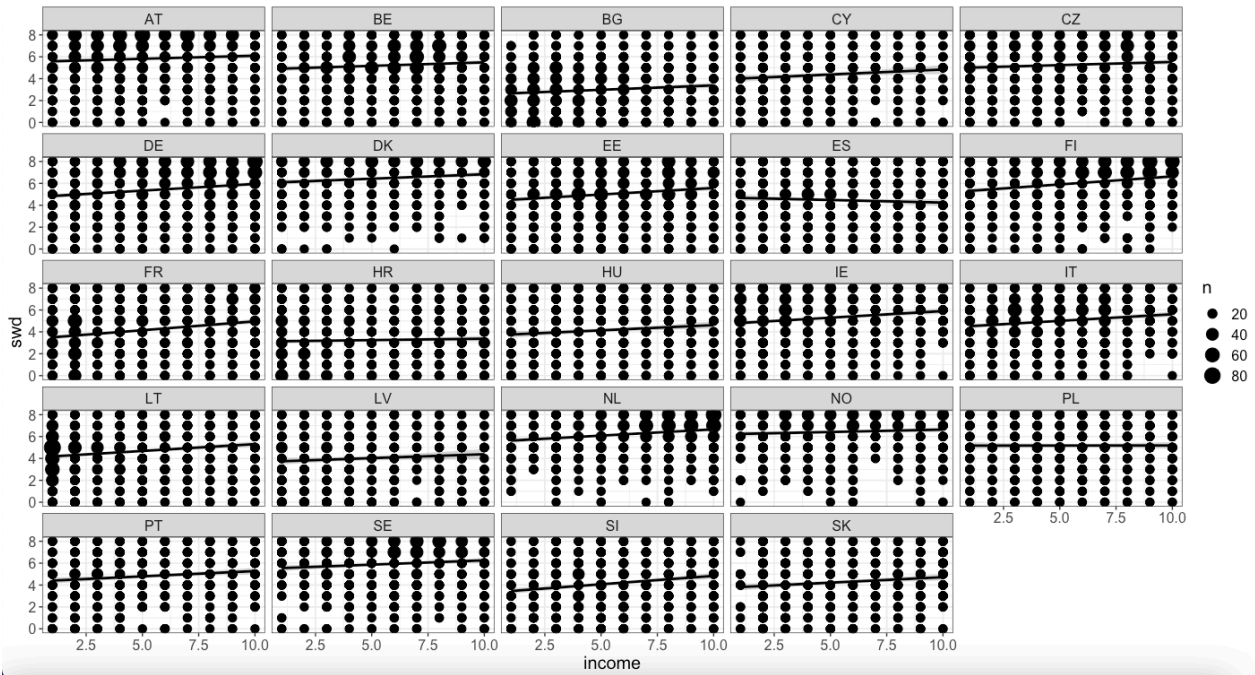


# 5 Results

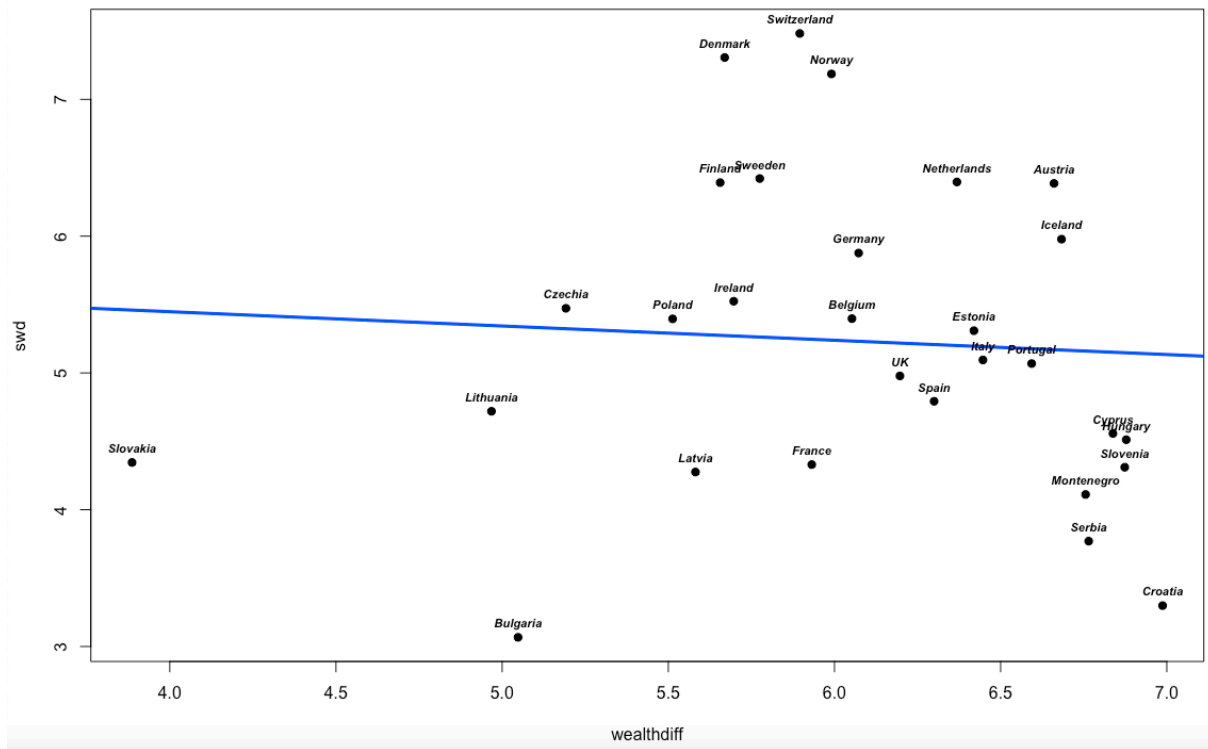
This chapter will present the results of the multilevel analysis. The chapter consists of three parts. In the first part I present the key results and findings from the analysis illustrated by scatterplots. The second part consists of an in-depth exploration of the respective models that have been run in order to more fully comprehend the relationship between income inequality and satisfaction with democracy. The third part addresses model diagnosis.

## 5.1 Income Inequality and Satisfaction with Democracy

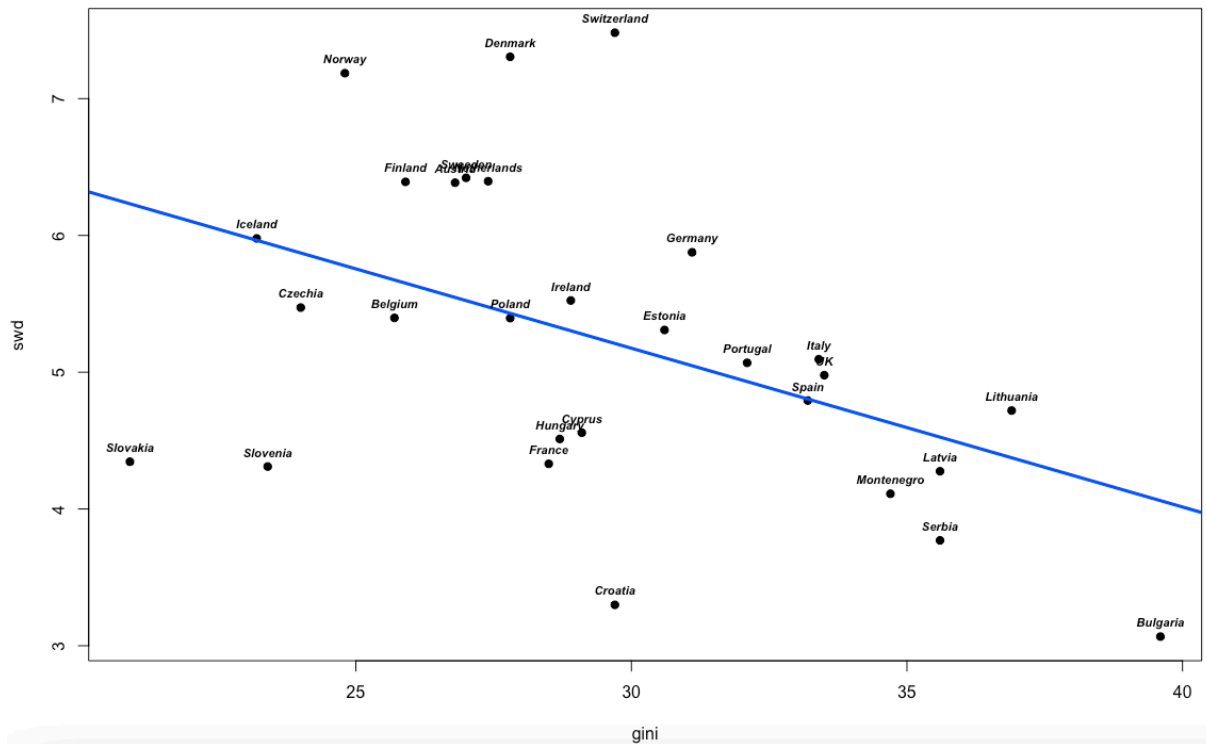
Table 5.2 displays information on the results from the multilevel regression analysis, and figure 5.1, 5.2, and 5.3 illustrate the bivariate relationship between income inequality (individual level income, subjective inequality, and objective inequality) and satisfaction with democracy.



**Figure 5.1.** Scatterplot of the relationship between respondents’ income and satisfaction with democracy, by country. The Y-axis represents satisfaction with democracy, while the X-axis represents respondents’ household income. For country codes, see page 48.



**Figure 5.2.** The relationship between respondents' perceptions of inequality and satisfaction with democracy. The Y-axis represents the average of satisfaction with democracy by country, while the X-axis is the average of respondents' subjective perception of income inequality in respondents' country.



**Figure 5.3.** The relationship between objective inequality measured by GINI, and satisfaction with democracy. The Y-axis represents the average of satisfaction with democracy by country, while the X-axis is the GINI index.

The above plotted graphs illustrate the key findings of the multilevel regression analysis, namely that satisfaction with democracy is 1) positively related to individuals' income, 2) negatively related to subjective inequality, and 3) negatively related to objective inequality (GINI). This is in accordance with the theoretical and empirical expectations. I will now view the plots one by one.

Plots 5.1, 5.2, and 5.3 tell that there is some variation in the bivariate relationships of the explanatory variables (especially GINI) and satisfaction with democracy, and there seems to be no clear trend among countries. If there was a straightforward trend, more similarities among countries would emerge, for example that several countries would cluster together at some area in plot 5.2 and 5.3.

The correlations show the following tendency: 1) the higher a respondent's income, the higher the respondent's satisfaction with democracy. This seems to be the general pattern across all countries, except Spain which shows the opposite trend. Overall, the theoretical argument on this matter is thereby as expected.

2) the more a respondent perceives that wealth is distributed unequally, the less the respondent becomes satisfied with democracy. Nevertheless, the negative correlation is not very strong. An interesting note is that respondents in almost all countries seem to rate their subjective perception of inequality relatively high: between 5 and 7 on the measurement scale. This indicates that respondents to a certain extent express similarity in their subjective view on income inequality. Slovakia is the only country that is located below 5 on the subjective inequality scale, indicating that Slovaks on average perceive wealth as distributed more equally compared to other Europeans. Slovakia is also the country that has the lowest GINI score in the sample. Thus, in the case of Slovakia, the respondents' perception of income inequality is in accordance with the objective level of income inequality. On the other side, the country of Slovenia has one of the lowest GINI scores in the sample, at the same time as Slovenians perceive income inequality to be among the highest compared to other Europeans. Bulgaria has the highest level of objective inequality in the sample, while Bulgarians rate wealth distribution to be quite equal. Compared to Slovakia, the cases of Slovenia and Bulgaria illustrate the opposite, namely that subjective inequality deviates from the objective inequality. Subjective inequality is therefore important to take into account when studying satisfaction with democracy.

Lastly, 3) Respondents living in countries with higher levels of inequality (GINI), tend to express lower levels of satisfaction with democracy. Bulgarians express the lowest level of satisfaction with democracy among all respondents, at the same time as they have the highest GINI score in the sample. In this way, Bulgaria is the case that serves the theoretical and empirical expectations best with regards to the effect of objective inequality on satisfaction with democracy.

Moreover, Slovakia is an interesting case, because it has the lowest GINI score of all countries at the same time as Slovaks express low levels of satisfaction with democracy. This trend is also seen in Slovenia: low GINI score, and low satisfaction with democracy. These countries are viewed as outliers in the sample and contradict the theoretical predictions.

## 5.2 Model Results

### 5.2.1 Empty Model

The first step in the regression analysis is running the empty model, a model that solely consists of the dependent variable. In this model, the ICC score tells the distribution of satisfaction with democracy across the countries. The current model is displayed in table 5.1 and shows an ICC coefficient of .193. This is not surprising given the relative spread of distribution on the satisfaction with democracy scale across countries. This score indicates that citizens' satisfaction with democracy to a certain extent (20 percent) are explained by intergroup-differences, whereas 80 percent is explained by intragroup-similarity. Although most of the variance in satisfaction with democracy is explained within countries, this ICC score is a relatively strong indication that multilevel regression analysis is a proper method when exploring determinants of satisfaction with democracy. Income inequality is in this thesis expected to explain, at least to some extent, these between-country differences.

Explanatory variables	Model 0	
	Coefficient	SE
Intercept	5.232***	.212
<b>Statistics</b>		
ICC	.193	
AIC	224 580	
BIC	224 607	
<i>N</i> respondents	49519	
<i>N</i> countries	29	

Sig: \*\*\* =  $p < 0.001$

**Table 5.1.** The empty model.

### 5.2.2 Explained Variance

The multilevel analysis has been run stepwise in a total of six models. When explanatory variables are added stepwise, the effects become more distinguishable and thus clearer to interpret. Table 5.2 contains the coefficients and standard errors of the random intercept regressions (model 1-3, and 5), and the random slope models (model 4 and 6).

With regards to model fit, a first impression that stands out from the results shown in table 5.2, is the consequent decrease of both the ICC, AIC, and BIC scores as the models become more complex containing more variables. From one model to the next, AIC and BIC scores drop > 10, indicating strong model support when a new model is introduced. For the ICC score, the same pattern is observed, except from the slightly low increase of ICC from model 5 to 6. From model 1 to model 5, ICC drops from 18.5 percent to 5.1 percent. This is quite a large decrease which means that the individual level control variables added accounts for relatively much of the country level variations in satisfaction with democracy. By the ICC score, the largest explanatory power across the country level variation is found in model 5. While ICC favors model 5, AIC and BIC favor the interaction model 6.

**Table 5.2.** Results from the multilevel linear regression analysis with multiple imputation of missing data.

Explanatory variables	Model 1 <i>Random intercept model</i>		Model 2 <i>Random intercept model</i>		Model 3 <i>Random intercept model</i>		Model 4 <i>Random slope model</i>		Model 5 <i>Random intercept model</i>		Model 6 <i>Random slope interaction model</i>	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	4.7698***	.207	5.0063***	.209	3.0657***	.129	4.7594***	.708	.3349	.728	.2628	.787
Income	.0884***	.004	.0888***	.004	.0413***	.003	.0401***	.006	.0412***	.003	.0499	.047
Subjective Inequality			-.0394***	.004	-.0249***	.004	-.0253***	.004	-.0249***	.004	-.0252***	.004
Education					-.0114***	.002	-.0113***	.002	-.0117***	.002	-.0116***	.002
Age					-.0012*	.000	-.0012*	.000	-.0011*	.000	-.0011*	.000
Gender					.0234	.018	.0237	.018	.0230	.018	.0232	.018
Trust					.5096***	.003	.5089***	.003	.5020***	.003	.5013***	.003
Political Interest					.0000	.011	.0011	.011	-.0117	.011	-.0107	.011
GINI							-.0572*	.023	-.0006	.019	.0017	.022
GDP									.0000***	.000	.0000***	.000
Corruption									.0307***	.003	.0308***	.003
Electoral System									.2449	.247	.2442	.247
Income*GINI											-.0003	.001
<b>Statistics</b>												
ICC	.185		.185		.092		.077		.051		.054	
AIC	224 061		223 996		207 642		207 524		207 388		207 352	
BIC	224 096		224 040		207 730		207 638		207 512		207 501	
<i>N</i> respondents	49519		49519		49519		49519		49519		49519	
<i>N</i> countries	29		29		29		29		29		29	

Sig: \*\*\* =  $p < 0.001$ ; \*\* =  $p < 0.01$ ; \* =  $p < 0.05$

5.2.3 Individual Level Income Inequality: Income and Subjective Inequality

Model 1 adds the explanatory variable of income inequality measured by respondents' household income and shows a positive and significant effect on satisfaction with democracy. The effect turns out stable and significant from model 1 to 5, when all other explanatory variables as well as control variables are added to the models. The regression coefficient of income in model 5 is .04<sup>12</sup>. This means that one unit standard deviation (SD) increase in income, increases democratic satisfaction by 0.04 SD. Thus, the substantive effect of income on democratic satisfaction is not large, however not insignificant. Income inequality between richer and poorer citizens measured by their position in the income decile distribution is found to positively affect citizens' satisfaction with democracy. Put differently, richer citizens belonging to upper income deciles are more likely to be satisfied with democracy, compared to citizens with lower income. This is in line with the theoretical expectation of this thesis. The predicted result is shown in figure 5.4.

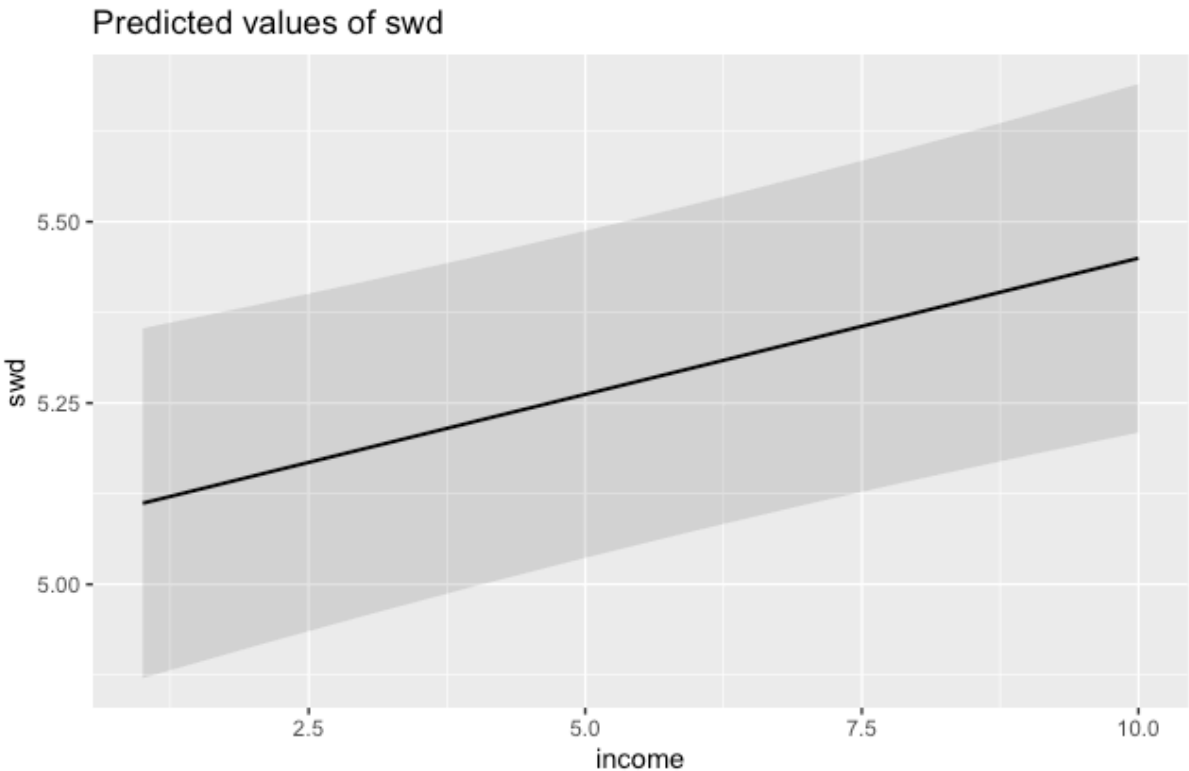
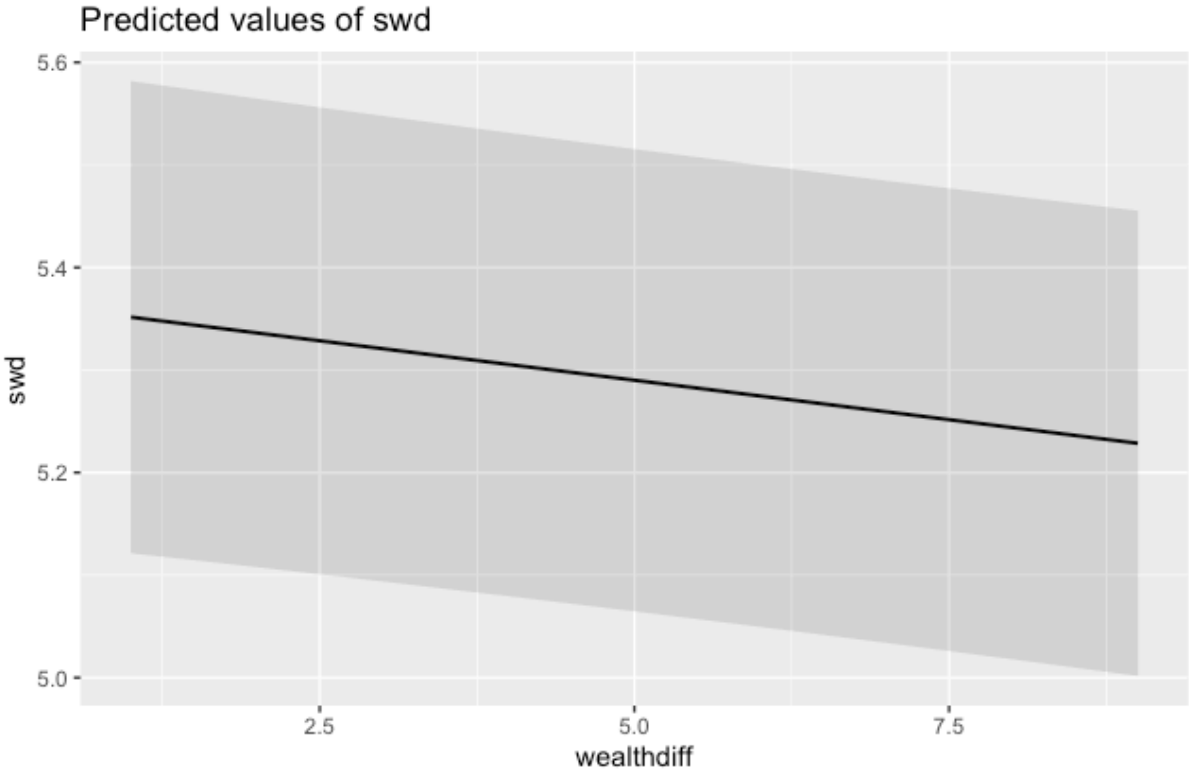


Figure 5.4. The predicted effect of individual level income on satisfaction with democracy.

<sup>12</sup> 2.8\*0.04=0.11 (2.8 is the SD of income).  
0.11/2.57=0.04 (2.57 is the SD of satisfaction with democracy).



Subjective inequality, measured by citizens' perceptions on the wealth distribution, is found to have the expected effect. I hypothesized that citizens that perceive a higher level of income inequality are less satisfied with democracy (H2). The results from all six models show that subjective inequality is negatively, and significantly ( $p < 0.001$ ) correlated with satisfaction with democracy. The regression coefficient in model 5 is  $-0.02$ , thus the substantive strength of the effect is marginal. However, the negative effect means that the more citizens believe that the distribution of wealth is equal, the more satisfied they are with democracy. The predicted effect is demonstrated in figure 5.5. In model 2, the only variable added is subjective inequality. In this model, AIC and BIC reduce by 65 (AIC) and 56 (BIC), clearly indicating that model 2 has a greater explanatory power compared to model 1. This supports that subjective inequality should be included in explaining satisfaction with democracy.



**Figure 5.5.** Predicted effect of subjective inequality on satisfaction with democracy.

#### 5.2.4 Individual Level Control Variables

Model 3 adds the individual level control variables of education, age, gender, trust, and political interest. The model reports that higher levels of satisfaction with democracy is associated with lower levels of education, younger age, being a man, and holding higher levels of trust. With regards to political interest, the effect turned out partly positive and partly negative throughout the models. The most robust effects are found in the education, age, and trust variable, being significant in all models. However, the substantive effects on all individual level control variables are relatively weak, except from trust (.50). From the theoretical expectations and previous empirical findings, these results are mixed.

A last note is that when the individual level variables are added in model 3, ICC, AIC and BIC values decrease significantly. This demonstrates that more of the intercountry variance in satisfaction with democracy is explained when the control variables are included in the model, thus the variables are important in explaining what shapes citizens' satisfaction with democracy. In later models when country level variables are added, the effects of the individual level control variables uphold and show minimal changes. I will provide some limited notes on each of the control variables.

The effect of education on satisfaction with democracy contradicts the expected finding<sup>13</sup>. It was expected that since more educated citizens hold more formal and organizational skills which thereby enable them to seek out information and engage in politics, higher levels of democratic support will be generated among them (Norris 2011, 130-131; Monsivàis-Carrillo and Ramos 2020, 3-4). However, in line with some other previous research (Farrell and McAllister 2006; Monsivàis-Carrillo and Ramos 2020), I find a negative correlation indicating that lower educational levels yield more democratic support.

Age is negatively correlated with higher satisfaction with democracy. This follows the expectations from modernization theory, that younger citizens are more open minded and positive towards minorities because they can take survival for granted. Thus, they become more supportive of democratic principles (Norris 2017).

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<sup>13</sup> I ran the analysis leaving out the trust variable, which is conceptually very close to democratic support. The results are shown in appendix A, table A.2. In this complementary model, the result of education still turns out negative. Thus, the negative effect of education is not because of the inclusion of trust.

As theoretically expected, men are more satisfied with democracy. However, this effect is not significant in any of the models.

Higher levels of trust are found to have a strong positive and significant ( $p < .001$ ) effect on satisfaction with democracy in all models. The effect of trust is the largest effect of all variables (.50 across all models). This might be due to the fact that when citizens believe that the functioning of democratic institutions such as the parliament is proper, this results in higher confidence of the workings of democracy and thus higher levels of satisfaction with democracy (Zmerli et al. 2007, 35-57). However, a concern for the analysis is that trust is conceptually very close to democratic satisfaction. Because of this, I ran a model without including trust, and the results are shown in appendix A, table A.2. The differences are marginal, except from GINI where the coefficient turns out positive.

The effect of political interest is somewhat ambiguous, and not significant. The effect turns out positive in model 3 and 4, but negative in model 5 and 6. The theoretical expectation indicates that when citizens are more interested in political matters, this will lead to more political participation and engagement and thus democratic satisfaction (Chang 2018, 3). Indeed, this expectation is supported in model 3 and model 4.

### 5.2.5 Country Level Income Inequality: GINI

The country level explanatory variable of interest, objective income inequality measured by the GINI Index, is added in Model 4. The effect is negative and significant at the 5 percent level ( $p < 0.05$ ), indicating that the theoretical expectations are supported. In model 4, the regression coefficient is  $-.06$ , which is not a very strong effect. This means that one unit SD increase in GINI leads to a decrease of  $.06$  SD in democratic satisfaction. I hypothesized that citizens living in countries with higher levels of income inequality are less satisfied with democracy (H3). If the theoretical assumptions of this thesis are correct, this is because when income inequality rises, a concentration of political power enables the economic elite to dominate politics, resulting in a biased political system in favor of the rich (Rational Choice Theory). Increasing levels of income inequality is also likely to intensify political conflicts between the rich and the poor, especially in redistribution. Moreover, income inequality leads more citizens into economic insecurity making them more obliged to support anti-democratic values and beliefs (Economic Insecurity Thesis). The theoretical implications will be further discussed in chapter 6. The predicted negative effect of GINI on satisfaction with democracy is illustrated in figure 5.6, and the effect by country is shown in figure 5.7.

In model 5 and 6, when the country level control variables are accounted for, the GINI-effect is still negative but no longer significant. In the interaction model 6, the GINI-effect turns out positive and not significant. This leaves us with a bit ambiguous interpretation of the GINI-effect. In model 4, the ICC, AIC and BIC values reduce to the extent that model 4 is preferred to model 1-3. However, AIC and BIC prefer model 6 to any other model, and this is when the GINI-effect is positive and not significant. ICC prefers model 5 to any other model, when the GINI-effect is negative and not significant. Yet, the effect is negative in two out of three models, one being significant. Thus, I assess the overall effect of income inequality on satisfaction with democracy to be negative and significant, as model 4 predicts.

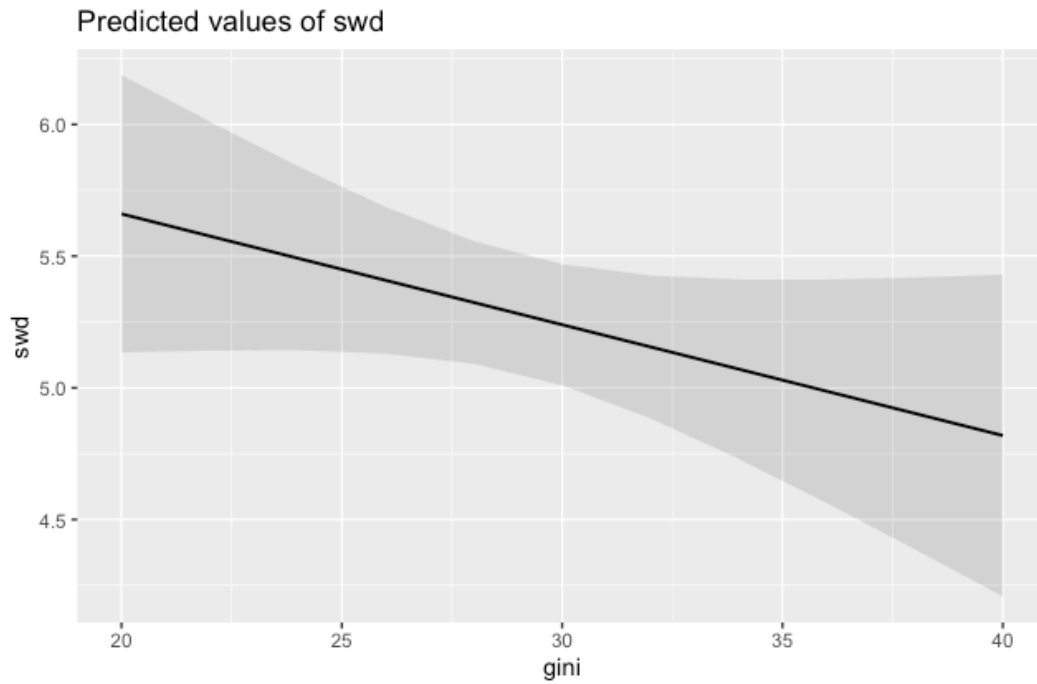


Figure 5.6. Predicted effect of objective inequality (GINI) on satisfaction with democracy.

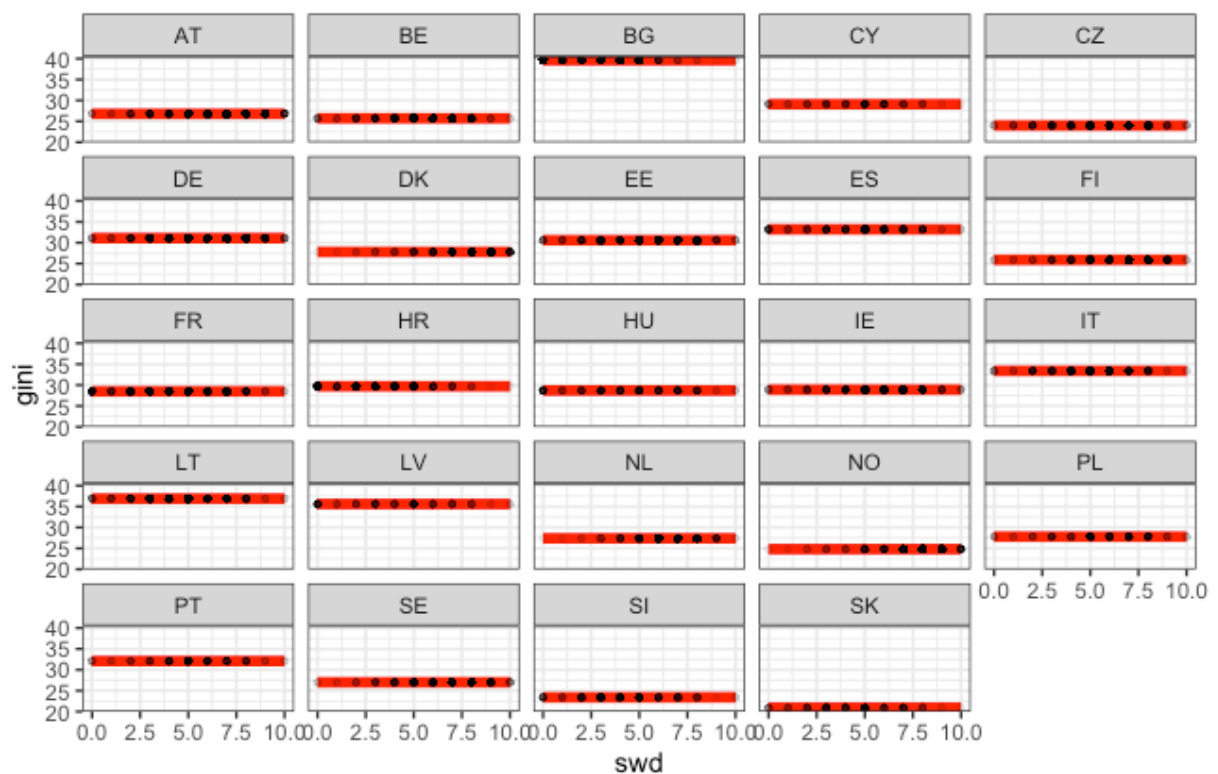


Figure 5.7. The effect of income inequality (GINI) and satisfaction with democracy by country. The red line represents the estimated effect. The dots along the red line represent the distribution of satisfaction with democracy in the respective country. For country codes see page 48.

### 5.2.6 Country Level Control Variables

In model 5, the country level control variables are added: GDP per capita, corruption and electoral system. Model 5 reports that higher levels of satisfaction with democracy are found in countries with higher GDP per capita, higher levels of corruption and countries having a proportional representation electoral system.

ICC, AIC, and BIC decrease from model 4 to model 5, when the country level control variables are included. ICC drops from .077 to .051, and AIC and BIC decrease  $> 10$  indicating stronger explanatory power notwithstanding model complexity as more variables are added. These signs mean that the control variables indeed are important when studying satisfaction with democracy.

As expected, corruption has a negative effect on satisfaction with democracy, which is significant ( $p < 0.001$ ) and stable in both model 5 and 6. Higher levels of corruption decrease democratic support by .03 SD (in model 5). Corruption is assumed to subvert fairness and equality and decrease generalized trust among citizens, which in turn harms the overall legitimacy and satisfaction with the democratic system (Uslaner and Rothstein 2005, 53-54; Donovan and Karp 2017, 472-473).

Higher levels of GDP per capita are associated with higher levels of democratic support. However, the effect is marginal, but significant ( $p < 0.001$ ). Theoretically, this might follow the logic of modernization theory suggesting that economic growth and development will bring about modernization and a demand for democracy as democratic values and beliefs spread among the citizens (Lipset, 1959; Przeworski et al. 2000).

The analysis results show that countries having a proportional electoral system lead to more democratic support among the citizens. One unit SD increase in electoral system (towards proportional representation) leads to .2 increase in democratic support. This effect is however not significant. One weakness of this result is that almost all countries in the sample have a proportional system, not a single-member district system. The distribution of this variable is therefore very skewed, and thus harms the validity of the results.

5.2.7 To What Extent Does the Effect of Individual Level Income Inequality Vary Between Countries?

In model 4, a random slope term is specified. Since H4 expresses an interaction between income inequality at both the individual level (measured by income), and at the country level (measured by GINI), and satisfaction with democracy, exploring whether the effect of income varies between countries is crucial. Hypothesis 4 expresses that *the level of national inequality conditions the effect of citizens' income on satisfaction with democracy*.

The random slope model allows the effect of income to vary between countries. In this model, the variance components illustrate how much variability in individual level income there is between citizens across countries. This indicates that the strength of the relationship between satisfaction with democracy and income will also vary significantly between countries. The variance components from model 4 are shown in figure 5.8.

By running two diagnostic tests, a *Lmtest* (linear regression model test) and an *Anova* (analysis of variance) test, the random slope model turned out to be significantly better when compared to the same model specified by a random intercept. This statistically justifies the application of a random slope model.

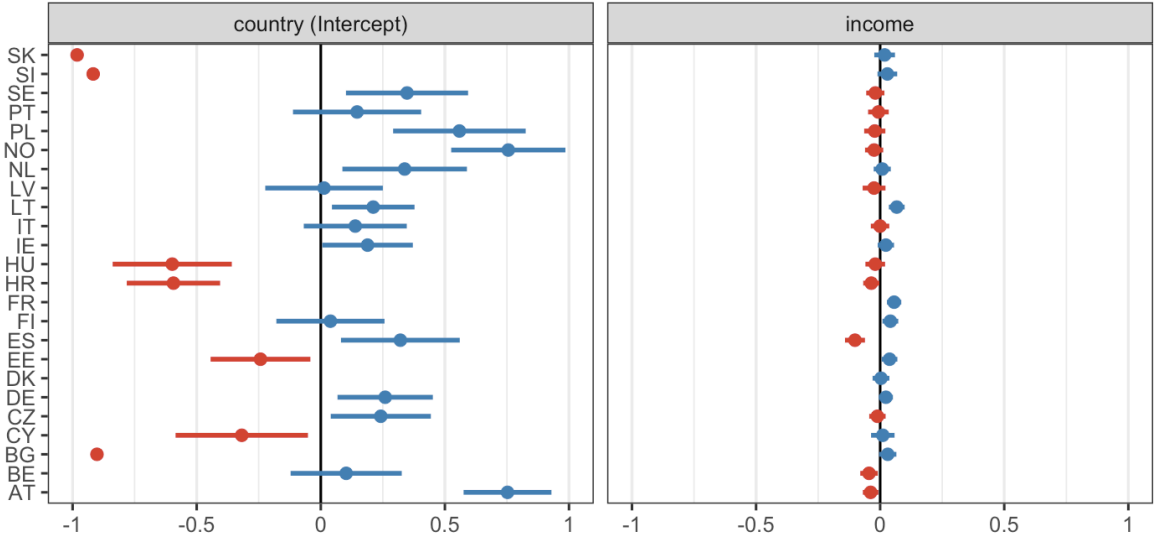


Figure 5.8. The variance components of individual level income in the random slope model 4.

### 5.2.8 Does GINI Explain that the Effect of Income on Satisfaction with Democracy Varies Between Countries?

The effect of individual level income on satisfaction with democracy is shown to vary across countries. I am interested in whether this is related to the countries level of income inequality.

Model 6 adds the interaction between individual level income, GINI, and satisfaction with democracy. The country result so far has shown that *both* richer *and* poorer citizens support democracy *less* when inequality is *high*. However, as I hypothesize, poorer citizens are expected to support democracy *less* than their richer fellow citizens when inequality is high. This is theoretically driven by the fact that higher levels of income inequality generate feelings of relative deprivation among the worse-off. Moreover, as the income gap widens between the rich and poor, the worse-off citizens end up having less resources such as time and money to participate in politics, which again will generate more dissatisfaction with the democratic system (Solt 2008, 49-50).

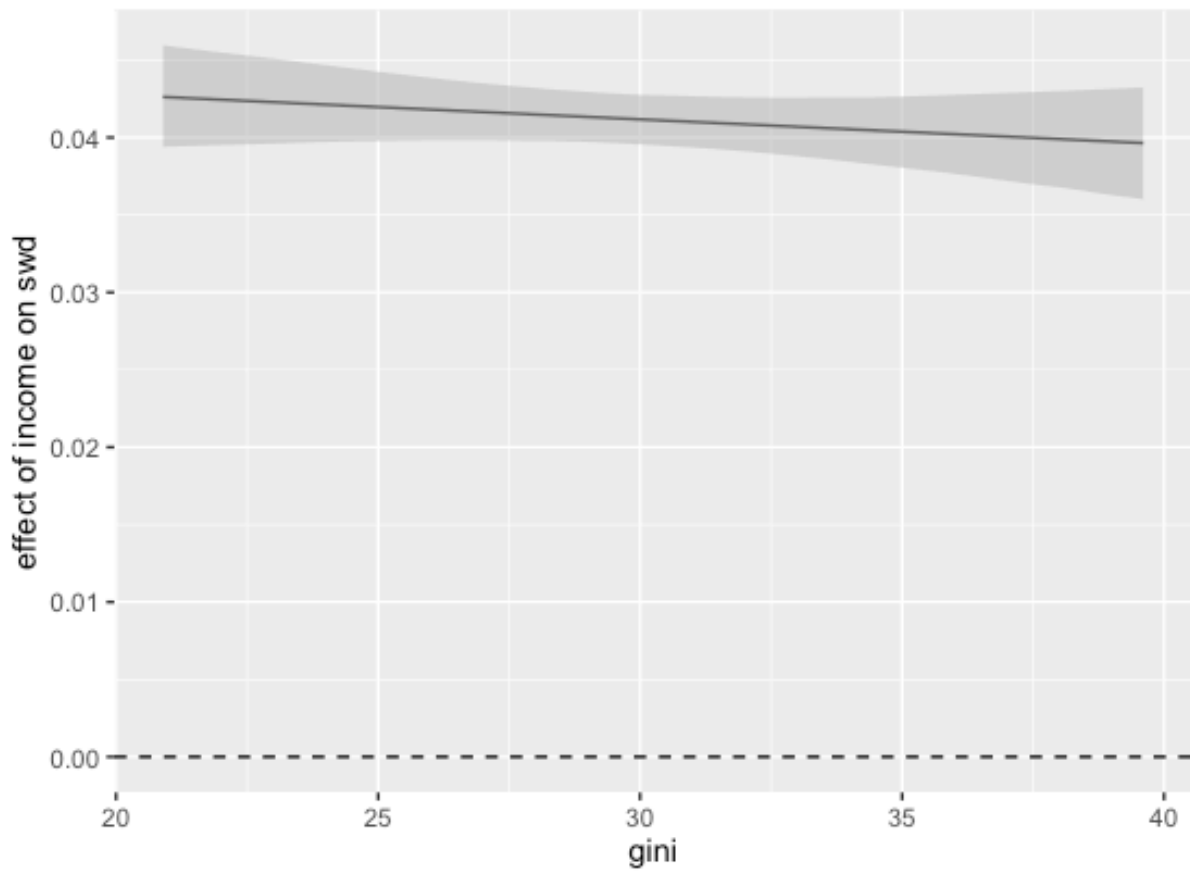
The negative interaction coefficient in model 6, shown in table 5.2 indicates that for one unit SD increase in GINI, the positive (albeit not significant) effect of income on satisfaction with democracy weakens by  $-.00033804^{14}$ . Put differently, the higher GINI, the less important the positive effect of individual income becomes on democratic satisfaction. Moreover, this interaction effect is not particularly strong in substantive terms. There seems to be variation in the country-level effect of income, but this variation is to a very little extent explained by GINI. This means that the expected interaction effect is not found. In addition, the result is not significant.

In model 6, AIC and BIC scores decrease indicating that even if the model get more complex compared to the previous models, the explanatory power of variations in satisfaction with democracy increases in model 6. The ICC score increases from .051 to .054, meaning that the interaction model does not provide any more news to the intergroup variations in satisfaction with democracy, as also shown in the regression coefficient. The interaction effect in model 6 is plotted in figure 5.9 and 5.10.

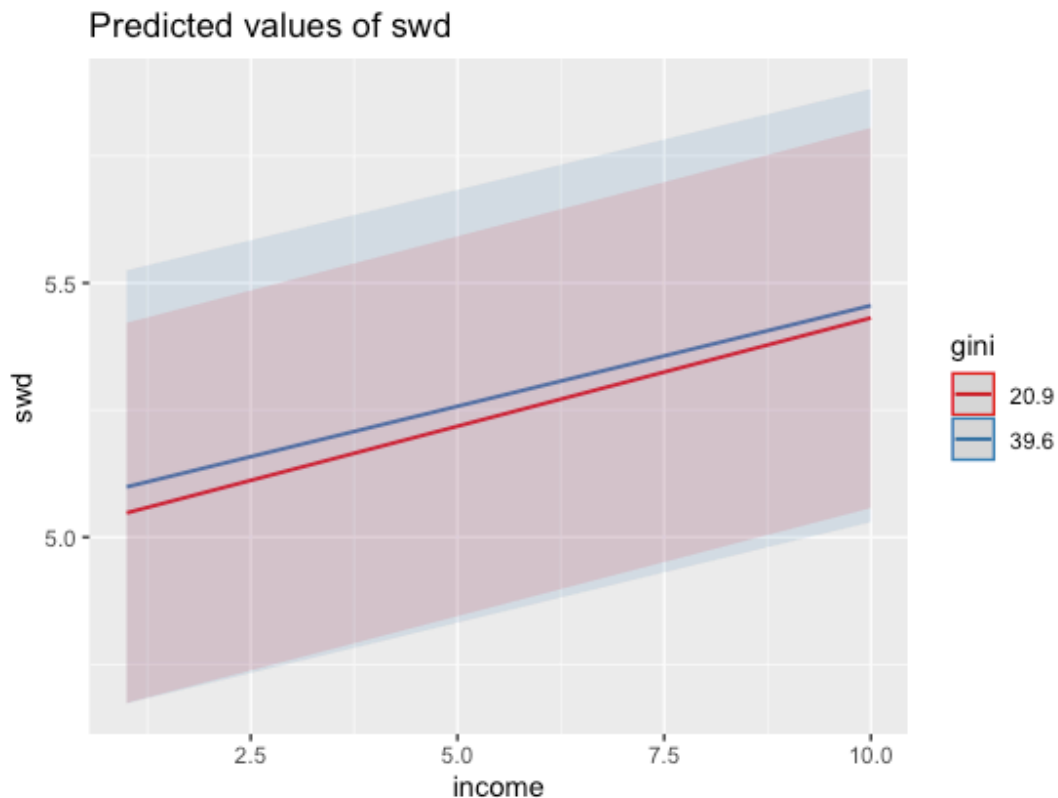
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<sup>14</sup> I tried to run model 6 without adding a random slope, but this yielded the same result. Thus, the result is not related to the specification of random slope.





**Figure 5.9.** Interaction plot displaying the predicted effect of individual level income\*GINI on satisfaction with democracy.



**Figure 5.10.** The predicted effect of individual level income and GINI on satisfaction with democracy. The minimum (red) and maximum (blue) scores on GINI are displayed to the right.

### 5.3 Model Diagnosis

The last part of this chapter focuses upon model diagnosis and robustness checks. I ran the regression analysis with listwise deletion in order to check whether this resulted differently compared to the analysis with multiple imputation. The results from the listwise deletion are displayed in appendix B, table B.2. The results from listwise deletion turn out similarly, except from some important differences: 1) the effects of neither education, GINI, nor GDP on satisfaction with democracy are significant in any of the models, 2) the effect of corruption turns out positively but with a lower significance level, 3) the interaction effect is positive instead of negative, 4) the effect of political interest is consistently negative in all models, and 5) the effect of gender is significant. Moreover, in the listwise deletion analysis, ICC, AIC, and BIC values follow a similar pattern as in the multiple imputation analysis, except that AIC and BIC values increase from model 4 to 5.

Based on this, continuing with listwise deletion in this case would thus mean that an inferential type-II error would be made with regards to the negative and significant effect of objective income inequality on satisfaction with democracy. In sum, applying multiple imputation on the missing data has shown to serve the analysis in some important ways. However, the differences are not very notable.

Furthermore, a convergence diagnosis of the imputation process was performed, and the result is shown in appendix B, figure B.1. There are no signs of convergence problems because the streams interact well with one another. A Rhat convergence diagnosis was also performed in order to check whether the values were at satisfactory levels, which they were. All Rhat-values were between .995 and 1.01, and are shown in appendix B, table B.1. A density plot of all 20 imputation models is also displayed in appendix B, figure B.2. The density plot illustrates that the imputation procedure in every variable seems reasonable as it is distributed evenly across the observed data. Lastly, all AIC and BIC values from the 20 imputation models are shown in appendix B, table B.3<sup>15</sup>.

#### 5.4 Chapter Summary

This chapter has presented the results from the multilevel regression analysis. In sum, the results have to a large extent met the theoretical expectations. Income inequality at the individual level by income and subjective perceptions, as well as the country level by GINI are found to affect satisfaction with democracy. Indeed, all effects are significant. Lastly, the results from the interaction model are not as expected, neither significant. In chapter 6, the overall results are discussed further in light of the research question, and the theoretical and hypothesized expectations of this thesis.

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<sup>15</sup> The AIC and BIC scores which are presented in the results from the regression analysis (in table 5.2) are means across all 20 imputed datasets. Because of this, I display all AIC and BIC values across all 20 imputed datasets in the appendix B.

## 6 Discussion and Conclusion

In this last chapter, I will discuss the findings from the analysis in relation to the overall purpose of this thesis, to answer the research question: *To what extent does income inequality, both subjective and objective, affect satisfaction with democracy?*

This thesis started with introducing some important issues, concepts, and questions. First of all, as this thesis stated in the beginning, the survival of democracy depends on legitimacy and satisfied citizens. Moreover, democratic dissatisfaction seen today has been argued to be part of a larger global trend of democratic backsliding (Foa and Mounk 2017). Considering this, I will once more underline what was pointed out in the introduction chapter of this thesis: Providing knowledge on how democracies emerge, backslide, and break down is crucial for our understanding of democracy. The purpose of this thesis has been to discover what effect rising levels of income inequality have on the democratic system, by studying satisfaction with democracy. The thesis presents some interesting results.

The aim of this thesis has been to provide insight into the relationship between income inequality and satisfaction with democracy. By this, it is important to acknowledge that this thesis does not claim causality regardless of the size of the substantive correlations. In addition, external validity is limited by the fact that the country sample consists of not more than 29 countries, and no country outside Europe. Including a larger number of countries could increase the reliability of the analysis.

### 6.1 How Does Income Inequality Affect Satisfaction with Democracy?

In chapter 2, I established the theoretical and empirical argument of why rising levels of income inequality lead to decreasing levels of democratic satisfaction. When income becomes more concentrated, this leads to a) political power becoming more concentrated (The Relative Power Theory), as economic and political power are interrelated, b) an intensification of the distributional conflict, and c) increasing economic insecurity among the losers of the market which gives rise to populism (The Economic Insecurity Thesis). These consequences of rising levels of income inequality trigger the following mechanisms: a) the worse off citizens become less represented in public policies because the political system becomes dominated and preoccupied with the interests of the better-off, b) a greater pressure and demand for redistribution from the masses, and a greater resistance of meeting these demands by the well-

off as the cost of redistribution gets too high, will intensify conflicts between rich and poor, and c) particularized trust (in-group solidarity) increases and generalized trust (out-group) decreases (which is important for regime stability). Economic insecurity, as being a result of income inequality is expected to yield more conflicts between rich and poor, generate more frustration, and give rise to populist anti-democratic establishments.

These three mechanisms are expected to create frustration and dissatisfaction among citizens. Therefore, in circumstances of more income inequality, citizens are more frustrated and dissatisfied with the democratic system.

Moreover, following the logic of relative deprivation, in contexts of high income inequality the individual level effect of income is expected to be strengthened. This means that a poor citizen living in a country with higher income inequality will be more dissatisfied with the democracy compared to a poor citizen living in a context with lower income inequality. This is because in a context of higher income inequality, feelings of relative deprivation among the poorer increase. The reference groups that poorer citizens compare themselves to are broadened as they are exposed to wealth in which they are not benefitting from. In this way, if economic resources are distributed more equally, poor citizens do not feel *as relative deprived as* when economic resources are distributed unequally. In addition, rising income inequality decreases the poors' resources such as time and money to participate and engage in political matters, whereas the rich receive more of these resources.

From this theoretical point of view, four hypotheses involving both subjective and objective income inequality have been developed:

*H1* Poorer citizens are less satisfied with democracy than richer citizens.

*H2* Citizens perceiving a higher level of income inequality are less satisfied with democracy.

*H3* Citizens living in countries with higher levels of income inequality are less satisfied with democracy.

*H4* The level of national income inequality conditions the effect of citizens' income on satisfaction with democracy.

The findings from the multilevel analysis have to a large extent met the theoretical expectations. I will now discuss the findings more in detail.

#### 6.1.1 Individual Level Income Inequality

At the individual level, I find that poorer citizens are more likely to express lower democratic satisfaction compared to richer citizens. Thus, differences in income levels do affect citizens' democratic satisfaction. This result has been proved to be statistically significant and robust, and is consistent with a vast amount of previous empirical findings (Andersen 2012; Kriekhaus et al. 2014).

However, the substantive effect is not large, but still important in explaining satisfaction with democracy. In this thesis, income inequality at the individual level is measured using relative income data, namely a respondent's income in a respective country. The analysis is thus limited to expressing relative differences solely between richer and poorer citizens, and not differences within the five poorest deciles or within the five richest deciles. The analysis exclusively reveals that when individuals' household income rise, individuals become more satisfied with democracy across European democracies. This is the general trend except from Spain, which is the only country in the sample where higher income are associated with lower democratic satisfaction. It is difficult to speculate why this is the case, but it would be interesting to look further into the case of Spain in order to explain this deviation. In the cases of Poland and Croatia, the correlation is neither positive, nor negative.

#### 6.1.2 Subjective Inequality

With regards to subjective inequality, the results are as expected. I find that citizens perceiving inequality to be larger are more dissatisfied with democracy. This is in accordance with the findings from several other studies (Kang 2015; Wu and Chang 2019). The finding is statistically significant and robust, but not strong. The negative effect shows minimal changes when other variables are controlled for. Moreover, citizens across European democracies tend to be similar in their perception of income inequality. As discussed in chapter 5, an interesting note is that Slovakia, the country with the lowest GINI score in the sample, citizens on average perceive wealth as being quite equally distributed. In fact, Slovaks perceive differences in

wealth to be relatively small compared to other Europeans. An additional note is that when Slovaks on average rate that differences in wealth are quite small (4 on the measurement scale), they also bring to it their moral judgement, which is close to fair (5 on the measurement scale). This means that in Slovakia, as being the most equal country in the sample with regards to GINI, citizens perceive that differences are small and that this is fair.

There are also some interesting findings from the control variables that were included in the analytical models. The results show that 1) lower education, 2) lower age, 3) being a man, 4) having higher levels of political trust, and 5) being political interested, tend to increase democratic satisfaction. Overall, the control variables are also considered important in explaining satisfaction with democracy.

### 6.1.3 Country Level Income Inequality

The findings of the role of objective income inequality are compelling: countries with higher levels of income inequality measured by GINI, tend to have lower levels of satisfaction with democracy compared to countries with lower levels of income inequality. This finding is as expected. As the GINI index explicitly measures income inequality, as compared to household income which more diffusively measures differences in income at the individual level, the results from GINI are given the most weight in this thesis. The thesis' negative correlation between GINI and satisfaction with democracy is significant at the 5 percent level in one of the analytical models (model 4: random slope model). The result is not to be considered robust, as the effect turns out not significant in two models, and the effect becomes positive in model 6. I choose to rely upon the results from model 4, where the effect turned negative and significant.

Most of the European countries follow the observed negative trend. However, the outliers of Slovakia and Slovenia contradict this trend. In these two cases, citizens are on average dissatisfied with democracy at the same time as the countries hold a low GINI score. Country characteristics might be the reason why. Citizens in Switzerland are on average most satisfied with democracy among Europeans. However, Switzerland's GINI score of 30 is far from the lowest score in the sample. This might indicate that citizens' satisfaction with democracy is shaped by other factors in addition to income inequality, factors that possibly are outside the scope of the this study.

The country level control variables also present some expected and interesting results: 1) higher levels of corruption tend to decrease democratic satisfaction, 2) higher GDP per capita tend to increase democratic satisfaction, and 3) having a proportional representation electoral system is associated with more democratic satisfaction.

#### 6.1.4 Does Both Subjective and Objective Inequality Matter?

As previously argued in this thesis, many studies rely solely upon objective measures when studying income inequality. From this, one of the contributions of this study has been to include *both* subjective and objective measures of income inequality. This, I argue, is important for future studies. Even if the overall results from this analysis shows a negative correlation on both the subjective and objective inequality on democratic satisfaction (as expected), the analysis has revealed that there exists a deviance between citizens' perceptions of income inequality and the actual level of inequality. As discussed in chapter 5, Slovaks' average perception of income inequality is more or less in accordance with the actual level of income inequality. However, in the countries of Bulgaria and Slovenia, the pattern is opposite: observed deviance between subjective and objective inequality. Bulgaria is the country with the highest income inequality in the sample (GINI=39), but the Bulgarians on average rate the difference in wealth distribution as moderate and fair (5 on the measurement scale). In Slovenia, Slovenians on average perceive differences in wealth as large, while Slovenia has the third lowest GINI score in the sample. This illustrates that subjective inequality is important to acknowledge in the study of income inequality and satisfaction with democracy.

I believe that more precise and comprehensive results are produced in the combination of both subjective and objective measures. However, I do not intend to go further into the discussion of whether objective measures are better than subjective measures or vice versa.

#### 6.1.5 Cross Level Income Inequality

In the analysis, the effect of individual income on satisfaction with democracy has been demonstrated to vary between countries, by specifying a random slope. However, the results from the analysis do not favor that this variation is due to income inequality at the country level. In this way, this cross-level finding is the greatest weakness of this study. The positive effect of individual income on satisfaction with democracy is weakened in a context of higher income inequality, the opposite of what was expected. The interaction results are also not significant.



The between-country variance in the income effect remains therefore unexplored from this thesis' perspective.

### 6.2 Implications for Hypotheses

Generally, this study 1) confirms that income inequality indeed is an important determinant in shaping citizens' satisfaction with democracy, 2) confirms the relevance of the theories presented, and 3) confirms the relevance of including both subjective and objective income inequality when studying satisfaction with democracy. Based on the above discussion, the consequences for the formulated hypotheses are drawn and presented in table 6.1.

	<b>Hypothesis</b>	<b>Assessment</b>
<i>Individual level</i>	<b>H1</b> Poorer citizens are less satisfied with democracy than richer citizens.	<b>Supported</b>
	<b>H2</b> Citizens perceiving a higher level of income inequality are less satisfied with democracy.	<b>Supported</b>
<i>Country level</i>	<b>H3</b> Citizens living in countries with higher levels of income inequality are less satisfied with democracy.	<b>Supported</b>
<i>Cross level</i>	<b>H4</b> The level of national inequality conditions the effect of citizens income on satisfaction with democracy.	<b>Rejected</b>

**Table 6.1.** Assessment of the formulated hypotheses.

### 6.3 Concluding Remarks

In all, this study has proven to demonstrate that income inequality, both at the individual as well as at the contextual level, is related to satisfaction with democracy. By the above presented empirical results, I conclude that both subjective and objective income inequality to a certain extent determines citizens' satisfaction with democracy. However, I do not rule out that other

determinants are central in affecting citizens in this area. The study fails to demonstrate that contextual level income inequality conditions individual level income inequality.

I argue that studies focusing on income inequality in the field of democracy remain crucial and important. Moreover, policies that aim to reduce income inequality continue to be important as income inequality weakens the overall legitimacy of democracy. Lastly, more efforts should be made in order to understand how democracies backslide or break down. How income inequality harms democratic legitimacy represents one of several topics of specific relevance in this context.

#### 6.4 Recommendations for Further Research

The relationship between income inequality and democracy is huge and complex, and several aspects would need further examination. Considering the topic of this thesis, the income inequality between the respective income deciles would be fruitful to look further into when studying satisfaction with democracy. A closer examination of each of the ten deciles would bring out more differences between the effects of the individual level income inequality. To my knowledge, this has been limited in the research field.

Since this study failed to demonstrate a cross-level interaction between country level income inequality and individual level income, more efforts should be made to investigate why the effect of income on satisfaction with democracy varies between countries.

Another direction for future studies is to expand the country sample outside Europe for an improvement of external validity. Moreover, having a greater variety of countries at different stages of democratic development would address whether income inequality affects democracies differently. Lastly, studying the effects of income inequality over time would give a more comprehensive understanding of how, and in what way, it affects democracies. All of these areas would improve the literature on income inequality and satisfaction with democracy.

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## Appendix

### Appendix A: Model Diagnostics

Variable	Vif-score Model 5	Vif-score Model 6
Income	1.194	46.36
Subjective inequality	1.002	1.002
Education	1.204	1.107
Age	1.147	1.092
Gender	1.033	1.025
Trust	1.059	1.049
Political interest	1.169	1.149
GINI	1.033	1.267
GDP	1.033	1.032
Corruption	1.032	1.031
Electoral System	1.005	1.005
Income*GINI		46.55

**Table A.1.** Multicollinearity check (Vif-scores)

Explanatory variables	Model 5	
	Coefficient	SE
Intercept	-1.415	.994
Income	.0739***	.004
Subjective Inequality	-.0402***	.004
Education	-.0038	.002
Age	-.0027***	.000
Gender	-.0074	.021
Political Interest	.2078***	.013
GINI	.0102	.029
GDP	.000***	.000
Corruption	.0645***	.004
Electoral System	.6812*	.285
<b>Statistics</b>		
ICC	.080	
AIC	222 904	
BIC	223 018	
N respondents	49519	
N countries	29	

Sig: \*\*\* =  $p < 0.001$ ; \*\* =  $p < 0.01$ ; \* =  $p < 0.05$

**Table A.2.** Results from model 5 without the inclusion of the control variable trust.



## Appendix B: Imputation Diagnosis

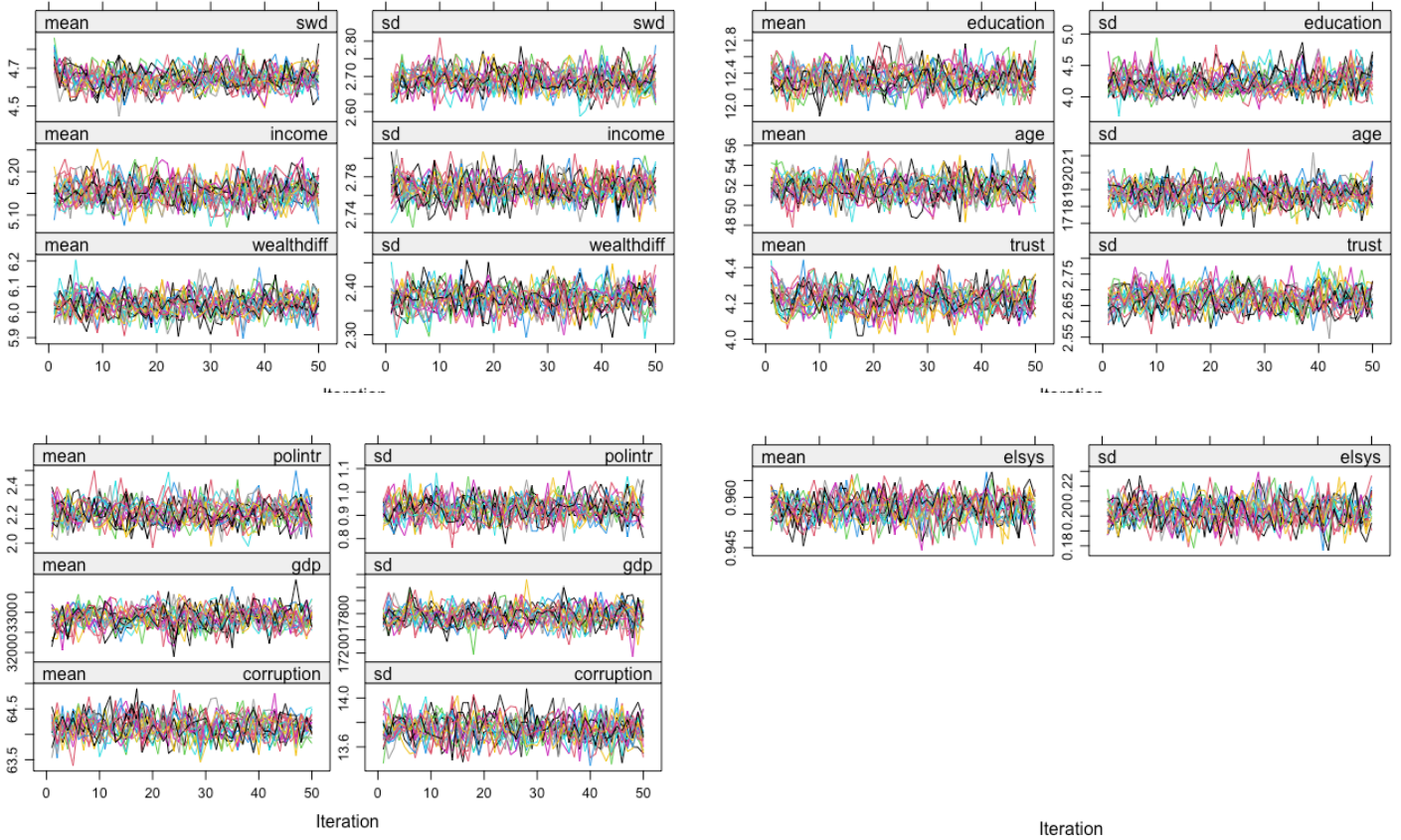
<b>Variable</b>	<b>Rhat-value</b>
Satisfaction with democracy	1.004
Income	.998
Subjective inequality	.998
Education	1.002
Age	.995
Trust	1.008
Political interest	1.001
GDP	1.000
Corruption	1.001
Electoral System	1.001

**Table B.1.** Rhat-Values.

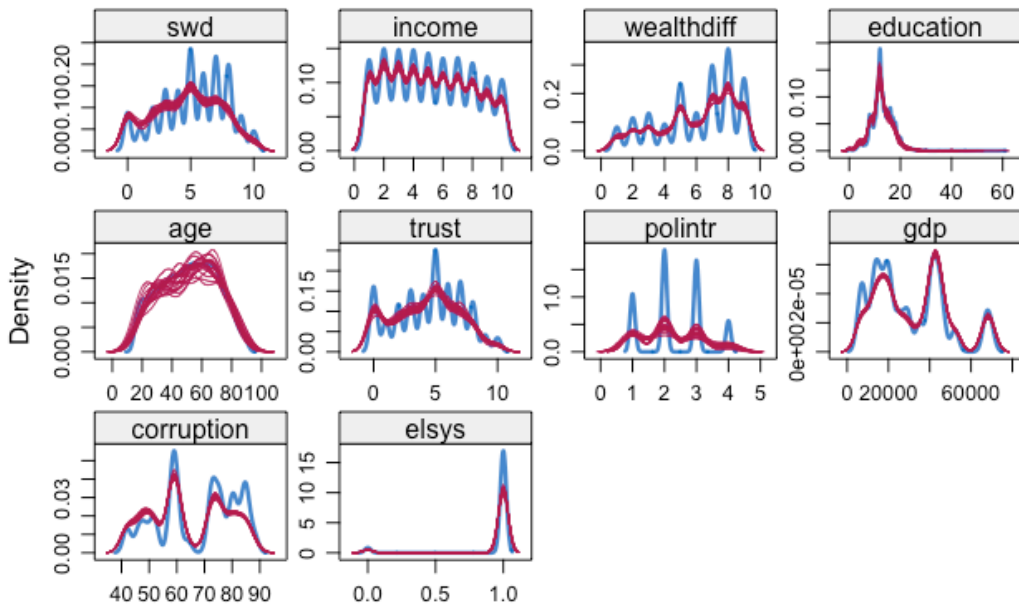
**Table B.2.** Results from the multilevel analysis using Listwise Deletion.

Explanatory variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	4.742***	.220	4.918***	.223	2.883***	.136	4.132***	.788	1.139	.868	1.187	.965
Income	.091***	.004	.091***	.004	.042***	.004	.037***	.009	.042***	.004	.012	.066
Subjective Inequality			-.029***	.005	-.014**	.004	-.015**	.004	-.014**	.004	-.015**	.004
Education					-.004	.002	-.004	.002	-.004	.002	-.004	.002
Age					-.000	.000	-.000	.000	-.000	.000	-.000	.000
Gender					.060**	.022	.061**	.022	.060**	.022	.060**	.022
Trust					.501***	.004	.501***	.004	.501***	.004	.500***	.004
Political Interest					-.005	.013	-.003	.013	-.006	.013	-.004	.013
GINI							-.042	.026	-.006	.020	-.009	.024
GDP									.000	.000	.000	.000
Corruption									.027**	.010	.028**	.010
Electoral System									-	-	-	-
Income*GINI											.000	.002
<b>Statistics</b>												
ICC	.185		.185		.083		.081		.040		.044	
AIC	136 496		136 479		126 874		126 682		126 895		126 849	
BIC	136 529		136 521		126 957		126 929		127 003		126 982	
N	30 568		30 568		30 568		30 568		30 568		30 568	
Countries	24		24		24		24		24		24	

\*\*\* =  $p < 0.001$ ; \*\* =  $p < 0.01$ ; \* =  $p < 0.05$



**Figure B.1.** Convergence diagnosis (mean and standard deviation) of the imputed data.



**Figure B.2.** Density plot of the imputation procedure. The red lines represent the imputed datasets  $M=20$ , and the blue lines represent the observed data.

	AIC empty model	AIC m1	AICm2	AICm3	AICm4	AICm5	AICm6
1	224572,6415	224059,828	223992,8828	207701,3837	207583,674	207450,816	207414,082
2	224452,1259	223962,7402	223903,2986	207544,9209	207424,205	207291,802	207251,224
3	224619,7895	224098,0192	224029,9616	207716,1825	207601,094	207419,112	207384,076
4	224774,6397	224231,4701	224170,3947	207884,4067	207766,261	207580,32	207543,799
5	224571,7211	224047,8326	223995,0797	207608,3521	207493,858	207349,63	207316,692
6	224415,5444	223874,3443	223806,309	207488,1704	207377,498	207284,753	207256,309
7	224531,5537	224043,1164	223971,9689	207757,9119	207636,384	207543,468	207503,285
8	224614,824	224085,4474	224022,4821	207626,0232	207509,161	207359,349	207325,727
9	224572,2975	224082,3179	224021,8613	207491,6022	207369,7	207215,328	207175,518
10	224613,2417	224093,0086	224010,4472	207606,3535	207481,288	207345,03	207300,893
11	224636,6468	224101,9721	224044,5779	207803,1694	207678,11	207577,25	207532,927
12	224586,5763	224075,1937	224005,8977	207595,4931	207472,877	207363,953	207323,428
13	224480,0599	223999,0088	223925,5842	207628,8027	207497,799	207386,765	207336,584
14	224487,8868	223946,8225	223881,386	207544,4255	207429,711	207291,074	207256,556
15	224529,5253	223977,6453	223921,9869	207598,2387	207488,157	207404,408	207376,839
16	224653,4175	224109,2854	224047,8733	207578,6874	207479,314	207303,989	207284,44
17	224627,537	224128,9789	224059,2983	207684,6872	207566,557	207385,378	207348,261
18	224524,758	223968,4432	223903,9426	207565,7068	207449,58	207298,12	207262,485
19	224638,8393	224112,6087	224045,1111	207669,8111	207546,818	207425,194	207383,94
20	224704,2552	224212,4154	224154,3796	207745,9095	207625,831	207493,314	207453,378
<b>Total</b>	4491607,881	4481210,499	4479914,724	4152840,239	4150477,88	4147769,05	4147030,44
<b>Mean</b>	<b>224580,3941</b>	<b>224060,5249</b>	<b>223995,7362</b>	<b>207642,0119</b>	<b>207523,894</b>	<b>207388,453</b>	<b>207351,522</b>

	BIC empty model	BICm1	BICm2	BICm3	BICm4	BICm5	BICm6
1	224599,0718	224095,068	224036,933	207789,485	207698,205	207574,158	207563,854
2	224478,5562	223997,981	223947,349	207633,022	207538,737	207415,143	207400,996
3	224646,2199	224133,26	224074,012	207804,284	207715,625	207542,454	207533,848
4	224801,0701	224266,711	224214,445	207972,508	207880,792	207703,662	207693,571
5	224598,1514	224083,073	224039,13	207696,453	207608,39	207472,972	207466,464
6	224441,9748	223909,585	223850,36	207576,272	207492,03	207408,094	207406,081
7	224557,9841	224078,357	224016,019	207846,013	207750,916	207666,809	207653,057
8	224641,2543	224120,688	224066,533	207714,124	207623,692	207482,69	207475,499
9	224598,7278	224117,558	224065,912	207579,703	207484,232	207338,669	207325,29
10	224639,6721	224128,249	224054,498	207694,455	207595,819	207468,372	207450,664
11	224663,0772	224137,212	224088,628	207891,271	207792,641	207700,591	207682,699
12	224613,0066	224110,434	224049,948	207683,594	207587,408	207487,295	207473,2
13	224506,4902	224034,249	223969,635	207716,904	207612,33	207510,107	207486,356
14	224514,3171	223982,063	223925,437	207632,527	207544,242	207414,415	207406,327
15	224555,9557	224012,886	223966,037	207686,34	207602,688	207527,75	207526,611
16	224679,8479	224144,526	224091,924	207666,789	207593,846	207427,33	207434,212
17	224653,9673	224164,219	224103,349	207772,788	207681,088	207508,72	207498,033
18	224551,1883	224003,684	223947,993	207653,808	207564,111	207421,461	207412,257
19	224665,2697	224147,849	224089,162	207757,912	207661,349	207548,536	207533,712
20	224730,6855	224247,656	224198,43	207834,011	207740,363	207616,655	207603,149
<b>Total</b>	4492136,488	4481915,31	4480795,73	4154602,26	4152768,51	4150235,88	4150025,88
<b>Mean</b>	<b>224606,8244</b>	<b>224095,765</b>	<b>224039,787</b>	<b>207730,113</b>	<b>207638,425</b>	<b>207511,794</b>	<b>207501,294</b>

**Table B.3.** AIC and BIC values across the 20 imputed datasets. The mean from the 20 datasets represents the AIC and BIC values for the six multilevel regression models.