Inequality, Collective Action and Democratic Transition:

A refined investigation of the relationship between inequality and democratization

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May 2013

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May 23, 2013

2013

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http://www.duo.uio.no/

Trykk: Oslokopisten, Oslo

Abstract

How does economic inequality affect the probability of democratization? There are well-developed economic theories which indicate that how income is distributed affects the likelihood of democratic transition. Perhaps most famous is the theory of Acemoglu and Robinson (2000*b*, 2006) which suggests that higher levels of inequality affect the probability of democratization through a process of collective action, where individuals are capable of mobilizing against the regime. However, empirical inquiries have yet to find any robust relationship between inequality and democratic transition. One proposed explanation for the lack of support, is the theory's inherent assumption that individuals without further problems are able to overcome their collective action problems. Empirical studies however, have not given this assumption any further attention. In this thesis I fill this gap. Using the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006) as a theoretical backdrop, I conduct a more refined test of the relationship between inequality and democratization by detecting specific circumstances which can function as triggers of collective action. By utilizing a cross-sectional time-series dataset, covering 169 countries observed between 1963 and 2008, this thesis takes a novel approach to democratic transitions by examining whether inequality may have an effect on democratization *conditional* on triggers of collective action. The results from my analysis provide clear rejections of the theoretical assumptions by Acemoglu and Robinson (2000*b*, 2006). Most interestingly, the findings cast doubt on the occurrence of the core causal mechanism in the theoretical model, namely that of collective action. Even under circumstances one should expect facilitate collective action, higher levels of inequality do not seem to have any significant effect on the probability of democratization. The findings suggest that one needs to look beyond the economic theory of Acemoglu and Robinson, in order to explain the relationship between inequality and democratization. If high levels of inequality do have an effect on democratic transitions, a more innovative approach may be necessary in order to detect this relationship.

Acknowledgements

Five years at Blindern have now come to an end, and writing this thesis has been the perfect way to end the journey. First and foremost, I would like to thank my supervisor Carl Henrik Knutsen. Thanks for your patience, constant availability and for your rigorous attention to detail throughout the process. Moreover, I am thankful to Håvard Hegre, Carl Henrik Knutsen and Håvard Nygård for allowing me to write this thesis in conjunction with the project *Conceptualization and Measurement of Democracy.*[1] Also, thanks to Tore Wig and all of the other seminar participants for their constructive and invaluable feedback on previous drafts and research ideas. Calina Langguth deserves a big high-five for reading large parts of the thesis and for correcting spelling mistakes. A special thanks also to Tarald Laudal Berge, Rune Busch, Aksel Braanen Sterri, Sirianne Dahlum and Espen Geelmuyden Rød for comments on previous drafts. A big thanks to Sirianne Dahlum, whose master's thesis has been a great inspiration. Moreover, I cannot thank Ida Rudolfsen enough for always offering her assistance and for her continuous technical support throughout the year. I would also like to thank Anders Ravik Jupskås, Øyvind Bugge Solheim, Emil Aas Stoltenberg, Jørn Wichne Pedersen, Jonas Kjærvik, Trygve Nesse and Øivind Bratberg for being such great friends to work alongside. Thanks also to professor Jan Teorell for the informative chat in Gothenburg, and for sharing his data. Lastly, I'd like to thank my family: my dear mother, father and my grandmother for their constant support. I know how proud you are. Finally, the biggest "thank you" goes to Oda, for your patience, support and for being who you are.

I alone am responsible for the errors in this thesis.

Lars Petter Berg
Oslo, May 23, 2013
Word count: 54.112

[1] RCN project 204454/V10, see http://www.sv.uio.no/isv/english/research/projects/conceptualization-and-measurement/index.html.

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Chapter 1

Introduction

The democratic waves at the end of the last century led scholars to predict "the end of history"; democratic regimes are so favorable to citizens that it is only a matter of time before all countries are governed by democratic institutions. However, democratic transitions have been hard to predict, and scholars argue over its fundamental causes. One of these contested causes is economic inequality.

The relationship between economic inequality and democratic transition is one of the most widely studied topics in comparative politics and political economy (Acemoglu and Robinson, 2000*b*, 2001, 2006, 2012; Boix, 2003; Papaioannou and Siourounis, 2008; Houle, 2009; Teorell, 2010; Huber, Ogorzalek and Gore, 2011; Knutsen, 2012). However, empirical studies have yet to find any strong support for the proposed relationship between economic inequality and democratization (Jung and Sunde, 2011). How does economic inequality relate to democratic transition?

In this thesis I set out to test the core implications of Daron Acemoglu and James Robinson's economic theory of democratization (2000*b*; 2001; 2006). This theory is perhaps the most developed theory on the relationship between economic inequality and democratization and by far the most cited with regard to the economic origins of democracy. It proclaims "that a high level of economic inequality increases the probability of countries to democratize and that the democratic transition happens through a process of collective action where citizens mobilize against the regime. The citizens' capability to act collectively is therefore an explicit assumption in the theory of Acemoglu and Robinson (2000*b*, 2006). Nevertheless, the empirical evidence of the suggested relationship between economic inequality and democratic transition is missing. This has caused scholars to question the assumption that individuals are capable of gathering in collective action against the regime. However, none have explicitly investigated the interacting relationship between collective action and economic inequality on democratic transition.

In this thesis I set out to fill this gap. I conduct a more critical and refined test of the theoretical assumptions of Acemoglu and Robinson's, by studying whether inequality has a conditional effect on democratization under circumstances one should expect facilitate collective action. In order to test this, I draw on insights from empirical studies which have found a strong connection

between collective action facilitating factors and democratic transitions. I localize three such factors: Economic crises, regional democratic transitions and events of war. Through providing a more refined test of the economic determinants of democratization, my research questions aim to make "a specific contribution to an identifiable scholarly literature" (King, Keohane and Verba, 1994, 15), namely the economic theories of democratization (Boix, 2003; Acemoglu and Robinson, 2000*b*, 2006).[1]

1.1 The puzzle

All scientific inquiry starts with the conscious or unconscious perception of a puzzle (Kuhn, 1970). My research motivation is no exception, and departs with a puzzle inspired by reflections on the Egyptian uprising in January, 2011, which illustrates the contemporary relevance of my chosen research topic.

On December 17, 2010, Tunisian fruit vendor Mohamed Bouazizi set himself on fire and inspired a nationwide uprising. Within a month President Zine El Abidine Ben Ali resigned and fled the country. On January 25th, 2011, thousands of protesters flooded the streets of Cairo, expressing their dissatisfaction with the authoritarian rule of President Hosni Mubarak. From this point on, there was no return. Protests and demonstrations intensified throughout the next weeks, culminating on February 11th with the fall of Mubarak after 30 years of autocratic rule. Egypts regime was known for repressing even the slightest sign of dissent, and the massive turnout took the world community by surprise. Before the protests erupted, prominent voices had argued that the country was not ready to have its own revolution. They claimed that for Egypt"revolution is going to take a while" and that the chances for Tunisian inspired protests remained small (Time, 2011*a*). A Tunisian domino effect was seen as highly unlikely (Time, 2011*b*) and there were apparently no signs indicating that Egypt would go down the Tunisian road (BBC News, 2011). Even shortly after the first demonstrations had broken out, former U.S Secretary of State Hillary Clinton openly announced that the Egyptian government was"stable" (Reuters, 2011). Arab leaders were also caught off guard by the Egyptian uprising. Even Egypts longtime regime opponents, such as the Muslim Brotherhood, did not how to react (Kuran, 2011). So why did the Egyptian people suddenly take to the streets?

An important factor for why Egyptians gathered in protest, seemed to be a demand for more political inclusion, together with a refusal to accept the persistence of the socio-economic inequalities sustained by the authoritarian elites in power (Ncube and Anyanwu, 2012). Egypt's unequal income distribution and increased economic grievances have particularly been pointed out as important explanations for why Egyptians finally were able to gather in collective action and demand change (Abdel Meguid, El Banna, Korayem and Salah Eldin, 2011, 15). This notion is also supported by the World Values Surveys from 2008, which measured people's perception of inequality and suggested that Egyptians had become more hostile to inequality and more dissatisfied with how income was distributed (The World Bank, 2013).

[1]This study is not an examination of democratization per se, but rather an inquiry of one specific strand within the literature on democratization, namely that of economic inequality and democratic transitions.

The Egyptian revolution does give resonance to the words of Lerner (1958) as a"revolution of rising frustrations", but the mentioned frustrations alone cannot be a sufficient explanation for why Egyptians *suddenly* took to the streets in January, 2011. Living standards in Egypt had declined consistently since the 1990s, and as much as 20 to 30 percent of the population had for a long time lived below the poverty line (Abdel Meguid et al., 2011). Some voices have also pointed out how little things have changed generally in the Arab world over the last 30 years: If a person fell asleep in the early 1980s and woke up in 2009, he would"rub his eyes in disbelief at how little had changed" (Economist, 2009). Structural factors alone thus fail to provide a sufficient explanation for the sudden revolt.

The Egyptian uprising pinpoints the main argument in this thesis. For a number of decades Arabs had kept their political and economic grievances private, fearing persecution if they publicly turned against their leaders (Kuran, 2011). The Egyptian people were no exception. A privately hated regime may seemingly enjoy public support because of people's reluctance to take part in public opposition against the regime. However, Kuran (1989) offers a suggestion for what triggers collective action: a"suitable shock would put in motion a bandwagon process [...] until then largely hidden (1989, 42). The fact that Egyptians suddenly were able to overcome their collective action problems thus cannot be understood without referring to the uprisings in Tunisia. Although economic grievances and rising levels of inequality very probably were important factors, it was the Tunisian uprisings and the successful ousting of President Zine El Abidine Ben Ali that provided the"shock" or the spark that ignited the Egyptian prairie fire. Inspired by their revolutionary comrades in Tunisia, the Egyptian people suddenly took to the streets and demanded reform and political freedom in order to end their long held economic and political grievances. The case of Egypt illustrates the difficulty of predicting regime change and the important role that collective action plays. The economic inequalities, in combination with the Tunisian shock-effect, were likely important for the uprisings and provide my research topic with both context and relevance.

1.2 My contribution

There exist well-developed theoretical accounts which view economic inequality as an important determinant of democratization (see Boix, 2003; Boix and Stokes, 2003; Acemoglu and Robinson, 2000*b*, 2001, 2006; Acemoglu, Johnson, Robinson and Yared, 2008). However, despite their theoretical impressiveness and rigorous consideration, empirical inquiries on the economic determinants of democratization leave these theories little support at best (see Barro, 1999; Papaioannou and Siourounis, 2004, 2008; Houle, 2009; Teorell, 2010; Ansell and Samuels, 2010; Haggard and Kaufman, 2012). Although empirical analyses have found a robust relationship between income distribution and the *level* of democracy – that is, more equal countries tend to be more democratic – the causal relationship between income distribution and democratic *transitions* is much less robust (Haggard and Kaufman, 2012, 495). Thus, there is to date no economic theory of democratization that is supported by strong empirical evidence.

My point of departure is the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2001, 2006). They maintain that democratic transition can be explained by disparities in wealth. As opposed to the earlier economic assertions held by modernization theorists such as Lipset (1959), arguing that higher *levels* of economic development induces transitions to democracy, the economic theories of democratization rather emphasize the importance of wealth *distribution*. The economic theory of Acemoglu and Robinson (2000*b*, 2006) assumes that higher levels of inequality affects democratization through a process of generating popular mobilization and social unrest, which in turn makes autocracy too costly to maintain for the ruling elites. In non-democratic regimes, higher levels of economic inequality increase public grievances and thus the probability for the poor majority to mobilize in collective action and to pose a revolutionary threat to the regime. Under high levels of inequality, individuals have larger incentives to fight for democracy because democracies are more redistributive than autocracies.

The democratizing effects of inequality thus work through the intervening variable of individuals engaging in collective action. More precisely: mobilization of the masses is the *causal mechanism* linking inequality to democratization.

$$Inequality \rightarrow Popular\ mobilization \rightarrow Democracy$$

However, the economic framework of Acemoglu and Robinson (2000*b*, 2006) anticipates somewhat simplistically that collective action-problems are solved by themselves. More precisely, the theory rests on the assumption that inequality *in itself* creates social unrest, which again causes democratization. I argue that such a simplistic understanding is problematic all the time that organizing in collective action can prove extremely difficult in authoritarian settings (e.g. Kuran, 1989). As exemplified with the case of Egypt, long-held economic grievances did not manifest themselves in protests and demonstrations before the protestors were triggered by an external event to act collectively. A focus on structural conditions like inequality alone may therefore not be sufficient to explain why individuals take to the streets. The simplified assumption of Acemoglu and Robinson (2000*b*, 2006) has also been criticized in recent empirical literature (Houle, 2009; Keefer, 2009; Haggard and Kaufman, 2012) but neither have provided any further inspection of the argument.[2] Haggard and Kaufman (2012) suspects that the economic theories of democratization "may ultimately prove to be conditional in form; that is, they are dependent on incentives and capacities for collective action that are not in fact given by the level of inequality. What are these additional factors that might enable subaltern groups to overcome barriers to collective action?" (2012, 513).

Following the propositions of Haggard and Kaufman (2012), I develop a research design which

[2]Keefer (2009) also states that "[t]he ability to act collectively is an explicit assumption in the analyses of Acemoglu and Robinson (2000*b*, 2006) and others", and that their predictions about the relationship between income distribution and democratization assumes that non-elites have the capacity to undertake collective action. Similarly, Ziblatt (2006, 322) asserts that "there is after all no systematic empirical evidence on how the structural variables of inequality [...] actually play themselves out with real actors, which is where the causal action is said to lie".

serves as a more refined test of the arguments made by Acemoglu and Robinson (2000*b*, 2006). I argue that the effect of economic inequality on democratization may be conditional in form: it's proposed effect may only be evident under certain circumstances. I localize three factors I assume to be highly capable of making economically deprived citizens overcome their collective action problems and mobilize against the regime: economic crisis, regional democratic transitions and events of war. Individuals who are mainly motivated by their material and redistributive interests in generating regime change, may fail to bring about the necessary actions to induce regime change. This means that economic grievances due to high inequality do not necessarily facilitate collective action against the state. The main argument in this thesis is thus rather simple and straightforward: In order to understand *where* and *when* inequality advocates democratization, one must identify the specific conditions under which successful public uprisings are most likely to take place - namely where collective action problems are solved. A reasonable suggestion is that disenfranchised citizens can induce the elites to democratize *only* under conditions that facilitate collective action.

1.3 Motivation

There are primarily three reasons for why I believe that the relationship between inequality and democratization requires further attention.

Firstly, much of the existing data on inequality is impaired by severe scarcity, which restricts the opportunities for broader cross-country comparisons. This sparseness of data on inequality has led some authors to claim that it is almost impossible to test "inequality leads to democratization"-hypotheses (see Przeworski, Alvarez, Cheibub and Limongi, 2000, 117). I believe that it is possible to overcome this challenge to some degree. By making use of better data on inequality in combination with multiple imputation techniques (see Honaker and King, 2010), I am able to draw more precise inferences about the proposed relationship between inequality and democratization. Additionally, I employ a measure of inequality which captures inter-group inequality between capitalists and laborers in the manufacturing sector. This is in agreement with how inequality is defined in the theory of Acemoglu and Robinson (2000*b*, 2006).

The second reason is related to the theoretical assumptions inherent in the theory of Acemoglu and Robinson (2000*b*, 2006). Acemoglu and Robinson rely on formal models and anecdotal evidence drawn from a handful of case studies to support their arguments and they do not provide any statistical tests of the proposed relationship. Two of the ways in which such formal models can be evaluated are (i) in terms of their predictive powers or (ii) in terms of the *assumptions* on which their predictions rely (Morton, 1999). The empirical literature on democratization has almost exclusively evaluated the economic theories in light of their predictive powers (e.g. Houle, 2009; Ansell and Samuels, 2010), which I find somewhat puzzling. There have been far fewer efforts towards an empirical validation of the specific *assumptions* inherent in the economic theories (Teorell, 2010, 27). As pointed out by Haggard and Kaufman (2012, 498), "the empirical question is not only whether the antecedent conditions [inequalities] are linked statistically with

the outcome but whether they also do so through the stipulated causal mechanisms".[3] Since a precondition in the theory is the presence of a mobilizing mass gathering in collective action, I argue that in order to properly evaluate the theoretical assumptions, empirical corroboration should extensively focus on this particular premise in conjunction with inequality. For these reasons I intend to undertake a more "fine-grained" analysis of the relationship between inequality and democratization, giving more attention to the core theoretical assumption implicit in the theory of Acemoglu and Robinson (2000*b*, 2006), namely that of collective action and popular mobilization.

Thirdly, if my theoretical assumptions hold up against the data, and inequality proves to have an effect on democratization conditional on factors that facilitate collective action, my findings will challenge the most recent empirical inquiries on the determinants of democratization which argue that inequality is not an important determinant of democratization (Houle, 2009; Teorell, 2010; Ansell and Samuels, 2011; Haggard and Kaufman, 2012). If my findings do *not* hold up against the data, the theoretical assumptions by Acemoglu and Robinson (2000*b*, 2006) do not bear up against empirical validation in the time-series of investigation, and their general validity should therefore be considered sufficiently undermined.

1.4 Research questions

Based on the aforementioned puzzle and the unclear relationship between inequality and democratic transition, this research project endeavors to systematically examine the relationship between inequality and democratization, by conducting a large N-study covering 85 democratic transitions in the period 1963 to 2008. Two research questions guide this thesis:

1. How does the level of economic inequality relate to the probability of democratization?
2. How do collective action-facilitating factors affect the relationship between economic inequality and the probability of democratization?

The first research question relates to the specific effect of the explanatory variable on the probability of an outcome on the dependent variable. The second research question however, studies the effect of the main explanatory variable on the probability of an outcome on the dependent variable, *conditional* on the presence of other explanatory variables. In the theoretical chapter, the two research questions are converted into distinct hypotheses, prepared for empirical assessment in the empirical analysis.

1.5 Defining concepts

Before proceeding any further, the terminology used throughout this thesis is clarified. I find it useful to elucidate these concepts initially, in order to provide the basis for the subsequent

[3]When referring to causal mechanisms, Haggard and Kaufman (2012) attempts to find out if the effect inequality has on democratization operates through postulated distributive mechanisms, as asserted by both Boix (2003) and Acemoglu and Robinson (2006). Because I intend to study which factors may help citizens in overcoming their collective action problems, I make no assumptions about whether individuals desire democracy for distributive reasons or not. This question thus falls outside the scope if this thesis.

theoretical and empirical investigation, and to avoid misconceptions. In this section I present the two main concepts of this thesis: democracy and inequality.

1.6 Democracy

Some concepts are more straightforward to conceptualize than others. Those who are not easily defined, fall into the category of "contested concepts" (Gallie, 1955). Democracy is such a contested concept, as scholars disagree about what democracy actually is and how it is to be measured, which matters for empirical conclusions (Casper and Tufis, 2003; Cheibub, Gandhi and Vreeland, 2010; Bogaards, 2011). In this section I distinguish between substantive and institutional definitions of democracy (see also Knutsen, 2011). This thesis applies an institutional definition of democracy, more precisely the "minimalist" definition by Alvarez, Cheibub, Limongi and Przeworski (1996) which emphasizes contested elections as the core principle in a democracy. First, the substantive definition is presented, in order to distinguish it from my definition of choice, the institutional.

1.6.1 A substantive definition

A substantive definition offers a broad understanding of democracy. Rather than solely identifying elements that are *required* for a democracy to function, a substantive definition attempts to identify what a democracy actually *is*. A substantive definition emphasizes the essence of democracy and points to some of the core principles constituting this essence. One of these core principles is the role of the citizens in the decision making process. A proponent of the substantive definition is David Beetham, claiming that "[t]he core idea of democracy is that of popular rule or popular control over collective decision making" (1999, 90). In addition, political equality is seen as one of the core principles in the substantive definition. Thus, regimes excluding e.g. minorities and women from participation in the political process are not viewed as democratic (see Dahl, 2006, 5).[4] As noticed by Knutsen (2011, 58), these concepts must be viewed as continuos concepts, because the substantive definition of democracy implicitly entails degrees of democracy. In a real world context, fulfillment of these two criteria will always fall short, and they should therefore in best cases be viewed as ideals of democracy.

1.6.2 An institutional definition

An alternative to the substantive definition of democracy is the institutional definition. This definition emphasizes the importance of institutions, as institutions are said to represent the core elements in a democratic system (e.g. Knutsen, 2011). Schumpeter (1976) is often held as a proponent of the institutional approach, considering democracy as the "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" (1976, 269). The existence of contested elections is thus seen as a core principle in many institutional approaches.[5] Although

[4] Conversely then, "dictatorships are regimes which lacks popular control over collective decision making and where there exists large political inequalities"(Knutsen, 2011, 58)

[5] Due to its emphasis on the importance of elections, the institutional definition is also sometimes referred to as an "electoral definition" of democracy (Przeworski et al., 2000). A solely focus on elections when rendering

the institutional definition emphasizes elections as one of many core principles in a democracy, there is one variant of the institutional definition which holds contested elections as *the* core principle of democracy. This approach has often been labeled as a minimalist definition of democracy (see Huntington, 1991, 9). Recently, this minimalistic definition of democracy has been used by Przeworski et al. (2000) who mainly define a political regime as democratic where "those who govern are selected through contested elections" (Przeworski et al., 2000, 15). This approach is viewed as preferable in empirical assessments of democracy due to its analytical stringency, because one can move away from an "intuition" of what democracy is, based on subjective judgements, and towards more stringent empirical assessment (Knutsen, 2011, 52). A minimalist approach can thus be said to have higher reliability than other democracy scores. Throughout this thesis I define a democracy in the lines of Schumpeter and Przeworski et al, emphasizing contested elections as the most important threshold for when countries can be said to be democratic. However, the choice of an institutional definition of democracy is not unproblematic, and this is elaborated on in chapter 4 where the concepts are operationalized.[6]

1.6.3 Prerequisites of democracy

The complexity of democracy as a concept begs for simplification before it can be subjected to empirical analysis (Coppedge, Alvarez and Maldonado, 2008, 645). Dahl (1971) classifies countries as "polyarchies" if they meet high standards on the two dimensions of political contestation and participation. "Polyarchies" thus refers to situations where all individuals in the population have equal possibilities to exercise control over public decision making. I start this section off by assessing one of Dahl's (1971) two criteria - contestation - as the minimalist definition used throughout this thesis holds contested elections as the most important prerequisite of a democracy. Thereafter the concept of participation is presented, together with a brief assessment of other principles.

1.6.4 Contestation

One of the disagreements related to the concept of democracy refers to the logical structures of democracy (Goertz, 2005), i.e. whether there are any necessary or sufficient requirements for a regime to be labeled democratic. Sartori (1987) asserts that "what makes democracy possible should not be mixed up with what makes democracy more democratic" (1987, 156). Sartori argues for a two-step procedure, where the first step distinguishes between democracies and

a country democratic is not a new phenomenon. Popper (1963) distinguished between two main types of government, where the one he labels 'democracy' consists of governments of which it is possible to get rid of the incumbent by general elections and "without bloodshed" (1963, 142)

[6]There are good reasons for why a narrow focus on contestation is defendable. Most of the quantitative research on democratization has in fact concerned contestation (Coppedge, Alvarez and Maldonado, 2008). Through a factor analysis, Coppedge, Alvarez and Maldonado (2008) find that most of the Polity Index and both of the Freedom House indices load on the contestation dimension (Coppedge, Alvarez and Maldonado, 2008, 645). Sartori has argued that the distinction between democracy and dictatorship should be treated as dichotomous (Sartori, 1987, 156). Dichotomies are fundamental when reasoning about concepts, and concepts are distinguished into "contraries" and "contradictories" (Sartori, 1987). "Contradictories" are concepts in which there do not exist any intermediate positions, such as alive versus dead or married versus single. Sartori (1987) argues that democracy should be treated as a such contradictory (1987, 182-184). Recall that this view differs in essence from the substantive definition of democracy, which implicitly recognizes degrees of democracy. Those who prefer the minimalist definition of the institutional approach however, would contend that you either are democratic, with contested elections, or you are not.

non democracies. In the second step, initial criteria can be applied to those regimes considered democratic in the first stage. Following Przeworski et al. (2000), the first step is contested elections. *Contestation* requires that executive offices are filled through competitive elections. This is an essential element in the minimalist definition of democracy (Alvarez et al., 1996; Przeworski et al., 2000). No regime should be defined as democratic unless offices are contested. Contestation is seen as a "vital ingredient in any democracy concept specification" (Knutsen, 2011, 66) and relates to popular control over collective decision making, where citizens select the representatives they want in charge of both legislating and implementing policies (Dahl, 1971). Contested elections can thus be said to be the *sine qua non* of democracy: "[e]ither a regime fills the executive and legislature through contested elections or it does not. If it does not, it is simply not a democracy" (Cheibub and Vreeland, 2012, 2).

Contestation is also important in order to separate democracies from regimes labeled as "competitive authoritarianism" (Levitsky and Way, 2002, 54), where regimes have elections but competition over power is not contested. Although Egypt's first multi-parti election in 2005 was by some labeled as contested (The Washington Post, 2005), Egypt's biggest protest group The Muslim Brotherhood was denied running due to a ban enforced by the Mubarak regime (BBC News, 2005). As is to be explained in chapter 4, Egypt in 2005 is not defined as a democracy in this sample, due to violations to the rule of contested elections. The concept of focusing on elections is also in accordance with Huntington (1991, 6) who argued that "[t]he central procedure of democracy is the selection of leaders through competitive elections by the people they govern". In sum, contested elections therefore allow citizens to chose whether they want to keep their politicians or not through balloting.

1.6.5 Other criteria

I do not claim that contestation captures all that one needs to know about democracy. Rather, I have emphasized what I believe is the most important prerequisite of democracy. Some other important criteria are however worth mentioning. Dahl's criteria of *participation* requires that all citizens are included in the political process.[7] Historically, participation has been restricted in both formal and informal ways. Formal restrictions limit the opportunity of certain groups to participate in elections and have historically been based on gender and ethnicity. The exclusion of women in Switzerland up until 1971 and the exclusion of Africans from common voting rolls in South Africa in the 1930s provide good examples.[8] Although such formal restrictions are less common today, they still exist and are mainly based on nationality and ethnicity. Informal restrictions on participation are more common, typically involving patronage and political clientelism where clients are induced to vote for their patron (see Berman, 1998). Also intimidation-strategies employed by political elites directed at supporters of other parties can reduce participation, and thus also reduce de facto political competition. Besides from

[7] Dahl (1971) particularly emphasized the importance of equal political rights and the right to vote.

[8] More precisely, all Africans were excluded from common voting rolls due to the Representation of Natives Act of 1936 (Okwesili, 2003, 13). Formal restrictions have also been based on property rights and wealth, especially in African countries. For instance, voting rights in Liberia in the 1970s were limited to citizens obtaining more wealth than L$2000 (**?**).

participation, other important factors are also excluded, such as i.e. regime effectiveness in implementing policies, rule of law and degrees of corruption.[9]

1.6.6 Democratization

As can be observed from the above discussion, democracy is difficult to define. Similar to democracy, *democratization* takes several interpretations. Democratization refers to the process of transitioning from an authoritarian regime to a democracy, also known as a "democratic transition" (Feng and Zak, 1999). In the widest sense, democratization refers to a move towards "more" democracy no matter how small this move is. Thus, democratization may just denote an improvement in an already autocratic state, sometimes referred to as a process of "liberalization" (Brumberg, 2002). Huntington (1991, 9) distinguishes liberalization from democratization, where the former is "the partial opening of an authoritarian system *short* of choosing governmental leaders through freely and competitive elections".[10] However, this important distinction is rarely reflected in conceptualizations of regime changes in the quantitative literature (Bogaards, 2010, 477). Contrary to liberalization, democratization refers to a democratic transition which implies a "change of category and a dichotomous conception of democracy" (Bogaards, 2010, 476). As this thesis is concerned with studying transitions from non democracies to democracies, a categorical conception of political regimes is preferable in order to be able to identify the critical moment of the transition. Thus, when referring to *democratization* this denotes the transition process moving from a non-democracy to a democracy.[11]

According to Shin (1994, 143) the process of democratization consists of several "analytically distinct but empirically overlapping stages" and can be separated into four different stages: 1) decline of the authoritarian rule; 2) the transition; 3) consolidation; and 4) the maturing of a democratic political order. Although Shin endeavors to clarify the concept of democratization, this contour of democratization exemplifies why there is conceptual confusion. Contrary to Shin (1994) I do not refer to the process of *democratization* as involving consolidation and the maturing of the regime. Rather, I emphasize the two first stages: authoritarian decline and the transition. More precisely, I intend to distinguish between the *establishment* of democracy and its *sustainability* (see also Przeworski et al., 2000; Cheibub and Vreeland, 2012). In order to do this, one needs to identify the *distinct* moment that marks the transition. I treat this distinct moment as the moment when countries experience contested elections.[12] Throughout this thesis I thus assert that a country has democratized when "political actors decide that the choice of rulers will proceed throughout competitive elections" (Cheibub and Vreeland, 2012, 2). In sum, I follow Cheibub and Vreeland (2012) arguing that although it is interesting to study why some democracies have more political and economic freedom than others, my focus is on the

[9]Despite strong arguments for why the absence of rule of law and the presence of corruption subvert the citizens' ability to use their political and civil rights (see Inglehart and Welzel, 2006; Knutsen, 2010), including such measures has earlier caused problems, such as systematic and unsystematic measurement errors (Knutsen, 2010)

[10]My emphasis

[11]I use the terms democratic transition and democratization interchangeably throughout the thesis.

[12]As also contended by Ulfelder (2012), the substance of the label "democratic transition" rests on a categorical idea of democracy - a national political regime is either democratic or it is not - and it privileges elections as the crucial procedural criterion for obtaining that status.

questions of contested elections and regime transitions "the miraculous moments when ballots, paper or electronic, truly determine the fate of political leaders – and the tragic moments when they stop" (2-3 2012).[13]

1.7 Inequality

As demonstrated in the literature on economic psychology, people perceive relative wealth as an important determinant of their subjective well-being. In fact, this may indicate that relative wealth is more important than absolute wealth for the notion of subjective well-being (Layard, 2005). This substantiates the economic theory of democratization under investigation. Acemoglu and Robinson (2000*b*, 2006) presume that economic inequality is of significant importance to individuals, and that inequality-related grievances might lead to demands for revolution. However, the notion of inequality is strained by conceptual vagueness and is difficult to operationalize (see Lambert, 2001).

At the most general level one can distinguish between two types of inequality: inter-individual inequality and inter-group inequality. The first concept is related to inequality between individuals or households, and is sometimes referred to as vertical inequality (Stewart and Langer, 2008, 55). This is probably the most common perception of inequality, familiarized by i.e. the Gini-coefficient. Inter-group inequality on the other hand, measures inequality between defined groups. In recent literature, especially the literature on civil war and conflict, inter-group inequality is often referred to as horizontal inequality (Stewart, 2008). Stewart defines this type of inequality as "inequalities in economic, social, or political dimensions or cultural status between culturally defined groups" (2008, 3). Horizontal inequalities are said to be present when e.g. religious and ethnic cleavages systematically coincide with the economic divisions in society (Østby, 2011, 8). This conception of inequality corresponds with what Tilly (1998) labels "categorical inequalities". Tilly argues that it makes little sense to measure inequality between individuals if the inequalities in reality are categorical, for instance why white South Africans on average have higher incomes than their black fellow citizens (Tilly, 1998, 31).

Obviously, inequality may be measured along political, cultural, social and economic lines (Stewart, Brown and Mancini, 2005, 7). The primary focus throughout this thesis is inequality between groups, namely that of inter-group inequality. However, in contrast to the above mentioned conception of horizontal inequalities, which treats groups as "culturally defined", this thesis emphasizes on inequality between two societal groups: the elite and the citizens. As

[13] I do not intend to study the effects of inequality on the probability of democratic stability. Despite conflicting reasoning on the relationship between inequality and democratization, there seems to be a more harmonious relationship in the literature concerning the effect of inequality on democratic consolidation. Authors seem to agree that inequality harms and destabilizes democratic consolidation (Boix, 2003; Houle, 2009; Muller, 1988, 1995). The theories linking inequality to democratic consolidation do not suffer from the same problems as those linking inequality to democratization, because the two types of transitions incline to follow different paths (Houle, 2009, 596). My focus is on collective action dynamics and the presence of these dynamics is more important in the process of democratic transition than in the breakdown of democratic rule (Shin, 1994; Houle, 2009). As maintained by Huntington (1996*a*), "with only one or two possible exceptions, democratic systems have not been ended by popular vote or popular revolt" (1996*a*, 9). Reversals to authoritarian rule are for the most part initiated from above, thus giving less attention to the ability of coordinating the masses.

will be explained in more detail in chapter 4, disparities in wealth between the elite and the citizens are captured by the main independent variable of choice, *capital share*. By utilizing this variable I am in compliance with the understanding of inequality employed in the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006) who emphasize the role of social conflict between the rich and the poor (2006, 20-21).[14]

1.8 Findings

The results from my analysis provide clear rejections of the theoretical assumptions by Acemoglu and Robinson (2000*b*, 2006). To begin with, the findings cast doubt on the occurrence of the core causal mechanism in the theoretical model as introduced by (Acemoglu and Robinson, 2000*b*, 2006), namely that of collective action. First and foremost, inequality does not seem to have any independent effect on the probability of countries to undergo democratic transitions. This finding thus concurs with recent empirical inquiries on the relationship between inequality and democratization, which suggest that higher levels of inequality have no robust independent effect on the probability of democratic transition. More interestingly; even under circumstances one should expect facilitate collective action, higher levels of inequality do not seem to have any significant effect on the probability of democratization. If anything, low levels of inequality seem to be a somewhat stronger predictor of democratization than higher levels, especially during periods of economic crisis. This line of reasoning follows the main assumptions by Boix (2003) who argues that high levels of inequality reduces the likelihood of democratization, as repression is more attractive than redistributing wealth in a democracy. A democratic transition may be therefore be viewed as less costly for elites under low levels of inequality. I also find that low inequality defined as land inequality, increases the probability of democratization. This finding may question another core assumption by Acemoglu and Robinson (2000*b*, 2006), that citizens desire democracy because of its redistributive mechanisms. Low land inequality may indicate a large number of people who hold their own property and who fear that autocratic elites will seize their land. They therefore desire representative political institutions that protects their property rights. Democratization is then not a result of a demand for *redistribution*, as assumed by Acemoglu and Robinson (2000*b*, 2006), but rather a result of a demand for *protection*. In any case, the main finding is that higher levels of inequality seems not to be related to the probability of democratic transitions, and the core assumptions of which the theory rely on should therefore be called into question.

1.9 Structure

The content of this thesis is divided into 7 chapters, and in the following section each of these chapters are briefly presented.

Chapter 2 starts off with a short presentation of the main theoretical strands within the literature on democratization, in order to place the economic theory by Acemoglu and Robinson

[14] In the subsequent chapters I use the terms economic inequality, income inequality and inequality interchangeably. Common for all is that they always point back to economic inequality.

(2000*b*, 2006) in its theoretical context. I show how this theory incorporates elements from all of the other theoretical strands into one integrated framework. Most similar is perhaps the "transitions from below"-approach, which suggests the role of the public masses as an important determinant of democratic transitions. This view parallels Acemoglu and Robinson (2000*b*, 2006), whose theory implicitly assumes that events of popular mobilization and collective action precede democratization. Towards the end of the chapter I briefly discuss the collective action problem, before I show why economic hardship by itself does not necessarily cause popular mobilization. Lastly, I suggest that economic grievances might lead to popular mobilization if they are spurred by some kind of "shock" prompting individuals to gather in collective action.

In chapter 3 I present the theoretical framework. I start off by presenting the theory of Acemoglu and Robinson (2000*b*, 2006) in greater detail, before I deduce two hypotheses directly related to their claims. Thereafter I argue that the proposed relationship may not be as straight-forward as assumed by the theory, and that higher levels of inequality may have a conditional effect on the probability of democratization. I then present three conditions which I refer to as collective action facilitating factors, that may prove to be the important "shock" or spark that prompts individuals to overcome their collective action problems and mobilize against the regime. The main aim of this chapter is to deduce a number of falsifiable hypotheses (Popper, 2002) that are to be tested in the empirical chapter.

In chapter 4 the research design is presented, where I argue why a large N-study is seen as the most appropriate method for studying the proposed relationships set forth in chapter 3. I also present the estimation techniques, choice of variables and threats to inferences. Missing observations are a substantial challenge in this thesis, and I explicitly explain how I intend to mitigate problems related to missing values by performing multiple imputation techniques. Although there is some uncertainty related to the estimates derived from multiple imputation, I argue that these uncertainties are less grave than those that would arise if the variables with missing values were to be excluded from the analysis.

In chapter 5 I conduct a series of empirical analyses in order to test the propositions obtained in chapter 3. All of the results indicate that higher levels of inequality do not have any effect on the probability of democratization, even when interacted with economic crisis, regional democratic transitions and events of war. Contrary to what hypothesized, lower levels of inequality seem to be a somewhat stronger predictor of democratizations in periods of economic crisis under the time period of investigation. This finding gives some support to Boix (2003) who argues that low levels of inequality increases the likelihood of democratization. Nevertheless, I interpret these results as a relatively apparent rejection of the theoretical assumptions put forth by Acemoglu and Robinson (2000*b*, 2006).

In chapter 6 I perform a series of robustness analyses, in order to validate the findings from the empirical analysis and to make sure that the findings were not driven by the choice of variables or by some arbitrary features concerning the data. Overall, the main impression is

that the results are quite robust. An interesting finding occurs when I measure inequality as land-inequality: higher levels of inequality in ownership of land is significantly and negatively related to the probability of democratization. Once again, the finding lends some support to Boix (2003). This may also suggests that the relationship between inequality and democratization works through a different set of mechanism than proposed by Acemoglu and Robinson (2000*b*, 2006). At low levels of land-inequality, citizens may desire democracy for other reasons than redistribution. Disenfranchised citizens and rising economic groups may aspire to democratic institutions in order to get legal protections from the state against authoritarian elites' expropriation of their assets and income (Ansell and Samuels, 2010). Democracy then results as a demand for *protection*, rather than a demand for redistribution, as suggested by Acemoglu and Robinson (2000*b*, 2006).

Chapter 7 wraps up the thesis, and I discuss the theoretical implications of the findings and potential weaknesses of the theory under investigation. I suggest some explanations for the findings, explicitly pointing to the potential importance of historical factors. Lastly, I discuss what I regard as the most interesting paths for future research, and suggest how the potential for a conditional effect of inequality on democratization can be studied in the time to come.

Chapter 2

Literature Review

Democratization is a rare event. But when they first do occur, they have huge consequences for the societies in which they materialize. Several pathways to democracy have been proposed in the literature, and Huntington (1991, 37-38) presents as many as twenty-seven different factors he argues have been important in promoting democracy.[1]

This chapter reviews some of the most often proposed pathways and relevant contributions to the democratization literature. The main priority is to place the economic theory by Acemoglu and Robinson (2000*b*, 2006) in its theoretical context. In order to do this, this chapter first presents the main theoretical contributions to the study of democratization, divided into four blocks: (i) the structural approach; (ii) democratization from above; (iii) democratization from below and the main approach constituting this thesis; (iv) the economic approach.[2] I proceed in this order in order to demonstrate that the economic theory of democratization (Boix, 2003; Acemoglu and Robinson, 2000*b*, 2006) incorporate elements from the three above-mentioned approaches into their theoretical framework. Finally, I present the theory of collective action and how it relates to the framework under investigation.

2.1 The structural approach

Theories within the structural approach emphasize structural factors as the main determinant of democratization. Dating back to the seminal works by Lipset (1959) and Moore (1966), Lipset observed a positive correlation between high levels of economic development and democracy, leading him to argue that economic development prompts transitions to democracy. The causal theories of democratization by Lipset and Moore hinges on a large middle class pushing for reform. As elaborated so elegantly by Moore, there will be no democracy without any bourgeois (Moore, 1966, 418). With an expanding middle class, income was distributed more equally which again increased the prospects for democracy. Geddes (1999*b*, 119) asserts that

[1] In a review of the literature on the third wave of democratizations, Shin (1994, 151) supports Huntington and contends that no single factor can be said to be sufficient or necessary for the emergence of democracy.

[2] I follow Teorell (2010, 16-28) who argues that there are four main theoretical traditions in the study of democratization. Teorell refers to the four approaches as the structural approach, the strategic approach, the social-forces approach and the economic approach. As explained in more detail, the economic approach draws on insights from all of the former three approaches, perhaps mostly from the social-forces approach, as an inherent causal presumption in the economic theories is that democratization is driven from below.

one can be quite certain about a positive relationship between high levels of economic development and democracy, although we don't know exactly why. Also Barsh (1992) proclaims that development and democracy are somehow causally linked, but that the real issue of interest is in which way the arrow of causation points: Is democracy a prerequisite for development, or a product of a certain level of development?

Ever since these observations by Lipset and Moore, the relationship between economic development and democracy has been a crux in the democratization debate (see Bollen, 1979; Diamond, 1992; Przeworski and Limongi, 1997; Przeworski et al., 2000; Boix and Stokes, 2003; Hadenius and Teorell, 2005; Inglehart and Welzel, 2006).[3] Despite the popularity, the modernization approach and the link between economic development and democratization has been scrutinized and criticized in recent years (Przeworski, Alvarez, Cheibub and Limongi, 1996; Przeworski and Limongi, 1997; Przeworski et al., 2000). Przeworski and Limongi (1997) finds that the relationship between income and democracy is a result of democracies becoming more stable when they reach a certain level of economic development, and not that countries are more likely to democratize when they become richer, as proposed by modernization theorists. Also, in their extensive work on democracy and development, Przeworski et al. (2000, 273) find that democracies, when first established, have higher chances of surviving as income per capita increases. These findings are contested however, and their claims have later been rejected (see Hadenius and Teorell, 2005; Boix and Stokes, 2003). Boix and Stokes (2003) argue that autocracies may still undergo democratic transitions under increased economic development, but at lower levels of economic development than hypothesized by Przeworski et al.[4] Also Acemoglu et al. (2008) maintain that the relationship between income and democracy is spurious, as they find that the effect between income and democracy disappears when they control for country-specific factors that affect both income and democracy. The track the real causes of democratization back to the times of colonization, where the institutional structures put up by colonizers at certain "formative phases" are said to explain why some countries followed a path towards increased economic development and democracy.

The triggers of democratization is perceived to be a result of changes in social or economic structures, beyond the reach of human agents. Teorell (2010, 18) conveys the process to be largely mechanical: a structural shift in the environment triggers a change in the political regime. However, the behavior of collective actors and especially the middle class played a key role in the modernization theories of Lipset (1959) and Moore (1966). Similarly, in their studies on the democratizing effects of mass political culture, (Inglehart, 1997; Welzel, Inglehart and Klingemann, 2003; Inglehart and Welzel, 2006) argue that mass attitudes and democratic values affects democratization through the causal mechanism of collective action. But in terms of their explanatory power, the role of human agency is still "black boxed" and questions on how, why

[3]For instance, Barro (1999) finds empirical support for Lipset's modernization hypothesis, where primary schooling and GDP per capita are seen as positive determinants of democracy in a sample of countries in the period 1960 to 1995.

[4]More precisely, Boix and Stokes (2003) argue that economic development may induce dictatorships to democratize below the threshold $4000.

and which social actors actually produce the specific outcomes, are left somehow vague (see Teorell, 2010). Hence, one could argue for the importance of shifting the focus from "causes" to "causers" of democratization (Huntington, 1991, 107). This assumption contrasts with theories on democratization emphasizing elite-led transitions (see O'Donnell and Schmitter, 1986).

2.2 Democratization from above

Lipset, Moore and structural theorists were later criticized for neglecting the "genetic question of how a democracy comes into begin" (Rustow, 1970, 340). According to this approach, structural prerequisites are not seen as the main determinant of democratization. One must rather emphasize the role of human agency and the strategic decision-making among *political elites*. Theorists within this approach are referred to as "universalists" as opposed to the structural oriented "preconditionalists" Berman (2007).

The important role given to human agency traces back to the works of Rustow (1970) and O'Donnell and Schmitter (1986). Rustow argued that one should abandon the search for "functional requisites" for democracy (1970, 361) and rather emphasize the role played by the different actors in society. In addition, it was argued that there was no transitions to democracy whose beginning was not somehow the consequence of divisions within the authoritarian elite (O'Donnell and Schmitter, 1986).[5] Democracy is installed through an elite-driven process from above, only modestly considering the forces from "below" (O'Donnell and Schmitter, 1986, 55). This top-down approach to democratization contrasts exceedingly with the bottom-up approach held by the economic theories, whose agency-focus is on the democratizing effect of the popular masses rather than intra-elite divisions. Divisions and bargaining between elite "hardliners" and "softliners" is seen as the main determinant for the next institutional outcome (Di Palma, 1990; O'Donnell and Schmitter, 1986; Karl and Schmitter, 1991; Przeworski, 1991).

This "no-preconditions view" as put forth by Rustow (1970), was by many held as a liberating view as the installment of democracy was perceived as something anyone can do (Carothers, 2002, 8). This strategic approach have also been referred to as a transition paradigm(Carothers, 2002) as democratization is presumed to occur through different "phases". The key part is played by different actors and especially strategic decision making among political elites, without any emphasis on structural preconditions in the initial phases. As explained in the previous section, this view have acquired empirical support (Przeworski et al., 2000) as structural preconditions such as economic development do not seem to affect the probability for countries to democratic transitions. Also, in one of the most recent contributions to the literature on democratization, Teorell (2010) finds that splits between elite-actors seems to play a key role as a short-term effect on democratization, from 1972 to 2006.

[5]Furthermore, Geddes (2003, 2006, N.d.) argues that divisions within the ruling elite are the main danger to dictators, especially from the military. Others again have asserted that the main threat to the autocratic rule come from members of the ruling party or from the coalition (Magaloni, 2008; Guriev and Sonin, 2009; Boix and Svolik, 2010).

Viewed from the perspective of the economic approach, a narrow focus on intra-elite negotiations do not suffice to explain why countries undergo democratic transitions. Carothers (2002, 17) maintains that agency-oriented scholars should shift their focus away from political elites to the importance of "underlying economic, social, and institutional conditions and legacies". Also, Schock (2005, xviii) proclaims that the literature on democratization focusing solely on intra-elite divisions are somehow problematic as "this leaves a tremendous gap in our understanding of the processes of mass political contention that almost always precede democratization". These two objections gain empirical support from studies showing that decisions made by political elites to a large extent are influenced by the behavior of the masses (see Adler and Webster, 1995; Bermeo, 1997; Bunce, 2000; Fishman, 1990; Collier and Hoeffler, 1999; Collier and Mahoney, 1997; Bratton and van de Walle, 1992, 1997; Tucker, 2007). Bunce (2000) describes the transitions to democracy in Poland and Spain and the critical role played by incumbents and other leaders through negotiations. However, the willingness of the elites to undertake negotiations were strongly influenced by the behavior of the masses (2000, 708). The democratic transition in Spain in the late 1970s is often held up as the a model of a peaceful and elite-initiated transition (e.g. Karl, 1990; Di Palma, 1990; Linz and Stepan, 1996). However, although elite pacts certainly were key to understanding the process towards democracy, these pacts originated under circumstances of widespread violence and unceasing mobilization (see Bermeo, 1997, 309). For instance, an industrial strife in the late 1960s and early 1970s resulted in mass arresting of union workers and ordinary workers (Maravall, 1978, 73) and well into the 1970s workers' protests were responded to with arrests and beatings (McAdam, Tarrow and Tilly, 2001, 172). Other research have also suggested that popular mobilization in general may foster democratization through protests that weaken the legitimacy of the incumbents, and thereby provoke instability by generating divisions within the sitting elite (Collier and Mahoney, 1997; Rivera and Gleditsch, 2011).

Moreover, the proponents of the agency-oriented approach never really address the causes of splits within the autocratic regime and what factors determine their preferences and beliefs (Teorell, 2010).[6] Contrary to all of these assumptions, others have maintained the important force from below.

2.3 Democratization from below

As opposed to the "ephemeral" role given to elite actors in the strategic approach (O'Donnell and Schmitter, 1986, 55), scholars have emphasized the importance of social classes and collective actors in the process of democratization (Bermeo, 1997; Bratton and van de Walle, 1992, 1997; Collier and Mahoney, 1997; Tarrow, 1995; Wood, 2001). These theorists are also agency-oriented, but rather recognizing the transformative power of political action by the masses. Barrington Moore's famous dictum "[n]o bourgeois, no democracy" (1966, 418) affirms the

[6]The strategic approach have also been criticized for verging on a tautology, as their explanation of democratization is seen as a result of the process leading towards democratization. This have led scholars to proclaim that the biggest problem with the strategic approach is theoretical and cannot just be solved by developing a better research design (see e.g. Rueschemeyer, Stephens and Stephens, 1992).

class-based focus and the importance of the middle-class as a democratic force. As opposed to the somewhat "black boxed" structural theories however, and their lack of interest in social actor-incentives, the actors within this approach are largely driven by material interests. As put forward by Bellin (2000), "among the panoply of interests that animate people politically,*material* interests trump all others" and collective actors are most likely to advocate democracy when "their economic interests put them at odds with the authoritarian state" (2000, 177).[7] Democracy thus originates from below through a process of power struggle among social forces with competing economic interests. Opposing Moore's emphasis on the democratizing power of the middle class, Rueschemeyer, Stephens and Stephens (1992) saw the importance of the working class as the true championing for democracy. Western countries who undertook massive industrialization and capitalist development, saw the emergence of powerful working classes and because of their political action, democracy was introduced. By including the actors and assumptions of their interests and motivations, this approach fills the "black box" of structural theories and contrasts with the elite-dominated view held by proponents of the strategic approach.

The general validity of this approach has been criticized for a lack of empirical testing, because its empirical foundation is dominated by case-studies (Teorell, 2010). They also fail to specify under which conditions the different classes will support democracy. Also, the respective literatures on collective action and democratization have been said to pay little attention to each-others discoveries (McAdam, Tarrow and Tilly, 2001, 9).

2.4 The economic approach

In this section I present the approach of inquiry; the economic approach. As noted at the outset of this chapter, this approach incorporates elements from the three above-mentioned approaches into one framework: The uneven distribution of wealth and level of income inequality (structural condition) relates to individual preferences and induces popular mobilization against the elite (forces from below) which again forces the elites to credible commit to future redistribution by installing democratic institutions and provide for free and fair elections (strategic interaction by elites).[8] Before I present the two main theories within the economic approach, I take a brief look at the broader literature on inequality and democratization.

Theories linking inequality to democracy have deep historical roots (see e.g. Aristotle, 2000). Dating at least back to de Tocqueville, one widely held assertion is that "extreme disparities re-

[7] My emphasis

[8] The theories of Boix (2003) and Acemoglu and Robinson (2000*b*, 2006) satisfy Jon Elster's (1983) three criteria for counting as a general (sociological) theory: (i) the explanation of individual action in terms of individual desires and beliefs; (ii) the explanation of macro-states in terms of individual actions; and (iii) the explanation of desires and beliefs in terms of macro-states. Thus, when transferred to the theoretical assumptions of the economic approach on democratization, this would be as follows: (i) the actions of individuals in form of social unrest constituting a revolutionary threat, is explained in terms of individuals' desire for democracy, as democracies redistribute more than autocracies; (ii) the democratic outcome is explained as a result of individual actions, both the social unrest constituting a revolutionary threat but also the actions of the elites who accepts democracy when the revolutionary threat is sufficiently high; (iii) individuals desire for their material well-being, equality and redistribution, most likely to be achieved in a democracy.

duce the sense of community and legitimacy upon which democracy is supposed to rest (Bollen and Jackman, 1985, 440). Lipset (1959) argues that societies with high levels of social conflict generated by inequality are less suited for democracy. Also Dahl (1971, 81-82) argues that when economic resources such as income, status and wealth are transformed into political resources, this increase the probability of being an autocratic regime. Extreme income inequality creates dissatisfied masses and discontent, and the elites have no other alternative than to resort to regime stability using repression.[9]

2.4.1 Theoretical contributions

The most recent attempts to explain democratization using political-economic tools, come from Boix (2003; 2003) and Acemoglu and Robinson (2000*b*; 2000*a*; 2001; 2006). Both theories uphold key causal claims including inequality, distributive conflict and strategic interactions between elites and opposition over the character of political institutions. Moreover, they both constitute their theories on the 'median-voter model' (Meltzer and Richards, 1981): In democracies, policy is determined by the relatively poor median voter who prefers more redistribution and higher taxes than relatively rich voters. On the contrary, in non-democratic societies where income is highly skewed towards the rich, wealthy elites in general prefer lower taxes and low redistribution, thereby accruing more wealth to themselves.[10] Hence, different social groups have divergent preferences over preferred policy. Income inequality is believed to be the crucial factor that causes individuals to take action and fight for their preferred regime. Despite these similarities however, the two theories differ in their predictions of what levels of inequality elicit the highest probability of democratization.

2.4.2 Boix' framework

Boix (2003) presents a game-theoretic argument of why *low* inequality fosters democratization: In egalitarian non-democracies, the rich have less to loose if the median-voter sets the tax rate. The rich are thus more likely to accept the poor's demands for democracy without making a fight. Declining levels of inequality also reduce the redistributive demand from the low-income voters, and high-income voters are then more likely to support democracy (Boix, 2011, 814).[11] Boix' (2003) theoretical argument implies a non-linear relationship where actors have asymmetric information related to whether the rich are able to suppress the poor. Although Boix maintains that unequal distributions of wealth increase the redistributive demands of the poor, high inequality is believed to hinder democratization: "[A]s the potential level of transfers becomes larger, the authoritarian inclinations of the wealthy increase and the probabilities of democratization and democratic stability decline steadily" (Boix, 2003, 37). This view thus corresponds with the already mentioned assertions by Lipset (1959) and Dahl (1971),

[9] Secondly, economic inequalities can undermine democracies through frustration and resentment. Democracies are especially vulnerable, as economic disparities may undermine the legitimacy and sense of community a democracy is supposed to rest on.

[10] The intuition behind the median-voter model is generally shared by the mass public as people do expect that democracy breeds social and economic equality (Przeworski, 2006, 4).

[11] Besides inequality, Boix also maintains the anti-democratic force of asset specificity. When elites control capital and assets are immobile such as land or oil, elites have more reason to fear democratization due to its taxing capabilities. If on the contrary assets are mobile and less specific, elites have less reason to fear taxation.

all maintaining that higher inequality impedes democratization.

$$Low\ inequality \Rightarrow Democracy$$

2.4.3 A&R's framework

The other approach is also the theory under investigation and is held by Acemoglu and Robinson (2000*b*, 2006). In contrast to Boix, Acemoglu and Robinson (2000*b*, 2006) argue that democratization is not likely at low levels of inequality as citizens are expected to be relatively well-off in highly equal societies. They should therefore have few incentives to fight for democratization (see also Ziblatt, 2006; Houle, 2009). A requirement for democratization is therefore a sufficiently unequal society where mass uprisings by the citizens pose a revolutionary threat (2006, 190). In the next chapter I probe deeper into the arguments of Acemoglu and Robinson, but first an important distinction must be made. The main argument in their article from 2000 is that *high* levels of inequality increase the probability of democratization. This argument is based on the observation that several countries democratized in Western Europe in the nineteenth century, and they link inequality and democratization to the Kuznets curve. Kuznet's (1959) main conjecture was that inequality took an inverted U-shape when countries experienced increased GDP per capita, due to the structural shifts in the economy from the agricultural to the industrial sector (Kuznets, 1959). Increased inequality was associated with industrialization and the shift from agricultural to industrial based economy, which again increased the risk of social unrest and in the end a democratic outcome. In *The Economic Origins of Dictatorship and Democracy* from 2006 however, the main argument is that democratization is most likely at *moderate* levels of inequality: At high levels of inequality elites prefer to repress a revolutionary threat in order to avoid the costs of redistribution under democracy. Citizens prefer democracy to non-democracy because democracies are more redistributive, and this preference only becomes stronger as the level of inequality rises. But, elites favor *non*-democracy for the exact same reasons: As democracies are more redistributive, the elites expect more redistribution under higher levels of inequality. Thus, they have strong incentives to repress the citizens in order to avoid a democratization (Acemoglu and Robinson, 2006, 190).

What these two arguments have in common is that democratization occurs because of a *demand* by the citizens. This contrasts with Boix (2003) where democracy instead is *supplied* by the elites. Acemoglu and Robinson (2006) incorporate this supply-based argument into their framework when they contend that democracy is not likely at high levels of inequality. However, their general argument in both (2000*b*) and (2006) is that democracy mainly is demanded by economically deprived citizens who desire to be politically included in a democracy and because of its redistributive mechanisms. I therefore refer to both of these works in conjunction throughout the thesis.

2.4.4 Empirical contributions

As can be seen from Table 2.1, empirical inquiries on inequality and democratization are also mixed. Bollen and Jackman (1985, 1995) find no robust relationship between income inequality

Table 2.1: Empirical inquiries on inequality and democratization

Studies	**Effect on democratization**	**Data**
Bollen and Jackman (1985)	No effect (income)	Income quintiles from the World Bank
Muller (1988)	No effect (income)	Gini from World Bank
Midlarsky (1992)	Positive effect (land) No effect (income)	Land Gini from World Bank Income quintiles from World Bank
Muller (1995)	Negative effect	Gini from World Bank
Burkhart (1997)	Inverted U (income)	Income quintiles from World Bank
Barro (1999)	Negative effect (income)	Gini from Deininger and Squire (1996)
Przeworski et al.(2000)	No effect (income) Positive effect (Labor share)	Gini from Deininger and Squire (1996) Labor share from Deininger and Squire (1996)
Boix (2003)	Negative effect (income) Negative effect (land)	Gini from Deininger and Squire (1996) % Family farms from Vanhanen (1997)
Papaioannou and Siourounis (2004)	No effect (income)	Gini from the World Bank
Houle (2009)	No effect (income)	Capital share from UNIDO (2011)
Ansell and Samuels (2010)	Positive effect (income) Negative effect (land)	Gini from Bourguignon and Morrisson (2002) % Family farms from Vanhanen (2003)
Teorell (2010)	No effect (income)	Gini from Galbraith and Kum (2003)
Alemán and Young (2011)	No effect (income)	Gini from Galbraith and Kum (2003)
Haggard and Kaufman (2012)	No distinguishable effect	Capital Share (UNIDO, 2011) Gini from Galbraith and Kum (2003) % Family farms from Vanhanen (2003)

Note: The table is a refined version of the table found in Houle (2009, 599-600).

and democratization, and Muller (1988, 1995) finds that high levels of inequality reduces the probability of democratization.[12] Also recent empirical studies find no robust relationship between inequality and democratization, but finds instead that democracies with sufficiently low levels of inequality are almost immune to breakdowns Houle (2009).[13] Also Greskovits (1997) argues that democracies in Eastern Europe have been more stable than democracies in Latin America due to their low levels of inequality, and Karl (2000) explains the democratic stability of Costa Rica and Uruguay due to their high levels of equality compared to the other democracies in the region.

Some of the studies find indications of a relationship between inequality and democratization. Burkhart (1997) finds an inverted U-shape relationship between income distribution and democracy, when studying levels of democracy and not transitions to democracy. Przeworski

[12]Muller (1988) suggests that high income inequality has a negative impact on democracy since it reduces the probability of democratic inauguration. He finds no support for this hypothesis however. However, Muller finds that high levels of inequality causes democratic breakdown: countries that were democratic in 1961 with extreme inequalities in distribution of income during 1960 - 1980 all experienced a breakdown in democracy (1988, 66), while egalitarian democracies experienced no breakdowns.

[13]However, see Knutsen (2012) who argues that the proposed effects found by Houle is highly sensitive on how democracy is measured.

et al. (2000, 117) finds no effect of inequality on the durability of dictatorships, when inequality is measured by the Gini index. However, when inequality is measured as labor share of the value added in manufacturing, the effect of inequality on democratization seems contingent on the level of development: Dictatorships in countries with income below $4000 seems especially vulnerable to breakdown under high levels of inequality. Similar to the findings of Przeworski et al. (2000), Ansell and Samuels (2010) argue that how inequality is measured is critical for what relationship is found. The authors find that low inequality, defined as land-inequality, increases the probability of democratization. Equal land-distribution means a greater number of "freeholders who fear both taxation and expropriation of their land or money by an autocratic elite". These freeholders therefore prefer a more representative system that can secure their property rights. They also find, in contrast to Boix (2003), that higher levels of income inequality increases the probability of democratization, although the effect is stronger on transitions from autocracies to partial democracies. Dutt and Mitra (2008) utilize a cross-sectional design and find that unequal societies more often fluctuate between autocracies and democracies than more equal societies because inequality is related to higher levels of political instability. Moreover, in a comprehensive study of the determinants of democracy, Teorell (2010) finds no relationship between inequality and democratic transitions. In a recent study utilizing a "medium N"-dataset, Haggard and Kaufman (2012) finds that regime transitions occur across cases with different levels of inequality and also that a large amount of the transitions occur when redistributive conflict is not present. They argue that factors such as political opportunities, resources and cultural framing are important, thus arguing against a narrow focus on structural conditions such as inequality.[14]

2.5 Collective action

Inequality seems to relate to democratization differently between distinct models utilized in previous research (Knutsen, 2012). In the remainder of this chapter I will first briefly discuss the collective action problem before I relate it to the theoretical assumptions by Acemoglu and Robinson (2000*b*, 2006). The main undertaking is to illustrate how economic grievances *alone* may not be sufficient to trigger individuals to gather in popular mobilization. What is needed, as indicated in the puzzle from the last chapter, is a "shock" or spark that creates the necessary window of opportunity for economically deprived citizens to gather in collective action and mobilize against the regime.

The theory of collective action is regarded as one of the most central subjects of political science (Ostrom, 1998) and the literature on collective action gives detailed explanations of why collective action is difficult to obtain (e.g. Olson, 1965; Tullock, 1971; Lichbach, 1995). Drawing on the works of theorists such as Olson (1965), rational choice theories have been successful in explaining the rarity of popular uprisings. When the costs of engaging in revolutionary activities outweighs the potential benefits, rational and self-interested individuals will abstain

[14]Similar to Ansell and Samuels (2010), Haggard and Kaufman (2012) apply different measures of inequality, measured as capital share, GINI and land inequality. They find that transitions to democracy occurred at all levels of inequality, irrespective of which inequality measure was used.

from involvement and rather hope that others will sacrifice what is necessary to secure regime change.[15] Because each individual contribution is bound to be minute and can in worst cases involve injuries and deaths (Kyi, 1992; Shepsle and Boncheck, 1997) "free riding" thus becomes rational, in the sense that a democratic outcome is a collective good – something one can enjoy whether one has participated or not.[16]

2.5.1 Economic grievances and relative deprivation

The theoretical contribution to the democratization literature by Acemoglu and Robinson (2000*b*, 2006) have undoubtedly raised the analytical bar, by providing a stringent and coherent theoretical account for how inequality relates to democratic transitions. However, some of their theoretical assumptions may reflect a too simplified picture of real-world events. The main argument in this thesis is that the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006) is too obsessed with inequality-based grievances and thereby fail to consider that economic grievances not necessarily *by itself* causes collective action and public unrest (e.g. Muller, 1985; Tilly, 1978). Implicit in the economic theory by Acemoglu and Robinson (2000*b*, 2006) is the assumption that citizens' inclination to mobilize against the regime increase monotonically with the level of economic grievances: when inequality increases, so does the pressure for regime change.

This line of reasoning – that economic deprivation causes individual action – follows the grievance-based theories provided by Ted Gurr (1970). In *Why Men Rebel*, Gurr (1970) argues that economic and social inequalities increases the risk of violent collective action through a process of frustrated expectations. Gurr's theoretical argument rests on the psychological phenomenon known as *relative deprivation*, which can be defined as

> "[...] [the] perceived discrepancy between men's value expectations and their value capabilities. Value expectations are the goods and conditions of life to which people believe they are rightfully entitled. Value capabilities are the goods and conditions they think they are capable of attaining or maintaining, given the social means available to them" (Gurr, 1970, 13).

This argument is closely associated with the arguments of Acemoglu and Robinson (2000*b*, 2006): The poor majority of individuals in a non-democracy believe they are rightfully entitled to be included in political decision making. These individuals have certain expectations about their future economic situation in a democracy relative to their current situation in a non-democracy. Runciman (1966) defines relative deprivation by arguing that person A is relatively deprived when (i) he does not have x, (ii) he sees other persons, which may include himself at some anticipated point in the future, as having x, (iii) he wants x, and (iv) he sees the

[15] Imagine a situation where individuals choose their actions in an interdependent situation. Following rational choice theory, each individual maximizes their short-term benefit, thereby generating a lower joint outcome than could have been achieved. This situation have been referred to as a "social dilemma" Ostrom (2007, 186). This *dilemma* exists because one outcome could have produced an outcome with higher returns for all individuals, but since individuals are behaving as rational actors that one outcome is not achieved. This is the problem of collective action.

[16] Olson (1965, 14) defines a public good as "any good such that, if any person [...] in a group [...] consumes it, it cannot feasibly be withheld from the others in that group"

achievement of x as *fully realizable*. The complication with this definition however, is the last notion of what is fully realizable; people may only desire what they actually believe they can obtain. As questioned by Boudon (1986, 173), "what rules determine the things that one can or cannot obtain"? Although individuals prefer democracy to non-democracy, the important question is whether these individuals actually believe that democracy can be obtained. More precisely, whether these individuals actually believe they have the capability and capacity to mobilize in collective action and challenge the incumbent elites. Although individuals have intense grievances, they may only pose a negligible challenge to the existing regime (see Alemán and Yang, 2011). In the following section I show that the understanding of individuals' capacity to overcome their collective action problem, is the major deficiency in the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006).

2.5.2 Incentives and capacities to act

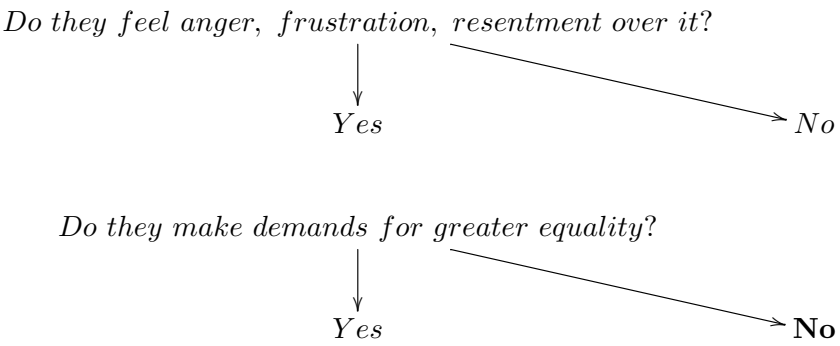
A core causal assumption in the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006) is that higher inequality creates grievances and manifests in collective protests from the citizens against the elites. Implicit in this argument is that citizens both have *incentives* to act and the *capacity* to overcome their collective problems. This distinction is of utter importance. The theory explains detailed about the *incentives* of citizens in order to organize in collective action and demand democratization. The point of departure traces back to the seminal work by Meltzer and Richards (1981). The Meltzer-Richard model posits that when the mean income exceeds the median income in a society, the distribution of income is skewed towards the rich. This implies that the majority of citizens ends up in the lower or middle range of the income tier. In countries with very skewed income distribution and thus high inequality, the poor have strong incentives to appeal for more redistribution and a more generous tax system. Democracy then becomes a way to "prevent significant extraction of social surplus by the leader" (Olson, 1993, 574). In short, citizens have incentives to engage in collective actions and popular protests against the elites as democracies redistribute more than autocracies.

However, the theory of Acemoglu and Robinson (2000*b*, 2006) is much vaguer on the actual *capacity* of citizens to overcome their collective action problems: "Because an effective threat of revolution is the spark that ignites the democratization process, greater inter-group inequality should be associated with a greater likelihood of democratization" (Acemoglu and Robinson, 2006, 36). I argue that the effective threat of revolution *per se* is not necessarily what triggers the democratization process, as maintained by Acemoglu and Robinson (2006). Following the reasoning of Kuran (1989), I claim that the threat of revolution itself requires some form of trigger in order to turn into a truly substantive threat, powerful enough to provoke change. Also, the empirical literature on inequality and democratization gives reason to question whether incentives *ipso facto* are enough for citizens to engage in collective action. As maintained by Rustow (1970, 346), not all causal links run from people's attitudes to their actions. Major public discontent against the regime may exist but appear largely hidden from the surface, as individuals are not aware of each others preferences.

Related to the importance of capacity, Dahl (1971) provides some important insights regarding collective action problems, when he discusses responses by disadvantaged groups in societies with high inequality. Gurr contends that "men are not likely to be mobilized by new, revolutionary hopes unless they feel sharply deprived (1970, 121) and that "discontent arising from the perception of relative deprivation is the basic, instigating condition for participants in collective action" (Gurr, 1970, 12). However, individuals who feel anger, frustration and resentment over inequality do not necessarily make demands for greater equality, although they feel sharply deprived:

> To the dismay and astonishment of activists who struggle to rouse a disadvantaged group to oppose its lot, the human psyche does not invariably impel those who are deprived of equality to seek it (Dahl, 1971, 95)

Although not explicitly stated by Dahl, this relates to the collective action problems individuals face in situations where they *want* to challenge the regime but, for some reason, do not turn their resentments into actual behavior. As can be seen from in the figure, Dahl (1971, 102) suggests that the connections from resentment to action may break down if frustrations instead turn into apathy, despair or hopelessness.[17]



Considering Dahl's figure, although individuals feel anger and frustration due to their economic grievances, they may not be able to make demands for greater equality. If this is the case, there will be no collective mobilization against the regime despite widespread economic grievances and high levels of inequality. Yet, history has shown that revolutions and mass uprisings do happen, and rational choice theories have been rather unsuccessful at predicting when mass upheavals actually occur (Kuran, 1991*a*; Centola, 2013).

2.5.3 Sparks and prairie fires

As I have argued in the previous sections, individuals do not necessarily become active when they are the most deprived. This can be illustrated by two examples taken from Lohmann (1994) and Magaloni (2006). During the 1970s and 1980s in East Germany, poor economic performance and extensive regime repression led to massive anti-regime sentiments. However, none of these sentiments did manifest in collective action and anti-regime uprisings. They only remained as sentiments. One reason for this was that the official records of public discontent

[17] In Dahl's original figure, three other questions precede the questions displayed in this figure. These questions are: (i) Do members of the disadvantaged group perceive it? (ii) Do they judge it to be relevant to their own conditions? (iii) Do they appraise it as illegitimate? (Dahl, 1971, 102). However, I have focused on his two last questions, as these questions are the mostly related to the questions of inquiry.

never were made public and instead kept classified and held inaccessible to anyone but high-level functionaries. This created an impression of a German people that lacked motivation and instead just kept silent (1994, 43-44). No one knew about each others anti-regime sentiments and collective action therefore remained absent.[18] Likewise, in a study of Mexico, Magaloni (2006) found that supporters of the Institutional Revolutionary Party (PRI) were given access to material benefits, such as medicines and scholarships for children, while opponents of the party were consequently refused. If party-supporters chose to defect, this implied what Magaloni refers to as a costly ideological investment; an investment the poor most often could not afford. Thus, the real anti-government sentiment in Mexico was hard to unravel, because voting for the PRI could be a result of fear of punishment.

Deprived citizens first become active when a window of opportunities opens up (Lohmann, 1994, 46). Tarrow (1994) argues that once a situation of collective action is triggered by some event, information will only cascade outward and influence other segments of the society. As more precisely noted by Hill and Rotchild:

> As protests and riots erupt among groups that have long histories of conflict, they stimulate other citizens in similar circumstances to reflect more often on their own background of grievances and mass action (Hill and Rothchild, 1992, 193)

Thus, under higher levels of inequality, one can assume that the overall grievances within a society will manifest in action when triggered by some external event. Related to this, Kuran (1989) explains why revolutions that seemed obvious in hindsight were almost impossible to predict. This can occur because individuals have private political preferences without necessarily espousing them in public: "A privately hated regime may enjoy widespread public support because of people's reluctance to take the lead in publicizing their opposition" (Kuran, 1989). Thus, the regime may seem unshakable although it would dissolve at the most minor shock. As noted during the Eastern European revolution, "seemingly unshakable regimes saw public sentiment turn against them with astonishing rapidity, as tiny oppositions mushroomed into crushing majorities" (Kuran, 1991*b*, 13). Furthermore, Lohmann (1993, 1994) argues that popular uprisings and mass protest activities may have a signaling effect through an "informational cascade": In a study of the East German Revolution, Lohmann (1994) argues that a series of demonstrations that took place in Leipzig in 1989, served as a signal for the mass mobilizations in other parts of the DDR. What these insightful accounts have demonstrated is that a "civil revolution is possible even when citizens pay a cost when they participate in unsuccessful protests and when they face incomplete information" (Kricheli, Livne and Magaloni, 2011, 5).

I follow Kuran (1989, 1991*b*,*a*) and Lohmann (1993, 1994) and argue that economic grievances, perhaps stemming from high inequality, and anti-regime sentiments alone, not necessarily generate popular uprisings against the regime. In order to understand when it does, one need to "identity the conditions under which individuals will display antagonism towed the regime

[18] As further noted by Lohmann (1994, 50), "[i]n their daily interactions with the regime, some people have positive experiences, other have negative ones. Since these are private experiences, it is possible that the status quo regime is maintained by a sufficiently large number of people who are imperfectly informed, whereas it would collapse if some or all of the dispersed negative information were to become publicly known".

under which they live" (Kuran, 1991*b*, 16). I localize three such conditions, of which I expect prompt citizens to overcome their collective action problems, and thereby make the economic grievances come to the surface and manifest in popular mobilization against the regime. These three conditions are: Economic crises, regional democratic transitions and events of war. As argued by Kuran (1989, 60), "just as a normally ephemeral spark can, given the right combination of physical conditions, touch off a wildfire, an event that would normally lead to mere grumbling can, given the right combinations of social conditions, touch off a revolutionary uprising". I treat the three conditions – economic crisis, regional democratic transitions and events of war – as the sparks that given the rich conditions – high levels of inequality – causes the revolutionary prairie fire, where citizens mobilize against the regime. These three conditions is more thoroughly elaborated upon in the next chapter.

2.6 Summary

In this chapter I have placed the economic theories of democratization Boix (2003); Acemoglu and Robinson (2000*b*, 2006) in their theoretical context. I started off with a short introduction to the main theories of democratization, following the schematic survey in Teorell (2010). The rationale behind presenting the alternative theories first, was to show the theoretical virtue of the economic approach, as it incorporates elements from the three main theoretical contributions into one theoretical framework.

I then presented the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006) which constitutes the building block in this thesis. Like Lipset and other structuralists, the economic theory maintains that income is an important ingredient for democracies to occur. However, rather than focusing on the level of income, it emphasizes the importance of distribution of income. The economic theory share a characteristic with the "bottom-up" theories associated with social forces tradition, by arguing that the disenfranchised popular masses are the causal link that ties inequality to democratization.

Towards the end of the chapter, I briefly discussed the collective action problem and how it relates to the theory of democratization presented in Acemoglu and Robinson (2000*b*, 2006). I particularly underscored that economic grievances alone may not by itself prompt individuals to engage in collective. The next chapter provides a more detailed and nuanced assessment of the theory of Acemoglu and Robinson from which I deduce a number of hypotheses. In order to provide a more refined test of the empirical implications of the theory, elements from the "democratization from below"-literature is also resumed in the next chapter, as this approach reveals several insights regarding the connection between collective action and democratization. The structural approach and the agency-oriented approach are returned to in chapter 4, where I discuss the choice of control variables in the empirical models.

Chapter 3

Theoretical framework

Social science seeks to evaluate and develop theories (King, Keohane and Verba, 1995, 475). In this chapter I present the theoretical framework under investigation, which has the theory of Acemoglu and Robinson (2000*b*, 2006) as a backdrop. As proposed by Acemoglu and Robinson (2006), that "others can use parts of [the theoretical framework] to address new questions and generate other comparative statics (...)", I intend follow their suggestion. Following the propositions of King, Keohane and Verba (1994, 29), one should ask of any theory: what are the observable implications of the theory? The observable implications of the theory by Acemoglu and Robinson (2000*b*, 2006) is that higher levels of inequality increases the probability of democratization through a process of collective action where people are able to organize against the regime and pose a significant revolutionary threat to the regime. At first glance, theories of economic inequality and democratization appear prone to rather straightforward tests: Is there any relationship between the level of inequality and transitions to democracy?

In order to better evaluate the causal claim that inequality affects democratization through a process of collective behavior, I emphasize the interaction between inequality and unpredictable short-term events, that help individuals to solve their collective action problems. I consider my findings successful if I am able to identify under which situations inequality has an effect on the probability of transitioning from an autocracy to a democracy.

3.1 The framework under investigation

In this section, I address the framework under investigation. The theoretical framework of Acemoglu and Robinson emphasize the importance of political institutions. Rational actors care about their future, and political institutions are durable and have the capacity to influence political action in the future. Under high levels of inequality, citizens in non-democracies desire democracy do to its redistributive mechanisms and because they can affect their own political and economic situation. A distinguishable feature with democracies and non-democracies is that the majority of citizens have political power in a democracy, as opposed to a non-democracy: "[P]olitical power is the capacity of a group to obtain its favorite policies against the resistance of other groups" (Acemoglu and Robinson, 2006, 21). In non-democracies, elites sets the rules of the game and have *de jure* political power. But since citizens are in a majority, and for the

most part have little influence over policy, they have de-facto power: they can challenge the regime if they feel their interests are not taken care of (Acemoglu and Robinson, 2006, 25). Since rational individuals care about their economic and political situation in the future, all groups in society would like to ensure themselves greater political power in the future. Political institutions can influence this allocation of political power because institutions are durable and often difficult to reverse when first established. A democracy then, enables the citizens to be more powerful in the future relative to under a non-democratic regime, by transferring power to the majority of the citizens (Acemoglu and Robinson, 2006, 174).

The arguments so far can be summarized as follows:

$$\textit{Political Power } t \Rightarrow \textit{Political Institutions } t \Rightarrow \textit{Political Institutions } t_{+1} \Rightarrow \textit{De jure Political Power } t_{+1}$$

Democratization then enable groups to increase their political power and influence in the future. But to fully understand the importance of political institutions, recall that de facto political power is *transitory*: Although you have de facto political power today, you may not have it tomorrow: "This transitory nature might result from a variety of economic, social, and political shocks to the system" (Acemoglu and Robinson, 2006, 175). This is at the core of the literature on collective action, and Acemoglu and Robinson (2006) contend that although "a group has solved the collective action problem today does not guarantee that it will manage to solve the problem tomorrow" (2006, 175). An important note is that Acemoglu and Robinson (2006) explicitly asserts that the de facto political power of the citizens "comes from an unusual event, such as a political crisis or the end of a war" (2006, 175).

Thus, the specific events *causing* collective action and provide citizens with de facto political power is added to the model:

$$\textit{Exogenous "Shocks" } t \Rightarrow \textit{Political Power } t \Rightarrow \textit{Political Institutions } t \Rightarrow \textit{Political Institutions } t_{+1} \Rightarrow \textit{De jure Political Power } t_{+1}$$

The final assumption is that democratization happens because the elites decides to "extend the franchise" (see also Acemoglu and Robinson, 2000*b*) and include more voices in the decision-making process. Although non-democratic elites prefer to make concessions – concessions are viewed as better than the cost associated redistribution in a democracy – concessions are not viewed as satisfactory for the citizens. Rational individuals are not only concerned with their situation right now but their economic and political situation in the future. Democratization is seen as more credible than just concessions, because when democratic institutions are first established they are difficult to reverse. Take the massive uprisings in Bahrain in 2011, where protestors demanded equality and political freedom for the Shia-majority of the population. The plan was to take to the streets on February 14th, but already one week before the protests the government decided to make several concessions: increasing social spending and releasing youth prisoners to satisfy the masses (Al Jazeera, 2011). However, protests were initiated on February 14th despite the concessions made by the elite, and only amplified the next months. The popular protests in Bahrain serve as a good example of a situation where political concessions were not

enough to dampen the mobilization of the masses.[1] The elites therefore have to make credible commitments about what future policy will look like, in order for democratization to take place:

> [T]he elites will be forced to democratize to prevent revolution by the disenfranchised. Once established, democracy will create durable changes in the political arena [elections] and these changes will constitute a sufficiently credible commitment to give the citizens power and the policies they want in the future (Acemoglu and Robinson, 2006, 178).

$$Exogenous\ "Shock" \Rightarrow Transitory\ (de\ facto)\ Political\ Power \Rightarrow Elites\ Commit\ to\ Future\ Policies \Rightarrow Introduction\ of\ Democracy \Rightarrow Increased\ Political\ Power\ for\ Citizens$$

However, de-facto power to overthrow the regime means nothing unless you are able to solve your collective action problems. Acemoglu and Robinson (2006) acknowledges the existence of collective action problems and emphasize that citizens must be able to organize in order to achieve democracy. However, they do not conduct any systematic test of this assumption and rather rely on case studies and anecdotal evidence. The validity of the theory thus hinges on the citizens ability to overcome their collective action problems.

3.2 The elementary assumptions

In order to allow for a more stringent discussion, I make three basic assumptions that structures the discussion and analysis, which are in line with those of Acemoglu and Robinson (2006). First, I assume that the world consists of two sets of actors, or more precisely, two sets of groups: the elite and the citizens. The first group is most often associated with the enfranchised elite, holding power and controlling resources and revenues. The second group consists of the citizens, and are more numerous than the first group, but also most often disenfranchised in a dictatorship. Furthermore I expect that all sets of individuals, the elite as well as the citizens, mainly are concerned with their material interests and economic well-being. By making these assertions, I am in conjunction with theory Acemoglu and Robinson (2000*b*, 2006).

Second, I assume that citizens in general prefer democracy to autocracy as "having a democratic system of government in and of itself is an improvement in the quality of life for most citizens" (Teorell, 2010, 141). This assumption extends the supposition that individuals are concerned with their material well-being, hence striving for a democratic outcome as democracies are perceived to be more redistributive than non-democracies. Insights drawn from psychological inquiries also indicates that individuals aspire to satisfy their basic economic needs and material well-being (Maslow, 1988). Low income may also undermine people's sense of well-being; when asked about their highest priority and aspirations, poor people favored a good job and steady income (see Narayan, Belshaw, Calderisi, Sugden et al., 2001). Also, Rodrik (1999) finds that institutions matter for distributive outcomes and that democratic institutions are associated

[1] As such, the argument of Acemoglu and Robinson (2000*b*, 2006) differs somewhat from that of Dahl (1971) who maintained that when citizens make demands for greater equality, a regime may gain their allegiance by answering to some of their demands, but not necessarily all of them, with the main aim of reducing their feelings of relative deprivation (1971, 104)

with higher wages and a larger factor share for labor in manufacturing [2].

In a democracy, citizens have the opportunity to vote and the power to influence the decision-making. One could in principal argue that citizens have a latent desire for democratization in all types of non-democracies, echoing the words of Schmitter and Karl (1991, 75) who states that "[democracy is] the word that resonates in people's minds and spring from their lips as they struggle for freedom and a better way of life [...]". This last argument can be defended with the fact that the number of democratic systems have increased rapidly, and only from 1972 to 1994 the number of democracies increased from 44 to 107 (Shin, 1994, 136).

3.3 The baseline hypotheses

I start off by considering the main assumptions in Acemoglu and Robinson (2006). Acemoglu and Robinson (2006) argue that inequality affects the probability of democratization at intermediate levels of inequality, following an inverse U-shaped curve. At low levels of inequality democratization is seen as *less* likely, as the potential gains of redistribution are small and because the population have few incentives for threatening with revolt. The elite can maintain the regime without fearing the threat of revolution (Houle, 2009, 592). At (extremely) high levels of inequality democratization is also not likely, because the redistribution costs for the elites in a future democracy exceeds the costs of repressing popular uprisings. The costs of introducing a democratic regime are thus viewed as too high under high levels of inequality, as the rich elites have much to lose from more distribution and change in the economic institutions (Acemoglu and Robinson, 2006). At intermediate levels of inequality however, democratization is most likely because disenfranchised citizens can always pose a reliable revolutionary threat, while at the same time the regime does not prefer to repress. This line of arguing corresponds with those of Huntington (1984), who maintains that a central and necessary requirement to bring about a democratic regime is "the absence of extreme inequalities in both wealth and income" (Huntington, 1984, 214)

However, it is not obvious why high levels of inequality should reduce the risk of democratization. High levels of inequality is also likely to increases the cost of repression for autocratic elites to maintain regime stability. Citizens are likely to have more to gain from regime changes in highly unequal societies, thus increasing the level of contestation when the level of inequality intensifies. The costs of maintaining an autocracy are also more likely to be higher when inequality is high, because more repression is required to stave off anti-regime mobilization (Ziblatt, 2006; Papaioannou and Siourounis, 2004). Acemoglu and Robinson (2006) assume that in egalitarian autocracies, maintaing regime stability imposes no cost for the elites. This is mainly because they do not have to use repression against the citizens because citizens have no incentives to demand democracy. The authors then suggest that egalitarian autocracies have low probabilities to undergo a democratic transition. In reality however, it is not obvious

[2] In all of the four specific case studies presented, going from a democracy to an autocracy, Rodrik (1999, 723) finds a significant fall in the factor share of labor. Considering the transitions from autocracy to democracy, six out of the eight case studies showed an increase in the labor share.

that maintaining regime stability in an egalitarian autocracy have no costs (Houle, 2009, 594). Maintaining an autocratic regime always require *some* cost.

Take Egypt from 1976 to 1987 as an example, where the independent variable of choice *capital share* averages on 0.48; a fairly egalitarian society at that time. During this period Egypt is distinguished by a relatively high level of political repression, using data from The Political Terror Scale.[3] Egypt receives a score of 3 out of 5, indicating that "there is extensive political imprisonment, or a recent history of such imprisonment (see Table 5 in Appendix). Execution or other political murders and brutality may be common" (Gibney, Cornett and Wood, 2008). As also can be seen from Table 5, taking the average repression-score in the most egalitarian autocracies in the sample of inquiry, the average repression-rate is at point 3.2. What these numbers suggests is that a significant level of repression is a common denominator among all types of autocracies, whether egalitarian or highly inegalitarian. This support the arguments of Wintrobe (1998) who proclaims that although a benign and good-hearted dictator desires a high level of welfare for its citizens, the regime will always rely on some level of repression.

If even egalitarian autocracies rely on some level of repression, one is certainly inclined to believe that elites in highly unequal autocracies are more inclined to use more repression, to decrease the risk of being overthrown by popular mobilization and social unrest. Thus, maintaing the autocracy will always require some costs (Houle, 2009, 594). As previously mentioned, Acemoglu and Robinson (2006) presume that highly unequal autocracies have a lower chance of democratizing, as the costs of redistribution rises with inequality and always exceeds the costs of repression. However, it is somehow problematic to assume that the cost of redistribution *always* exceeds the cost of repression. Under high levels of inequality, people have strong incentives to mobilize against the regime. This will again increase the level of repression needed for the elites to maintain regime stability. Wintrobe (1998, 48) argues that increased repression may increase the risk of further public disobedience by the citizens, as repression reduce their loyalty to the regime. If Wintrobe is right, increased repression leads to more public disobedience, which again leads to more repression, and so on. This may turn into a situation which involves (too) high repression costs for the elite, and therefore one cannot a priori assume that the cost of repression is always less than the cost of redistribution at high levels of inequality (Houle, 2009, 595).[4]

Kricheli, Livne and Magaloni (2011) show that citizens are more likely to coordinate to overthrow autocratic elites the more repressive the regime is: while allowing dictatorships to survive by staving off the anti-government oppositions, repression also makes the regime more vulnerable to small acts of disobedience. In highly repressive dictatorships even the smallest acts of defiance have the potential to cascade into major uprisings. One might then get a situation, often called "the paradox of repression" (Smithey and Kurtz, 1999): If there is a popular and unarmed challenge against the regime, repression may sustain and even promote further dissent.

[3]The Political Terror Scale (PTS) measures levels of political violence and terror experienced by a country in a particular year, based on a 5-level "terror scale" originally developed by Freedom House.

[4]The same mechanism is accounted for by Dahl (1971, 15), arguing that the more the costs of repression exceed the cost of toleration, the higher chance for a competitive regime.

As non-violent dissent often does not depend on either physical fitness or advanced technology (Teorell, 2010, 104), a non-violent uprising might have the "potential to allow the maximum degree of active participation in the struggle by the highest proportion of the population (Schock, 2005, 40). As also argued by Giersch (2011) the outcome of anti-government civil uprisings depends on both the willingness and readiness of the regime to kill its own people, and is therefore not given. The successful democratic transitions in South Korea (1987) and in Indonesia (1999) indicate democratizations in highly unequal regimes, occurring in the aftermath of numerous strikes and anti-government demonstrations. On that account, assuming that regime sentiments to repress their opponents is a linear function of increased inequality, is not a sufficient assumption. And despite elites' willingness to repress, they are not necessarily likely to succeed. In sum, although the aim of repression is to subdue the protesters, repression may only increases popular anger, broaden civil movements and eventually strengthen the masses determination to finish off the regime completely. Drawing on these insights, I deduce the following baseline hypothesis:

Hypothesis 1. *High levels of inequality increase the probability of democratization, contrary to medium or low levels of inequality, ceteris paribus.*

It is a fundamental assumption for the conditional hypotheses presented subsequently in this section, that exclusively high levels of inequality have a positive relationship with democratization. Also, since this thesis is concerned with testing the theory of Acemoglu and Robinson (2006), I find it reasonable to present their main assumption as an alternative hypothesis, which will also be tested in the empirical analysis:

Hypothesis 1b. *Medium levels of inequality increase the probability of democratization, contrary to high or low levels of inequality, ceteris paribus.*

3.4 Conditional effects of inequality

> "Patiently endured so long as it seemed beyond redress, a grievance comes to appear intolerable once the *possibility* of removing it crosses men's mind".[5]
>
> — *Tocqueville (1856/1955, 177)*

Following the assertion by Tocqueville, this section aims to identify the circumstances where individuals have the possibility to undertake political action agains the regime. When studying the potential conditional effects of inequality, one is faced with the dilemma of identifying under what circumstances inequality may have an effect on the prospects of democratization. Empirical assertions maintaing that economic features may have a conditional effect on democratizations are in fact a rarity, and few quantitative studies have endeavored to undertake these measures.[6]

[5] My emphasis

[6] One exception is Boix (2011) who seeks to reconcile some of the contradictory findings in the empirical literature on modernization and democratization, and develops what he refers to as a conditional modernization-theory of democratic transitions (2011, 809). Boix' argues that the magnitude of the effect of development on

To exemplify the assumptions presented in the next section, consider the arguments made by Belkin and Schofer (2003) when studying factors leading to increased risk of being overthrown in a coup d'tat. The authors distinguish structural conditions from triggering causes: Deep structural conditions are factors such as attributes of society and political culture, and triggering causes are short-term crises that precipitate the coup. Coup risk is thus viewed as a function of these two (2003, 594-595): "We understand coup risk as a reflection of structural background causes that make coups possible rather than immediate, triggering causes that precipitate specific coups" (2003, 598). More precisely, the structural factors induces coup risk, while the triggering factors causes the coup.

The same argument may be applied to democratizations. High levels of inequality are structural and latent conditions in societies, not necessarily by itself causing democratization, but rather increase the *risk* of democratization. There are however actuating factors - the triggers - that are responsible for the immediate effects of democratization. This is not to say that the triggering effects do not have an independent and strong effect on the probability of democratization on its own, but rather that the effect is somehow stronger under the presence of structural conditions, in this case sufficiently high levels of income inequality.[7] The structural effects of inequality and the trigger-effects inducing democratization, can be compared with a person bothered with a high level of cholesterol. Although high levels of cholesterol are said to increase the long-term probabilities of a heart attack, individuals can live a fairly long life despite the high level of cholesterol. The short-term effects of high cholesterol do not result in death unless you undertake a certain event, like jogging or other physical work, inducing the risk for a specific attack (Belkin and Schofer, 2003).

The theoretical assumption of a conditional effect of inequality on the probability of democratization, is summed up in the words of Kuran (1989, 60):

> "Their silence [the citizens] makes society appear stable, even though it would find itself in the throes of revolution if there were even a slight surge in the size of the opposition. Sooner or later, a relatively minor event makes a few individuals reach their boiling point and take to the streets in protest. This kicks off the latent revolutionary bandwagon, and the opposition darts into power. The magnitude and speed of the revolutionary process come

democratization varies due to other factors, and that the effect of development on democratic transitions follows a nonlinear pattern, where the effect is stronger when income grows but then weakens considerably above a given income threshold (2011, 814). The reasoning is that high-income voters accepts democracy at high levels of development. Furthermore, as high levels of development often is correlated with low levels of income inequality, low-income voters will reduce their redistributive demands as inequality declines, and high-income voters are more likely to support democracy. The endogenous effects of development decreases at high levels of income (Boix and Stokes, 2003) as the ruling factions are more likely to democratize when economic development is increasing.

[7] Contrary to my assumptions, Belkin and Schofer (2003) contends that triggering effects will have no effect on the probability of coup in the absence of the structural conditions. In my case however, the triggering effects are also expected to affect the probability of democratization on its own. Earlier studies have found that economic crises (Haggard and Kaufman, 1995; Teorell, 2010), regional diffusion (Gleditsch, 2006) and war (Bermeo, 2003) have a positive effect on democratization. Moreover, my arguments are also in accordance with Belkin and Schofer (2003), as one of their structural background concepts are economic wealth and their triggering factors includes economic crisis, participation in war and contagion from other regional coups (Belkin and Schofer, 2003, 601-604)

as an enormous surprise, precisely because the masses had been concealing their growing frustrations".

Frustrations and economic grievances may be held by individuals for a long period of time, without manifesting in actual behavior. If there is a conditional effect of inequality on democratization, frustrations and economic grievances should be more likely under higher levels of inequality. However, societies can survive and maintain their stability for a long time, even under high levels of inequality. Thus, if inequality is to have any effect on democratization, citizens need to overcome their collective action problems. Hence, the core argument of this thesis is that this happens when citizens are triggered to participate on collective action. Below, I discuss particular factors that may facilitate collective action. These factors are not accidentally chosen, as they in fact are emphasized by Acemoglu and Robinson (2006, 2000*b*) as factors where citizens should be more likely to overcome their collective action problems, and pose a revolutionary threat.

3.5 Shocks

Throughout history, social unrest has been a catalyst in altering power structures, at least since the French Revolution (see Ponticelli and Voth, 2011). The French Revolution, the Russian Revolution and the Iranian revolution are all examples of revolutions that took the world by surprise (Kuran, 1989). The same can definitely be said about the recent revolutions in the Middle East; presumably stable and hitherto long-lasting dictatorships came to a sudden end in Tunisia, Egypt, Libya and Yemen. Such rare events are "not something which can occur in any type of society at any given period in its history" (Huntington, 1968, 265).

Kuran argues that although shocking they might seem, the revolutions were not surprising in hindsight, given the long time presence of class-conflicts, public disappointments and government failures. Although individuals hold deep resentments toward their regime, they might do so without ever expressing this in public (Kuran, 1989). The reason is that the expected costs of participating in collective action, involving in the worst case death, exceeds the expected benefits of a successful outcome: a regime change (see Tullock, 2005). But, "[a] suitable shock would put in motion a bandwagon process that exposes a panoply of social conflicts, until then largely hidden" (Kuran, 1989, 42). If only individuals expect that others will coordinate their actions, the calculus may be substantially altered. Large crowds also reduce the risk of getting punished by the regime, if the revolution would prove not to be successful. What should be clear from this is that collective action is critical for bringing about a successful revolution. Kuran's main argument, which I seek to elaborate upon, is that a "privately hated regime may enjoy widespread support because of people's reluctance to take the lead in publicizing their opposition" (1989, 42). Following these assumptions, I argue that the effect of inequality on the probability of democratization may be conditional: if inequality is to have any effect, it depends on the occurrence of events and shocks that prompt individuals to overcome their collective action problems.

An important component in the economic theory of democratization by Acemoglu and Robinson

(2000*b*, 2006) is the assumption that individuals have complete information. But, as maintained by Teorell (2010), this is a highly problematic assumption. Some valuable insights can be drawn from Boix (2003), who as opposed to Acemoglu and Robinson (2006) contends that citizens have uncertain preferences about their own mobilizing strength against the regime, and about the repressive capabilities of the elites (2003, 28). If poor agents would know the outcome of a revolution *ex ante* they would have no incentives to pay the costs of engaging in the revolution in the first place. However, this may no be the case. This can be altered "if the parties in contention have some uncertainty about the actual balance of power in society" (Boix, 2003, 14). The question then is to localize the constituents that can give rise to this uncertainty, and thus make it more likely for the least well-off to mobilize against the regime. As also argued by Kennedy (2010, 788), "[o]nly when a political opening for change is present do social conditions make democratization a more likely outcome". This "political opening" may be decisive for inequality to have an effect on democratization. In the next sections I present three variables of which are clustered under the label of "shocks" - changes that affect the balance of power between the poor majority and the rich elites, and that should prompt individuals to overcome their collective action problems. These variables are: economic crisis, regional democratic transitions and events of war. The main argument is summarized in Figure 3.1: The dashed line

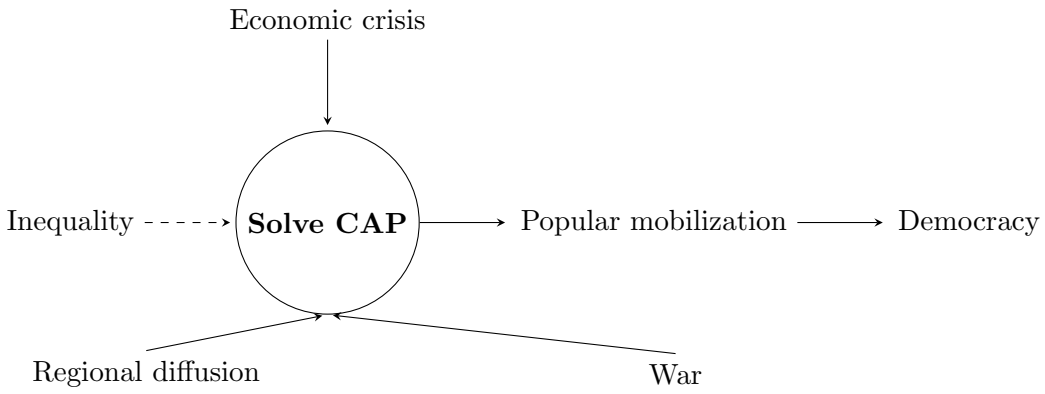


Figure 3.1: The main theoretical argument

from inequality suggests that high levels of inequality not necessarily by itself cause individuals to overcome their collective action problems (CAP). But, under certain circumstances which might prove to be the decisive spark that starts the prairie fire, individuals have the capability to gather in popular uprisings and challenge the regime.

3.5.1 Economic crisis

Building up to the next hypothesis is the assumption that economic shocks and short-term crises are the "spark" that prompt individuals to overcome their collective action problems. Acemoglu and Robinson (2001, 939) asserts that the poor pose an explicit revolutionary threat especially during periods of crisis and as also argued by Hechter and Okamoto (2001, 205), political mobilization of all kinds is facilitated when the central state is perceived to be in crisis.

The unpredictable effects of economic crises dates at least back to Tocqueville (1856/1955)

who maintains that regime change often is a result of an economic crisis. Also Davies (1962) observes that revolutions are most likely to occur "when a prolonged period of objective economic and social development is followed by a short period of sharp reversal" (1962, 6). While modernization theorists focus on the long term effects of socio-economic development, some scholars have considered the short-term effects of economic decline on the probability of democratic transitions (e.g. Huntington, 1991; Lipset, 1994; Haggard and Kaufman, 1995; Geddes, 1999*b*; Drazen and Easterly, 2001; Acemoglu and Robinson, 2006). For instance, economic crises preceded many of the democratic transitions in Sub-Saharan Africa, such as Mali (1992), Benin (1991), Madagascar (1993), the Central African Republic (1993) and Guinea-Bissau (2000) (Villalón and VonDoepp, 2005).

Haggard and Kaufman (1995, 26) argue that during times of economic distress, the probability of democratic transitions increases as economic crises often bring about popular unrest. Thus, the causal mechanism linking economic crisis to the democratic transition is through the public masses. Acemoglu and Robinson (2006) also identify economic distress as a catalyst for transitions to democracy, as economic crises help citizens overcome their collective action problems and thereby reducing the opportunity costs of engaging in rebellion. Repressive activities become costly and less attractive for the elites, thus making a democratic outcome more appealing. Moreover, if the regime looses legitimacy it may induce dissatisfied groups to struggle against it (see Hegre, Ellingsen, Gates and Gleditsch, 2001, 34). Particularly non-democracies are said to rely to a great extent on their outcome legitimacy Fukuyama (2005), that is, their produced results and economic performance (see also Knutsen, 2013). This view corresponds to Linz and Stepan (1996) who argues that poor economic performance can prove detrimental for non-democratic regimes, as they often depend on their performance claim (1996, 79). Democracies on the other hand can always claim its legitimacy to the fact that they are a democracy, where citizens can vote for other economic programs and alternative governments if they feel their interest are not taken care of, rather than initiating a regime change.

Economic crises may encourage political reforms by weakening the defenders of the regime status quo by bringing about an unstable political climate (e.g. Gourevitch, 1986; Drazen and Easterly, 2001; Overland, Simons and Spagat, 2005; Knutsen, 2013). For instance, Bracher (1984) shows how economic hardship translated into social unrest in a study of the fall of the Weimar Republic during the Great Depression. Social unrest was also evident when the Asian financial crisis hit Indonesia in 1997, creating economic instability that sparked off several riots and demonstrations (Skoufias, Tiwari and Zaman, 2012). Incumbents in countries that experience economic crisis are vulnerable to revolutionary threats and eventually being thrown out of office.[8]

[8] Also, Przeworski and Limongi (1997) argues that a variety of factors are important to consider when studying the occurrence of regime transitions, and that economic crisis is one of these factors. According to Przeworski and Limongi (1997) regimes experiencing a decreasing GDP per capita in the previous year are much more likely to fall than those who experienced positive economic growth. These results hold for both autocracies and democracies.

Moreover, Valenzuela (1989) argues that the ideal mix for democratization is "high labor mobilization at certain critical moments of the breakdown of authoritarian institutions". These critical moments can be either strategically chosen by the mobilizing forces, or exogenous given events, potentially affecting the realization of the mobilization. Gasiorowski (1995) asks if economic crises may trigger democratic transitions in conjunction with certain background conditions? I maintain that these background conditions may be a high level of inequality, and that economic crisis might be the shock that helps economically deprived citizens to overcome their collective action problems. Economic crises may therefore relate to the relative level of resentment and deprivation in a society, by spurring grievances directly related to the regime which in turn may escalate into revolutionary action (Davies, 1962; Gurr, 1970). In that way, economic crises increase the opportunity structures for citizens already driven by anti-regime sentiments. Relating the opportunity argument to that of grievances, economic crises may prove to be the decisive spark instigating revolutionary activities. An economic crisis may thus have a democratizing effect as it leads to a decrease in the collective action costs for potential protestors (Wright, 2009, 5).

These assumptions lead up to hypothesis 2:

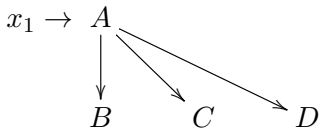
Hypothesis 2. *High levels of income inequality increases the probability of democratization, in situations of economic crisis.*

3.5.2 Spill-over effects

Exogenous shocks and trigger-effects may not only be economic of nature. They may also be political. External influences may have a decisive importance in influencing whether societies move towards becoming democratic, through the effect of diffusion (Huntington, 1984, 205). Recently, a number of scholars have studied the effect of international forces on democratization processes during the Third Wave of democratization (see Huntington, 1991; Levitsky and Way, 2005; Pevehouse, 2002*a*; Gleditsch and Ward, 2006; Brinks and Coppedge, 2006; Teorell, 2010). This growing literature suggests that the relationships runs through several causal mechanisms, but usually through two processes: imposition or emulation. Regarding the first, states on the verge to becoming more democratic may have incentives in promoting democracy in their neighbor states. One possible answer is because they want to enhance internal security (Teorell, 2010, 86). As maintained by Pevehouse (2005, 18), emerging democracies may have incentives to help the pro-democratic opposition in neighboring countries to topple the regime. In contrast to imposition is diffusion through the process of emulation. Emulation can be described as the process when actors in one state make a change that is similar to a change in some other state (see Brinks and Coppedge, 2006, 466). As explained by Gleditsch and Ward (2006), domestic actors in one state can be influenced by events occurring in their neighboring states, and thereby use their neighbors as good examples for their own actions (2006, 467). Local actors can emulate the successful examples of their neighbors that install democracy, by discovering "that it can be done", but perhaps more importantly "how it can be done" (Huntington, 1991, 101). What these demonstration effects have showed is the possibility for groups in another country to bring

an end to the authoritarian regime and to install a democratic system (Huntington, 1991, 101). Furthermore, these later democratizers learned about the dangers they needed to avoid and the difficulties they needed to stay away from, in order to overcome their collective action problems.

As individuals have incomplete and uncertain information about elite capabilities, events such as neighboring diffusion may prompt domestic revolutionaries to reestimate their probabilities for success and thus be more likely to mobilize, when witnessing the success of similar actors abroad (see also Boix, 2003, 29). Huntington (1991, 100) refers to the effect of diffusion as a process of "snowballing" where successful democratization in one country encourages democratization in other countries. Event A in one country is highly capable of triggering a similar events almost simultaneously in different countries.



As seen from the above figure, event A in one country may cause comparable events such as B, C and D in other countries. This is the core argument of the democratizing effects of regional diffusion through emulation: citizens in other countries are able to overcome their collective problems as they witnessed their fellow revolutionaries manage to do the same. However, why citizens were able to overcome their collective action problems in country A cannot be an effect of diffusion through emulation. The factor x_1 denotes this.[9] As precisely pronounced by Huntington (1991, 33), x_1 may refer to an "unique and even idiosyncratic cause" that may cause event A in one country. The effect of regional diffusion through emulation may also resemble a "signaling effect" Lohmann (1994); Kricheli, Livne and Magaloni (2011). Threatening protests can be a result of their signaling potential, namely "what citizens can infer about other citizens' true attitudes against the regime" (Kricheli, Livne and Magaloni, 2011, 27). In highly repressive regimes, coordinating and organizing protests can be considerably difficult. But when they first occur, they can have an immense information revealing potential in signaling the underlying weakness of the regime. This signaling effect is not necessarily domestically bound, as witnessed during the Arab Spring where major protests and the government ousting in Tunisia in 2011 "signaled" to their neighbor states that this was in fact achievable.

On the basis of these arguments, my two next hypotheses are presented:

Hypothesis 3a. *High levels of income inequality increases the probability of democratization, when countries in the same region democratize.*

Hypothesis 3b. *High levels of income inequality increases the probability of democratization, when popular mobilizations occur in the region.*

[9] What the diffusion effect cannot explain on the other hand, is what exactly caused the first democratization. As the revolutions in Egypt, Libya and Yemen most probably were related to the fall of the dictators in countries in their neighborhood, democratic diffusion cannot explain why Mohamed Bouazizi chose to set himself on fire 17th of December, 2010.

3.5.3 War

War outbreaks and war terminations may also be the important shocks which serve as important signals for individuals to overcome their collective problems. This view is also held by Acemoglu and Robinson (2006):

> The de facto power of the citizens that comes from an unusual event, such as a political crisis or the end of a war becomes institutionalized and translated into future political power by the introduction of relatively free and fair elections in which the votes of all the citizens count, not just the elites(2006, 175).

As also argued by Silver (1974), revolutions are not unusual after military defeat in war. Defeat in wars increases the probability of victorious revolutions because (i) rulers are weakened both physically and psychologically, and (ii) citizens take the defeat as an evidence that they had previously overestimated the strength of the regime (1974, 67). What this suggest is that engaging in collective action is more easily overcome in times when wars has recently come to an end. Also Boix (2003, 28-30) argues that regime changes are triggered by exogenous shocks that weaken the elite or at least reveal its true weakness, and holds war as one these shocks: "[C]ertain political events, by prompting citizens to update their beliefs on the probability of survival of the existing political arrangement, play a considerable role in triggering shifts in the institutional order" (Boix, 2003, 29). Moreover, in her study of revolutions, Skocpol (1979) criticized earlier theories of revolutions for being too narrowly focused on *intra*national conflicts and processes of modernization. Revolutions, she argued, could not be explained without systematic reference to *inter*national structures and developments (1979, 14). International events such as wars and revolutions in other countries, were seen as factors that affected the probability of revolution in the host country. Also Papaioannou and Siourounis (2004) maintains that masses can more easily overcome their collective action problems when autocracies have been destabilized in times of war (2004, 26). Additionally, Bermeo (2003, 159) suggests that a large proportion of the electoral democracies established after 1945 emerged in the aftermath of a war, or as means to bringing the war to an end.

Based on this information, I present my two final hypotheses:

Hypothesis 4a. *High levels of income inequality increases the probability of democratic transition, in situations where war recently has broken out.*

Hypothesis 4b. *High levels of income inequality increases the probability of democratic transitions, in situations where war recently has ended.*

3.6 Summary

In this chapter I have presented my theoretical contribution to the economic literature on democratization, providing a more novel understanding of the relationship between income inequality and democratization. I have argued for the importance of conducting a more refined test of the theoretical assumptions inherent in the economic theories of democratization, in order to give

the theories the test they deserve.

I started off by assessing the theoretical contribution of Acemoglu and Robinson (2006), before I presented their main theoretical assumptions of the relationship between inequality and democratization. In short, the theory of democratization by Acemoglu and Robinson (2000*b*, 2006) suggests that sufficiently high levels of inequality affect transitions from authoritarian to democratic regimes, through prompting collective action by the masses which again forces elites to engage in credible commitments with the citizens by installing democratic institutions. Thus, citizens need to overcome their collective action problems for a democratization to occur.

This somewhat simplified assumption is challenged by literature suggesting that economic grievance alone not necessarily are sufficient in triggering collective action. Drawing on findings from literature on collective action and from other strands within the democratization literature, I have tried to give a more profound view on the relationship between inequality and democratization, and argued that inequality may increase the probability of democratization under certain circumstances. Three circumstances were located: economic crisis, regional diffusion and war. What they all have in common is their potential of serving as a "shock", thereby triggering individuals to overcome their collective action problems.

The hypotheses generated in this theoretical chapter is to be tested in chapter 5. Table 3.1 provides a summary of the different hypotheses in conjunction with their main theoretical contributions.

Table 3.1: Summary of the hypotheses

	Hypotheses	**Key contributions**
Basic assumptions	1a) High levels of inequality increase the probability of democratization contrary to medium or low inequality, ceteris paribus	Acemoglu and Robinson (2000*b*) Kricheli et al (2011), Wintrobe (1998)
	1b) Medium levels of inequality increase the probability of democratization, contrary to high or low inequality, ceteris paribus	Acemoglu and Robinson (2006)
Conditional effects	2) High levels of income inequality increases the probability of democratization in situations of economic crisis	Acemoglu and Robinson (2006), Kuran (1989, 1991*b*) Haggard and Kaufman (1995)
	3a) High levels of income inequality increases the probability of democratization when countries in the region democratize	Boix (2003) Gleditsch and Ward (2006), Brinks and Coppedge (2006), Lohmann (1994), Huntington (1991)
	3b) High levels of income inequality increases the probability of democratization when popular mobilizations occur in the region	Boix (2003) Gleditsch and Ward (2006), Brinks and Coppedge (2006), Lohmann (1994), Huntington (1991)
	4a) High levels of income inequality increases the probability of democratization in situations where war recently has broken out	Acemoglu and Robinson (2006) Kuran (1989), Silver (1974), Bermeo (2003)
	4b) High levels of income inequality increases the probability of democratization in situations where war recently has ended	Acemoglu and Robinson (2006) Kuran (1989), Silver (1974), Bermeo (2003), Boix (2003)

Chapter 4

Research design

The aim of this thesis is to investigate if the level of inequality can explain why countries undergo democratic transitions, and whether factors facilitating collective action are conditional for the effect of inequality. In this chapter I present the research design, the data and the variables of choice, which arguably take into account the many dynamics of the relationship between inequality and democratization.

I start off with discussing why I consider a quantitative design to be the best approach to address the research questions, before I introduce the statistical model. Thereafter I briefly discuss what I consider to be the main methodological challenges connected to the inferences in this thesis: problems of endogeneity, omitted variable bias and serial correlation. In the subsequent sections I present my choice of the main dependent and independent variable. I also present a number of control variables which are theoretically and empirically related to democratization.

Towards the end of the chapter, I present one last substantial challenge connected to the research design in this thesis, namely that of missing observations on the main independent variable of interest *capital share*. It is an ambition in social sciences to design research by maximizing leverage (King, Keohane and Verba, 1994, 29). One of the ways in which this can be achieved is by improving already existing data, in order that more implications may be observed. I intend to improve data and treat the problems of missingness by performing multiple imputation. Although this will lead to some precariousness related to the inferences made, I argue that this is less problematic than the uncertainty that would arise if variables were to be excluded due to missingness.

4.1 Why a quantitative design?

Quantitative research designs is one out of many designs that can be applied when conducting social science research. Previous studies on democratization also reflects this methodological diversity, as scholars have conducted case studies (Bermeo, 1997, 2003; Haggard and Kaufman, 1995), applied game-theoretical models (Boix, 2003; Acemoglu and Robinson, 2000*b*, 2001, 2006), medium-N research designs (Haggard and Kaufman, 2012) and large-N research designs (Przeworski et al., 2000; Boix, 2003; Houle, 2009; Teorell, 2010). However, rather than be-

ing seen as competing approaches, qualitative and quantitative designs should be evaluated by their individual strengths. But more important; when conducting research, one should chose the research design that best enables you to answer the questions of inquiry (King, Keohane and Verba, 1994).

There are several reasons for why a quantitative design is chosen for this subject. First and foremost I am interested in the general trends and effects of inequality on democratization. I follow the propositions of King, Keohane and Verba (1994) contending that the goal in social science is to make causal inferences, in seeking to make general claims based on specific observations. This falls natural, all the time the main theory of inequality and democratization under investigation (Acemoglu and Robinson, 2000*b*, 2006) also is general of nature, and not meant to only be applied on a case-to-case basis: "Our aim is [...] to search for general tendencies that hold true across different types of nondemocratic regimes and to contrast those with the tendencies in a typical democracy" (Acemoglu and Robinson, 2006, 119). Quantitative designs have this advantage, by allowing to make general inferences (Bryman, 2004, 76). Perhaps more important, quantitative designs allow for inferring potential conditional effects of inequality on democratization through tracking variations in data. Studying the interaction of specific variables is laborious qualitatively - applying quantitative tools however, allows for in-depth and over-time analysis of structural co-variations and potential causal relationships unobservable to the researcher's eye in any single case study.

An advantage of the theory of Acemoglu and Robinson (2000*b*, 2006) is their usage of game theory and mathematical models, as such models render logical consistent predictions. At the same time, such models facilitate empirical testing. However, the lack of empirical scrutiny is perhaps the most appropriate criticism against the economic theories of democratization (Teorell, 2010, 27). When wanting to make scientific inquiries, game theory alone is insufficient (Achen, 2005, 328). Statistics is, on the other hand, the most powerful tool around, and theories have to survive quantitative evaluation if they are to be taken seriously (Achen, 2005).

4.2 Analyzing time-series cross-section data

This study conducts a time-series cross-section (TSCS) analysis, where the data of interest includes repeated observations over time of the same fixed political units (see e.g. Beck, 2001). The political units in this case is countries.[1] The dataset consist of 169 countries observed between 1963 and 2008, rendering over 6600 observations. The data set is compiled from a number of frequently used and reliable sources and the baseline dataset is from Polity IV (Marshall and Jaggers, 2003), containing data back to the 1800s. Countries with a recorded population of less than 500.000 in 2011 is excluded by default. My main independent variable of interest is the ACLP-index from Przeworski et al. (2000) with updated data from Cheibub, Gandhi and Vreeland (2010) and covers the time period 1946 to 2008. The time-period investigated in the analysis is somewhat restricted however, due to unavailable data on the independent variables,

[1] All of the analyses are conducted using STATA v.12, and the imputations have been carried out using Amelia II. All of the imputations are run in R-studio

especially on the main independent variable of interest *capital share*. Thus, when determining the time-period for the analysis, I have tried to strike a balance between increasing the total number of observations on regime transitions and inequality, as well as applying indicators and measurements that I find to be in concurrence with the theory of Acemoglu and Robinson (2000*b*, 2006). The "entry" years refers to the year 1963 or the year a country became independent. Similarly, the exit year refer to the year 2008 or the year the country ceased to exist. As an example, the entry year of Yugoslavia is 1963 and the exit year is 1990, as the fall of communism in Eastern Europe resulted in multi-party elections in the now former Yugoslav Republics. Two of these former republics, Slovenia and Croatia, held multi-party elections in 1990 and their entry years in the dataset is thus sat to 1991, with 2008 as their exit year. In all the empirical analyses the main rule is that all of the independent variables are included with a one-year lag structure, in order to reduce the risk of reverse causation.

4.3 Statistical model

In this thesis the main concern is transition *to* democracy. The dependent variable of choice takes binary values: 1 if there is a democracy and 0 if not. The empirical analyses are therefore performed as probit regressions. As opposed to standard OLS models which assume a linear relationship between the dependent and the independent variables, the relationship between inequality and democratization is not necessarily linear. The effect might be stronger at certain levels of inequality. Moreover, in a linear probability model, predicted probabilities may take values greater than 1 and lesser than 0:

$$Pr(y = 1|x) = x_\beta + \epsilon \tag{4.1}$$

As the main dependent variable of interest takes binary values, the predicted probabilities from a linear probability model may not be limited to fall between the range of 0 and 1. This may result in nonsensical outcomes such as predicted negative probabilities, offering little substantial meaning.[2] In order to limit predictions to range from 0 to 1, I make use of the probit model. Alternatively the more commonly used logit model could have been utilized, and choosing between logit and probit models is often a matter of convention as they tend to produce indistinguishable results (Long, 1997, 83). Probit models treat the same set of problems as does logistic regression, and both models are estimated using the maximum likelihood method. What separates them is that the logit function is replaced by the normal cumulative distribution function (Gelman and Hill, 2007, 117). The model can be written directly as

$$Pr(y_i = 1) = \Phi(X_i\beta) \tag{4.2}$$

where Φ denotes the normal cumulative distribution function (cdf). Probit models have also been referred to as transition models (see Beck, Epstein, Jackman and O'Halloran, 2001) and

[2]In an empirical comparison between linear probability models and logistical models, Hellevik (2009) shows that the two models create almost similar results results when the dependent variable is dichotomous. However, the vast majority of previous research on inequality and democratization utilizing a dichotomous democracy variable, have applied some form of logistical or probit regression. I therefore intend to do the same.

is frequently utilized by authors studying democratic transitions (see Przeworski et al., 2000; Boix and Stokes, 2003; Boix, 2003; Dunning, 2008; Houle, 2009). Therefore, in order to be in correspondence with the literature, the probit model is the preferred model of choice.[3] Table 4.1 displays the number of transitions in the sample.

Table 4.1: Regime transitions, 1963 - 2008

	Dictatorship	Democracy
Dictatorship t_{-1}	3923	85
Democracy t_{-1}	48	2532
Observations	6658	
Countries	169	

Source: Cheibub, Gandhi and Vreeland (2010)

4.4 Interaction terms

A common criticism of quantitative political science denounces its propensity to overly simplify a complex political reality. One of the most frequent simplifications is that independent variables are treated as exactly independents. This leads to the deluding assumption that the effect of an independent variable on a dependent variable always is the same, regardless of the level on other independent variables (Friedrich, 1982, 797). This criticism is applicable to the empirical inquiries on inequality and democratization. None of the studies listed in Table 2.1 in chapter 2 attempt to examine the potential conditional effects of inequality on democratization. This thesis endeavors to explore this relationship. Given the complexity of social phenomena, it often makes sense to allow the effect of an independent variable on a dependent variable to vary across different levels of (an)other independent variable(s). Such conditional relationships between two variables are also said to present a more accurate reflection of social reality (Rosenberg, 1968, 106). In light of this, the core endeavor of this thesis is to study whether inequality has a conditional effect on the probability of democratization, as became evident in the last chapter.

Including multiplicative terms such as XZ in statistical models is suitable when conditional hypotheses are under evaluation (Brambor, Clark and Golder, 2006; Berry, Golder and Milton,

[3] A version of the probit model - the *dynamic* probit model - is perhaps more commonly used by authors studying democratic transitions and democratic stability (e.g. Przeworski et al., 2000; Houle, 2009). By applying this method one is allowed to study the separate effects of inequality on democratization and on democratic stability, and to obtain different parameter estimates for each transition pattern. Inequality is thus allowed to have different effects on transitions from dictatorship to democracy and the other way around. I have chosen not to utilize this models as the main model of choice, as the theoretical chapter made clear that the key emphasis in this thesis is transitions to democracy. However, I show in the next chapter that dynamic probit models and probit models produce identical results, and choosing the probit model instead of the dynamic probit model is therefore seen unproblematic.

2012).[4]

When evaluating conditional effects, the effect of the independent variable x on the dependent variable y depends upon a third variable z (Franzese, Kam and Jamal, 2001, 2). In general, multiplicative terms are widely identified as hard to interpret (see Friedrich, 1982; Wright Jr, 1976) and when operating with non-linear models such as the probit, interaction effects cannot be fully evaluated by simply looking at the sign or the statistical significance of the coefficient (Ai and Norton, 2003; Brambor, Clark and Golder, 2006).[5] To cope with this, Brambor et al (2006) demonstrate how political scientists can increase their ability to substantively interpret interaction models, by creating marginal effect plots. These plots display how the marginal effect of the independent variable varies over values of another variable. Consequently, in the next chapter the interaction effects of interest are exposed in marginal effect plots, in order to ease interpretation.

4.5 Methodological challenges

As I maintained at first in this chapter, there are certain methodological challenges worth addressing. In this section I emphasize three main methodological challenges that may generate false inferences regarding the relationship between inequality and democratization: omitted variable bias, endogeneity and serial correlation. Another challenge relates to missing values, and is to be explained towards the end of this chapter.

4.5.1 Omitted variable bias

It is unavoidable that variables affecting the probability of democratization will be excluded from the analysis. When important variables are excluded, effects are estimated as if they were real whilst they may actually be spurious. This is referred to as the problem of omitted variables bias (see Greene, 2008). As briefly touched upon in chapter 2, Acemoglu et al. (2008) argue that the true relationship between the level of income and the level of democracy really is spurious. The explanation for this is that previous studies have failed to recognize the importance of underlying historical factors in the shaping of the path to democracy. Such sources of bias may occur when the variables that are not included change between countries but not over time (see Green, Kim and Yoon, 1999; Stock and Watson, 2007; Kennedy, 2008). One proposed way of dealing with such time-invariant variables, is by controlling for fixed effects. Fixed effects regression controls for omitted variable bias when the omitted variables fluctuate across countries, but do not change over time. However, including fixed effects in analyses using a binary dependent variable can be somewhat pernicious (see Beck, 2001; Beck and Katz, 2001). When the dependent variable of interest is binary, taking only two values such as 0 and 1, a majority of nations will always be scored zero or one, hence having no impact on the parameter

[4] As also argued by Friedrich (1982, 826), "[A] model with a multiplicative term yields coefficients that provide a more detailed description of the relationship between a dependent variable and a set of independent variables than a model without a multiplicative term".

[5] Brambor, Clark and Golder (2006) argues that the interpretation of interaction variables makes little sense if just considering the joint effects of the interacted variables.

estimates. In the application at hand, within-case variation is highly limited and thus of little substantial interest. I overcome this methodological challenge by including a number of control variables which are theoretically and empirically associated with democratization, in order to reduce the risk of making false inferences. This will be explained more thoroughly in one of the following sections.

4.5.2 Endogeneity

One of the characteristics of a misspecified model is uncertainty related to the direction of the causal arrow (Berry, 1993, 30). As political science research rarely can be said to be experimental (King, Keohane and Verba, 1994, 185), manipulating the independent variables is almost impossible. If the explanatory variables included in the analysis were not affected by any of the other variables in the analysis, they would be exogenous to the model. Contrarily, the explanatory variables would be endogenous to the model if their values can be explained by the other variables included in the analysis. As such, one is often faced with problems of endogeneity: "when the designated dependent variable turns out to be causing the explanatory variable" (King, Keohane and Verba, 1995, 476). Related to this, my analysis face a profound challenge of endogeneity as income inequality may be both the cause *and* the effect of democracy:

$$Inequality \rightleftarrows Democracy$$

Several studies have pointed to the fact that democracy induces higher wages (see Rodrik, 1999; Przeworski et al., 2000) both due to a higher productivity rate in democracies but also because of the higher income-shares for labor in democracies. Labor have a higher ability to organize in democracies, as democracies are associated with freedom of association. At the opposite, organizing in independent unions is more severe in dictatorship, thus reducing laborers' bargaining power (see Deyo, 1998) which in turn reduces wages. Empirical studies have also found that democracies in general generate more egalitarian income distributions than non-democracies (see Muller, 1988; Li, Squire and Zou, 1998; Reuveny, 2003; Chong, 2004). The most ideal test controlling for endogeneity would be through an instrument variable probit estimator (IV Probit), which is often used in estimations where one or more of the independent variables is endogenous (see e.g. Harkness, 2005). The instrument variable method is often used to solve problems posed by endogeneity and makes it credible to assert that the association between the independent and the dependent variable is in fact causal, rather than just a correlation (Miguel, Satyanath and Serengeti, 2004, 726). However, good instruments are hard to find, particularly for inequality. Therefore, as a second best option, all of the analyses are performed with a one year lag-structure on the explanatory variables, in order to reduce problems related to endogeneity (see Hadenius and Teorell, 2005; Hegre and Sambanis, 2006). I then assume that the effect of the explanatory variables occur before the effect on the dependent variable.

4.5.3 Serial correlation

Both logit and probit techniques assume temporal independence (Beck, Katz and Tucker, 1998, 1261). However, in time-series cross-section (TSCS) analyses a reasonable assumption is that

repeated observations of the same panel over time are not independent of each other. Residual correlation is common in TSCS-analyses, as the value of a variable in time t is likely to be similar the value in t_{-1}, especially those values that are closest in time. This refers to the problem of serial correlation and is especially relevant when utilizing variables that are relatively stable over time, such as my main independent variable of interest; inequality. Under such circumstances, normally distributed standard errors are not sufficient to capture the uncertainty related to the estimates (Wooldridge, 2010). Thus, all of the analyses are estimated with robust standard errors clustered on country, in order to produce more accurate standard errors (Long and Freese, 2006, 86). The clustering option takes account of serial correlation within countries and potential country-specific heteroskedasticity, thereby allowing the ϵ of e.g. South Africa to have a different variance than for example France. All models are clustered by country, as geographical and other contextual factors obviously are not independent of each other.

4.6 Democracy

As discussed in the introductory chapter, a common distinction is between substantive and institutional definitions of democracy. I briefly indicated that I intend to rely on the institutional definition, and the operationalization of democracy reflects this choice. In this section I first argue why I consider the institutional definition of choice, the ACLP-index (Alvarez et al., 1996; Przeworski et al., 2000), as most proper for the subject of this thesis. Thereafter I present the ACLP-index and how it is operationalized. Lastly, I find it natural to briefly asses two of the most utilized measures of democracy - The Freedom House Index (FHI) and the Polity Index - and why they are omitted from the main analysis.

4.6.1 Why the ACLP-index

Adcock and Collier (2001) contend that the process of moving from ideas to observable indicators works through four different stages. First, there is the *background concept* which usually take on a variety of meanings, in this case the concept of democracy. Then, after having reflected upon the background concept, one move towards to the *systematized concept* which commonly involves a more explicit definition and a specific formulation of a concept applied by a scholar. Then, the third level is where the *indicators* are developed in order to operationalize the systematized concept in a sufficient manner. Finally, the fourth level are the observable *scores*.

As a main rule when choosing the best indicators for measuring a concept, I intend to follow Adcock and Collier (2001) who argue that "[r]ather than make sweeping claims about what the background concept [democracy] "really" means, scholars should present specific arguments, linked to the goals and context of their research, that justify their particular choices" (2001, 532). No existing cross-country democracy indices are withheld problems with reliability and validity (Munck and Verkuilen, 2002; Goertz, 2005) and however one chooses to conceptualize democracy, it should be intimately linked with theory (see Munck and Verkuilen, 2002). By utilizing the ACLP-index I am primarily in conjunction with the definition of choice in the

theory of Acemoglu and Robinson (2006). When there is created a window of opportunity for citizens to engage in collective action against the elites, the de facto power of the citizens is institutionalized by "the introduction of relatively free and fair elections in which the votes of all the citizens count, not just the elites" (Acemoglu and Robinson, 2006, 175). Democracy is thus a situation where citizens have de-jure political power through elections and it looks after the interests of all the people in a society, as opposed to a non-democracy where elite-interests outdo majority interests.

However, a potential caveat needs to be addressed. Acemoglu and Robinson (e.g. 2000*b*) argue that the democratizations in several Western countries in the nineteenth century happened because social unrest and the threat of revolution forced the elites to extend the *franchise*. By providing universal suffrage, this acted as a credible commitment to future redistribution and averted further social unrest (Acemoglu and Robinson, 2000*b*, 1168). This relates to Dahl's (1971) concept of participation rather than just contested elections. Since the variable of choice in this thesis, the ACLP-index, only apprehends contested elections, I may not encapsulate the importance of suffrage extension in the theory of Acemoglu and Robinson (2000*b*, 2006). However, I intend to argue that a focus on contested elections nevertheless captures their main assumptions. Recall that citizens in a dictatorship aspire to transfer their de-facto political power into future de-jure political power in a democracy. A democratic transition therefore "shifts future political power away from the elites to the citizens, thereby creating *a credible commitment to future pro-majority policies*" (Acemoglu and Robinson, 2006, 26). I argue that this credible commitment may as likely be captured in contested elections, and not just solely by suffrage extension.[6]

Dahl (1971, 4) argues that the two concepts of participation and contestation are "two somewhat different theoretical dimensions of democratization". Consequently, countries may have universal suffrage but at the same time highly repressive governments and limited contestation. The constitutions of Kazakhstan, Kyrgyzstan and Uzbekistan all grant citizens universal suffrage and one should thus expect that citizens have acquired their de-jure political power.[7] However, universal suffrage means little if elections are not contested:

> "A country with universal suffrage and a completely repressive government would provide fewer opportunities for opposition [...] than a country with a narrow suffrage but a highly tolerant government [...] [and] in the absence of the right to oppose, the right to "participate" is stripped of a very large part of the significance it has in a country where public contestation exists" (Dahl, 1971, 5).

[6] As suffrage extension is important in the theoretical framework of Acemoglu and Robinson (2000*b*, 2006), a solely attention to contestation may reduce the measurement validity. A recent dichotomous democracy measure by Boix, Miller and Rosato (2012) escapes this problem somewhat, as a country is defined as democratic if the country has competitive elections and suffrage for the majority of the male population. According to the authors, the latter criteria is included in order to capture the variation across countries before World War I. Due to its focus on participation this measure could have been applied in this analysis. But as maintained by Boix, Miller and Rosato (2012, 13), the added suffrage requirement is of minimal importance for the time period covered by the ACLP-index, which also relates to the time-period in this thesis. I have thus chosen not to utilize this index.

[7] Article 117 in the Constitution of Uzbekistan states that all citizens are eligible to vote and that the President and representative bodies shall be elected on the basis of universal suffrage by secret ballot (Constitution of The Republic of Uzbekistan, 1992)

Authoritarian elections thus often only serve as a *façade*: electoral institutions do exist but yield no meaningful contestation for power (Levitsky and Way, 2002, 54). Merritt (2006, 4) contends that although Kazakhstan, Kyrgyzstan and Uzbekistan hold popular elections, questions can be raised about how fair and competitive they actually are. The presidential election in Uzbekistan in 2000 were by no means contested, as President Islam Karimov was reelected with almost 96 percent of the votes (Nohlen, Grotz and Hartmann, 2001, 496).[8] I expect that citizens prefer free, fair and contested elections where they have a significant say through balloting, rather than non-contested elections where votes in reality have no impact. Not until elections are labeled as contested can citizens claim to have de-jure political power. By focusing on elections as the threshold for when a country becomes democratic, I argue that this makes theoretical sense all the time democratization is seen as a direct response to social unrest by making a credible commitment to future redistribution (Acemoglu and Robinson, 2000*b*,*a*, 2001, 2006). However, excluding participation is not unproblematic, and I will address this in one of the subsequent sections.

4.6.2 The ACLP-index

I define a democracy by using the dichotomous democracy index from Alvarez et al. (1996) with updated data from Cheibub, Gandhi and Vreeland (2010), from now on referred to as the ACLP-index. Such a minimalistic definition of democracy is previously used in studies of inequality and democratization (e.g. Barro, 1999; Przeworski et al., 2000; Houle, 2009; Haggard and Kaufman, 2012; Cheibub and Vreeland, 2012) and is especially appealing all the time it is easy to operationalize. The variable takes only two values: 0 = Dictatorship and 1 = Democracy.[9] The ACLP-index classifies a regime as a *dictatorship* according to the criteria in Table 2.

Consequently, a regime is coded as a democracy if the chief executive and the legislature have been directly or indirectly elected by popular vote; if there are de facto multiple parties both outside the regime front and within the legislature; and if elections actually led to an alternation in office (Przeworski et al., 2000; Cheibub, Gandhi and Vreeland, 2010, see).[10] The minimalist regime definition defines a democracy when the governmental offices, that of the chief executive and the legislature, is filled as a consequence of contested elections. The inclusion of the attribute of "offices" is one of the distinct aspects with the ACLP index (Munck and

[8] As noted by Levitsky and Way (2002), a rule of thumb is that no elections are contested if incumbents are reelected with more than 70 percent of the votes.

[9] Furthermore, there are four possible combinations of outcomes, whereas (ii) and (iv) are regarded as transitions : (i) dictatorship at t_{-1} and dictatorship at t; (ii) dictatorship at t_{-1} and democracy at t; (iii) democracy at t_{-1} and democracy at t; and (iv) democracy at t_{-1} and dictatorship at t. The main focus in this thesis is (ii) dictatorship at t_{-1} and democracy at t.

[10] This criteria is referred to as the "alteration rule": regimes are not democratic unless they allow for leadership change through election. Thus, one alteration after election is needed for a country to be classified as democratic (Przeworski et al., 2000, 23-28). This coding rule is not unproblematic, and in some cases it results in Type I-errors: Botswana satisfies the three first criteria, and is in general perceived to be a democracy (see e.g. Marshall and Jaggers, 2003). Yet, the same party has ruled in Botswana since independence, always controlling a majority in the legislature (Alvarez et al., 1996, 10). Botswana does not fulfill this last criteria, and is therefore coded as non-democratic. The important question is therefore if elections are held because the ruling party know they will win, and whether the ruling party actually would leave office if they lost. Because these questions cannot be answered, Alvarez et al. (1996) argue that they prefer these Type I-errors to potential Type II-errors, where countries that in fact are autocratic are coded as democratic.

Table 4.2: The four main rules of the ACLP-index

Coding rules	**Conditions**
Rule 1. "Executive Selection"	The Chief Executive is not elected.
Rule 2. "Legislative Selection"	The Legislature is not elected.
Rule 3. "Party"	There is no more than one party. Specifically, this rule applies if (1) there are no parties, or (2) there is only one party, or (3) the current term in office ends in the establishment of non-party or one-party rule, or (4) the incumbents unconstitutionally close the legislature and rewrite the rules in their favor.
Rule 4. "Alternation"	Applies only to regimes that have passed the previous three rules. The incumbents will have or have held office continuously by virtue of elections for more than two terms or have held office without being elected for any duration of their current tenure in office, and until today or until the time when they were overthrown they had not lost an election.

Source: Przeworski et al. (2000, 28-29).

Verkuilen, 2002, 11), referring to whether offices are filled through the process of competitive elections or not. This is argued to be an apt decision, as "the concept of democracy seems inextricably linked with the notion of access to power" (Munck and Verkuilen, 2002, 11). The inclusion of offices gives the ACLP-index an advantage over other democracy indices, mainly drawing their inspiration from Dahl (1971) by solely focusing on contestation or/and participation (Gasiorowski, 1996; Vanhanen, 2000, e.g.).

Regarding timing rules of the transitions, a transition to democracy is coded by the time of the inauguration of the newly elected government, and not by the year the democratic elections were held (Przeworski et al., 1996, 51). This coding rule implies that some information in data is lost, like that of the Dominican Republic in 1963 where the democratic regime only lasted for six months. The Dominican Republic is thus *not* coded as a democracy in 1963 in my data although they were somewhat democratic for six months. Moreover, if a democratic regime prevailed December 31st in 1980, the country of interest is coded as democratic throughout the whole year of 1980.

Table 4.3: Decriptive statistics - Dependent variable

Regime type	Value	N	Percent
Dictatorship	0	4,010	60.35
Democracy	1	2,635	39.65
Total			100
Observations	6,645		
Countries	169		

Source: Cheibub, Gandhi and Vreeland (2010).

4.6.3 Issues with ACLP

A significant omission that affects various indices of democracy concerns one of Dahl's (1971) main attributes: participation (Munck and Verkuilen, 2002). The ACLP-index (somehow) averts this problem, as the data is solely gathered for the post World War II period. As argued by Alvarez et al (1996), the struggle for democracy in Western Europe concerned mainly suffrage and the right to participate. In countries recently confronted with the possibility of establishing democratic institutions however, universal suffrage is more or less taken for granted (1996, 5). In these cases, the one main concern is contestation: "whether divergent political forces will be able to compete for governmental offices and to assume offices if they win election" (1996, 5).[11] A reasonable assumption is thus that contestation is the most important part of the electoral process in the time period of my analysis (see e.g. Przeworski et al., 1996, 5) and (Coppedge, 1997, 181).

Some countries are certainly more democratic than others, considering features such as press freedom, freedom of speech and political participation. Substantive definitions of democracy arguably secure higher face validity than their institutional counterparts (Knutsen, 2011, 59).[12] The "minimalistic" definition applied can undoubtedly be criticized, especially from a normative point of view (Dahl, 1971; Beetham, 1994). However, normative aspects of democracy do not come without challenges, and the more encompassing a definition, the higher is the propensity for conceptual vagueness and operationalization issues (Knutsen, 2011, 61). Munck and Verkuilen (2002) offer some useful criteria for assessing alternative indices of democracy. The indicator should be so specific and clear-cut that one avoids large measurement errors. Also, it should be so stringent that there is little room for subjective choices. The ACLP-index relies on observable criteria, rather than subjective judgements, such as the FHI. This formal content minimizes the risks of measurement error and enhances the reliability (Przeworski et al., 2000; Adcock and Collier, 2001).

4.6.4 Alternative indices of democracy

After having argued for why the ACLP-index is the preferred measure of choice in this thesis, I find it natural to shortly address two of the most utilized democracy indices in the democratization literature, and why they are left out of the analysis.

The Freedom House Index (FHI)

The Freedom House Index (FHI) is one of the most utilized and most cited measures of democracy (Høyland, Moene and Willumsen, 2010) and is composed by two indices: the political rights index (PR) and the civil liberties index (CL).[13] The FHI comes close to what I have

[11] However, the assumption is not totally unproblematic. There can be informal restrictions on the right to vote, which eventually distorts the real value of votes (Hadenius, 1992, 40).

[12] A test can be said to have high face validity if the test measures what is supposed to be measured in a sufficient manner. More precisely, face validity refers to whether the theoretically defined concept adequately captures the background concept, which is "the broader constellation of meanings and understandings associated with a given concept" (Adcock and Collier, 2001, 531).

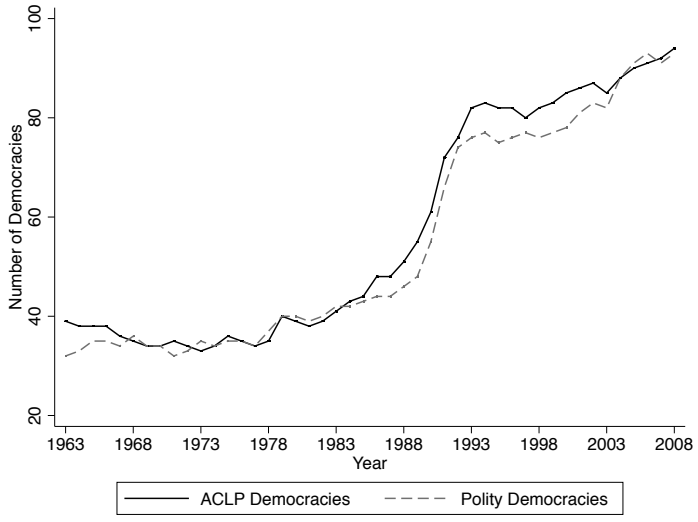
[13] The existence of political and civil rights were seen as essential for democracy by Beetham (1994) who contended that "[t]he freedoms of speech, association, assembly and movement [...] are essential to democracy as

referred to as a substantive definition of democracy, by not only focusing on institutions but also how they work in practice. Moreover, Dahl's (1971) two criteria of contestation and participation is captured in respectively the PR and the CL indices. Despite its advantages, much criticism is labeled against the FHI. One problem with the FHI is the inclusion of elements that differs *conceptually* from democracy, such as rule of law (Knutsen, 2011, 88). The FHI is thus "maximalist" in nature as opposed to the minimalist definition, who solely focus on contested elections. Munck and Verkuilen (2002) addresses two major drawbacks with maximalist definitions: First, its usefulness can be severely decreased by making it a concept with significantly few empirical referents. Second, and although empirical referents are found, its analytical usefulness can be discussed (2002, 9). Moreover, the FHI is not a preferable choice of measure in this thesis, as it only have data back to 1972. The time-series under investigation starts in 1963, and I therefore prefer an index with better coverage.

The Polity Index

As opposed to the FHI, the Polity Index (Marshall and Jaggers, 2003) comes closer to an institutional definition of democracy, by incorporating formal institutional structures and excluding civil liberties and other components prone to subjective judgement from the coding process (Knutsen, 2011, 91). As such, Polity is often endorsed due to its methodological impressiveness and transparency (Munck and Verkuilen, 2002, 26). Polity is continuous and runs from - 10 to 10, where 10 is most democratic. Common for researchers who study democratic transitions is to dichotomize the measure, where countries scoring +6 is viewed as democratic. As can be seen from Figure 4.1, a dichotomized Polity is highly correlated with the ACLP-index. However,

Figure 4.1: ACLP and Polity



when studying transitions there is no clear threshold for when there is a switch in type of regime (Bogaards, 2010; Cheibub, Gandhi and Vreeland, 2010; Cheibub and Vreeland, 2012). Although "extremes" are easily identified - Sweden is obviously democratic and North Korea is utterly not

such, since without them no effective popular control over government is possible" (1994, 29)

- the exact timing of the democratic transition is not obvious without "crisp, explicit, and replicable rules for coding transitions" (Cheibub and Vreeland, 2012, 22). The ACLP-index provides these advantages. Polity have also been criticized having validity problems, and in some cases Polity and FHI deviates substantially.[14] The Polity index is also criticized for omitting participation in their measurement procedure (Munck and Verkuilen, 2002, 28). As explained above, this is also a problem with the ACLP-index although somewhat less severe. Moreover, Polity has a comprehensive empirical scope in contrast to the FHI, encompassing my time-period of investigation. Despite arbitrariness related to the cut-off point when the democratic transitions are coded, the attention to institutional aspects and empirical comprehensiveness satisfies some important criteria in my analysis. I therefore chose to utilize the Polity-index when I conduct the robustness tests in chapter 6.

4.7 Inequality

As indicated in the introductory chapter, conceptualizing inequality provides a substantial challenge (e.g. Lambert, 2001). Collecting substantial data is also challenging as different indices of inequality tend to lack extensive time series (Houle, 2009; Timmons, 2010). Detecting a valid indicator is therefore important, and in the following section I treat some of the difficulties related to measuring inequality and why I utilize the variable capital share as a proxy for inequality throughout this thesis.

4.7.1 The Gini-index

Perhaps the most utilized measure of income inequality is the Gini-index from Deininger and Squire (1996). Inequality is measured as the level of income distribution ranging on an index between 0 and 1, where 0 indicates perfect *equality* and 1 indicates perfect *inequality*. Since the Gini index directly captures income inequality between individuals, it can be argued that it has a high face validity.[15] Aside from being the most utilized measure of income inequality, the Gini coefficient is applied in the most prominent empirical studies concerned with the effect of income inequality on democratization (e.g. Muller, 1985, 1988; Barro, 1999; Przeworski et al., 2000; Boix, 2003; Ansell and Samuels, 2010).

However, I am reluctant about using this measure for several reasons. First of all, the data set includes less than 11% of the country-years between 1950 and 1996, making observations less likely to be representative for the whole population (Houle, 2009, 598). Even worse, out of a total of 6658 observations in my dataset, the Gini-index (Deininger and Squire, 1996) only has 603 observations. This indicates a missingness of as much as 91%. The overall coverage is thus extremely poor and several countries are also left out of the sample. Perhaps the biggest challenge however, is that the Gini-index is composite from a variety of sources, making com-

[14] As Polity does not endorse civil liberties, Polity codes Russia as *more* democratic under Vladimir Putin than under Boris Jeltsin, whereas the FHI codes the opposite. This might seem puzzling, as democratic elections have been rendered less competitive under Putin than under Jeltsin (McFaul and Stoner-Weiss, 2008, 72)

[15] Face validity is said to be high when we are measuring what we think we are measuring (e.g. King, Keohane and Verba, 1994, 25).

parability a profound challenge: the observations include personal and household surveys, net and gross income and income and expenditure. Also, less than 8 percent of the observations are from Sub-Saharan Africa. Since many of the countries in the Middle East and Africa are nondemocratic regimes with intermediate levels of inequality, a statistical analysis using the Gini-index could provide support for the inverted U-shape argument of Acemoglu and Robinson (2006) simply because these less democratic countries with intermediate inequality levels would be excluded from the analysis (Houle, 2009, 590).

4.7.2 Capital share

I use the variable *capital share* as a proxy for inequality. The variable measures the proportion of value added in the industrial sector that accrues to the capital owners (Houle, 2009; Ortega and Rodriguez, N.d.). In contrast to the 603 observations on the Gini-index Deininger and Squire (1996) capital share has 3327 observations. Previous research on inequality and democratization have also used capital share as a measurement of inequality (see Przeworski et al., 2000; Acemoglu and Robinson, 2006; Dunning, 2008). Capital share is defined as 1 minus the wage share, measuring the proportion of compensation of employees to the value added in production (Houle, 2009, 602). The variable is composed from data collected by the United Nations Industrial Development Organization (UNIDO).[16] There are both theoretical and methodological reasons for why capital share serves as an appropriate measure of inequality in this thesis: Theoretically, using capital share to measure income inequality is consistent with the theory of Acemoglu and Robinson (2000*b*, 2006) who emphasize inter-group inequality between capitalists and workers instead of the overall level of inequality. According to Adcock and Collier (2001), a "[v]alid measurement is achieved when scores meaningfully capture ideas in the corresponding concept" (2001, 530). I argue that capital share therefore must be seen as a valid measure when testing the relationships as posited in the theory of inequality and democratization by Acemoglu and Robinson (2006):

> "when the major conflict is between the rich and the poor, one variable that captures inter-group inequality is the share of labor income in GDP. The reasoning here is that, whereas the poorer segments of society obtain most of their income from labor, capital income (and sometimes land income) accrues largely to a smaller elite. Therefore, a high labor share corresponds to a low level of inter-group inequality when conflict is between rich and poor" (Acemoglu and Robinson, 2006, 59).

Acemoglu and Robinson (2006) define the income of the non-elites as

$$Yp = (1 - \theta)y/(1 - \eth) \tag{4.3}$$

and the income of the elites as

$$Ye = \theta y/\eth \tag{4.4}$$

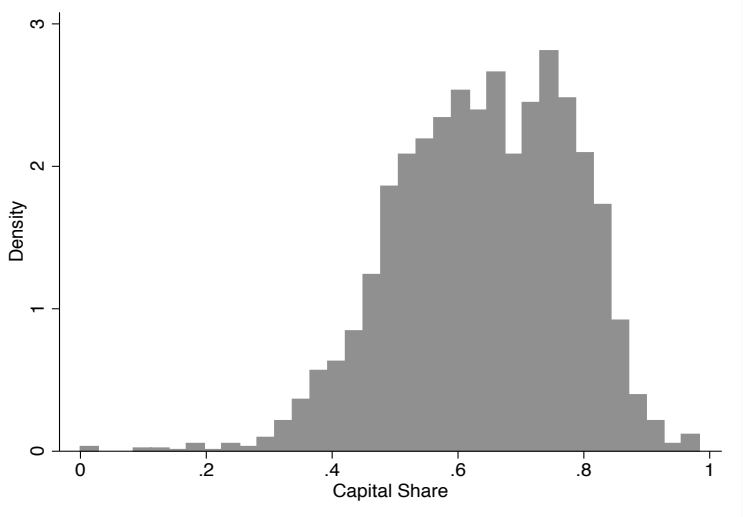
where y is the average income, $\eth$ is the relative size of the elites and θ denotes the share of income accruing the elite. Thus, the variable capital share directly captures θ (see Houle, 2009).

[16] Thanks to Carl Henrik Knutsen for lending me the data.

Also, Acemoglu and Robinson (2006) expect that democratization is more likely in societies where elites are heavily invested in human and physical capital, rather than in land. Land is easier taxable and rich landowners have more reason to fear democracy. Also, popular uprisings and general social disturbance may be more harmful to owners of human and physical capital, as they often have to rely on cooperation in the workplace. Land owners on the other hand, are more likely to use repression when faced with social disturbance in order to preserve their preferred regime. Taken together, these considerations imply that "democratization is more likely in a more industrialized society where the elite own significant physical and human capital than a more agricultural society where the elites are mainly invested in land. Stated differently, democracy is more likely when the elites are industrialists rather than land owners" (Acemoglu and Robinson, 2006, 32). Thus, if Acemoglu and Robinson (2006) are correct, democratization should be highly likely when the conflict is between capitalists and laborers.

Methodologically, and in contrast to the inequality data-set by Deininger and Squire (1996), capital share is extracted from the same source meaning that potential biases associated with different methods, definitions and sources are avoided.[17] The capital share variable is also probably the best proxy of inequality in terms of its broad cross-sectional coverage (Dunning, 2008). Capital share has the same interpretation as the Gini-index: economic inequality is highest closer to 1, as the value added accrued to the capital-owners increases at the expense of the wage-earners. Moreover, *capital share* stretches from the year 1963 to 2008 in the original UNIDO-dataset (UNIDO, 2011) and has 3533 unique observations from 151 countries. Figure 4.2 displays the variables' distribution, and the mean value is .64. Despite all of its advantages,

Figure 4.2: Histogram of Capital Share



capital share is not withheld problems as it contains a significant amount of missing values. However,' '[u]ncertainty and limited data should not cause us to abandon scientific research" (King, Keohane and Verba, 1994, 10) and as I explain towards the end of this chapter, I intend to reduce thieuncertainty related to missing data by performing multiple imputations. Although

[17] As mentioned, the variable is extracted from the UNIDO dataset provided by the the United Nations.

it is not a perfect solution, I have chosen to do so by mainly two reasons: First, an exclusion of countries without data on capital share leads to a loss of 38 democratic transitions, which counts for 44% of all of the democratic transitions in the sample. Second, I believe the uncertainty related to the multiple imputation process is less grave than the uncertainty that stems from excluding the cases with missing observations.

4.8 Control variables

Most often, models contain some sort of error. Usually this is specification error, as it is impossible to include all sorts of relevant variables in the models applied (see e.g. Schrodt, 2010). In this section I present the choice of control variables included in the empirical analysis. To avoid as much specification error as possible, the models applied in the empirical analysis include a number of control variables, theoretically and empirically related to democracy and inequality. The inclusion of these variables reduces the risk of omitted variable bias, which occurs when important variables that could have influenced the causal connection between inequality and democracy are left out of the analysis King, Keohane and Verba (1994, 28). Excluding such important variables may lead to an under- or overestimation of the effects in the empirical analysis, in that way complicating interpretation. Another handful of variables potentially linked with inequality and democratization could have been included in the analysis in order to alleviate the problems related to omitted variable bias, but I have focused on those I consider the most relevant, based on previous literature.[18] I first present the four variables included in the parsimonious model, before I present the remaining variables which are included in the extensive model.[19]

Income

Countries with high income are on average more equal than countries with low income (e.g. Przeworski et al., 2000). The level of income has also been argued to affect the probability of democratization. Lipset (1959) famously argued that higher levels of GDP per capita increased the probability for a country to be democratic, and numerous studies have later corroborated these assumptions (see e.g. Przeworski and Limongi, 1997; Przeworski et al., 2000; Hadenius and Teorell, 2005; Inglehart and Welzel, 2006). As also noted by Hegre, Knutsen and Rød (2012, 3) the notion that richer countries are more likely to be democratic, was an established saying for a long period of time. It is therefore necessary to study the effect of inequality on democratization independently of level of income. Moreover, the level of income in a countries is also highly correlated with how the income is distributed, as democratic countries on average are more equal than non-democracies. Therefore, I include the variable Real GDP per capita as a proxy for income. The variable is log transformed in order to create a distribution closer to

[18] Including too many variables is not only beneficiary: First, if two or more of the explanatory variables correlate there may be problems related to multicollinearity Kennedy (2008, 192-194). Second, the inclusion of too many explanatory variables may increases the risk of conducting so-called "garbage-can regressions", which may in worst case result in observations with meaningless results (Achen, 2005, 337).

[19] The main point with the parsimonious model is to build a model which includes the variables that are most likely to cause the most variation on the dependent variable. The variables of choice is based on findings in recent literature, where these variables are found to relate to democratization Houle (e.g. 2009).

the normal distribution than the original variable, and the variable is extracted from Gleditsch (2002*a*).

Oil

There have also been proposed arguments that profusion of natural resources is incompatible with democratic traits but rather increases the longevity of autocratic regimes (see Ross, 2001; Boix, 2003; Jensen and Wantchekon, 2004). Ross (2001) finds that oil and other types of natural resources such as non-fuel minerals impedes the prospects for democratization. The causal interpretation of the detrimental effects of oil-abundance on democratization, is that a country rich on natural resources have incentives and, most important, the possibility to "buy off" their citizens and potential opposition groups, thus dampening democratic pressure. This is done in a combination of high spending with lower tax-rates, while simultaneously expanding their internal security forces and investing in their military capabilities. One could also reason that oil-rich states prolong autocratic rule by using their fiscal powers to suppress dissent and social disturbances (see Ross, 2001, 355-356). As witnessed in 2011 in the wake of the Arab Spring, the Saudi Arabian government gave their citizens a 15 % pay raise in an attempt to dodge revolts and uprisings, in trying not to become "the next Libya" (AOL News, 2011). This also corresponds to the findings of Smith (2004, 232) who found that oil-rich states avoided collapse although oil prices increased in the 1980s, because "leaders [...] invested their windfall revenues in building state institutions and political organizations that could carry them through hard times". Bueno de Mesquita and Smith (2009) argues that governments in countries with resource-rents from oil and mineral extraction, reduce the provision of pubic goods, as they require few labor input by the citizens, thus increasing the probability for increase authoritarianism when facing revolutionary pressure. Boix (2003, 42-43) also argued that an economy driven by natural resource abundance such as oil, was hurtful for democracy as it increased the asset specificity and thereby making the rich relatively better off under dictatorship. Moreover, studies have also pointed to the impoverishing effect of natural resources (Fishlow, Alejandro, Fagen and Hansen, 1978) and that natural resource abundance may increase the level of inequality (Leamer, Maul, Rodriguez and Schott, 1999). The oil measure included in the analysis is a dummy variable and takes the value 1 if a country gets more than one third of its export revenues from oil or gas. The variables is originally from Fearon and Laitin (2003), but I have extracted them from Hegre, Karlsen, Nygård, Strand and Urdal (forthcoming) [20]

Regime duration

Previous studies of democratization suggests that states with earlier experience with regime transitions are more likely to democratize(Houle, 2009; Epstein, Bates, Goldstone, Kristensen and O'Halloran, 2006). Regimes also seems to become more resilient to threats over time (Clague, Keefer, Knack and Olson, 2003; Svolik, 2012). Muller (1995, 977) finds that a country's democratic experience is positively correlated with a change in the level of democracy from 1965 to 1980. Other empirical inquiries also suggest that political instability relates to regime type

[20] Fearon and Laitin (2003) have applied data from the World Bank coded in intervals of 5 year from 1960 to 2005.

(Feng, 1997, 2005) but also to income distribution, as unequal countries are said to be more unstable than egalitarian ones (Alesina and Perotti, 1996, 1205). I therefore include a variable measuring regime durability, extracted from the Polity dataset Marshall and Jaggers (2003). The variable is log-transformed, as suggested by Knutsen (2012). The variable measures "[t]he number of years since the most recent regime change (defined by a three-point change in the POLITY score over a period of three years or less) or the end of transition period defined by the lack of stable political institutions" (Marshall and Jaggers, 2002, 17).

% Democracies

A naive assumption would be that politics is carried out in a closed domestic arena, as democratization not always is the product of endogenous forces (Keefer, 2009, 666). Ideas have the ability to spread across country boarders and recent literature have suggested that the international political climate affects the probability for countries to become democratic (e.g. Gleditsch and Ward, 2006; Brinks and Coppedge, 2006; Levitsky and Way, 2010). According to these studies, previous research studying democratic transitions have tended to neglect the importance of "diffusion" – the spread of ideas – by implicitly expecting that the critical variables determining a political system are domestic (Brinks and Coppedge, 2006). As argued by (Wejnert, 2005, 56), "the geographic as well as numeric expansion of democratic countries increases the capacity to observe and to model democratic states". There is also good reason to assume that the democratizing effect of diffusion and the spread of ideas play a more important role in the time period of investigation, rather than in two first waves of democratization. One reason for this is because of the enormous expansion of global communication networks and the increase in transportation in the decades after the second World War (Huntington, 1991, 101).

In order to control for the possibility that international factors influence the prospects for democracy, the last variable included in the baseline model is a variable measuring the proportion of democracies in the world. I have constructed the variable based on the total number of democracies in the world, divided by the number of countries. Countries were defined as democratic tusing the ACLP-index (Alvarez et al., 1996; Cheibub, Gandhi and Vreeland, 2010).

Fractionalization

Ethnic diverse and social heterogenous societies are said to be negatively associated with democratizations, being sources of instability and violence (Easterly and Levine, 1997; Horowitz, 1985). As also noted by (Houle, 2009, 604), an incumbent may be less willing to leave office the regime opponents belong to another ethnic or religious group. Several empirical and theoretical studies also indicate that heterogenous societies complicates coordination, that is crucial for ensuring provision of public goods (Alesina, Baquir and Easterly, 1999; Baldwin and Huber, 2010). Different groups of citizens may also have different incentives to monopolize power under conditions of ethnic heterogeneity (Miquel, 2007). Ethnic and religious diversity are also said to be damaging to the economy, if associated with polarization of political life (Dahl, 2000) and there has also been shown negative effects of ethnolinguistic diversity on economic performance in several non-democratic African countries (Easterly and Levine, 1997)

I therefore include the variable *Ethnic Fractionalization*, extracted from Alesina, Devleeschauwer, Easterly, Kurlat and Wacziarg (2003) capturing both ethnic and linguistic diversity, and a variable capturing *Religious Fractionalization*. The variables range from 0 to 1 and reflect the probability that two randomly selected persons in a population are drawn from two different groups. The ethnicity-variable covers 650 distinct ethnic groups in 190 countries and data on religious fractionalization covers 294 different religions in 215 countries and dependencies (Alesina et al., 2003, 6-7).[21]

Growth

The economic performance of both autocracies and democracies are said increase likelihood of regime breakdown. Earlier studies have argued that growth is important in order to secure a democratic outcome (Boix, 2003) and recent empirical studies have also found a positive effect of GDP growth on the prospects for democratization (see Hegre, Knutsen and Rød, 2012). Moreover, growth may also influence the level of inequality, as it may affect diverse segments of the population differently (see Houle, 2010). Particularly, the effects of negative economic growth on democratization are well studied (e.g. Przeworski et al., 2000; Haggard and Kaufman, 1995). The probability of regime breakdown increases when facing a temporary performance crises, as this implies "a reduction in the resources available to political elites for sustaining bases of support" (Haggard and Kaufman, 1995, 29). Also Burke and Leigh (2008) finds that negative economic shocks increase the probability of democratization. I therefore include a variable measuring economic growth, and the variables is taken from the World Development Indicators (World Bank, 2010)

Religion

Also different types of non-economic factors are said to be important determinants of democratization. Liberal values and cultural have been put forth as important causes of democratization (e.g. Almond and Verba, 1963; Inglehart and Welzel, 2006), and particularly the predominant religion within a country is said to relate to the type of political regime. Several authors have argued that protestantism and its individualism corresponded particularly well with democratic values, contrarily to other religions (Lipset, 1959; Huntington, 1984; Bollen, 1979). Other scholars have emphasized the detrimental effects of Islam on both transitions to democracy and democratic stability (Bollen and Jackman, 1985; Huntington, 1991; Midlarsky, 1998; Feng, Kugler and Zak, 1999; Fish, 2002; Teorell, 2010). According to Huntington (1991, 28), "Islam [...] rejects any distinctions between the religious community and political community [...] to the extent that governmental legitimacy and policy flow from religious doctrine and religious expertise, Islamic concepts of politics differ from and contradict the premises of democratic politics". Third, there have been argued that catholicism reduces the probability for countries to undergo a democrat transition, when compared to protestantism (see Lipset and Lakin,

[21]The data from Alesina et al. (2003) relates to one year for a given country, most often from the early to mid-1990s (2003, 7). This may be a source of bias if there were to be drastic changes in a country's ethnic composition. However, I follow Teorell (2010, 163) and treat these patterns as constant throughout the time-period from 1963 to 2008.

2004). In general, religion has also been found to affect citizens' tolerance toward inequality (Milanovic, Gradstein and Ying, 2001, 30-31). I therefore include three variables measuring the percentage of Muslims, Catholics and Protestants. The variables are originally from La Porta et al (1999), but I have extracted them from the QOG-dataset (Teorell, Charron, Samanni, Hlmeberg and Rothsetein, 2011). The variables range from 0 to 100, measuring the percentage of the population belonging to a certain religion in 1980.

Colonial origin

Countries do vary in their historical origins, and time-invariant historical factors may be an important determinant of the establishment of a regime (see Acemoglu et al., 2008). Carothers (2002, 16) argues that "it is evident that the specific institutional legacies from predecessor regimes strongly affect the outcomes of attempted transitions". Some countries included in this analysis have been independent for a long time, like Denmark and France, while some countries gained their independence from colonial rule not more than 50 years ago, such as Zambia. Moreover, there is a huge literature on the historical and demographic determinants of democratization, and perhaps the most profound concerns the effects of colonialism. More specifically, countries with a British colonial legacy are understood to be more favorable to democracy than countries with other colonial origins (Huntington, 1984; Bollen and Jackman, 1985; Lipset, Seong and Torres, 1993; Lipset and Lakin, 2004). According to Bernhard, Reenock and Nordstrom (2004) the British were better than their European counterparts France and Spain in developing self-government and a more independent civil society in their colonies (2004, 227-232). Thus, I include a dummy-variable capturing whether the country have been a British colony or not. The variable is extracted from Teorell et al. (2011).[22]

4.8.1 The conditional variables

In this section I present the three variables I expect prompt individuals to overcome their collective action problems. In the empirical analysis, each of the three variables is interacted with inequality in order to see if inequality has a conditional effect on the probability of democratization. As I argued in the theoretical chapter, these variables are strongly supported by the empirical literature as causers of democratization (e.g. Haggard and Kaufman, 1995; Gleditsch and Ward, 2006; Bermeo, 2003)

Economic crisis

Economic crisis is viewed as a strong predictor of democratic transition. Przeworski and Limongi (1997) find that economic crises increase the probability of regime breakdown in both authoritarian and democratic regimes. Also Haggard and Kaufman (1995) argue that economic distress increases the probability of democratic transitions, because economic crises often bring about popular unrest.

[22]The classification of former colonial rule is based on the classification criteria by Bernhard, Reenock and Nordstrom (2004), where British settler colonies are excluded (the US, Canada, Australia, Israel and New Zealand) and thus exclusively focusing on "Western overseas" colonialism.

There is no widespread definition of how to operationalize economic crisis (e.g. Park, 2006). Previous literature on economic crisis and democratization have defined crisis as both inflationary crises (e.g. Gasiorowski, 1995) and as declining economic growth (Haggard and Kaufman, 1995; Przeworski and Limongi, 1997). I define an incident as an economic crisis when economic growth decrease beyond a critical level (see e.g. Drazen and Easterly, 2001; Alesina, Ardagna and Trebbi, 2006). I define an economic crisis if economic growth decreases with a minimum of 5% the current year. I follow Alesina, Ardagna and Trebbi (2006, 10) and generate a dummy variable called *crisis*, taking the value 1 if the country currently is in crisis and 0 if otherwise. This should be interpreted as a fairly strong test, as the value on the lowest 10% percentile on the economic growth variables is - 3.7. The crisis variable is based on the economic growth variable extracted from the World Development Indicators (World Bank, 2010).

Regional diffusion

As already mentioned, I have included a variable measuring the annual percentage of democracies in the world. In this section I present two related variables. One variable measures the annual number of democratic transitions in a country's region, excluding the specific country from the calculation.[23] Regional transitions are calculated using the ACLP-index from Cheibub, Gandhi and Vreeland (2010). The rationale behind this variable is that regional democratic transitions may have a signaling effect: by showing that the toppling of an autocratic regime is possible, this might help individuals in the host country to overcome their collective action problems.

I also include a variable measuring the total number of strikes, riots and anti-government demonstrations in the region, also exempting the specific country from the calculation. The variables constituting the index are extracted from the Cross-National Time-Series Data Archive (Banks, 2011). The intuition behind this variable corresponds to the arguments of diffusion and the spread of ideas: regional popular uprisings might send signals and ideas to other revolutionaries, triggering them to overcome their collective problems. I follow the most commonly utilized method of defining diffusion, namely that of regional diffusion (see e.g. Gleditsch, 2002*b*; Pevehouse, 2002*b*; Starr and Lindborg, 2003). This definition corresponds to what has been labeled as *proximate* contiguity (Gleditsch and Ward, 2001), meaning that entities are somehow close to each other, although not necessarily sharing a land boarder. I have chosen to focus on regions, because states located within the same region often share the same view of political and economic policies (Starr and Lindborg, 2003).[24]

What these two variables have in common with the economic crisis variable, is that they might have the important "shock" effect and the signaling effect, that prompt individuals to engage in popular uprisings.

[23]The different regions are Western Europe (including Australia, United States, New Zealand and Canada), Eastern Europe and post-Soviet countries, Middle East and Northern Africa, Sub-Saharan Africa, Asia and finally Latin America.

[24]As argued by Wejnert (2005, 56), the transmission of ideas between countries is enhanced by proximity and density. More specifically, "the closer countries are to each other, the greater the number of possible linkages through which democracy can be prompted or spread".

War

Another important factor in the transitory arguments by Acemoglu and Robinson (2006) is the stimulating effects of war: "[War] fits well with our theory because war is a time when the citizens [...] have significant temporary power until they are demobilized (2006, 180). More specifically, when wars have come to an end, citizens are supposed to have de facto political power:

> "The de facto power of the citizens that comes from an unusual event, such as a political crisis or the end of a war, becomes institutionalized and translated to future political power by the introduction of relatively free and fair elections in which the votes of all the citizens count, not just the elites" (Acemoglu and Robinson, 2006, 175).

Thus, war termination is viewed as a window of opportunity for mobilizing forces to challenge the incumbents and to demand more inclusive political institutions that are seen as credible. I therefore include the dummy variable *termination* taking the value 1 the year the conflict ended. The variable is extracted from the UCDP/PRIO Armed Conflict Dataset (Gleditsch, Wallensteen, Eriksson, Sollenberg and Strand, 2002). Also, a number of empirical studies have suggested that democratizations have occurred in the aftermath of a war or as a course of avenue for bringing a the conflict to an end (e.g. Bermeo, 2003). A regime may not only be weakened after the war has ended, but also when a war breaks out (Teorell, 2010, 103). There is also included a dummy variable that records the year of the outbreak of war, where the variable takes the value 1 if at least 25 were killed in battle related deaths that year. What should be noted is that none of these two variables distinguishes between type of conflicts, as Acemoglu and Robinson (2000*b*, 2006) do not seem to be concerned about whether citizens acquire de facto power after i.e. internal or external conflicts. I have chosen not to distinguish between types of conflict. Although Bermeo (2003, 160) notes that democracies more often were established after *internal* wars after 1945, Boix (2003, 29) maintains that Argentine's military defeat in the Falkland's war signaled a political weakness of the ruling elite in a way that made "democracy inevitable". Thus, both internal and external wars may create the window of opportunity for where the masses are able to mobilize against the now rendered unstable regime.

De facto collective action

Acemoglu and Robinson (2006) assert that what is important for democratization is when citizens pose a credible *threat* of revolution. It is relatively difficult however to offer a satisfactory test of this *threat*. Undoubtedly, one could suggest that there always exist some kind of latent threat of revolution in non-democracies, since the public majority most often are excluded from policy-making. However, there is no obvious reason for why this *latent* threat of revolution should be sufficient to force the elites to make concessions. A more reasonable assumption is that the threat becomes credible when it manifests in popular uprisings against the regime. For instance, Hugo Chves did not make any policy concessions until the grievances held by oil workers manifested itself in anti-regime demonstrations and strikes in Venezuela in 2002 (Acemoglu and Robinson, 2006, 180).

In order to study what I refer to as *de facto* collective action, there is included three variables extracted from the Cross National Time-Series (CNTS) Data Archive (Banks, 2011):

- *demonstrations*: "any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature"
- *strikes*: "any strike of 1,000 or more industrial or service workers that involves more than one employer and that is aimed at national government policies or authority"
- *riots*: "any violent demonstration or clash of more than 100 citizens involving the use of physical force"

The data is frequently utilized in large N-studies on the effect of protest on regime transitions (see e.g. Ulfelder, 2005; Teorell, 2010; Bueno de Mesquita and Smith, 2010; Rivera and Gleditsch, 2013). Most of the information about protests are derived from articles in *The New York Times* which might be a source of bias, both geographically and due to limited comprehensiveness (Banks, 1979). Smaller events may be underreported compared to bigger events. Although this is true, I treat this as unproblematic as I assume that only events of a certain size have any chance to alter an autocratic regime.[25] The Banks-data is also criticized for being constrained by their lack of transparency, and that it is unclear how the typologies are derived, e.g. how much violence is needed before being coded as a violent riot rather than a demonstration (e.g. Rivera and Gleditsch, 2013). These objections should be a call for caution when interpreting the results in chapter 5.[26]

As these variables measure de facto collective action, one might question the necessity of including the aforementioned shock-variables: economic crisis, regional democratic transitions and events of war. However, Acemoglu and Robinson (2000*b*, 2006) emphasize the fairly vague classification *threat* of revolution. When elites introduce free and fair elections, they might do so based on *anticipated* popular pressure from below, although this threat not yet has materialized (Acemoglu and Robinson, 2006). I therefore contend that because the variables extracted from Banks (2011) measure *de facto* collective action, a solely attention to these variables may prove insufficient to encompass the importance of a *threat* of revolution.[27]

4.9 Missing values and multiple imputation

> "If archaeologists threw away every piece of evidence, every tablet, every piece of pottery that was incomplete, we would have entire cultures that disappeared from the historical record".

[25] See also Teorell (2010, 166-167) and Ulfelder (2005, 321) for similar arguments.

[26] Previous studies examining the causes of political instability have investigated the effect of coup-risks Londregan and Poole (1990) and the risk of government collapse (Alesina and Perotti, 1996; Alesina, Osler, Roubini and Swagel, 1996). As my theoretical backdrop necessitate a focus on mass political movements, these approaches would not be sufficient

[27] Moreover, a reasonable assumption is that the acts of popular mobilization is performed by actors with a defined purpose. As briefly stated by Teorell (2010, 127), the real-world actors participating in these forms of collective action might think strategically and weigh the costs of participating against the potential benefits, before considering taking final action against the regime. If so, this might be somehow problematic for my data, and the data from Banks only allows me to draw inferences about acts of de-facto collective action, and as such not the explicit threats.

— Honaker and King (2010, 563)

The problems related to missing data are ubiquitous in social science data (Honaker, King and Blackwell, 2012; Høyland and Nygard, 2012). Without any exception, data on income inequality is scarce and verges on the boarder of being habitual. In general this has rendered cross sectional time-series analyses somewhat troublesome (see e.g. Barro, 1999; Przeworski et al., 2000; Boix, 2003; Houle, 2009; Haggard and Kaufman, 2012). The challenges related to missing data is also fundamental to this analysis. Although I apply a measurement of inequality with far better coverage than the Gini-index Deininger and Squire (1996) my main independent variable of interest *capital share* is troubled with missing observations. Excluding countries without data on capital share leads to a loss of 38 democratic transitions, which counts for 44% of all of the democratic transitions in the sample. I intent to treat this problem by performing multiple imputations. Although there is uncertainty related to multiple imputations, I regard this uncertainty as less grave than the uncertainty stemming from excluding cases without observations.

The most common response by statistical packages when confronted with missing data, is through listwise deletion: all units with at least one missing value is excluded from the analysis (Høyland and Nygard, 2012, 17). This often results in a drastic decrease in the sample size. In a review of the literature on survey data, King et al. (2001) suggests that as much as 94% make use of listwise deletion to eliminate their observations. This results in "a loss of valuable information at best and severe selection bias at worst" (2001, 49). Although their review is on survey data, they argue that similar problems frequently occur in non-survey research as well (2001, 49).

If listwise deletion were to be appropriate, one must assume that the missing observations are missing completely at random (MCAR); more precisely, that the missing values are uncorrelated with the values on the dependent variable. This is most often not the case in panel data, where missing values for the most are not missing at random (NMAR) (see Høyland and Nygard, 2012). Data is missing completely at random when the probability of a missing observation x_1 is unrelated to the value of x_m or to the value of any other variable. This is not the case with the data on inequality from the dataset of Deininger and Squire (1996). There is reason to believe that the scarce data from Sub-Saharan Africa relative to those from the Western countries, is not related to coincidental procedures, but rather because the availability of collecting data is easier overcome in Western countries. If data is not MCAR, listwise deletion creates biased results. Furthermore, the MCAR assumption is violated whenever one can predict that the probability that a cell in a data matrix is missing. Listwise deletion may then generate biased parameter estimates (King et al., 2001; Cranmer and Gill, 2012). By making inferences based on multiple imputation rather than listwise deletion, better efficiency is achieved since no observed data will be discarded (King et al., 2001).

When making use of the data, one is compelled to utter carefulness when performing the analyses. Often, sources of bias can be overlooked during the data collection. One of the sources that may lead to selection bias is when the chosen observations systematically distorts the pop-

ulation from which they are drawn (King, Keohane and Verba, 1994, 28). Although I make use of data collected by others, there is still good reason to question some of the procedures of which the data are collected. In reality, missing data are not due to some arbitrary reasons but is very often systematic. Among countries with data on my main independent variable capital share, the majority are distinguished by being relatively rich democracies. Some of these rich democracies have almost complete time series from 1963, like Belgium, Canada and Israel, while countries such as China, Libya and Peru only have a handful of observations. Non-democratic countries such as Oman, Haiti and Togo do not have any observations at all. By not taking this into consideration, this may lead to biased estimates. Inspections of the data in Table 4.4 justify the concerns for sample-selection biases; the average Polity-score for observations with data on capital share is 2.6, whereas for countries with missing data on capital share, the average Polity-score is -1.9. This suggests that non-democratic countries have on average fewer observations on the capital share variable. Moreover, societies holding citizens with relatively moderate to high

Table 4.4: Concerns for sample selection bias

Capital Share	Polity	ACLP	Observations
No missing	2.62	.54	6655
Total missing	-2.01	0.25	6579
Observations	6589	6645	

Note: The scores on Polity and ACLP are reported at their mean.

levels of income, are more likely to have fewer gaps in their time-series. These countries are perhaps also more willing to dispose their level of inequality. If those countries that do not collect data on income inequality were deleted from the analysis through listwise deletion, the dataset would be prone to overestimate the true effects of inequality. As also argued by Little and Rubin (2002, 42), the level of bias caused by listwise deletion depends i.e on "what proportion of the data are missing" and "how far the pattern of missing values is from being completely random".

It is plausible to assume that the data on income inequality displayed by some autocracies are not accidental selected at certain points in time. Some autocratic countries may thus expect to have more to fear from revealing their true data at certain points in time. If this is true, such countries would be included in the dataset containing only missing values. By throwing them out, information would be lost. For instance, China's recently officially published inequality data have been met by much criticism, questioning its truthfulness and whether they actually relate to realities. The Gini-scores released in 2013 was China's first official release since 2001, and was also their second lowest Gini-coefficient in ten years (The Atlantic, 2013). The delayed government response to reveal their Gini-scores is perhaps signaling the Communist Party's unease to show how China's socio-economic inequality has divided the elites from the poor majority. Such strategic disclosure of data can be problematic for the analysis and if the case of China is true, and transfers to other autocracies as well, one would run the risk of

not analyzing data of income inequality when inequality is high. This may lead to systematic biases when interpreting the coefficients.

4.9.1 Multiple imputation process

In order to alleviate the problems caused by missing values, and to avoid potential sample selection bias, I perform multiple imputations using the AMELIA II software (Honaker and King, 2010; Honaker, King and Blackwell, 2012).

The imputation process generates predicted values for all the missing values on the variables included in the imputation model.[28] The imputation process is based on algorithms, taking the cross sectional time series structure of the data into account.[29] Multiple imputation allows the analysis to use all of available information in the dataset to predict candidate estimates of the missing value (Høyland and Nygard, 2012, 11). For each missing observation, the imputation algorithm allows the variables to draw on correlations with the other variables included in the imputation process, for then to replace the missing values with the "new" imputed values. Thus, instead of excluding the uncertainty in the data set - the missing values - the information from the existing sources are combined to give a more complete picture.

I include two polynomials of time in the imputation model, as suggested by Honaker, King and Blackwell (2012). Variables often vary smoothly over time, and in such cases the values closest in time will guide the imputation of the missing value. However, exact how these patterns vary over time may differ within countries. Inequality may vary smoothly over time in some countries, while not in others. By including polynomials, these differences are taken care of. Also, variables that change over time may vary to a great extent *across* different countries. Therefore, I also impute with trends specific to each cross-sectional unit. I regard this as important for the analysis as there is no reason to believe that inequality changes in the same exact same manner over time in different countries.

I also include lags and leads of the independent variables as suggested by Honaker and King (2010, 567), where both previous and future observations predicts the inserted value. Both past and future values on a variable are likely to be highly correlated with present values, and the inclusion of lags and leads should therefore improve the model (Honaker, King and Blackwell, 2012, 22). In addition, I restrict all the variables with logical bounds in order to avoid meaningless imputed values.[30] I also set the empirical prior to 5% due to high missing-

[28] As advised by King et al. (2001), all of the control variables are included in the imputation.

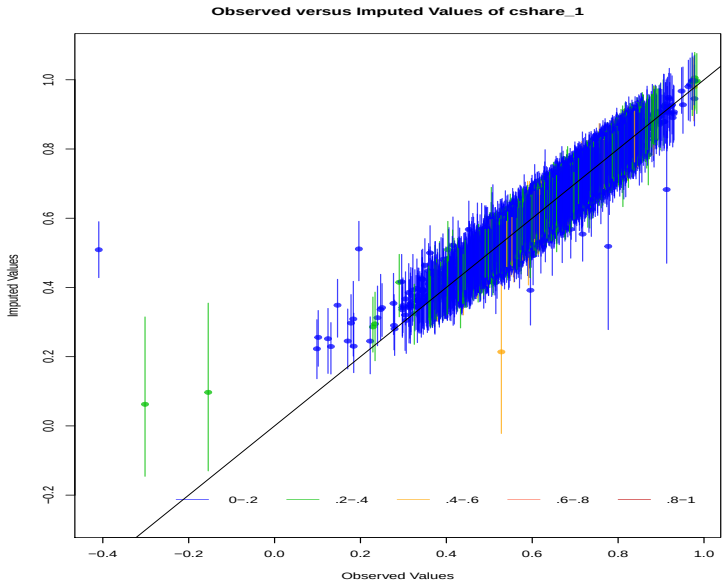
[29] Another common way to reduce uncertainty related to missing values, is through linear interpolation. This is also previously done when treating missingness on inequality variables (e.g. Fearon and Laitin, 2003; Østby, 2008; Ansell and Samuels, 2010). However, as noted by (Høyland and Nygard, 2012), there are at least two problems related to linear interpolation. First, these techniques assume that data is either missing completely at random, or missing at random, which is often a simplified assumption. Second, linear interpolation is more problematic when the gap in the time-series exceeds one year. As already mentioned, I do not assume that missing values on capital share is missing completely at random or at random. Also, several of the countries in the analysis have larger gaps the one year, such as Sudan (19 years) and Saudi Arabia (16 years). I therefore consider linear interpolation as suboptimal compared to multiple imputation.

[30] For example, the Polity index has a natural range from - 10 to 10, and by setting logical bounds I avoid generating values below - 10 or above 10.

ness, particularly on my main independent variable capital share (Houle, 2009, 617). As noted by (Honaker, King and Blackwell, 2012, 23) a prior up to 5% "is moderate in most applications".

I have also run a so-called over-imputation, in order to judge the fit of the model. By doing this, all of the observed values are treated as if they were missing. Then there is constructed a confidence interval of what the imputed value would have been, if the observed data had been missing (Honaker, King and Blackwell, 2012, 31). If the imputation model perfectly predicts the true values, the imputations cover the line. This is graphically illustrated in Figure 4.3. As can be seen, a satisfactory high number of observations falls on the line and I therefore conclude that the model has a good fit and that there is good reason to trust the imputed values.[31]

Figure 4.3: Overimputed Capital Share



4.9.2 Summary statistics

Table 4.5 and Table 4.6 shows the summary statistics for the main variables utilized in the analyses, for both non-imputed and imputed data. As seen in Table 4.5, the most significant amount of missing values stems from my main independent variable of interest *capital share* and the other inequality measures *(%) Family Farms* and *Gini (UTIP)*.

4.9.3 Summary

In this chapter I have presented my research design. Employing a quantitative design has two significant advantages which were decisive for my choice. Firstly, it allows for making general inferences about the relationship between inequality and democratization. Secondly, a quantitative design is the most suitable method when studying the potential conditional effects of

[31] See also Figure**??** in the Appendix for an example of how satisfactory the imputation process generated new values, with Saudi Arabia and Malaysia as illustrative examples.

Table 4.5: Summary statistics – Non-imputed data

Variable	Mean	Std. Dev.	Min.	Max.	N
Democracy (ACLP)	0.397	0.489	0	1	6645
Capital Share	0.641	0.139	0	0.983	3307
Log Real GDP pc.	8.217	1.129	5.139	11.343	6107
Oil	0.147	0.354	0	1	6587
Log Duration	2.425	1.291	0	5.293	6601
(%) Democracies	38.714	11.835	23.944	56.098	6603
Growth	2.025	6.346	-50.29	92.586	5581
British Colony	0.258	0.438	0	1	6658
Religious frac.	0.425	0.241	0.002	0.86	6443
Ethnic frac.	0.464	0.262	0	0.93	6450
Muslim	25.211	36.635	0	99.8	6408
Protestant	11.218	19.307	0	97.8	6376
Catholic	30.364	35.398	0	96.900	6408
Strikes	0.128	0.53	0	13	6383
Riots	0.43	1.84	0	55	6382
Demonstrations	0.566	1.898	0	60	6383
(%) Family Farms	42.693	24.036	0	98	4981
Gini (UTIP)	41.021	6.848	22.1	64.36	3054
Reg. trans. diffusion	0.363	0.746	0	5	6603
Pop. mob. diffusion	34.787	24.009	0	151	6603
War outbreak	0.047	0.211	0	1	6658
War termination	0.043	0.202	0	1	6658

Table 4.6: Summary statistics – Imputed data

Variable	Mean	Std. Dev.	Min.	Max.
Democracy (ACLP)	0.396	0.489	0	1
Capital Share	0.661	0.121	0	0.983
Log Real GDP pc.	8.243	1.134	5.139	11.343
Oil	0.147	0.353	0	1
Log Duration	2.416	1.291	0	5.293
(%) Democracies	38.55	11.938	16.638	56.498
Growth	2.065	5.991	-50.29	92.586
British Colony	0.258	0.438	0	1
Religious frac.	0.427	0.238	0.002	0.86
Ethnic frac.	0.464	0.259	0	0.93
Muslim	25.28	36.186	0	99.8
Protestant	11.256	18.973	0	97.8
Catholic	30.156	34.852	0	96.900
Strikes	0.136	0.522	0	13
Riots	0.464	1.826	0	55
Demonstrations	0.596	1.896	0	60
(%) Family Farms	43.604	23.199	0	98
Gini (UTIP)	42.992	6.36	22.1	64.36
Reg. trans. diffusion	0.37	0.742	0	5
Pop. mob. diffusion	35.434	23.735	0	151
War outbreak	0.047	0.211	0	1
War termination	0.043	0.202	0	1
N		6658		

inequality.

Whilst holding both methodological and theoretical advantages, the main independent variable of choice *capital share* comprises several missing values. I have chosen to respond to this shortcoming by performing multiple imputations, despite the uncertainty related to this process. My line of argument shows that multiple imputation is preferable to the method of excluding cases by listwise deletion, because the missing values on *capital share* presumably are not missing at random. Excluding these cases could consequently bias the results.

I began this chapter by arguing that one of the main goals of political science is to employ a design that maximizes leverage (King, Keohane and Verba, 1994, 29). In addition to improving the already existing data, another way is to advance theory by increasing its observable implications (King, Keohane and Verba, 1994, 30). In the next chapter I conduct a more refined test of the relationship between inequality and democratization, by studying whether inequality has a conditional effect on democratization.

Chapter 5

Empirical analysis

> "Perhaps [...] we make make the wrong decisions about which factors to emphasize and which to ignore, but whether we do can only be answered by the scientific and empirical usefulness of the theory".
>
> — *Acemoglu and Robinson (2006, 81)*

In the following chapter I present the results from the empirical analysis. I began chapter 3 arguing that one should ask of every theory what its observable implications are. The same applies for the empirical analysis. One should ask whether the observations are relevant to the implications of theory, and if so, what these observations enable the researcher to infer about the correctness of the theory (King, Keohane and Verba, 1994, 29).

In this thesis I set out to test a core implication of the economic theory of democratization as put forward by Acemoglu and Robinson (2000*b*, 2006). As prescribed by the authors, higher levels of inequality affects the probability of democratization through the causal mechanism of popular mobilization. Empirical inquiries, however, have found no robust relationship between inequality and democratization, leading to an almost uniform dismissal of the economic theories of democratization. In fact Teorell (2010) concludes that "[f]uture economic approaches to explaining democratization thus should pay less attention to [...] the importance of income inequality" (2010, 153). I argue that this apparent rejection of the economic approach may be somewhat hasty, as none of these studies have tested the potential conditional effect of inequality. I am interested in whether the effect of inequality changes under circumstances one should expect that collective action problems are overcome. For the purpose of this study, this is seen as more important than evaluating the predictive power of the model and the effects of the control variables. However, some of the control variables are commented upon in more detail during the empirical assessment. The important question is then: Under what conditions is inequality most likely to have an effect on democratization?

5.1 The stages of the analysis

The empirical analysis proceeds in several stages. Initially, I take a look at the data and present some descriptive statistics, before I move on to the results from the empirical analysis. The

analysis section proceeds in three stages: First, the results from the non-imputed analysis are presented, using a basic probit regression. The sample is restricted to include solely autocracies, and countries that were democratic throughout the whole period of investigation are excluded (see also Papaioannou and Siourounis, 2004; Houle, 2012). Thereafter I run the same analysis on imputed data, in order to see whether the results change due to potential sample selection bias. Then, I turn to the conditional hypotheses where all of the analyses are run on imputed data. Lastly, I present the results from the analysis where inequality is interacted with the variables I have referred to as *de facto* collective action: strikes, riots and demonstrations. The imputation process described in the previous chapter generated 10 different datasets, and all of the analyses are run on an *averaged* dataset over these 10 imputed data sets.

5.2 Descriptive statistics

Before turning to the results from the empirical analysis, I take a preliminary look at the data. I follow Achen (2005) who suggests that research professions "need greater emphasis on classic skills that generated so much of what we know in quantitative social science: plots, crosstabs and just plain looking at the data" (2005, 338). As a first endeavor, I address the number of democracies throughout the time period under investigation. Figure 5.1 shows the annual number of countries and democracies in the world from 1963 to 2008. As can seen from the graph,

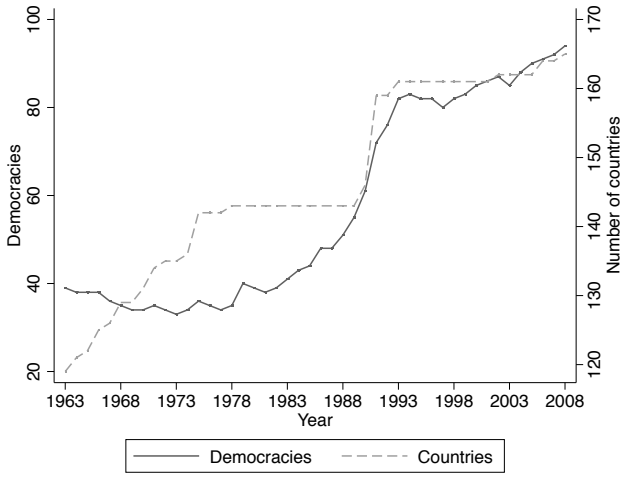


Figure 5.1: Democracies and countries in the world, 1963 - 2008

a slight decrease in democracies occurred during the 1960s and until the mid-1970s. Thereafter a steady increase in democratic transitions followed, starting with the fall of right-wing authoritarian regimes in Southern Europe in the mid-1970s. A rapid democratic improvement took place from around 1980; a time when elected governments replaced military dictatorships in Latin America from the late 1970s and throughout the 1980s (see Carothers, 2002). A significant portion of the time-period under investigation encapsulates what Huntington referred to as the "Third Wave of Democratization" (1991), beginning in the early 1970s and lasting until ap-

proximately 1990, culminating with the fall of the Soviet Union.[1] The steepest increase is from around 1980 until the early 1990s, largely explained by the significant number of democratic transitions in Latin American countries such as Bolivia (1982), Argentina (1983), Brazil (1985), Guatemala (1986), Paraguay (1989), Nepal (1990) and Chile (1990) and in Eastern European countries such as Poland (1989), Hungary (1990) and Romania (1990) following the end of the Cold War. Also several African countries went through democratic transitions, especially in the early 1990s, in countries such as Cape Verde (1990), Benin (1991), Ghana (1992), Mali (1992), Burundi (1993) and Niger (1993). One can certainly argue that the "Third Wave" deserves the appellation "the global democratic revolution" (Huntington, 1991, 33).

Moving on, Figure 5.2 reveals a pattern compatible with the assertion that democracies are associated with low levels of income inequality. This observation is consistent with theories arguing that high levels of inequality impedes democratization (Boix, 2003), hinders consolidation of already established democracies (Boix, 2003; Acemoglu and Robinson, 2006) or that the level of inequality is affected by type of regime (e.g. Rodrik, 1999; Przeworski et al., 2000).

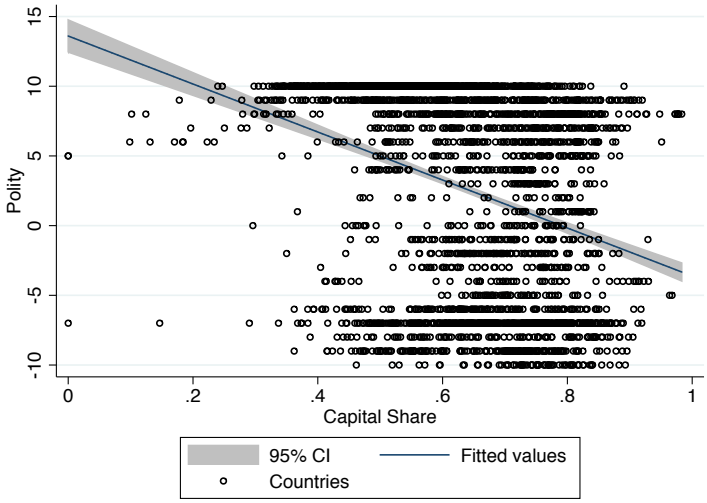


Figure 5.2: Inequality and political regimes

Furthermore I consider what the descriptive statistics reveal about democratic transitions. I take a look at the probabilities for autocracies to undergo democratic transitions at three different levels of inequality: low, intermediate and high. The variable capital share is divided into three percentiles: lower values are below the 33% percentile and higher values are above the 66% percentile. Capital share has a mean value of .64 and the threshold for the lowest percentile is .57 and .71 for the highest. Countries with capital shares below .57 are therefore regarded as equal whereas countries with capital shares above .71 are regarded as unequal. The two upper rows presents the results from the non-imputed dataset, whereas the two lower rows are from the imputed data. The second (1b) and the fourth (2b) row excludes communist countries, as

[1] More precisely, the Third Wave of Democratization commenced in Lisbon, Portugal in 1974 where the military coup of April 25th according to Huntington began a "world wide movement to democracy" (1991, 3-4)

communist and non-communist countries are said to be different categories of autocratic regimes (e.g. Boix, 2003; Acemoglu and Robinson, 2006). Communist regimes are often brought about due to its redistributive aspects and comparably relative egalitarian income distributions, where the poor rule after expropriating the capital of the wealthiest. In non-communist dictatorships, often right-wing dictatorships, wealthy elites have incentives to repress the poor and exclude them from the decision-making process (Boix, 2003, 23). Because of the egalitarian features of communist countries, a failure to control for them could result in overestimating an effect of low inequality on democratization. The results from Table 5.1 suggest that the probability

Table 5.1: Probability of Democratization per Capital Share Tiers

		Capital Share				
		Low	Middle	High	Transitions	N
1.	Democratization	0.007 (8)	0.012 (13)	0.023 (26)	47	1539
1b.	Democratization	0.006 (7)	0.011 (11)	0.024 (25)	43	1412
2.	Democratization	0.009 (20)	0.010 (21)	0.020 (44)	85	4021
2b.	Democratization	0.008 (18)	0.009 (18)	0.021 (43)	79	3496

Note: The two upper rows are results from the non-imputed data. Row 1b and 2b excludes countries with communist legacy. The observations from the imputed data are taken from the averaged dataset.

of transitioning to democracy increases for countries with higher levels of inequality than for countries with intermediate and low levels of inequality. Each of the three inequality levels have their own designated theoretical contributions: low (Boix, 2003), medium(Acemoglu and Robinson, 2006) and high (Acemoglu and Robinson, 2000*b*) levels of income inequality induce democratization. I start by looking at the first column. According to Boix (2003) democratization should be more likely at lower levels of inequality. The estimates in the first row leave Boix little support: Only 8 out of 47 democratic transitions occurred under low levels of inequality. Furthermore, the proposition that democratization should be more likely at intermediate levels of inequality (Acemoglu and Robinson, 2006), where elites are inclined to repress at high levels of inequality, is neither supported by data. 13 democratic transitions took place under moderate levels of inequality. Rather, the majority of the democratic transitions under the time-period of investigation occurred under high levels of inequality. This is also the main argument by Acemoglu and Robinson (2000*b*) and gives preliminary support to my second hypothesis (H2), that if anything, democratization is more likely at high levels of inequality.[2] The second row excludes the communist countries from the analysis, but the results remain unchanged.

The results from the imputed data shows a similar picture: democratic transitions are most likely at high levels of inequality.[3] In sum, the statistics suggests a correlation between higher

[2] Acemoglu and Robinson (2000*b*) argues that a "very equal society may never democratize [...] because there is relatively little social unrest"(2000*b*, 1176). Acemoglu and Robinson (2000*b*) suggest that democratic reforms coincide with the peak of the Kutznets curve, i.e. when inequality is at its highest. Increased inequality is often associated with industrialization, which again increase social unrest and then induce democratization.

[3] At first sight it seems like the imputed data diverges substantially from the non-imputed regarding democratic transitions under low levels of inequality. This could have suggested that the countries that democratized with missing values on capital share, in reality had low levels of inequality. However, when the number is observed against the total amount of transitions, the differences between the non-imputed and the imputed data are minimal.

levels of inequality and transitions to democracy. The preliminary results thus supports the most recent findings on inequality and democratization Haggard and Kaufman (2012) showing that the majority of democratic transitions from 1980 - 2000 occurred under high levels of inequality (2012, 501). Obviously, Table 5.1 displays correlations and not causations, and bivariate analyses of the relationship between x and y are in general not enough in order to make causal inferences (Hadenius and Teorell, 2005, 93). As previous empirical evidence has shown, the correlations between inequality and democracy may not be robust when including other variables in the regression.[4] In the next section I present the results from the statistical analysis in order to test the potential effects of inequality in a more proper manner.

5.3 Inequality and democratization

This section presents the results from the empirical analysis. Table 5.2 shows the impact of each of the independent variables on the probability of democratization, estimated with a probit regression. When interpreting the results, an increase in x increases or decreases the probability of y=1. More precisely, an increase in x makes democratization more or less likely. Moreover, positive coefficients indicate a positive relationship between the independent variable and the probability of democratization. I start off by considering the baseline assumptions regarding the relationship between inequality and democratization, testing H1 and H1b, both assuming that inequality has an independent effect on democratization. As explained in chapter 4, all independent variables are included with a one-year lag structure, in order to reduce the risk of endogeneity.

5.3.1 Probit estimation

Model 1 shows the most basic model, testing the proposition that there is a linear relationship between inequality and democratization. Model 1 includes only four control variables. In Model 2 the squared capital share variable is included, in order to test the non-linear proposition by Acemoglu and Robinson (2006) suggesting that there is an inverted U-shaped relationship between inequality and democratization. Model 3 and 4 includes more control variables, theoretically and empirically linked to democratization. In order to see if there is any regional effects (e.g. Bunce, 2000) of inequality on democratization, I include six different regional variables in Model 5 and Model 6. These variables are also involved in all of the next tables. Omitting regions from the analysis could bias the results. For instance, Mainwaring and Perez-Linan (2005) shows that the effects of per capita income on democracy has been different in Latin America than in other regions of the world. One should therefore be cautious about making universal generalizations when studying democratic transitions, as causal heterogeneity and domain restrictions must be taken into consideration. By failing to control for regions there runs a risk for capturing the effect of being a Latin American country, rather than just being distinguished

[4]The inclusion of theoretically and empirically relevant controls is improving the extent to which it is possible to make causal inferences. By holding the controls at a constant level, one comes closer to identifying the actual condition causing the outcome on the dependent variable (Wooldridge, 2010).

by high levels of inequality.[5] Model 1 in Table 5.2 displays the results from the baseline

Table 5.2: Probit Regression on the effect of Inequality on Democratization Non-imputed dataset

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.797	-1.988^{+}	0.648	-1.588	0.782	-2.059*
	(0.629)	(1.152)	(0.742)	(1.396)	(0.797)	(0.954)
Capital Share sq.		2.139*		1.716		2.207*
		(0.970)		(1.129)		(0.975)
Log Real GDP per capita	0.212**	0.214**	0.158	0.158	-0.081	-0.081
	(0.075)	(0.075)	(0.107)	(0.106)	(0.132)	(0.131)
Oil (dummy)	-0.628^{+}	-0.649^{+}	-0.611	-0.623	-0.498	-0.520
	(0.335)	(0.336)	(0.413)	(0.413)	(0.395)	(0.396)
ln Duration	-0.410***	-0.405***	-0.411***	-0.407***	-0.381***	-0.379***
	(0.068)	(0.068)	(0.073)	(0.073)	(0.078)	(0.078)
(%) Democracies	0.014*	0.013*	0.015^{+}	0.015^{+}	0.016*	0.015^{+}
	(0.006)	(0.006)	(0.008)	(0.008)	(0.008)	(0.008)
Growth			-0.029*	-0.029*	-0.031*	-0.031*
			(0.015)	(0.015)	(0.015)	(0.015)
British Colony			-0.138	-0.144	0.026	0.032
			(0.249)	(0.250)	(0.267)	(0.267)
Religious frac.			-0.430	-0.428	-0.235	-0.256
			(0.428)	(0.429)	(0.457)	(0.454)
Ethnic frac.			0.129	0.106	0.234	0.209
			(0.299)	(0.295)	(0.265)	(0.258)
Muslim			-0.007^{+}	-0.006	-0.003	-0.003
			(0.004)	(0.004)	(0.005)	(0.005)
Protestant			-0.004	-0.004	0.006	0.006
			(0.010)	(0.010)	(0.012)	(0.012)
Catholic			-0.003	-0.003	-0.006*	-0.007*
			(0.002)	(0.002)	(0.003)	(0.003)
Constant	-3.848***	-2.968***	-2.806*	-2.070^{+}	-0.720	0.244
	(0.726)	(0.711)	(1.127)	(1.108)	(1.269)	(1.186)
Observations	1474	1474	1201	1201	1201	1201
AIC	337.852	339.127	304.387	306.064	303.594	304.866
ll_0	-194.352	-194.352	-175.408	-175.408	-175.408	-175.408
ll	-162.926	-162.564	-139.194	-139.032	-133.797	-133.433

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

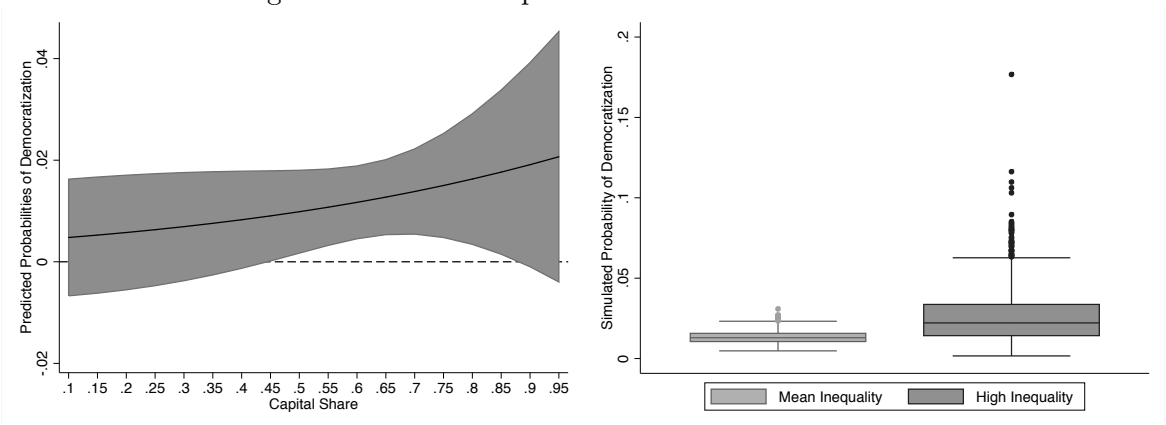
regression. As can be seen, higher capital shares are associated with higher probabilities for transitions to democracy, although the coefficient turns out to be far from significant. Thus, it leaves no support to the hypothesis of Boix (2003) suggesting a negative monotonic relationship between inequality and democratization. On the contrary, the sign of the coefficient gives some support to Acemoglu and Robinson (2000*b*) who contends that democracies evolve under higher levels of inequality, although the coefficient is not significant. The positive coefficient is in line

[5] As can be seen from Figure 4 in the Appendix, Latin America and Asia are the most unequal regions in the sample with average capital shares on .72 and .71. If failing to control for e.g. Latin America, I risk capturing the effect of being a Latin American country.

the descriptive statistics from Table 5.1, showing that a majority of the democratic transitions occurred under high levels of inequality. Assessing the explanatory variables, all except oil turns out to be significant in the expected direction. Perhaps somewhat surprisingly, an increase in GDP per capita is positively related to the probability of democratization, opposing the findings of Przeworski and Limongi (1997).[6] However, the effect disappears when further controls are added. Regime durability seems to be the strongest predictor across all models, as also suggested in recent research (e.g. Hegre, Knutsen and Rød, 2012). This indicates that regime longevity reduces the risk of authoritarian breakdown. Also the variable Growth takes a negative and significant sign; not that surprising. For example, Acemoglu and Robinson (2001) shows through formal models that authoritarian stability depends largely on their economic performance, because non-democracies as opposed to democracies have no formal legitimacy. Model 2 reports the main argument of Acemoglu and Robinson (2006) suggesting that countries with intermediate levels of inequality have higher probabilities to democratize. If supported, the coefficient on capital share should be positive and capital share squared should take a negative sign. As can be seen, the exact opposite happens and capital share squared turns out significant at the 5 % level. If anything, the relationship is U-shaped and not inverted U-shapes as suggested by Acemoglu and Robinson (2006). I return to this finding when I comment the results from the imputed data. This finding also concurs with the findings ofAnsell and Samuels (2010, 24) who detects the exact opposite mechanism of what predicted by Acemoglu and Robinson (2006).

Figure 5.3 displays the predicted probability of democratization when inequality increase from its mean value to its maximum value, with all of the other explanatory variables held at their mean. As seen from the figure, the predicted probability of democratization increases at higher

Figure 5.3: Predicted probabilities of democratization



levels of inequality although the coefficient comes out insignificant. The confidence intervals are fairly large at all levels of inequality and there is only a significant effect when the confidence intervals do not cross the dashed horizontal line, from approximately .45 to .85. The plot clearly

[6]Przeworski and Limongi (1997) held up that democracies were established at all levels of economic development, and the emergence of democracies could thus not be seen as a by-product of economic development (Przeworski and Limongi, 1997, 177). But when first established, rich democracies tend to survive more often than poor democracies

shows that low inequality has no marginal effect on democratization, and the relationship is clearly not inverted U-shaped.[7] The baseline hypotheses are therefore preliminary rejected. The two last models in Table 5.2 do not substantially different results; the effect of inequality is still insignificant and in the positive direction, although somewhat weaker than in the previous models. The inclusion of time and regional variables in Model 5 and Model 6 improves the model. In this case, AIC takes lower values compared to the previous models. A decrease in AIC indicates that the model performs better. Both time and regional effects thus explains more of the variance in the dependent variable.[8]

The results from the non-imputed data uncovered a non-significant relationship between inequality and democratization. Before I move on to the conditional effects of inequality, the results from the baseline model with imputed data are presented, in order to see whether the results change substantially. In chapter 4 I maintained the possibility for sample section bias on the main variable of interest *capital share*, as the majority of the observations are drawn from democratic countries. Table 5.3 displays the results from the imputed data. Capital share still takes a positive sign and continues to be insignificant, equivalent to the results from the non-imputed data. Economic hardship alone does not seem to be a strong predictor of democratization. This finding is actually not all that surprising, as it provides support to recent empirical inquiries on inequality and democratization which found no substantial independent effect of inequality on the probability of democratic transitions (e.g. Houle, 2009; Alemán and Yang, 2011). Without too much speculation, I make some suggestions for what may explain this finding. One plausible explanation is that high levels of inequality has two effects which are in fact offsetting (Houle, 2009). While high levels of inequality spur anti-regime sentiments and social unrests, they may at the same time reduce the willingness of the elites to democratize. This leaves the net effect of inequality on democratization somewhat ambiguous. If Meltzer and Richards (1981) are correct in claiming that highly unequal democracies redistribute (wealth) relatively more than equal democracies, there are good reasons to assume that elites in unequal autocracies have rational motifs for worrying about the redistributive aspects of democratization. The findings also falls in line with Ingleharts (2007) position, who points to the extensive literature on social movements and political participation and maintains that socioeconomic grievances do not by themselves generate distinct actions (2007, 307). Before I turn to the conditional hypotheses, I will reflect upon the positive significant effects of the variable capital share squared. As can be seen from Table 5.3, capital share squared is significant in all of the models. Since coefficient estimates generated from probit regressions are substantially difficult to interpret (see King, Tomz and Wittenberg, 2000), a common procedure is to present the coefficient estimates as marginal effects. Marginal effects displays the change in probability of

[7] The fact that the effect turns out significant between .45 and .85 is not that surprising, as there are few observations at extremely low and extremely high values. Almost as much as 88% of the observations on capital share falls between the .45 and .85.

[8] AIC is preferable when comparing models without the same number of observations. As opposed to the Log Likelihood function, the AIC "penalize" the inclusion of more controls in the model (see Bozdogan, 2000). Ceteris paribus, the inclusion of an extensive amount of controls predicts more of the variation in democratizations. However, AIC penalize an unrestricted inclusion of controls. Thus, more controls do not necessarily generate a lower AIC.

Table 5.3: Probit Regression on the effect of Inequality on Democratization – Imputed data

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.695	-2.843**	0.076	-2.936**	0.092	-2.743*
	(0.620)	(0.902)	(0.706)	(0.976)	(0.750)	(1.070)
Capital Share sq.		2.877***		2.493**		2.342**
		(0.836)		(0.820)		(0.895)
Log Real GDP per capita	0.171**	0.180**	0.142*	0.145*	0.166*	0.166*
	(0.060)	(0.061)	(0.066)	(0.067)	(0.079)	(0.078)
Oil (dummy)	-0.574*	-0.583*	-0.479+	-0.480+	-0.363	-0.368
	(0.260)	(0.258)	(0.270)	(0.269)	(0.273)	(0.272)
Log Duration	-0.343***	-0.344***	-0.333***	-0.332***	-0.332***	-0.331***
	(0.050)	(0.050)	(0.048)	(0.048)	(0.049)	(0.048)
(%) Democracies	0.006	0.005	0.013**	0.012*	0.013*	0.012*
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
Growth			-0.019*	-0.018*	-0.019*	-0.018*
			(0.008)	(0.008)	(0.008)	(0.008)
British Colony			0.165	0.115	0.246	0.199
			(0.152)	(0.150)	(0.163)	(0.161)
Religious fractionalization			-0.877**	-0.877**	-0.828*	-0.826*
			(0.333)	(0.333)	(0.334)	(0.330)
Ethnic fractionalization			0.257	0.191	0.181	0.130
			(0.252)	(0.249)	(0.261)	(0.259)
Muslim			-0.007*	-0.006*	-0.004	-0.004
			(0.003)	(0.003)	(0.003)	(0.003)
Protestant			-0.008	-0.006	-0.008	-0.006
			(0.007)	(0.007)	(0.007)	(0.007)
Catholic			0.003	0.003	0.002	0.002
			(0.002)	(0.002)	(0.003)	(0.003)
Constant	-3.431***	-2.445***	-2.712***	-1.823**	-2.786**	-1.939*
	(0.613)	(0.518)	(0.744)	(0.694)	(0.919)	(0.868)
Observations	4035	4035	4035	4035	4035	4035
AIC	731.779	728.956	709.786	708.673	708.289	707.576
ll_0	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208
ll	-359.889	-357.478	-341.893	-340.337	-336.144	-334.788

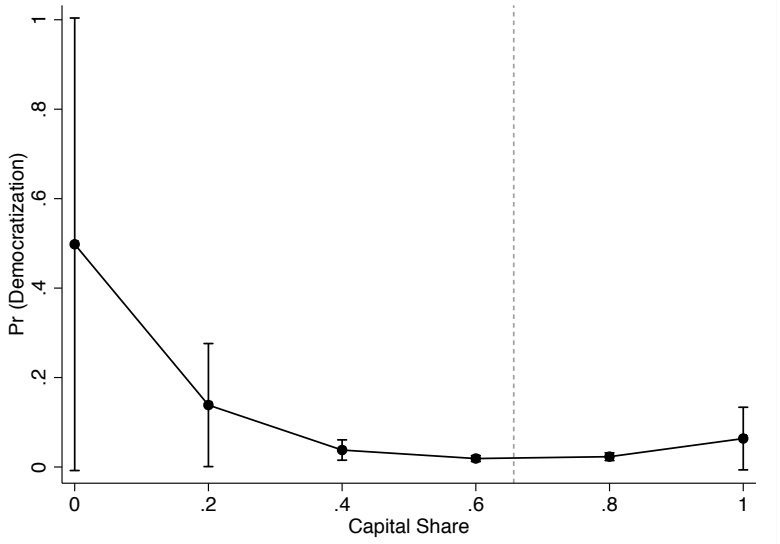
Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

y=1 when the independent variable x increases with one unit. I therefore present the relationship in Figure 5.4. Similarly to the results from the non-imputed data, the relationship between inequality and democratization seems to be a *convex* relationship. This is in stark contrast to the suggested inverted U-shape relationship, or *concave* relationship, suggested by Acemoglu and Robinson (2006). If anything, the relationship is U-shaped and the alternative hypothesis 1b can be rejected.[9]

[9]The vertical dashed line indicates at what level of inequality the effect turns (.65). After this point, the marginal effect of inequality on democratization increases slightly at higher levels of inequality.

Figure 5.4: The convex relationship between Inequality and Democratization



5.4 Conditional effects of inequality

The results from both the non-imputed and imputed data uncovered a non-significant relationship between inequality and democratization. In this section I probe deeper into the relationship between inequality and democratization by studying the potential conditional effects of inequality on democratization. As maintained in the theoretical chapter, inequality may not *ipso facto* be a sufficient cause of democratization. Instead, inequality may increase the likelihood of democratization under conditions one should expect facilitates collective action. If so, recent empirical inquiries have failed to properly model the relationship between inequality and democratization (Acemoglu and Robinson, 2000*b*, 2006).

Before the results are presented, I repeat that the explanatory variables are introduced with a one year lag structure. This also includes the "shock"-variables economic crisis, diffusion and war, included in the interaction terms with inequality. Chapter 4 revealed some methodological reasons for why lagging the independent variables were preferable, in order to reduce the risk of reversed causation. However, the variables are also lagged due to theoretical concerns: A key feature with the theory of Acemoglu and Robinson (2001, 2006) is that collective action is intrinsically transitory: bringing about collective action is easier than to sustain it. The poor pose a revolutionary threat especially during periods of shocks and crisis (see Acemoglu and Robinson, 2001, 939).[10] By including the variables with a one year lag-structure, I avoid ob-

[10]"In some situations, the collective-action problem is easier to solve, opponents to the regime are easier to coordinate, and revolutions are easier and less costly to carry out" (Acemoglu and Robinson, 2006, 31). This framework corresponds to the findings of Haggard and Kaufman (1995) who found that many of the transitions in Latin America happened during times of economic crises. Resembling the transitory arguments by Acemoglu and Robinson (2006), Lichbach (1995, 17) argues that the commitment of individuals to particular causes will most probably face a decline after a short period of time, and that most dissident campaigns often are brief and ephemeral. Similarly Tarrow (1991, 15) speaks about "the exhaustion of mass political movement" during collective action-events and that "[t]he power to trigger sequences of collective action is not the same as the power to control or sustain them" (Tarrow, 1994, 23). Also Hardin (2001, 18) argues that "the extensive political participation of civil society receives enthusiastic expression only in moments of state collapse or great crisis" and that it "cannot be maintained at a high level".

serving that the "shock"-variables are an inherent part, or an outcome, of the democratization process. I now turn to the empirical findings.

Table 5.4: Probit Regression on the Conditional Effect of Inequality on Democratization

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Share	0.027	0.775	0.030	-0.240	0.126	0.969	0.093	0.024	0.087	0.159
	(0.740)	(0.829)	(0.765)	(0.839)	(0.753)	(1.163)	(0.749)	(0.804)	(0.751)	(0.780)
Economic Crisis (- 5%)	0.338*	2.739**								
	(0.153)	(0.933)								
Cap.Share*Crisis		-3.601*								
		(1.418)								
Reg. trans. diffusion			0.131*	-0.108						
			(0.053)	(0.329)						
Cap.Share * Reg.trans. diffusion				0.337						
				(0.444)						
Pop. mob. diffusion					0.005*	0.024				
					(0.002)	(0.019)				
Capital Share * Pop. mob. diffusion						-0.027				
						(0.027)				
War outbreak							0.173	-0.558		
							(0.200)	(1.435)		
Capital Share * Outbreak								1.019		
								(2.016)		
War termination									-0.134	0.938
									(0.237)	(1.120)
Capital Share * Termination										-1.534
										(1.608)
Log Real GDP per capita	0.157*	0.166*	0.159*	0.163*	0.163*	0.160*	0.172*	0.171*	0.163*	0.163*
	(0.078)	(0.077)	(0.078)	(0.078)	(0.079)	(0.079)	(0.080)	(0.080)	(0.079)	(0.079)
Oil (dummy)	-0.373	-0.373	-0.361	-0.363	-0.360	-0.354	-0.374	-0.375	-0.358	-0.356
	(0.271)	(0.277)	(0.279)	(0.278)	(0.277)	(0.277)	(0.278)	(0.280)	(0.273)	(0.272)
Log Duration	-0.337***	-0.339***	-0.331***	-0.332***	-0.330***	-0.330***	-0.334***	-0.334***	-0.331***	-0.331***
	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)
(%) Democracies	0.013**	0.012*	0.011*	0.011*	0.013*	0.013*	0.013*	0.013*	0.013**	0.013**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Growth			-0.017*	-0.017*	-0.017*	-0.017*	-0.019*	-0.019*	-0.020*	-0.020*
			(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
British Colony	0.237	0.262+	0.255	0.244	0.254	0.262	0.248	0.246	0.245	0.246
	(0.160)	(0.158)	(0.166)	(0.164)	(0.164)	(0.164)	(0.163)	(0.163)	(0.162)	(0.162)
Religious fractionalization	-0.829*	-0.811*	-0.842*	-0.854*	-0.822*	-0.852*	-0.832*	-0.834*	-0.829*	-0.828*
	(0.333)	(0.329)	(0.341)	(0.344)	(0.339)	(0.337)	(0.335)	(0.336)	(0.333)	(0.332)
Ethnic fractionalization	0.206	0.151	0.181	0.193	0.177	0.178	0.184	0.183	0.177	0.176
	(0.264)	(0.260)	(0.266)	(0.267)	(0.268)	(0.269)	(0.263)	(0.264)	(0.261)	(0.261)
Muslim	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Protestant	-0.007	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-0.008	-0.008
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Catholic	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Constant	-2.737**	-3.277***	-2.689**	-2.535**	-2.987**	-3.508***	-2.836**	-2.775**	-2.750**	-2.803**
	(0.908)	(0.946)	(0.916)	(0.941)	(0.927)	(1.045)	(0.932)	(0.962)	(0.921)	(0.938)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	709.722	704.796	704.760	706.230	706.285	707.114	709.479	711.265	709.936	711.561
ll_0	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208
ll	-336.861	-333.398	-333.380	-333.115	-334.143	-333.557	-335.740	-335.633	-335.968	-335.780

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.4.1 Economic crisis

In contrast to the analyses above, economic crisis is included in Model 1 in Table 5.4. The crisis variable takes a positive sign in the expected direction and is significant at the 5% level.

Dictatorships are rendered vulnerable when economic growth declines with more than 5%. This should be interpreted as a rather robust finding and supports a fairly comprehensive literature suggesting the similar dynamics (e.g. Haggard and Kaufman, 1995; Przeworski and Limongi, 1997; Geddes, 1999*b*; Epstein et al., 2006; Houle, 2009). Also Huntington (1991, 49-54) argues that poor macroeconomic performance, as reflected in negative rates of growth, undermines the legitimacy of authoritarian regimes and can thus serve as a cause of democratization. The significant positive effect of economic crisis on democratization also validate the case-specific evidence provided by Haggard and Kaufman (1995).[11]

In Model 2 capital share is interacted with economic crisis in order to test H2, if higher levels of inequality increase the probability of democratization when experiencing an economic crisis. The interaction term turns out significant and takes a negative sign, hence working in the opposite direction of what hypothesized. Rather than being inducive to democratization, higher levels of inequality *decrease* the probability of democratization in times of economic crisis. H2 is therefore rejected. I find this result somehow surprising as it stands in contrast to the theoretical assumptions that economic shocks could be the "spark" initiating the "revolutionary bandwagon" (Kuran, 1989, 60) causing economically deprived citizens to take to the streets and demand regime change. Figure 5.5 displays the marginal effects of the interaction between inequality and economic crisis, evidently showing that the marginal effect of inequality on democratization during periods of crisis is higher under lower levels of inequality.[12] In order to interpret this finding, perhaps a return to one of the main theories of inequality and democratization is necessary, that of Boix (2003). One plausible explanation is that it becomes more attractive to repress oppositional forces during economic downturns when inequality is high. As already mentioned, the legitimacy of non-democracies is said to hinge on their economic performance (Fukuyama, 2005; Knutsen, 2013) and poor economic performance in general may prove detrimental for authoritarian incumbents (Linz and Stepan, 1996, 79). However, poor economic performance do not necessarily cause democratization. When being confronted with an economic crisis, elites may have stronger incentives to democratize when inequality is low. This line of reasoning follows the main assumptions by Boix (2003) who argues that high levels of inequality reduces the likelihood of democratization, as repression is more attractive than redistributing wealth in a democracy. A democratic transition may be viewed as less costly for elites under low levels of inequality. Authoritarian elites may acquiesce to and even lead democratic reforms "if they believe they can retain leverage over the political process and re-

[11]The origins of the economic crises however, can be due to a variety of factors. For instance, the economic crises witnessed in Bolivia (1981), Uruguay (1985), Argentine (1983) and the Philippines (1986) varied in nature and intensity, but common for them all was past domestic policy mistakes and sudden withdrawal of external lending associated with the international debt crisis (Haggard and Kaufman, 1995, 45-46). One could also ask whether economic crisis threatens the stability of the regime, or if the instability of a regime is a causer of economic crisis. In dictatorships the elites may be put under pressure due to economic shocks and is forced to liberalize. But shocks may also be political, such as the death of the leader, causing investors to run away and workers to increase their demands, eventually causing economic decline Przeworski et al. (2000, 112). The results contradicts the findings of Przeworski et al. (2000), proclaiming hat dictatorships are not particularly sensitive to economic crises and that dictatorships are likely to die under all kinds of economic conditions (2000, 111)

[12]The marginal effects plot is conducted using the *margins* and the *marginsplot* command in STATA 12.

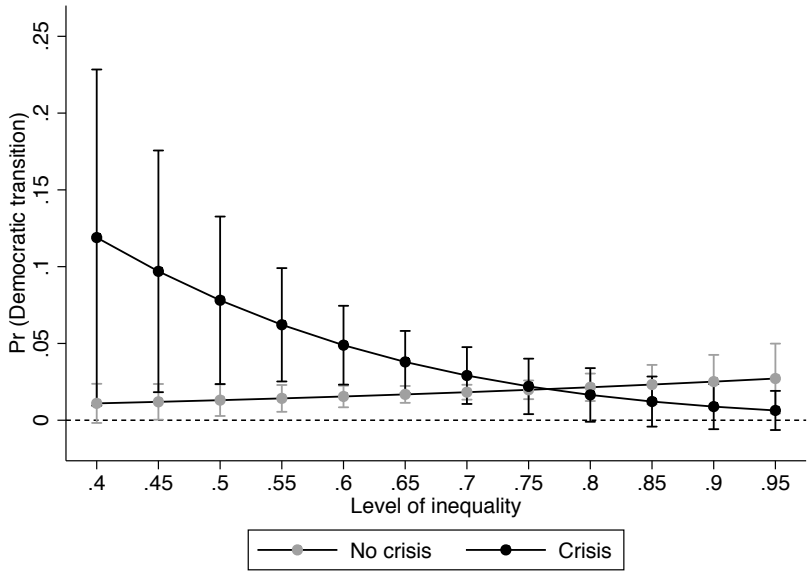


Figure 5.5: Marginal Effects plot of the interaction between Inequality and Economic Crisis

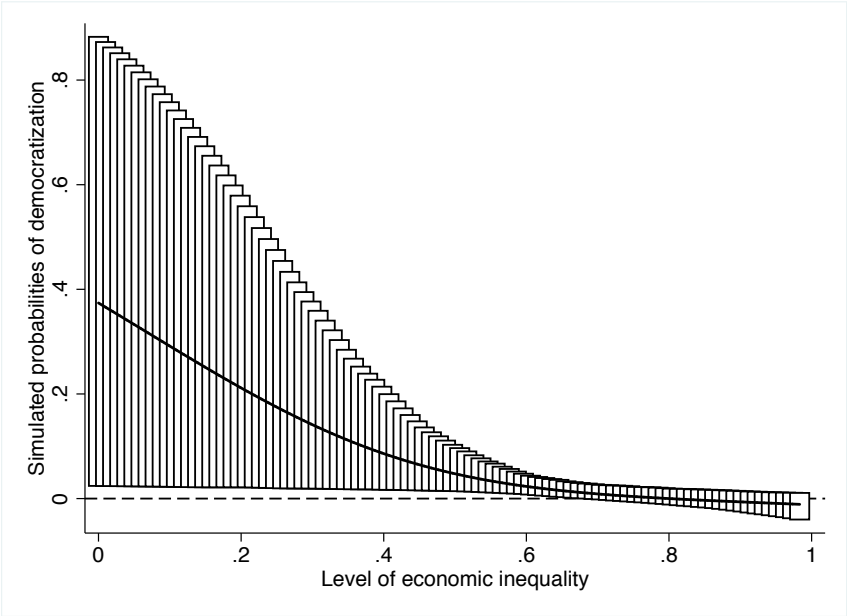


Figure 5.6: Simulated probabilities of the interaction between Inequality and Economic Crisis

duce the long-term threats to their continuing power at lower cost than under authoritarian rule" (2011, 25). High inequality societies may also be more unorganized and unstable than egalitarian societies, thus complicating an effective opposition to the elites and thereby reduce the likelihood of democratization. Sing (2004) demonstrates how opposition parties and labor movements in Hong Kong and Singapore in the 1990s failed to profit on the economic crisis and to mobilize support for more democracy. Weak labor unions and a fragile opposition largely explained this failure. In an egalitarian context however, trade-unions and oppositional forces may be relatively stronger and less fragile, thereby executing a stronger influence on the incumbent elites. Nevertheless, hypothesis 2 is evidently rejected. Figure 5.6 displays the simulated probabilities of democratization of the interaction between inequality and economic crisis, con-

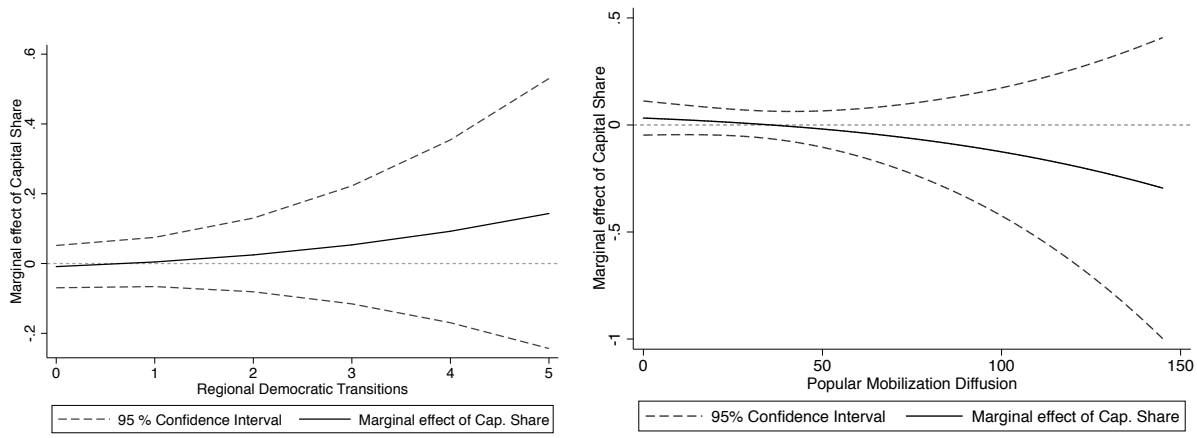
firming the same pattern as seen in the margins plot. The y-axis displays the change in the predicted probability of democratization. Evidently, the pattern is the same as in the margins plot. The probability of democratization decreases under higher levels of inequality, when a country experience an economic crisis.

5.4.2 Spill-over effects

Model 3 to 6 displays the diffusion effects of democratization. Model 3 and 4 displays the diffusion effects of regime transitions and model 5 and 6 displays the diffusion effects of popular mobilization. As can be seen, both of the diffusion variables are significant in the expected direction, although somewhat stronger for regime transitions. However, the interaction term between capital share and regime transition diffusion comes out as non significant, leaving no support to H3. Although regional democratizations seem to induce host-country democratization, this effect appears to be independent of the level of inequality. Since the regional diffusion variable is significant in the positive direction however, this suggests the "snowballing effect" (Huntington, 1991, 100) where democratic transitions in the region encourage democratization in countries in the same region. This finding supports the conclusion by Brinks and Coppedge (2006) that countries tend to become more similar their neighbor states: "[P]urely domestic actors can be influenced by events in neighboring countries. Influential members of civil society can use their neighbors as good or bad examples" (Brinks and Coppedge, 2006, 467).[13] Moreover, and paralleling the finding from the previous hypothesis, the observation of a diffusion effect fits particularly well with the framework of Boix (2003) whose actors are uncertain about each others preferences and of the probability that the regime is likely to use repression. This indicates that regional democratic transitions have a "signaling effect". Individuals may interpret regional transitions as a signal of opportunity to challenge their regime. As exemplified in the introductory puzzle, successful events in neighboring countries provide domestic actors with renewed confidence that their regime may be altered. As maintained by Boix (2003, 29), "certain political events, by prompting citizens to update their beliefs on the probability of survival of the existing political arrangement, play a considerable role in triggering shifts in the institutional order". Nevertheless, this process seems to be unaffected by the level of inequality and hypothesis 3a and 3b is therefore rejected. Before a final rejection of the hypotheses, I display the effects in a marginal effects plot, as suggested by Brambor et al (2006). This is seen Figure 5.7 below. The left plot displays the marginal effect of inequality over different frequencies of regional democratic transitions, and the right plot shows the marginal effect of inequality over different frequencies of regional popular mobilizations. In both cases, the high confidence intervals indicate that a potential interaction effect between inequality and regional signaling effects is far from significant. Hypothesis 3a and 3b is therefore clearly rejected.

[13]It should be noted however that the effect of regional transitions as hypothesized in this thesis, differs somehow from the arguments by Brinks and Coppedge (2006). Brinks and Coppedge (2006, 467) proclaim that pressure for democratic convergence will be higher the greater the gap in level of democracy between the country and its neighbors. The argument in this thesis however adhere to the arguments of Kuran (1989) and Lohmann (1994), that regional democratic transitions serve as "signals" by spurring oppositional forces and prompting individuals to overcome their collective action problems.

Figure 5.7: Marginal effects of Inequality at different levels of diffusion



5.4.3 War

The two last two columns present the coefficients of *War outbreak* and *War termination* and their interactions with capital share, in order to test H4 and H4b, if higher inequality increases the probability of democratization in certain times of war. Wars indicate a potentially weakened regime. The hypothesized mechanism is that war outbreaks and war terminations, are situations of political instability where one should expect citizens are more able to overcome their collective action problems. It should be reminded that the collective action facilitating variables are not randomly chosen. The theories of both Boix (2003) and Acemoglu and Robinson (2006) contend that situations of war helps citizens to solve their collective action problems in attempting to overthrow the regime. As can be seen from the two last columns, neither the coefficient of war outbreak alone (.308) or the interaction term (.401) comes out as significant. The same applies for the termination variable; it even takes the wrong sign and is highly insignificant (0.794). Neither war termination or war outbreak the previous year this have a significant effect on democratization in the time-period under investigation. Teorell (2010) finds similar results in his study of democratic downturns and upturns during the Third Wave of democratization, from 1972 to 2006. I therefore concur with Bermeo (2003) who asserts that "whether and when wars make democracy remains open questions" (2003, 159). H4a and H4b are therefore also rejected.

5.4.4 Preliminary summary of the findings

Summarizing the results from the preliminary analyses, all of the interaction terms with the exception of inequality interacted with economic crisis, come out as not statistically significant. So far the empirical evidence suggests that higher levels of inequality have no effect on the likelihood of democratization, *even* under circumstances one should expect facilitate collective action. I consider this as a relatively apparent rejection of the theoretical assumptions of Acemoglu and Robinson (2000*b*, 2006). If anything, lower inequality seems to have a stronger effect on democratization especially in situations where there is an economic crisis, giving some support to Boix (2003) who asserts that elites have stronger incentives to democratize when

inequality is low. The next section presents the results from the analysis of how inequality interacts with de facto collective action. In consistency with the theory of Acemoglu and Robinson (2000*b*, 2006), I expect the likely effect of strikes, demonstrations and riots on the probability of democratization to increase under high levels of inequality.

5.4.5 De facto collective action

Studies of collective action have often focused on *contentious* collective action - "potentially subversive acts that challenge normalized practices, modes of causation, or systems of authority" (Beissinger, 2002, 14). This draws the attention to collective behavior that aims directly or indirectly to challenge the autocratic regime (Ulfelder, 2005, 312). Such collective acts are based on the idea that the authority to define a society's political regime belongs to the political elite and not the public majority; an idea that coincides with the arguments by Acemoglu and Robinson (2000*b*, 2006).[14]

The final section in this chapter contemplates the democratizing effects of collective action interacted with inequality. The collective action variables are also included with one year lag-structures, allowing me to capture the impact of popular mobilization one year on the probability of democratization the next year. I then avoid assessing popular protests as the *consequence* of democratic elections.[15] The analyses are presented in Table 5.5, following the same layout as the previous tables. Before I turn to the interpretation of the interaction terms, I shortly comment upon the popular mobilization variables. A first notice is that all of the popular mobilization variables are significant in the expected direction. This confirms that during the time-period of investigation, popular mobilization played an important role in the establishment of democratic regimes. This supports the argument by Acemoglu and Robinson (2006) that political transitions are transitory in nature: when individuals are able to overcome their collective problems and organize in strikes, demonstrations and anti-government protests, the likelihood of democratization increases.[16] The results also support the presumptions held by the "democratization from below"-theorists, touched upon in chapter 2, maintaining forces from below as an important determinant of democratization (e.g. Bermeo, 2003; Bratton and van de Walle, 1992, 1997; Collier and Mahoney, 1997). Recent statistical studies of the determinants of democratization have also found evidence of a positive relationship between threats from

[14] Manifestations of popular opposition such as strikes and anti-government demonstrations, occurs frequently in democracies because people are free to express their true beliefs and views about a government that rests upon their support. In dictatorships however, such acts are less frequent as dictatorships are only maintained when being able to prevent and suppress such forms of expression (see Przeworski et al., 2000; Schock, 2005). When they first occur however, strikes and demonstrations create instability within autocracies (Przeworski et al., 2000, 271).

[15] As an example, the official election results after the first democratic election in Tunisia in 2011 spurred social unrest in several parts of the country (The Telegraph, 2011). Protests were thus also a result of the democratic elections, and not only a cause.

[16] This finding corresponds well with those of Haggard and Kaufman (1995): "[D]irect action" campaigns - anti-regime protests, general strikes and demonstrations - also figured prominently in the authoritarian withdrawals. This popular upsurge occurred at different points in time process of transition, but tended to culminate in "climatic moments" that, because of the size and timing of demonstrations and the difficulties they posed for the regime, proved important for the process of political change" (1995, 63-64). The results also corresponds to the arguments of Bueno de Mesquita and Smith (2009, 5) who argues that one of the main threats to political survival can emerge from domestic mass movements seeking to the replace the incumbent regime with new institutions.

Table 5.5: Probit Regression on the Conditional Effects of Inequality on Democratization – De Facto Collective Action

	Strikes		Demonstrations		Riots	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.069	0.085	0.027	-0.372	0.123	-0.352
	(0.747)	(0.815)	(0.760)	(0.913)	(0.754)	(0.888)
Strikes	0.542***	0.601				
	(0.146)	(0.832)				
Capital Share * Strikes		-0.083				
		(1.178)				
Demonstrations			0.360**	-0.392		
			(0.115)	(0.790)		
Capital Share * Demonstrations				1.066		
				(1.110)		
Riots					0.276*	-0.720
					(0.127)	(0.904)
Capital Share * Riots						1.413
						(1.301)
Log Real GDP per capita	0.154+	0.154+	0.147+	0.147+	0.166*	0.165*
	(0.082)	(0.082)	(0.081)	(0.082)	(0.080)	(0.081)
Oil (dummy)	-0.355	-0.355	-0.376	-0.394	-0.352	-0.372
	(0.271)	(0.273)	(0.272)	(0.265)	(0.268)	(0.265)
Log Duration	-0.318***	-0.318***	-0.307***	-0.309***	-0.315***	-0.320***
	(0.049)	(0.048)	(0.050)	(0.051)	(0.048)	(0.049)
(%) Democracies	0.013*	0.013*	0.012*	0.013*	0.014**	0.014**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Growth	-0.015+	-0.015+	-0.017*	-0.017*	-0.017*	-0.017*
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
British Colony	0.206	0.206	0.233	0.233	0.219	0.226
	(0.158)	(0.158)	(0.162)	(0.159)	(0.160)	(0.157)
Religious fractionalization	-0.811*	-0.811*	-0.855**	-0.838*	-0.886**	-0.900**
	(0.326)	(0.329)	(0.330)	(0.332)	(0.331)	(0.330)
Ethnic fractionalization	0.172	0.172	0.237	0.235	0.190	0.206
	(0.271)	(0.270)	(0.257)	(0.256)	(0.267)	(0.269)
Muslim	-0.004	-0.004	-0.004	-0.004	-0.004	-0.005+
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Protestant	-0.008	-0.008	-0.007	-0.008	-0.007	-0.007
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Catholic	0.001	0.001	0.001	0.001	0.001	0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Constant	-2.742**	-2.751**	-2.724**	-2.453*	-2.876**	-2.537**
	(0.943)	(0.964)	(0.939)	(0.993)	(0.928)	(0.976)
Observations	4035	4035	4035	4035	4035	4035
AIC	699.156	701.152	700.373	701.428	704.911	705.396
ll_0	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208
ll	-330.578	-330.576	-331.186	-330.714	-333.456	-332.698

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

below and democratization (Ulfelder, 2005; Teorell, 2010; Alemán and Yang, 2011). Moreover, these results may also be interpreted as leaving less support to advocates of democratization

as an "elite project" (Collier and Hoeffler, 1999) and those who hold "top-down"-processes as the main determinant of democratization (e.g. O'Donnell and Schmitter, 1986).[17] Although elite-splits may have played a part in the democratic transitions, they may have been "caused in the first place by the challenge of the disenfranchised cities to the existing system" (Acemoglu and Robinson, 2006, 85).

Another interpretation of the positive effects is because the time-period under investigation incorporates the third wave of democratization, largely characterized by the democratic transitions in Sub-Saharan Africa and in the post-Soviet states, where popular mobilization played a large part in overthrowing the incumbents (Bratton and van de Walle, 1997; Beissinger, 2002; Bunce, 2003).[18] An interesting note is that the effect seems somewhat stronger for the non-violent mobilization variables *strikes* and *demonstrations*, than for riots.[19] This finding is consistent with what I referred to in chapter 3 as the "paradox of repression": although being faced with brutal state force, unarmed challenges may be sustained and even expanded. Harsh repression against peaceful demonstrators may have a mobilizing effect by "spreading a sense of victimization, or even martyrdom" (Teorell, 2010, 105). Repression directed at dissidents may make them more committed to their struggle, and if they remain mobilized when being repressed, this may influence new members to participate (Schock, 2005, 42).

For instance, in 1990 one could witness the rise of a pro-democratic movement in Nepal, about one year after a Nepali Congress leader had lashed out at the royal regime and the king himself, declaring that time had come to "launch a mass movement for the restoration of democracy" (Baral, 1994, 122). This pro democratic movement was also the first peaceful mass movement in the country's history. The anti-government sentiments intensified and people continued to take to the streets as a response to that the monarchy had threatened the public by engaging in mass arrests, violent repression and torture (Schock, 2005, 140). The public resilience against the government in the face of repression also triggered defections within the political elite, as more and more members of the National Panchayat opposed the use of violence against the non-violent demonstrators (Parajulee, 2000, 83). A more recent example is the large-scale protests on Tahrir Square in Cairo, during the last days of January, 2011. The popular gatherings were from the very start peaceful, and maintained their endurance although experiencing the repressive power of the Mubarak-regime. Abdel-Rahman Samir, one of the protestors and member of the Revolutionary Youth Coalition, paints a good picture of the sustainability of the peaceful

[17] In a study of the Third Wave of democratization, Carothers (2002, 6) criticized the "transition paradigm" for being outdated: "[i]t is time to recognize that the transition paradigm has outlived its usefulness and to look for a better lens" and that "the transition paradigm was a product of a certain time [...] and that time has now passed" (2002, 20)

[18] The findings also support Huntington (1991) who argues that externally monitored democratizations played almost no role in the third wave of democratization. Others have also contended that almost all of the transitions to democracy in the third wave were of a societal-led type, where internal forces played the major role (Inglehart, 1997, see)

[19] The popular masses matter for democratization when they gather in peaceful anti-government demonstrations and strikes, but also when using violent means such as in riots. Riots seems to have a positive effect on the probability of democratization. A first note is that this finding goes against recent empirical reviews, finding that collective action affects democratization only when peaceful (Teorell, 2010, 102). My findings support Bermeo (1997, 314), who concludes that democratizations in Latin America and Asia in many cases proceeded alongside bloody popular uprisings.

uprising: "Last January we lost a lot of lives, but we didnt win by attacking the Interior Ministry - we won by staying in the square. When you are attacked but remain peaceful you manage to get more support on the streets, and this creates greater pressure" (Egypt Independent, 2012).

I now turn to the interaction effects of inequality and popular mobilization. Although popular mobilization in itself increase the likelihood of democratization, this effect seems to be primarily independent of the level of inequality. As witnessed, although pointing in the right direction, none of the interaction terms come out as significant.[20] The level of inequality does not seem to have any effect when interacted with the indicators of collective action. This result must be interpreted as leaving significantly scant support to the theoretical assumptions of Acemoglu and Robinson (2000*b*, 2006), that sufficiently high levels of inequality affects democratization through a process of popular mobilization.

5.5 Summary

The main aim of this chapter has been to empirically assess whether inequality have a conditional effect on the probability of democratization. I started off with a descriptive look at the data, in order to get a contour of how economic inequality relates to democratization in the time-period of investigation. Preliminary analyses showed that a majority of democratic transitions occurred under higher levels of inequality. Both the correlations from Table 5.1 and the results from the non-imputed data allowed for this interpretation, although inequality did not come out as significant in any of the regressions. The effect seemed to be weak at best. The results from the imputed data however only strengthened these results, uncovering that inequality alone was far from significant in explaining democratization in the time-period of analysis. I interpret these findings as only lending more empirical support to recent empirical inquiries on inequality and democratization, arguing against any robust relationship between inequality and democratization (e.g. Houle, 2009; Haggard and Kaufman, 2012).

I then moved on to the core section of the chapter, conducting what I referred to as a more "fine-grained" analysis of the relationship between inequality and democratization. The theoretical justification of this section is based on literature suggesting that economic grievances by itself only manifest in collective behavior when individuals are initiated by a "spark" or some kind of exogenous "shock". Based on empirical findings in the democratization literature and the explicit theoretical assumptions by Acemoglu and Robinson (2006) on what factors should facilitate collective action, I located three conditions of which I interacted with inequality, in order to see whether inequality affected inequality under the presence of these conditions. If inequality were to have any effect on democratization, it should be under circumstances where one should expect collective action problems are easier overcome. The results were striking: Neither during economic crisis, through diffusion or during war events did higher levels of inequality seem to play any role, thus leaving no support to the theory of Acemoglu and Robinson (2000*b*, 2006). If anything, lower inequality seems to be a stronger predictor especially during economic

[20]The respective p-values for the interaction terms are Capital Share * Strikes (0.895), Capital Share * Demonstrations (0.302) and Capital Share * Riots (0.302).

crisis, although this effects also is weak at best and should be interpreted with caution. In the next chapter I perform a series of additional tests, in order to test the robustness of these results.

Chapter 6

Robustness tests

Uncertainty is an important aspect in all kinds of scientific research. In this section I assess the uncertainty of the results from the empirical analysis, in order to ensure that the results are not driven by the choice of indicators or some arbitrary properties of the data and research design.

I start off considering different operationalizations of my two main variables, democracy and income inequality. Next, I reestimate the analyses using different lag-structures on the explanatory variables, as the potential transitory effects of inequality may not be sufficiently captured by only using a one-year lag structure. Then I estimate whether the results are driven by influential observations with extreme values on one of the variables. Thereafter I address the issue of dependency: I control for potential time-specific trends in the data by including a number of time-dummies, in order to reduce the risk that some distinguishing time-specific factors drive the results. Lastly, I conduct some additional tests using logit and dynamic probit models, before I examine whether there are any highly correlated variables which may cause the insignificant relationship between inequality and democratization.

6.1 Alternative operationalizations of democracy

In the introductory chapter I presented what I referred to as *substantive* and *institutional* definitions of democracy. I made it clear that I preferred a variant of the institutional definition throughout the thesis, namely the minimalistic definition of democracy (Alvarez et al., 1996; Przeworski et al., 2000). Particularly, in chapter 4 I argued that a focus on contested elections should be a valid measure, since the theory of Acemoglu and Robinson (2000*b*, 2006) maintain that social unrest decline only when the elites have credibly committed to future redistribution through the installment of political institutions. Although I have argued that the ACLP-index sufficiently captures the theoretical assumptions by Acemoglu and Robinson (2000*b*, 2006), I prefer to rule out the possibility that some particular attributes of the ACLP-index dictate my results (see Munck and Verkuilen, 2002).

Therefore, I also run all of the main analyses utilizing the Polity index (Marshall and Jaggers, 2003) as the dependent variable, originally ranging from -10 (most autocratic) to 10 (most democratic). In the analysis this variable is dichotomized, and as advised by *The Polity IV*

Project and other scholars (Milner and Kubota, 2005; Hadenius and Teorell, 2007), a regime classifies as democratic when it crosses the threshold value of six or more. The Polity IV is an often used proxy for democracy (see Murtin and Wacziarg, 2011; Knutsen, 2012) and although literature have pointed out that cut-off points are somehow arbitrary (Bogaards, 2011; Hegre, Knutsen and Rød, 2012), a threshold of six should prove as a fairly strong test. The Polity measure also includes certain participation aspects (Munck and Verkuilen, 2002, 10) as opposed to a solely focus on contested elections (Przeworski et al., 2000).

Running the baseline probit regressions with the dichotomized Polity on the imputed data yields similar results as when utilizing the ACLP-index (see Table 6 in the Appendix). The coefficient of capital share is still positively signed and highly insignificant. Contrarily to 5.3, the coefficient of capital share squared is on no account significant across the different model specifications. This indicates that the effect of capital share squared in the previous analysis is highly sensitive to model specifications and to how the dependent variable is operationalized. Even when running the full model with all of the interaction terms, the choice of Polity as a dependent variable does not alter any of the results of interest (see Table 8 in the Appendix). The diffusion variables are still significant in the expected direction, but the effect of economic crisis disappears and is now insignificant ($p = .252$). Capital share and all of the interaction terms are still insignificant across all models. Even the interplay between inequality and economic crisis turns out to be insignificant, suggesting that some caution must be made when interpreting the coefficients from Table 5.4, which indicates that lower levels of inequality increase the likelihood of democratization during times of economic crisis. Lastly, the analysis including the de facto collective action variables is run with Polity as a dependent variable. None of the results are substantially altered (see Table 9 in the Appendix). Inequality is still insignificant and strikes, demonstrations and riots alone are still highly significant in the positive direction, strengthening the arguments from the last chapter regarding the importance of the "forces from below".

Although the ACLP-index and Polity are highly correlated (.84), there are some substantial differences in how transitions are coded. As noted by Casper and Tufis (2003), although there is a high correlation between the two dependent variables, one must be careful drawing the conclusion that they measure the same. Only 36% of the ACLP-transitions are also coded as Polity-transitions, and 54% of all the ACLP-transitions had Polity-scores below the threshold of 6, as can be seen from Table 6.1. This raises some important questions about the validity of the coding process of each of the data sets, which may prove to be consequential for the inferences that are to be made (see also Haggard and Kaufman, 2012, 501). For the results of this analysis however, the variations between ACPL-transitions and Polity-transitions only strengthen the conclusions from the empirical chapter: High levels of inequality is not robustly related to the probability of democratizations, independent of how transitions are coded.

An alternative way of studying democratic change, and perhaps a less crude analysis than the study of democratic transitions, is examining the *liberalization* of a regime, also referred

Table 6.1: ACLP and Polity transitions

ACLP and Polity Transitions	ACLP transition & Polity below 6	
Argentina 1973	Albania 1981	Peru 1963
Argentina 1983	Argentina 1963	Philippines 1986
Benin 1991	Bangladesh 1986	Poland 1989
Bolivia 1982	Bhutan 2007	Romania 1990
Brazil 1985	Bolivia 1979	Sierra Leone 1996
Bulgaria 1990	Burundi 1993	Sierra Leone 1998
Burundi 2005	Cape Verde	Spain 1977
Comoros 2004	Central African Republic 1993	Sri Lanka 1989
Ecuador 1979	Comoros 1990	Suriname 1988
El Salvador	Congo Brazzaville 1992	Suriname 1991
Georgia 2004	Czechoslovakia 1989	Thailand 1975
Ghana 1979	Dominican Republic 1966	Thailand 1979
Honduras 1982	Fiji 1992	Thailand 2008
Hungary 1990	Ghana 1969	Uganda 1980
Indonesia 1999	Ghana 1993	
South Korea 1989	Greece 1974	
Liberia 2006	Guatemala 1966	
Malawi 1994	Guatemala 1986	
Mali 1992	Guinea-Bissau 2000	
Nigeria 1979	Guinea-Bissau 2004	
Pakistan 1988	Honduras 1971	
Panama 1989	Kenya 1998	
Peru 1980	Kyrgyzstan 2005	
Peru 2001	Mauritania 2007	
Portugal 1976	Mongolia 1990	
Senegal 2000	Nepal 1990	
Sudan 1965	Nicaragua 1984	
Sudan 1986	Niger 2000	
Thailand 1992	Nigeria 1999	
Turkey 1983	Pakistan 1972	
Uruguay 1985	Paraguay 1989	

to as "democratic upturns" (see Teorell, 2010). A regime put under substantial pressure from below may be willing to provide some forms of concessions in an attempt to satisfy the masses, without risking a regime change. Teorell (2010) explains a process of liberalization as involving gradual democratic reforms and small changes, such as for example lifting bans on newspapers. Giersch (2011) maintains that the toppling of a regime from below perhaps only comprises the first step of a regime change, since "some transitional agreement about a constitutional process and free elections must ultimately be negotiated between representatives of the opposition and the regime". For instance, during the 1970s in Brazil a process of liberalization initiated by the military elite gradually developed into democratization, strongly supported by the Brazilian labor movement (Collier and Mahoney, 1997, 296). The process of liberalization thus can be viewed as a modest goal of loosening restrictions and expanding individual civil and political rights (Shin, 1994, 142), as opposed to democratization which goes beyond just extending rights.

In order to study the potential effect of inequality on democratic upturns, I utilize the SIP-index.[1] When using the SIP index, I code three different types of what I refer to as democratic transitions. The first corresponds to what I mentioned above as liberalization. I follow Strand et al. (2012) and code a democratic upturn if the SIP score at time t is at least 0.03 higher than the SIP score at t-1. Although the change seems minor, a positive change of 0.03 corresponds roughly to a one-unit change on the Polity index, or to a 3% increase in the amount of the population eligible for voting (2012, 5). For instance, (Strand et al., 2012) records that the 'Rose Revolution' of Georgia in 2003 improved values on the participation scale, although legislative and presidential elections were far from democratic and totally dominated by the main party, the United National Movement Party (2012, 5).

[1] As described by Strand, Hegre, Gates and Dahl (2012, 5), "[t]he index combines aspects of the Polity (Jaggers and Gurr, 1995) and Polyarchy (Vanhanen, 2000) by integrating a weighted measurement of political participation from Polyarchy with the Polity measures of executive constraints and executive recruitment".

I also run the analyses by dividing the SIP-index into three categories, in order to study transitions to and from so-called semi-democratic regimes. As maintained by Gates, Hegre, Jones and Strand (2006), semi-democracies, also referred to as inconsistent regimes, are *ceteris parebus* more likely to break down than ideal type dictatorships or democracies, because dictatorships and democracies are self-enforcing regimes: When power is concentrated in the hands of the executive in an autocracy, potential challengers have no access to the power and without this access "the expected costs of challenging an autocratic regime outweigh the expected benefits of capturing the narrow base of power" (Gates et al., 2006, 895). In a democracy the motivation of power is the same, but as argued by Przeworski (1991, 30-31), "[d]emocracy will evoke generalized compliance, it will be self-enforcing, when all the relevant political forces have some specific minimum probability of doing well under the particular system of institutions". Previous research also suggest that states lingering in between full-blown dictatorships and democracies hold the greatest prospects for democratization (e.g. Hadenius and Teorell, 2007). Since I have utilized the ACLP-index throughout this thesis, inconsistent regimes such as Venezuela are considered as autocratic as North Korea, leaving me unable to capture these, perhaps, important differences. I follow Fjelde and Hegre (2011) and define countries as autocracies if they have SIP scores below or equal to .15 and democracies if countries have SIP scores above .80. Countries falling in between are labeled semi-democratic, as can be seen from the figure below:

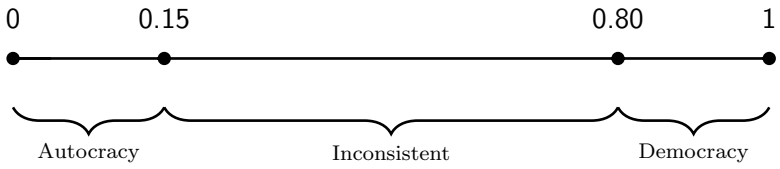


Figure 6.1: Thresholds for the SIP index

After running all of the analyses with three different SIP-indices, the main impression is still the same: Higher levels of inequality do not have any independent effect on the probability of democratic upturns, transitions from autocratic to semi-democratic regimes, or from autocratic and semi-democratic to democratic regimes.[2] When democratizations are coded as a 0.03 increase in SIP, economic crisis, regional democratic transition and popular mobilization diffusion is still significant in the expected direction. The negative interaction between inequality and capital share and economic crisis is also significant, and support the results from the main analysis in Table 5.4.[3] None of the analyses indicate that high levels of inequality were related to higher probabilities of democratization, even when democratization was coded fairly modest as a 0.03 increase in SIP. Also, the analyses studying both transitions from autocracies to semi-democracies and transitions from autocracies and semi-democracies to democracies yield similar results. There are no indications of any independent or any contingent effect of higher levels of inequality on the probability of democratization (see Table 17 and Table 14). On the

[2]In chapter 2 I showed that Ansell and Samuels (2010) find a positive effect of high levels of income inequality on the probability of moving from autocracies to semi-democracies. I find no indication of such a relationship when utilizing the SIP-score.

[3]War termination also becomes significant, which indicate that democratic upturns occurred in the aftermath of wars in the time-period of investigation.

contrary, some of the results indicate that low levels of inequality, interacted with the collective action facilitating variables, increase the probability of democratic transitions (see Table 14).

In sum, using both a dichotomized Polity and three different SIP-indices as indicators of democratic transitions and democratic upturns, do not substantially alter any of the results. The main finding is still that both the independent and the conditional effect of high levels of inequality on the probability of democratization is insignificant. In sum, the main dependent variable of choice throughout this thesis is relatively robust to alternative operationalizations.

6.2 Alternative operationalizations of inequality

Issues related to validity are important and measurement validity is concerned with whether the operationalization adequately reflects the concept the researcher seeks to measure (Adcock and Collier, 2001, 529). Throughout the thesis I have utilized the variable *capital share* as a proxy for inequality. I have maintained that capital share should provide high measurement validity as the theory under investigation emphasize inter-group inequality between laborers and capital owners. The most critical issue in this thesis is whether capital share is a valid measure of inequality. As mentioned in chapter 4, I have imputed approximately 50 % of the observations on the capital share variable. Although this is quite substantial, the capital share variable has markedly better cross-country coverage than any other measure of income inequality (see Dunning, 2008), such as the Gini coefficient. I have also restricted the time-frame of investigation, now ranging from the first year of which I have data on capital share (1963) to the last one (2008). Countries with particularly poor coverage on capital share and other important variables such as GDP per capita, are also removed from the analysis.[4] That being said, there are still some caveats related to the inequality measure.

First, it is not obvious that capital share is the best proxy for measuring income inequality (Timmons, 2010). This variable only captures the relative income between registered wage earners and capital owners in the manufacturing sector. Consequently, it must be considered a somehow rough measure. When capital shares increase, more of the surplus accrues capital owners relative to the wage earners, thus generating higher economic inequality. As such, capital shares do not consider the distribution of income in other sectors, such as the often huge tertiary sector. It also leaves out the income distribution among landowners and peasants in the agricultural sector. This could bias the results because land-distribution, and thus income in the agricultural sector, may impact the probability of democratization (see Boix, 2003; Ziblatt, 2008; Ansell and Samuels, 2010, 2011). As also mentioned in chapter 2, Ansell and Samuels (2010) find that equal distribution of land promotes democratization, while at the same time unequal distribution of income also increases the probability of democratization. Different growth rates between a relatively static agricultural sector and a growing industrial sector may increase *income* inequality, although land distribution is held constant. This suggests that how inequal-

[4]These countries are North Vietnam, South Vietnam, North Yemen and South Yemen. These countries are also excluded due to coding discrepancies, which caused a number of difficulties in the making of the final data set. I treat the exclusion of these countries aS non-problematic for the general inferences made in this analysis.

ity is measured is decisive for how it relates to democratization. In studies of Latin America, a region where inequality in landholding is considerably high, rural groups and peasants have often organized in order to play a role in politics and to demand legislative change (Loveman, 1976; Wright, 1982). Also, as suggested by Baland and Robinson (2008), the expansion of suffrage and increased political participation in Chile and Mexico cannot be understood without paying attention to rural social relations. By providing more attention to inequality in land, I would have been more in conjunction with the theoretical assumptions of Boix (2003), who asserts the importance of asset specificity, i.e. that wealth is held in land rather than in capital. Also, in a review of the most frequently used indicators of economic inequality, Lambert (2001) finds that countries are ranked quite differently regarding their level of inequality. A cautionary note is therefore needed when interpreting the results from the analysis, as it is not unlikely that the indicator *capital share* used to measure inequality in this thesis is pivotal for the outcome of the results.[5]

Summed up; since capital share only captures relative income between registered wage earners and capital owners in the manufacturing sector, capital share is expected to measure economic inequality in countries where industries are capital intensive. It is also expected to less extensively capture degrees of economic inequality within other sectors, such as the tertiary and agricultural sector. Thus, one could expect that capital share predicts democratizations in middle-income countries fairly well, while not so well low-income countries in agricultural based societies (Flaten, 2012).

I therefore re-estimate the baseline analyses using two different proxies for inequality: the percentage of family farms (Vanhanen, 2000) and the Gini coefficient from the University of Texas Inequality Project (UTIP) (Galbraith and Kum, 2005).[6]

The results show that when capital share is substituted with the Gini, none of the results are altered. Inequality still remains highly insignificant across all models (see Table 19). This is also true for all of the interaction effects. However, when inequality is measured as the percentage of family farms, some interesting findings materialize. Lower levels of land-inequality seems to increase the probability of democratization and the effect is significant on 5%. Once again, this finding corresponds to the arguments of Boix (2003) who maintains the importance of asset specificity such as land in democratic transitions. Because land is easy taxable and elites risk to loose relatively more wealth in a democracy, high levels of land-inequality induces the rich

[5]Moreover, as asserted by Timmons (2010) capital share does not distinguish between payments to e.g. Chief Executive Officers (CEOs). A CEO can be defined as "[t]he person who has the highest position in a company or other organizations and who makes all the important decisions about how it is run and manuel laborers" (Financial Times Lexicon, N.d.) and manuel laborers. Thus, a high score on capital share *could* reflect high salaries to the manuel laborers, thus giving an impression of a level inequality that is higher than in fact is the case.

[6]Family farms are defined as "farms that provide employment for not more than four people, including family members, [...] that are cultivated by the holder family itself and [...] that are owned by the cultivator family and held in owner-like possession (Vanhanen, 1997, 48). A smaller proportion of family farms indicates higher levels of land inequality. Data for the 1980s is based on information from 1960-1980, and data for the 1990s are based on data from the 1980s, but also some from the 1970s and even 1960s. Some caution is therefore needed when interpreting the results.

to repress an eventual uprising. Also in his empirical analysis, Boix (2003) finds that more unequal distribution of land reduces the probability of democratization (2003, 90-97). This finding may also suggest that inequality affects democratization through a different type of *mechanism* than through redistributive demands from the poor, as suggested by Acemoglu and Robinson (2000*b*, 2006). Ansell and Samuels (2010) find that equal distributions of land increases the probability of democratization. They suggest that equal distribution of land indicates a large number of people who holds their own property. These "freeholders" fear that autocratic elites will seize their land, and they therefore desire representative political institutions that protects their property rights. As argued by Olson (1993), "history provides not even a single example of a long and uninterrupted sequence of absolute rulers who continuously respected the property rights of their subjects" (1993, 572). Democracies were therefore seen as "the only societies where individual rights to property and contract are confidently expected to last across generations" (1993, 572). Democratization is therefore not a result of a demand for *redistribution*, as hypothesized by Acemoglu and Robinson (2000*b*, 2006) but rather a result of a demand for *protection* (Ansell and Samuels, 2010, 1546).[7]

In order to better evaluate a theory, one option is to disaggregate the analysis to smaller geographical areas (King, Keohane and Verba, 1994, 24). Therefore, and in order to see if it is possible to make any "bounded" or contingent generalizations (George and Bennett, 2005), I run the main analysis on different regions. In some regions, land-holdings are the most important asset and source to income, and this relates particularly to several countries on the African content. Much capital in Africa is invested in land and agriculture is said to involve more than just the planting and harvesting of crops (Bates, 2008, 79). A higher percentage of family farms, indicating lower levels of land inequality, turns out to be significant and increase the probability of democratization in only one region: Sub-Saharan Africa. Without speculating too much about this finding, it should be interpreted as an interesting starting point for future studies on both the importance of land-inequality in democratization and the regional dynamics of inequality.[8]

6.3 Alternative lag-structures

In order to provide the most satisfactory test of the transitory arguments of Acemoglu and Robinson (2000*b*, 2006), the variables in the main analyses were included with a uniform one-year lag structure. This was also done in order to avert problems of reversed causality between the explanatory variables and the dependent variable. In general, choice of lag-structure is somewhat arbitrary and in this section I examine whether the results are robust to alternative

[7]This effect runs contrary to the assumptions of Huntington (1968, 375) who argues that "[w]here the conditions of land-ownership are equitable and provide a viable living for the peasant, revolution is unlikely. Where they are inequitable and where the peasants live in poverty and suffering, revolution is likely, if not inevitable, unless the government take prompt measures to remedy these conditions". Also, Keefer (2009) argues that if democratization is a result of redistributive conflicts, one should expect that new democracies are governed by left-wing governments, most likely to represent the interests of the poor. This is not typically the case. Keefer (2009, 661) shows that out 91 democratic transitions between 1975 and 2004, 31 were right-wing governments while only 25 were left-wing.

[8]I also ran the full model with family farms interacted with all of the conditional variables, but none of the interaction terms turned out to be significant in either direction (see Table 20).

lag structures.[9] In this section I run the models with interaction terms with two different sets of lag-structures. First with two-year lags and thereafter with no lags. A two-year lag is applicable for several reasons. As illustrated in case studies of Latin America by Haggard and Kaufman (1995), the transitory effects of economic crisis reveals a more complicated pattern than one-year effects. In several instances the economic crisis lasted for more than one year before bringing about any regime change, and the time it took also varied significantly from country to country. By lagging the variables with two years I am still in conjunction with the transitory arguments of Acemoglu and Robinson (2000*b*, 2006). Lagging the variables with two years also makes sense because of the coding rules of the ACLP-index. Democratic transitions are coded by the time of the *inauguration* of the newly elected government, and not the year of the election (Przeworski et al., 1996, 51). If elites provide free and fair elections towards the end of the year, but the government is not inaugurated until the year after, a one-year lag does not sufficiently capture this dynamic. A two year-lag might therefore be more appropriate.

When the analyses are conducted without lag-structures, I implicitly assume that the outcome on the explanatory variable causes the outcome on the dependent variable within the same year. Empirically, this seems reasonable. Transitory effects are often *more* transitory than a one-year lag can capture. For instance, both the Tunisian and the Egyptian revolution during the Arab Spring happened within a month. Nevertheless, some caution is necessary when the results are interpreted due to endogeneity concerns. For instance, economic downturns and negative rates of growth may be a result of the democratic transition rather than the cause (see e.g. Papaioannou and Siourounis, 2008), and demonstrations and civil uprisings may as well be the consequence of the transition rather than the cause. As previously explained in the example of Tunisia in 2011, protests were undeniably a pivotal factor explaining why the regime fell, but protests also broke out after the election (The Telegraph, 2011).

When the analyses are run without lagging any of the independent variables, the results are not substantially altered. Inequality in interaction with the shock-variables are still highly insignificant (see Table 21 in Appendix). Also, the interactions between inequality and strikes, demonstrations and riots remain insignificant (see Table 22). When the variables are included with a two year lag-structure however, some differences can be observed, although not very strong. For instance, the interaction *capital share * termination* (.097) slightly indicates that higher levels of inequality reduces the probability of democratization in the aftermath of war. Once again, this denotes the opposite effect of what was anticipated and the effect contradicts the assumptions of Acemoglu and Robinson (2000*b*, 2006). If anything, lower levels of inequality seems to be more related to democratizations (Boix, 2003). Moving on to the model where inequality is interacted with strikes, demonstrations and riots, all of the interaction terms are now significant, but in different directions (see Table apx:twoyearbanks). *Capital share **

[9]Previous quantitative assessments of the theories of Boix (2003) and Acemoglu and Robinson (2006) have been criticized for their random use of lag-structures. One of the critiques comes from Haggard and Kaufman (2012, 499) who maintain that "transitions and reversions may be more compressed or extended, not constant across cases, and thus not well captured by the artifact of the country-year coding constraint typical of the panel designs". On a more general note, also Teorell (2010, 155) suggests that future large N-studies on democratization should be more sensitive to utilizing different lag-structures.

demonstrations and *capital share * riots* are significant in the positive and expected direction, while *capital share * strikes* is significant but takes a negative sign. What to make out of this difference is not that obvious, and I remain skeptical about making too strong inferences. As also can be seen in Figure 6.2 below, the indicated effect of inequality interacted with demonstrations is not distinctly robust, although it points to that demonstrations have a stronger effect on democratization at higher levels of inequality.[10] In sum, including the variables with

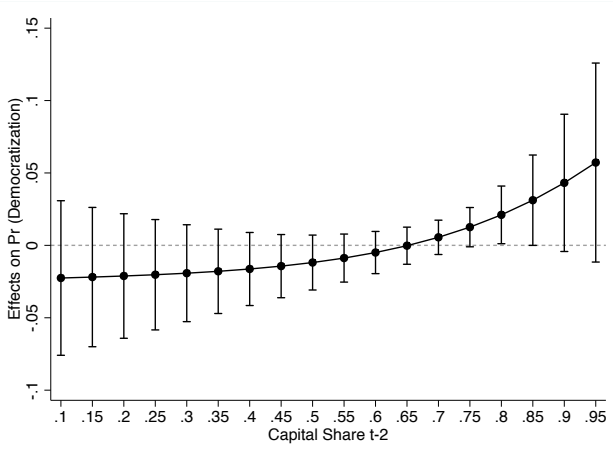


Figure 6.2: Average marginal effect of the interaction between Inequality and Demonstrations

two different sets of lag-structures do not substantially alter any of the results. Although some minor differences were observed, I remain skeptical about making too strong inferences about these findings. I maintain that the net conditional effect of inequality still is highly uncertain.

6.4 Influential cases and outliers

Having assessed the models with alternative specifications of the dependent and the independent variable, I now consider whether there are a few number of cases that influence the estimates of the parameters. More precisely, I want to detect whether there are any atypical observations driving the results. Although the main analyses uncovered an insignificant effect of inequality on the likelihood of democratization, these results may be driven by some exceptional cases. In order to avoid that this might be the case, I focus on *influential observations*. Influential observations may impact the results of the regression if they take extreme values on some of the independent variables (Long and Freese, 2006, 145). If the results generated from a model in reality are driven by influential observations, the results are biased. In order to detect potential influential observations, I use the *dfbeta* command in STATA.[11] Although there are no rules for where to put the threshold, observations are categorized as influential if the dfbeta is greater than one (see Menard, 2009, 137).

[10] I also plotted the interaction between capital share and riots, and the effect is similar to that of capital share interacted with demonstrations. It indicates that the marginal effect of riots on the probability of democratization is higher under high levels of inequality. However, also this effect is not very robust and should not be given too much attention. The plot can be seen in Figure 7.4 in the Appendix.

[11] The dfbeta command do not apply to probit models, so I estimated the analyses as logit regressions. I see this as unproblematic, as probit and logit models yield almost indistinguishable results (see e.g. Table 26)

I run one model from each of the three main tables in the analysis in order to see whether any observations can be said to be influential. After running the three models, there are only detected four observations at most with a *dbeta* above 1.[12] These observations are the democratic transitions in Central African Republic (1993), Nigeria (1979), Nigeria (1999) and Suriname (1988). The extensive time-span of 20 years between two of the observations (Nigeria 1979 and 1999) suggests that potential time-specific effects do not account for why these cases are considered as potentially influential. In order to make sure that the results are not driven by these irregular observations, I re-run all of the three models with and without the influential observations to see whether the results are altered in any significant way. If they are not, I assert that the cases are not influential and thus not driving the results.

When removing the observations, none of the results change in any substantial way across all three models (see Table 6 in Appendix). The independent effect of inequality is still highly insignificant. The conditional effects of inequality are also insignificant, with exception of inequality interacted with economic crisis. The effect become somewhat stronger when the influential observations are removed, confirming that inequality seems to have a negative effect on the prospects for democratization in times of economic crisis. In sum, I therefore consider the results from the main analyses to be robust against influential observations.

6.5 Additional tests

Before I summarize this chapter, I run some additional tests. First, I detect whether the results are caused by any time-specific trends in data. This problem is perhaps more acute when the time-series are short. The relatively extensive time-series (45 years) in this thesis should therefore mitigate some of these potential problems (see Skog, 2010, 327). The main analyses have already mitigated some of these potential problems by including variables capturing regime longevity and the annual percentage of democracies in the world. In order to further reduce the probability of spurious effects due to time-specific trends, all of the models from Table 5.4 and Table 5.5 are re-estimated with the inclusion of dummy variables for every fifth year.

The inclusion of time-dummies does not alter the results substantially (see for example Table 25). The only significant interaction from the main analysis, between capital share and economic crisis, is still significant with a negative sign. The remaining interaction coefficients are still highly insignificant. The inclusion of time-dummies does not alter the results when capital share is interacted with strikes, demonstrations and riots either. It should be noted that the independent effect of strikes, demonstrations and riots is still highly significant and in the positive direction, indicating that "forces from below" have a substantial and robust effect on democratization throughout the time-period of investigation.

[12]Running the baseline model, only two influential cases were detected: Nigeria (1979) and Nigeria (1999). The extensive model including the interaction term between capital share and economic crisis, identified three influential cases. Nigeria (1979), Nigeria (1999) and Cyprus (1973).

The main analyses in the previous chapter were run on a sample including solely autocracies, using a probit model. In this section I run the analysis using logit and dynamic probit models, in order to see whether the results are robust over different model specifications. By running the analyses with a dynamic probit model, this allows me to use the full sample of countries and include more information in the regression. Then I am also in correspondence with previous literature on inequality and democratization (Przeworski et al., 2000; Boix, 2003; Houle, 2009; Ansell and Samuels, 2010). The dynamic probit model generates coefficients for the effect of the explanatory variables on the probability of democratic stability. More precisely, the probability for a democracy in t to still be a democracy in t_{+1}. Much of the literature studying the effect of inequality on democratization also study the effect of inequality on the probability of democratic stability (e.g. Przeworski et al., 2000; Boix, 2003; Houle, 2009). As the theoretical chapter made clear however, this thesis is only concerned with the effects of inequality on the probability of transitions *to* democracy, as transitions to and from democracies tend to follow quite different patterns (Przeworski et al., 2000; Houle, 2009; Regan and Bell, 2010) and democratic breakdowns most often is initiated from "above" (Houle, 2009, 597).Huntington (1996*b*, 9) also argued that "[w]ith only one or two possible exceptions, democratic systems have not been ended by popular vote or popular revolt". The coefficients concerning the effect on democratic stability is thus not reported in any of the tables in the appendix. As can be seen from Table 26 and Table 27 the results are not altered in any of the models, and I infer that the results do not seem to be driven by choice model.

As a last test, I also test for multicollinearity. Multicollinearity occurs if two or more of the independent variables, $x1$ and $x2$ are highly correlated. If this is the case, disentangling the individual effects of the variables becomes difficult. In some cases, a high degree of multicollinearity between the variables might inflate the standard-errors which may cause one to believe that the results are non-significant, when they in reality are not. Since the main analyses have provided little support the theoretical assumptions of Acemoglu and Robinson (2000*b*, 2006), it is important to examine whether the non-effects in fact are due to high multicollinearity between the variables.

Problems related to multicollinearity is discerned by using a Variance Inflation Factor (VIF) test, and as a general rule, multicollinearity is considered a problem if the VIF exceeds the threshold of 10. Multicollinearity is not a problem in the baseline analysis without the interaction terms. The variable with the highest VIF in the sample is the variable *muslim* (3.56). I therefore conclude that the insignificant independent effect of inequality is not caused by problems related to multicollinearity. Regarding the models with interaction-terms between capital share and economic crisis, and between capital share and demonstrations, the VIF values are significantly higher (30). This is not surprising, since the two variables that make up the interaction term most likely are highly correlated with their product (see e.g. Greene, 2003). Because of the high levels of multicollinearity, I cannot be entirely sure about whether the insignificant conditional effects of inequality are driven by multicollinearity or not. Some caution is therefore necessary when interpreting the results.

6.6 Summary: A second look at the results

The main findings from the previous chapter was the consistent lack of support of a positive effect of high levels of inequality on the probability of democratization. Neither of the analyses found any support for an independent effect or any conditional effects of higher levels of inequality, leaving the theoretical assumptions of Acemoglu and Robinson (2000*b*, 2006) no support. Contrarily to the theoretical assumptions, lower levels of inequality rather indicated a positive effect on democratization, particularly during periods of economic crisis.

This chapter strengthens these results. The findings hold across different specifications of democratic transitions, both Polity-transitions and democratic upturns. Even in inconsistent regimes, in general highly unstable, high levels of inequality do not have any effect on the likelihood of democratization. Moreover, I found no contrasting results when I excluded potential influential observations from the analysis or when I used different model specifications. In addition, the results were not significantly altered when the variables were included with different lag-structures, although demonstrations and riots seemed to have a somewhat larger marginal effect on democratization under higher levels of inequality. These results were not very robust however, and should not be interpreted as any strong predictions.

The most interesting finding from this chapter is that inequality defined as land-inequality seems to be significantly related to democratizations: Equal distribution of land increases the probability of democratization. This may also be interpreted as higher levels of land-inequality is negatively related to democratization, pointing in favor of the theoretical assumptions of Boix (2003). In fact, this finding provides partial support to Acemoglu and Robinson (2006, 32) who maintain that rich landowners in non-democracies have good reasons to fear democracy, because land is easier taxable than physical capital. Under high levels of land-inequality then, rich land-owners are more willing to use force to keep their preferred regime. However, Acemoglu and Robinson (2006, 32) also assert that "democracy is *more* likely when the elites are industrialists rather than landowners".[13] If this presumption is correct, inequality defined as *capital share* should be a stronger predictor of democratization than inequality defined as land-inequality. This assumption does not find support in any of the data.

Adding all of the findings from this chapter together, the robustness tests strengthen the finding that higher levels of inequality have no effect on the probability of democratization, even under conditions where one should expect collective action problems were easier to overcome. If anything, lower levels of inequality seems to be a stronger predictor of democratizations in the time-period under investigation, particularly when defined as land-inequality.

[13] My emphasis.

Chapter 7

Concluding remarks

> "[S]ocial science conclusions cannot be considered reliable if they are not based on theory and data in strong connection with one another and forged by formulating and examining the observable implications of theory".
>
> — *King, Keohane and Verba (1994, 28)*

The guiding question of this thesis is: How does the level of economic inequality relate to democratic transition? Through rigorous empirical assessment I have endeavored to answer this question in the most suitable manner. I complete this thesis with some concluding remarks about the results and their implications. First, the most striking findings are commented upon, namely the lack of support for the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006). Most noticeable is that inequality does not seem to have an effect on democratization, even under circumstances one should expect facilitate collective action. Second, I assess the findings in light of related theoretical contributions on democratization, and suggest some interesting paths for future research.

7.1 Theoretical implications of the findings

What are the theoretical implications of the findings? The results from the empirical analysis suggest that the theoretical assumptions of Acemoglu and Robinson (2000*b*, 2006), tying higher levels of inequality to an increased probability of democratization, do not hold as valid explanations for why countries went through democratic transitions between 1963 and 2008. These results remain robust across both non-imputed and imputed data, suggesting that the uncertainty related to the imputation process does not drive the results. Moreover, the findings are also robust over different specifications of democracy. As such, my results concur with recent empirical inquiries arguing that inequality does not seem to be robustly related to democratization (e.g. Houle, 2009; Teorell, 2010; Alemán and Yang, 2011).

The main argument of this thesis however, was that inequality may have a *conditional* effect on democratization. In the theoretical chapter I drew on literature suggesting that without some kind of "shock" or spark to start the prairie fire, privately held economic grievances might not be sufficient to explain why people gather in popular uprisings and mass collective action

(Kuran, 1989, 1991*b*; Lohmann, 1994). To cope with this, and fill a gap in the literature, I argued that by studying inequality in conjunction with such sparks and "shocks", I allowed for conducting a more refined test of the theoretical assumption of Acemoglu and Robinson (2000*b*, 2006) than previous empirical assessments. I localized three types of shocks: economic crisis, regional diffusion and wars. The three components were not randomly drawn, as both theoretical and empirical literature suggests that these factors may prompt individuals to overcome their collective action problems (e.g. Boix, 2003; Acemoglu and Robinson, 2006; Haggard and Kaufman, 1995; Bermeo, 2003).

However, even under circumstances one should expect that people have the *capability* to gather in popular uprisings, higher levels of inequality seem to play no part. In fact, and contrary to the theoretical expectations, one of my findings was that economic grievances and higher levels of inequality seem to have a negative impact on the probability of democratization, when countries experience economic crises. Although the main argument throughout the thesis has been that higher levels of inequality might increase the probability for democratization under certain circumstances, these assumptions do not hold up against the data. In the beginning of chapter 5, Figure 5.2 displayed the high correlation between democracies and lower levels of inequality. Therefore, the results from the empirical analysis raise two important questions: Why is there a cross-section correlation between inequality and democracy and what factors may explain these non-findings?

One plausible explanation is that a country's disparities in wealth and level of democracy is determined by historical factors. Tilly (1995) argues that democracies can be seen as oil-fields or gardens. An oilfield is a product of its history and cannot be produced whenever and wherever: "The presence of oilfields depends on long, long conjunctions of circumstances that appear rarely in history, and are little amenable to human intervention"(Tilly, 1995, 366). If democracies are perceived as gardens however, they will not flourish everywhere, but "given adequate soil, sun, and precipitation, many different sorts of gardens grow in a variety of environments" (Tilly, 1995, 366). Throughout this thesis democracies have been perceived as gardens. The assumption has been that under the right structural conditions, where economic inequality is sufficiently high and citizens are able to overcome their collective action problems, democracy is more likely to be established. If democracies are oilfields however, valid explanations of why democracies do, and do not occur, rest on historical explanations with little room for short-term dynamics.

One could argue that at some point in time societies commenced onto different developing trajectories which have proven to be vital for how these countries should be understood today. Perhaps somewhat ironically, a return to Acemoglu and Robinson is necessary to understand my findings. As Acemoglu, Robinson and co-authors actually argue in another seminal contribution (Acemoglu et al., 2008), the cross-country correlation between higher levels of income and democracy can be explained by the fact that societies embarked on different political and economic paths at some critical points in time. At these critical points in time, some countries

ventured onto a path leading to prosperity and democracy, while other countries embarked upon a path leading to dictatorship, poverty and inequality (Acemoglu et al., 2008, 812). It has been said that the regional environment in which the Europeans established their colonies, may be important to understand why some societies have been distinguished by extreme disparities in wealth and smaller propensities to establish democratic institutions (Sokoloff and Engerman, 2000; Engerman and Sokoloff, 2002). For instance, good soil and favorable climate rendered some countries on the South-American continent able to specialize in the production of commodities such as sugar and coffee, which attracted large amounts of labor and slaves. These economies had the highest per capita income on the continent. However, because of the increased efficiency on the plantations and the fact that an overwhelming majority of the population were laborers and slaves, distribution of wealth became extremely unequal. These extreme inequalities further contributed to the establishment of institutions privileging and protecting the elites and restricting the opportunities of the masses (Sokoloff and Engerman, 2000, 221). High levels of inequality were sustained through these "extractive" institutions and government policies, as elites were able to acquire disproportionate shares of power through the legal system. Such institutions may have been detrimental for economic progress and for sustaining the high levels of inequality, as well as for the propenstites for future establishment of democratic institutions (see Sokoloff and Engerman, 2000; Acemoglu, Johnson and Robinson, 2001; Acemoglu and Robinson, 2012).

Factor endowments and regional characteristics such as soil, climate and the size of the native population, might suggest why some countries embarked upon a road leading to higher levels of inequality and reduced propensity of setting up democratic political institutions. These initial conditions may have had long-lasting effects because government policies and institutions fostered their persistence (Engerman and Sokoloff, 2002). Considering the fact that Latin America is known as the most unequal region in the world, as also suggested by the highest capital share in the sample (.72), historical awareness seems to be of great importance. Hence, these variables might be the omitted variables causing the correlations between high levels of inequality and non-democracy, as seen in Figure 1 in chapter 5. Whether these factors are solely correlations or actual long-run causations however, is left for further research to explore.

Furthermore, although I find no effect of the short-term effects of inequality on the prospects for democratization, inequality may affect democratization through longer time-lags. To fully understand why choices are made at some points in time, one may have to understand these choices as a result of a longer process of events (e.g. Pierson, 2011).[1] The presumption that democratic transitions are a relatively swift process might be a hasty conclusion, especially during the time-period of investigation. Changes to democracy in Taiwan (1996), South Korea (1988) and Mexico (2000) did not come along through quick processes of democratization followed by national elections and the installment of democratic institutions. Rather, their political evolutions were "extremely gradual, incremental processes of liberalization with an or-

[1] Although Pierson's argument originally applies to longer historical events, the argument transfers to this example, as a sole focus on short-term events may distort the importance of longer causal lags.

ganized political opposition pushing for change across successive elections and finally winning" (Carothers, 2002, 15). For instance, Taiwan held its first ever direct presidential election in 1996, but the process leading towards the election was a long path of gradual liberalization, starting already in 1986 (Diamond, 2008, 249). The decision to move towards more democracy was seen as beneficial because a "failure to liberalize the system could result in violent conflict (Hu, 2005, 26). As the main focus in this thesis has been on short-term dynamics, I am not been able to capture these potential long-run effects.

7.2 Potential weakness of the theory

In the theoretical chapter I maintained that the assumptions inherent in the economic theory of democratization by Acemoglu and Robinson (2000*b*, 2006) can be separated into individuals' *incentives* for democracy and individuals' *capacity* to overcome collective action problems. Although I have focused the criticisms towards individuals' capacity of overcoming collective action problems, there might also be raised objections to how Acemoglu and Robinson (2006) treat people's *incentives*. The economic theories of democratization are based on the Meltzer-Richard model (Meltzer and Richards, 1981), assuming that in highly unequal societies the relatively poor median voter desires more redistribution through taxes and income distribution. Elites in highly unequal societies have more to fear from the median voter in a democracy, "in terms of demands for increased taxation and social spending" (Ansell and Samuels, 2010, 1544). However, low-income voters do not necessarily desire higher taxes or redistributive transfers (Kaufman, 2008, 6). Surveys from Latin America - the most unequal region in the sample - show no connection between how respondents regard the unfairness of income distribution and their preferences for more redistribution (Kaufman, 2008, 7). The somewhat simplified assumptions constituting the Meltzer-Richard model, neglect the fact that middle-class voters often oppose a shift of resources towards the poor. Although there might exist "high tax"-coalitions between middle-class and low-income voters, organized middle-income voters are more likely to succeed over the poor when competing for the same scarce resources (Kaufman, 2008, 7-8).[2]

Another weakness of the economic theories is their inattention to non-material collective identities in the process of democratization. Recall the different strands within the democratization literature from chapter 2. Teorell (2010, 24) criticizes the social forces tradition for not paying attention to societal actors that may not be driven by material motives, such as university students, regional elites and human rights activists in their theoretical framework. Studies have shown that these groups have played a key role in public protests and democratizations in several parts of the world (Bratton and van de Walle, 1992). The same critique can be applied to the economic approach. With respect to what determines individuals' preferences over outcomes, individuals in the theories of Boix (2003) and Acemoglu and Robinson (2000*b*, 2006) are only concerned with their personal income. They thus evaluate their preferences of

[2]See also (Ansell and Samuels, 2010) for a critique of the main assumptions underlying the Meltzer-Richard model (Meltzer and Richards, 1981). Ansell and Samuels (2010) assert that the biggest supporters of democracy are middle-income voters and organized labor, as democracy is viewed as a means to secure legal protection from the state for their property rights.

democracy versus dictatorship solely in terms of the net material benefit that would accrue to them from living under each type of institution.[3] Especially the amount and density of students could perhaps be viewed as an important factor when studying mass uprisings in nondemocratic regimes. As witnessed in Morocco in 2011 in the wake of the Arab Spring, the initial protests were mainly organized by students and student groups (CNN, 2011). Haggard and Kaufman (2012) argue that protests and mobilization from below, affecting the democratic transitions in several African states, primarily was limited to students, civil servants and other sectors of the urban middle class (2012, 506).[4] Although some kind of inequality may be an important factor in such demonstrations, this is not captured in the inequality measure utilized in this thesis. Even though the level of inequality proves to affect the probability of democratization through other causal processes of collective action than outlined in this thesis, the distributive theory of Acemoglu and Robinson (2000*b*, 2006) is still largely underspecified regarding *what* these factors are.

7.3 Implications for further research

The empirical findings of this thesis leave the theory of Acemoglu and Robinson (2000*b*, 2006) little support. However, some interesting aspects that may affect the relationship between inequality and democratization have not been encompassed in this thesis. In the following, some suggestions are made to future research on inequality and democratization.

First, future studies on the relationship between inequality and democratization could benefit from a more careful attention to the nature and dynamics of authoritarian rule.[5] Numerous studies contend that different autocratic regimes differ in how and when they break down (Geddes, 1999*b*, 2004; Ulfelder, 2005; Teorell, 2007, 2010; Rivera and Gleditsch, 2011). In an assessment of the effect of development on democratization, Bueno de Mesquita and Downs (2005, 80) argue that many advocates of modernization theory tend to "overlook the fact that autocratic states are not passive observers of political change" and that they rather "set the rules of the game and rig them to suit their interests". This criticism could also be applied to empirical studies of economic inequality and democratization. A reasonable assumption is that the level of inequality relates to the probability of democratization differently across different authoritarian regimes. Separating between authoritarian regimes may allow for more accurate empirical evaluations of the economic theories of democratization, as both Boix (2003) and Acemoglu and Robinson (2006) maintain that repressive capabilities are important in order

[3]Teorell (2010, 27-28) is also critical to the theories of Boix (2003) and Acemoglu and Robinson (2000*b*, 2006) for assuming that individuals' preferences over different outcomes solely is related to their personal income. Teorell (2010) also criticizes the economic approach and their game-theoretic models for being too obsessed with abstract categories such as "elites" and "the poor", as this leaves out other crucial actors.

[4]More specifically, the states referred to by Haggard and Kaufman (2012, 506) include Benin (1991), Congo (1992), Malawi (1994) and Mali (1992)

[5]Although the framework of Acemoglu and Robinson (2006) expects that elite concessions are not sufficient for avoiding further pro-democratic mobilization and unrest, one might assume that the effect of concessions differs between different types of authoritarian regimes. As witnessed in rich and non-democratic states such as Saudi Arabia and Bahrain, elites have escaped the demands by pro-democratic forces by increasing their use of repression and paying off demonstrators. For instance, the Saudi Arabian government gave their citizens a 15 % pay rise in order to dodge revolts and further uprisings in the wake of the Arab Spring (AOL News, 2011)

to understand when inequality may affect democratization. Although the theoretical models of Acemoglu and Robinson (2006) explicitly acknowledge the importance of the repressive capacities of the regime, future empirical studies on the relationship between inequality and democratization should give this perspective more attention. The importance of repressive capabilities and state capacity is clearly stated by Huntington (1968, 1) who starts his analysis by stating that "the most important political distinction among countries concerns not their form of government but their degree of government". Moreover, state capacity may affect the opportunity of groups to engage in collective actions against the state (Soifer, 2009; Sobek, 2010).

Furthermore, studying how different authoritarian regimes break down may be particularly relevant to the theories of inequality and democratization as the masses are said to play different roles in how different authoritarian regimes break down. In personalist regimes (Geddes, 1999*a*, 20) the masses are often demobilized because the elites' primary concern is the suppression of threats and doing whatever is required in order to secure their position (Ulfelder, 2005, 315-316).[6] In contrast, collective action and civil resistance are said to render single-party regimes more vulnerable, as mass mobilization *per se* may be understood as a blow to regime legitimacy (Ulfelder, 2005, 317). If inequality affects the probability of democratization through a process of collective action, as suggested by the economic theories (Boix, 2003; Acemoglu and Robinson, 2000*b*, 2006), the aforementioned approach could with benefit be included in future empirical inquiries testing the economic theories of democratization.

Future studies on the relationship between inequality and democratization should also investigate the relationship between so-called *horizontal inequalities* and democratic transitions. By giving attention to inequality between ethnic groups, one is also in concordance with the notion of inter-group inequality. Inequality measured as inequality between ethnic groups is also largely in tune with the theoretical arguments by Acemoglu and Robinson (2000*b*, 2006) for two reasons: First, it captures the importance of inter-group inequalities, as highlighted by Acemoglu and Robinson (2000*b*, 2006). Second, by measuring inequality between ethnic groups it may better incorporate collective action dynamics, as opposed to measurements only concerned with inequality between individuals, such as the Gini coefficient. For instance, Fearon and Laitin (1996, 718) maintain that ethnic groups may more likely solve their collective action problems as "ethnic groups are frequently marked my highly developed systems of social networks that allow for cheap and rapid transmission of information about individuals and their past histories". Also Mancini, Stewart and Brown (2008, 107) argues that "[t]heories of civil conflict share the common conviction that ethnic identity facilitates collective action and as such it plays a key role in the understanding of civil violence.[7] Recent literature on the relationship between economic inequality and civil conflict (e.g. Stewart, Brown and Mancini, 2005; Østby,

[6] Geddes (1999*a*, 20) defines a regime as personalist if "the leader, who usually came to power as an officer in a military coup or as the leader of a single- party government, had consolidated control over policy and recruitment in his own hands, in the process marginalizing other officers' influence and/or reducing the influence and functions of the party".

[7] This potential for mobilization is also acknowledged by Tilly (1998, 126) when arguing for the importance of categorical inequalities: "[S]ince categorical inequality always leaves members of certain categories visibly disadvantaged, it often occasions discontent and sometimes generates outright rebellion.

2008; Cederman, Weidmann and Gleditsch, 2011) has produced a strong theoretical foundation for how "disparities in the distribution of wealth lead to the polarization of group belonging, thereby facilitating group mobilization for violent collective action" (Fjelde and Østby, 2012, 4). However, even though groups are able to mobilize, their aggression is not necessarily directed at the state (Fjelde and Østby, 2012). Even if ethnic groups are more likely to overcome their collective action problems and organize rebellion, they do not necessarily have ambitions for democratization. It should be noted however that one of the findings in this thesis is that riots and violent clashes between the populace and the elites increases the probability of democratization. Addressing the potential importance of horizontal inequalities when investigating the relationship between inequality and democratization, may bring about interesting findings.

7.4 Final remarks

I opened my thesis with a brief discussion of the recent Egyptian revolution and the role inequality might have played in it. Viewing the case of Egypt in light of my findings, it may be that economic inequality was not deciding for why the exogenous shock that the events in Tunisia provided, led to an uprising in Egypt. It is possible that other structural factors, such as political exclusion and modern communications technology, allowed for the uprising to begin. Even if economic grievances were *really* the decisive factor, the findings in this thesis do not give this interpretation any additional weight.

In conclusion, the research questions, hypotheses and results presented in this thesis, should be interpreted as an effort to critically asses the potential importance of the economic determinants of democratization. I concur with Robinson (2006) who asserts that there is still a lot to learn about the topic of economic determinants of democracy, and I hope the results presented in this thesis encourage further research on the potential importance of inequality on democratic transitions.

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Appendix A. Dataset and Do-files

Dataset and do-files from STATA, and information about the multiple imputation process, will be provided upon request. Contact: larspberg@gmail.com.

Appendix B. Descriptive statistics

In this section I provide some additional descriptive statistics.

Table 1: Countries and years in the analysis

Afghanistan 1963 - 2008	Albania 1963 - 2008	Algeria 1963 - 2008	Angola 1975 - 2008
Argentina 1963 - 2008	Armenia 1991 - 2008	Australia 1963 - 2008	Austria 1963 - 2008
Azerbaijan 1991 - 2008	Bahrain 1971 - 2008	Bangladesh 1972 - 2008	Belarus 1991 - 2008
Belgium 1963 - 2008	Benin 1963 - 2008	Bhutan 1963 - 2008	Bolivia 1963 - 2008
Bosnia 1992 - 2008	Botswana 1966 - 1967	Brazil 1963 - 2008	Bulgaria 1963 - 2008
Burkina Faso 1963 - 2008	Burundi 1963 - 2008	Cambodia 1963 - 2008	Cameroon 1963 - 2008
Canada 1963 - 2008	Cape Verde 1975 - 2008	Central African Republic 1963 - 2008	Chad 1963 - 2008
Chile 1963 - 2008	China 1963 - 2008	Colombia 1963 - 2008	Comoros 1975 - 2008
Rep. of Congo 1963 - 2008	Dem. Rep of Congo 1963 - 2008	Costa Rica 1963 - 2008	Croatia 1991 - 2008
Cuba 1963 - 2008	Cyprus 1963 - 2008	Czech Republic 1993 - 2008	Czechoslovakia 1963 - 1993
Denmark 1963 - 2008	Djibouti 1977 - 2008	Dominican Rep. 1963 - 2008	East Timor 2002 - 2008
Ecuador 1963 - 2008	Egypt 1963 - 2008	El Salvador 1963 - 2008	Eq. Guinea 1968 - 2008
Eritrea 1993 - 2008	Estonia 1991 - 2008	Ethiopia 1963 - 2008	Fiji 1970 - 2008
Finland 1963 - 2008	France 1963 - 2008	Gabon 1963 - 2008	Gambia 1965 - 2008
Georgia 1991 - 2008	Germany 1990 - 2008	East Germany 1963 - 1990	West Germany 1963 - 1990
Ghana 1963 - 2008	Greece 1963 - 2008	Guatemala 1963 - 2008	Guinea 1963 - 2008
Guinea-Bissau 1974 - 2008	Guyana 1966 - 2008	Haiti 1963 - 2008	Honduras 1963 - 2008
Hungary 1963 - 2008	India 1963 - 2008	Indonesia 1963 - 2008	Iran 1963 - 2008
Iraq 1963 - 2008	Ireland 1963 - 2008	Israel 1963 - 2008	Italy 1963 - 2008
Ivory Coast 1963 - 2008	Jamaica 1963 - 2008	Japan 1963 - 2008	Jordan 1963 - 2008
Kazakhstan 1991 - 2008	Kenya 1963 - 2008	North Korea 1963 - 2008	South Korea 1963 - 2008
Kuwait 1963 - 2008	Kyrgyzstan 1991 - 2008	Laos 1963 - 2008	Latvia 1991 - 2008
Lebanon 1963 - 2008	Lesotho 1966 - 2008	Liberia 1963 - 2008	Libya 1963 - 2008
Lithuania 1991 - 2008	Macedonia 1991 - 2008	Madagascar 1963 - 2008	Malawi 1964 - 2008
Malaysia 1963 - 2008	Mali 1963 - 2008	Mauritania 1963 - 2008	Mauritius 1968 - 2008
Mexico 1963 - 2008	Moldova 1991 - 2008	Mongolia 1963 - 2008	Montenegro 2006 - 2008
Morocco 1963 - 2008	Mozambique 1975 - 2008	Burma/Myanmar 1963 - 2008	Namibia 1990 - 2008
Nepal 1963 - 2008	Netherlands 1963 - 2008	New Zealand 1963 - 2008	Nicaragua 1963 - 2008
Niger 1963 - 2008	Nigeria 1963 - 2008	Norway 1963 - 2008	Oman 1963 - 2008
Pakistan 1963 - 2008	Panama 1963 - 2008	Papa New Guinea 1975 - 2008	Paraguay 1963 - 2008
Peru 1963 - 2008	Philippines 1963 - 2008	Poland 1963 - 2008	Portugal 1963 - 2008
Qatar 1971 - 2008	Romania 1963 - 2008	Russia 1992 - 2008	Rwanda 1963 - 2008
Saudia Arabia 1963 - 2008	Senegal 1963 - 2008	Serbia 2006 - 2008	Sierra Leone 1963 - 2008
Singapore 1963 - 2008	Slovakia 1993 - 2008	Slovenia 1991 - 2008	Solomon Islands 1978 - 2008
Somalia 1963 - 2008	South Africa 1963 - 2008	Spain 1963 - 2008	Sri Lanka 1963 - 2008
Sudan 1963 - 2008	Suriname 1975 - 2008	Swaziland 1968 - 2008	Sweden 1963 - 2008
Switzerland 1963 - 2008	Syria 1963 - 2008	Taiwan 1963 - 2008	Tajikistan 1991 - 2008
Tanzania 1963 - 2008	Thailand 1963 - 2008	Togo 1963 - 2008	Trinidad 1963 - 2008
Tunisia 1963 - 2008	Turkey 1963 - 2008	Turkmenistan 1991 - 2008	UAE 1971 - 2008
USSR 1963 - 1991	Uganda 1963 - 2008	Ukraine 1991 - 2008	United Kingdom 1963 - 2008
USA 1963 - 2008	Uruguay 1963 - 2008	Uzbekistan 1991 - 2008	Venezuela 1963 - 2008
Vietnam 1976 - 2008	Yemen 1990 - 2008	Yugoslavia 1963 - 1991	Zambia 1964 - 2008
Zimbabwe 1970 - 2008			

Table 2: Countries who have democratized

Albania 1991	Argentina 1963	Argentina 1973	Argentina 1983
Bangladesh 1986	Benin 1991	Bhutan 2007	Bolivia 1979
Bolivia 1982	Brazil 1985	Bulgaria 1990	Burundi 1993
Burundi 2005	Cape Verde 1990	Central African Rep. 1993	Chile 1990
Comoros 1990	Comoros 2004	Rep. of Congo 1992	Cyprus 1983
Czechoslovakia 1989	Dominican Rep. 1966	Ecuador 1979	Ecuador 2002
El Salvador 1984	Fiji 1992	Georgia 2004	Ghana 1969
Ghana 1979	Ghana 1993	Greece 1974	Guatemala 1966
Guatemala 1986	Guinea-Bissau 2000	Guinea-Bissau 2004	Honduras 1971
Honduras 1982	Hungary 1990	Indonesia 1999	Kenya 1998
South Korea 1988	Kyrgyzstan 2005	Liberia 2006	Madagascar 1993
Malawi 1994	Mali 1992	Mauritania 2007	Mexico 2000
Mongolia 1990	Nepal 1990	Nepal 2008	Nicaragua 1984
Niger 1993	Niger 2000	Nigeria 1979	Nigeria 1999
Pakistan 1972	Pakistan 1988	Pakistan 2008	Panama 1989
Paraguay 1989	Peru 1963	Peru 1980	Peru 2001
Philippines 1986	Poland 1989	Portugal 1976	Romania 1990
Senegal 2000	Sierra Leone 1996	Sierra Leone 1998	Spain 1977
Sri Lanka 1989	Sudan 1965	Sudan 1986	Suriname 1988
Suriname 1991	Taiwan 1996	Thailand 1975	Thailand 1979
Thailand 1992	Thailand 2008	Turkey 1983	Uganda 1980
Uruguay 1985			

Source: Democratic transitions measured with the ACLP-index (Cheibub, Gandhi and Vreeland, 2010).

Table 3: Democratic transitions with missing on Capital Share

Albania 1991	Argentina 1963	Argentina 1973	Argentina 1983
Benin 1991	Bhutan 2007	Brazil 1985	Bulgaria 1990
Burundi 1993	Burundi 2005	Cape Verde 1990	Comoros 1990
Comoros 2004	Rep. of Congo 1992	Guatemala 1966	Guinea-Bissau 2000
Guinea-Bissau 2004	Liberia 2006	Madagascar 1993	Mali 1992
Mauritania 2007	Nepal 2008	Niger 1993	Niger 2000
Nigeria 1979	Nigeria 1999	Pakistan 2008	Paraguay 1989
Peru 1963	Peru 1980	Portugal 1976	Sierra Leone 1996
Sierra Leone 1998	Sudan 1965	Sudan 1986	Thailand 1992
Thailand 2008	Uganda 1980		

Table 4: Inequality by region

	Mean Capital Share	Observations
Latin America	.721862	593
Asia	.7102076	508
Sub. Sah. Africa	.6646896	624
Mid. East	.6427614	513
Eastern Europe	.6227179	342
West / N. America	.5189367	751

Note: The observations are from the non-imputed dataset.

Table 5: Repression in egalitarian autocracies

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**N**
Capital Share	0.444	0.065	0	0.5	127
Pol. Terror Scale	3.232	1.017	1	5	69

Source: The Political Terror Scale (Gibney, Cornett and Wood, 2008), UNIDO dataset (UNIDO, 2011)

Appendix C. Multiple imputation diagnostics

In this section I provide additional information about the multiple imputation process.

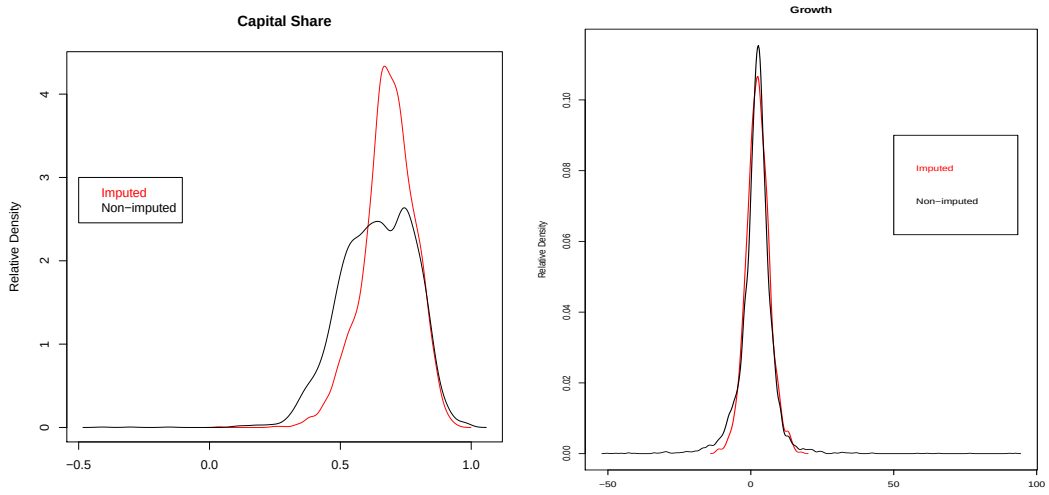

Figure 1: Capital Share and Growth – Imputed vs. non-imputed

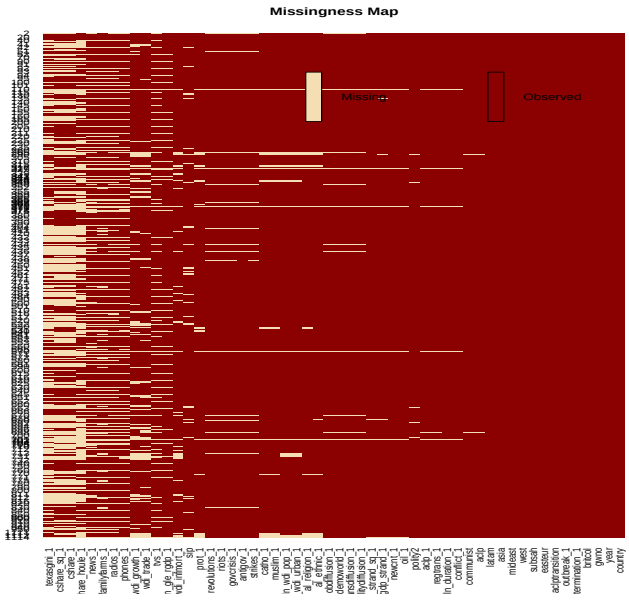

Figure 2: Missingness map

Red dots are imputed values and black dots are observed values.

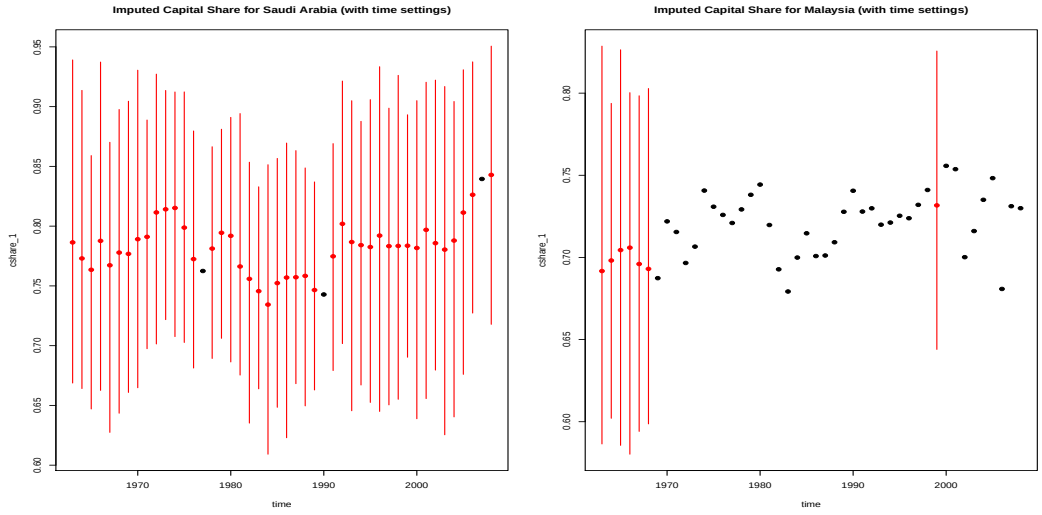

Figure 3: Imputation Diagnostics – Saudia Arabia and Malaysia

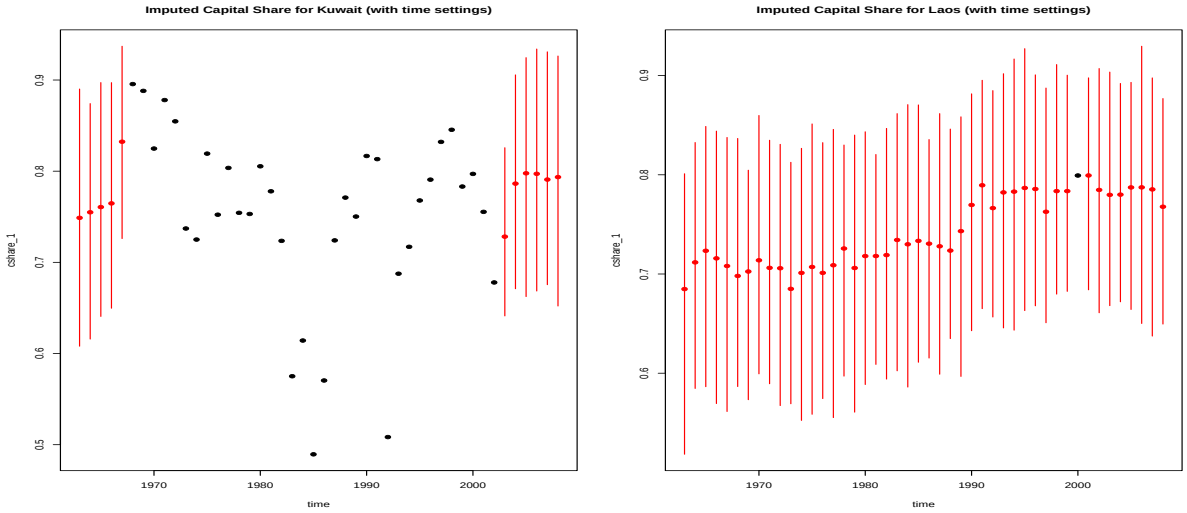

Figure 4: Imputation diagnostics – Kuwait and Laos

Appendix D. Tables from the robustness tests

In this section I provide figures and tables from the robustness tests in chapter 6. First, I present the figures with influential observations. Then I show the results from the main analyses when these observations are excluded. Then, the tables with different operationalizations of the dependent variable are presented. Furthermore, I present the analyses with different operationalizations of inequality. Finally, the analyses with different lag-structures are presented before I display the results with different model specifications – logit and dynamic probit models.

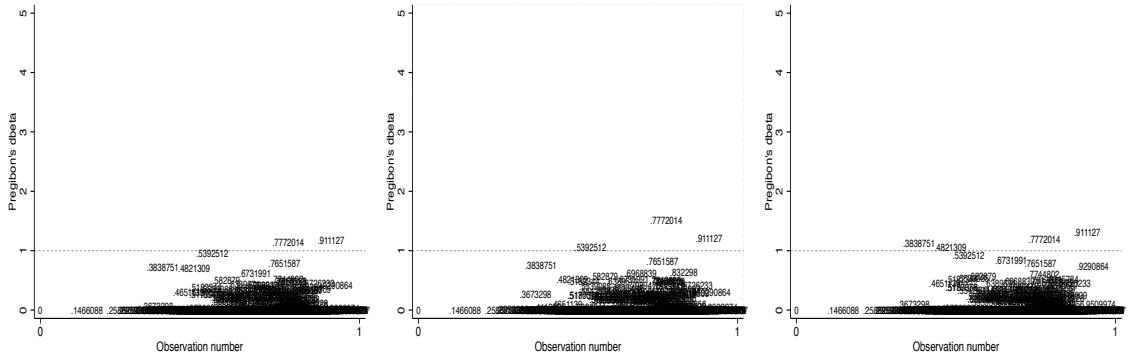

Figure 5: Influential Observations – Baseline, full and de facto model

Table 6: Probit model – Removing Influential Cases

	(1) ACLP Democratic Transition	(2) ACLP Democratic Transition	(3) ACLP Democratic Transition	(4) ACLP Democratic Transition	(5) ACLP Democratic
Capital Share	-0.627	1.718	0.132		
	(1.811)	(2.056)	(2.517)		
Economic Crisis (- 5%)		7.371***			
		(2.237)			
Cap.Share*Crisis		-10.048**			
		(3.517)			
Demonstrations			0.874		
			(1.858)		
Capital Share * Demonstrations			-0.203		
			(2.563)		
Log Real GDP per capita	0.411*	0.405*	0.395*		
	(0.177)	(0.181)	(0.181)		
Oil (dummy)	-1.377+	-1.426+	-1.330+		
	(0.771)	(0.787)	(0.775)		
Log Duration	-0.744***	-0.762***	-0.682***		
	(0.120)	(0.120)	(0.127)		
(%) Democracies	0.032**	0.029*	0.029*		
	(0.012)	(0.012)	(0.012)		
Growth	-0.037*		-0.032+		
	(0.017)		(0.018)		
British Colony	0.425	0.427	0.614		
	(0.411)	(0.395)	(0.387)		
Religious fractionalization	-1.905*	-1.866*	-2.015**		
	(0.777)	(0.778)	(0.766)		
Ethnic fractionalization	0.539	0.525	0.454		
	(0.609)	(0.630)	(0.570)		
Muslim	-0.009	-0.006	-0.010+		
	(0.007)	(0.006)	(0.006)		
Protestant	-0.017	-0.013	-0.030		
	(0.017)	(0.015)	(0.019)		
Catholic	0.005	0.006	0.004		
	(0.006)	(0.006)	(0.005)		
Constant	-5.554*	-7.247**	-6.132*		
	(2.204)	(2.331)	(2.461)		
Observations	4033	4032	4031		
AIC	692.740	673.156	675.617		
ll_0	-404.464	-400.575	-396.674		
ll	-328.370	-317.578	-317.808		

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

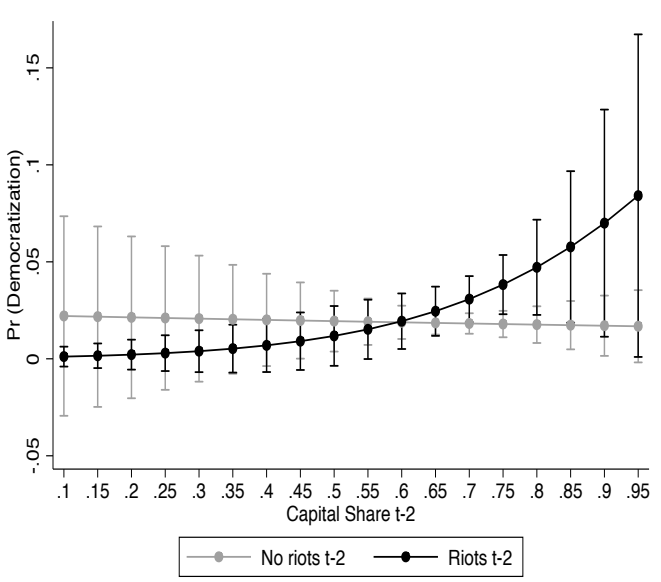

Figure 6: Marginal effect of inequality and riots on democratization

The three next tables presents the effects of inequality on democratizations with Polity-transitions as dependent variable.

Table 7: Probit model – Polity as dependent variable – Baseline model

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.902	0.620	0.671	0.618	0.699	0.798
	(0.617)	(2.136)	(0.711)	(2.267)	(0.704)	(2.195)
Capital Share sq.		0.221		0.041		-0.078
		(1.586)		(1.624)		(1.614)
Log Real GDP per capita	0.209***	0.210***	0.182**	0.182**	0.212**	0.212**
	(0.063)	(0.063)	(0.060)	(0.060)	(0.066)	(0.066)
Oil (dummy)	-0.567*	-0.567*	-0.444+	-0.444+	-0.350	-0.350
	(0.237)	(0.237)	(0.238)	(0.237)	(0.235)	(0.235)
Log Duration	-0.300***	-0.299***	-0.288***	-0.288***	-0.297***	-0.297***
	(0.053)	(0.053)	(0.055)	(0.054)	(0.057)	(0.057)
(%) Democracies	0.012**	0.012*	0.017***	0.017***	0.017***	0.017***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Growth			-0.010	-0.010	-0.009	-0.009
			(0.008)	(0.008)	(0.008)	(0.008)
British Colony			0.180	0.180	0.178	0.178
			(0.152)	(0.151)	(0.159)	(0.160)
Religious fractionalization			-0.244	-0.244	-0.133	-0.133
			(0.263)	(0.263)	(0.271)	(0.270)
Ethnic fractionalization			-0.096	-0.097	-0.253	-0.252
			(0.194)	(0.198)	(0.198)	(0.201)
Muslim			-0.004	-0.004	-0.002	-0.002
			(0.002)	(0.002)	(0.003)	(0.003)
Protestant			-0.001	-0.001	-0.002	-0.002
			(0.006)	(0.006)	(0.007)	(0.007)
Catholic			0.003+	0.003+	-0.000	-0.000
			(0.002)	(0.002)	(0.003)	(0.003)
Constant	-4.421***	-4.335***	-4.128***	-4.111***	-3.940***	-3.972***
	(0.686)	(0.936)	(0.792)	(1.092)	(0.795)	(1.059)
Observations	4035	4035	4035	4035	4035	4035
AIC	485.569	487.558	487.318	489.317	491.140	493.139
ll_0	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226
ll	-236.785	-236.779	-230.659	-230.659	-227.570	-227.570

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8: Probit model – Polity as dependent variable – Full model

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Share	0.659	0.706	0.647	0.186	0.722	1.332	0.700	0.728	0.719	0.996
	(0.704)	(0.760)	(0.710)	(0.838)	(0.704)	(1.141)	(0.705)	(0.739)	(0.698)	(0.707)
Economic Crisis (- 5%)	0.193	0.396								
	(0.169)	(1.217)								
Cap.Share * Reg.trans. diffusion				0.562						
				(0.446)						
Pop. mob. diffusion					0.004	0.018				
					(0.003)	(0.024)				
Capital Share * Pop. mob. diffusion						-0.020				
						(0.035)				
War outbreak							0.190	0.465		
							(0.238)	(1.363)		
Capital Share * Outbreak								-0.384		
								(1.877)		
War termination									0.206	2.244
									(0.246)	(1.589)
Capital Share * Termination										-2.929
										(2.350)
Log Real GDP per capita	0.211**	0.211**	0.205**	0.214**	0.209**	0.206**	0.217**	0.218**	0.219***	0.218***
	(0.065)	(0.065)	(0.065)	(0.066)	(0.066)	(0.066)	(0.067)	(0.067)	(0.066)	(0.066)
Oil (dummy)	-0.361	-0.359	-0.339	-0.341	-0.337	-0.329	-0.357	-0.357	-0.358	-0.353
	(0.233)	(0.233)	(0.240)	(0.238)	(0.238)	(0.238)	(0.238)	(0.238)	(0.237)	(0.234)
Log Duration	-0.297***	-0.297***	-0.297***	-0.299***	-0.294***	-0.294***	-0.298***	-0.298***	-0.298***	-0.298***
	(0.056)	(0.056)	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)	(0.056)	(0.057)	(0.057)
(%) Democracies	0.017***	0.017***	0.015**	0.016**	0.018***	0.017***	0.017***	0.017***	0.017***	0.017***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
British Colony	0.174	0.174	0.182	0.165	0.182	0.186	0.184	0.185	0.184	0.189
	(0.157)	(0.157)	(0.161)	(0.160)	(0.159)	(0.160)	(0.158)	(0.158)	(0.159)	(0.160)
Religious fractionalization	-0.143	-0.141	-0.151	-0.166	-0.136	-0.153	-0.132	-0.131	-0.123	-0.120
	(0.271)	(0.271)	(0.275)	(0.277)	(0.276)	(0.279)	(0.272)	(0.272)	(0.271)	(0.272)
Ethnic fractionalization	-0.246	-0.248	-0.253	-0.229	-0.268	-0.268	-0.258	-0.258	-0.256	-0.257
	(0.201)	(0.202)	(0.202)	(0.203)	(0.203)	(0.203)	(0.199)	(0.199)	(0.199)	(0.200)
Muslim	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Protestant	-0.001	-0.001	-0.002	-0.001	-0.002	-0.002	-0.002	-0.002	-0.001	-0.001
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Catholic	-0.000	-0.000	-0.001	-0.001	-0.000	-0.000	-0.001	-0.001	-0.000	-0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Western Europe / N. America	-0.059	-0.065	0.012	-0.038	-0.149	-0.226	-0.025	-0.021	-0.020	0.008
	(0.426)	(0.413)	(0.431)	(0.433)	(0.465)	(0.509)	(0.426)	(0.428)	(0.426)	(0.410)
Eastern Europe/Post-Sovjet	-0.543*	-0.543*	-0.474+	-0.487+	-0.498+	-0.509*	-0.528*	-0.528*	-0.525*	-0.515*
	(0.258)	(0.258)	(0.254)	(0.257)	(0.260)	(0.257)	(0.252)	(0.252)	(0.251)	(0.248)
Sub-Saharan Africa	-0.326*	-0.327*	-0.359*	-0.370*	-0.270+	-0.280+	-0.315*	-0.314*	-0.313*	-0.313*
	(0.150)	(0.150)	(0.150)	(0.150)	(0.158)	(0.157)	(0.149)	(0.149)	(0.148)	(0.148)
Middle East	-0.809**	-0.812**	-0.737*	-0.746*	-0.710*	-0.717*	-0.806**	-0.807**	-0.808**	-0.810**
	(0.285)	(0.284)	(0.294)	(0.296)	(0.295)	(0.297)	(0.286)	(0.286)	(0.285)	(0.287)
Asia	-0.475*	-0.477*	-0.435*	-0.431*	-0.486*	-0.488*	-0.470*	-0.469*	-0.464*	-0.459*
	(0.202)	(0.203)	(0.203)	(0.203)	(0.207)	(0.207)	(0.201)	(0.201)	(0.200)	(0.200)
o.Latin America	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Cap.Share*Crisis		-0.295								
		(1.772)								
Reg. trans. diffusion			0.126*	-0.278						
			(0.056)	(0.331)						
Growth			-0.007	-0.007	-0.007	-0.007	-0.008	-0.008	-0.008	-0.008
			(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Constant	-3.943***	-3.978***	-3.847***	-3.598***	-4.120***	-4.501***	-3.988***	-4.011***	-4.024***	-4.210***
	(0.791)	(0.803)	(0.799)	(0.829)	(0.807)	(0.952)	(0.807)	(0.823)	(0.789)	(0.807)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	491.052	493.025	489.284	490.226	491.102	492.703	492.499	494.477	492.427	492.682
ll_0	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226
ll	-227.526	-227.513	-225.642	-225.113	-226.551	-226.352	-227.250	-227.238	-227.214	-226.341

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9: Probit model – Polity as dependent variable – De facto model

	Strikes		Demonstrations		Riots	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.720	0.938	0.714	1.040	0.777	0.490
	(0.697)	(0.762)	(0.720)	(0.953)	(0.724)	(0.832)
Strikes	0.563**	1.271				
	(0.181)	(1.106)				
Capital Share * Strikes		-1.006				
		(1.561)				
Demonstrations			0.466***	0.980		
			(0.123)	(0.815)		
Capital Share * Demonstrations				-0.727		
				(1.173)		
Riots					0.411**	-0.138
					(0.145)	(0.972)
Capital Share * Riots						0.774
						(1.341)
Log Real GDP per capita	0.197**	0.196**	0.185**	0.183**	0.212**	0.213**
	(0.067)	(0.068)	(0.066)	(0.065)	(0.067)	(0.067)
Oil (dummy)	-0.336	-0.329	-0.384+	-0.377	-0.341	-0.352
	(0.227)	(0.232)	(0.233)	(0.236)	(0.237)	(0.237)
Muslim	-0.002	-0.002	-0.002	-0.002	-0.002	-0.003
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Log Duration	-0.284***	-0.284***	-0.264***	-0.263***	-0.274***	-0.275***
	(0.056)	(0.055)	(0.058)	(0.057)	(0.055)	(0.056)
(%) Democracies	0.017***	0.017***	0.016**	0.016**	0.018***	0.018***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Growth	-0.004	-0.004	-0.006	-0.006	-0.006	-0.006
	(0.007)	(0.007)	(0.008)	(0.008)	(0.007)	(0.007)
British Colony	0.176	0.175	0.193	0.190	0.156	0.163
	(0.156)	(0.157)	(0.156)	(0.158)	(0.155)	(0.153)
Religious fractionalization	-0.114	-0.123	-0.160	-0.173	-0.196	-0.201
	(0.264)	(0.268)	(0.262)	(0.263)	(0.270)	(0.270)
Ethnic fractionalization	-0.279	-0.289	-0.209	-0.209	-0.276	-0.265
	(0.202)	(0.202)	(0.194)	(0.194)	(0.198)	(0.201)
Protestant	-0.002	-0.002	-0.001	-0.001	-0.000	-0.001
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Catholic	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Constant	-3.933***	-4.052***	-3.953***	-4.156***	-4.131***	-3.941***
	(0.789)	(0.778)	(0.802)	(0.909)	(0.800)	(0.832)
Observations	4035	4035	4035	4035	4035	4035
AIC	484.130	485.711	481.164	482.856	484.241	485.916
ll_0	-269.226	-269.226	-269.226	-269.226	-269.226	-269.226
ll	-223.065	-222.856	-221.582	-221.428	-223.121	-222.958

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The two next tables presents the effects of inequality on 0.03 increase in the SIP-index.

Table 10: Probit model – SIP as dependent variable (0.03 increase) – Baseline

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.072	-1.526^{+}	-0.024	-1.979*	-0.030	-2.050*
	(0.371)	(0.801)	(0.413)	(0.801)	(0.411)	(0.869)
Log Real GDP per capita	0.026	0.030	0.007	0.011	-0.005	-0.002
	(0.038)	(0.038)	(0.043)	(0.044)	(0.048)	(0.049)
Oil (dummy)	-0.122	-0.123	-0.108	-0.110	-0.099	-0.104
	(0.078)	(0.079)	(0.088)	(0.089)	(0.093)	(0.094)
Log Duration	-0.282***	-0.282***	-0.262***	-0.262***	-0.257***	-0.257***
	(0.027)	(0.027)	(0.029)	(0.029)	(0.030)	(0.030)
(%) Democracies	0.017***	0.017***	0.020***	0.019***	0.022***	0.021***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Capital Share sq.		1.307^{+}		1.618*		1.672*
		(0.747)		(0.767)		(0.821)
Growth			-0.015**	-0.015**	-0.017**	-0.016**
			(0.005)	(0.005)	(0.006)	(0.006)
British Colony			-0.125	-0.148	-0.161^{+}	-0.182*
			(0.089)	(0.090)	(0.092)	(0.091)
Religious fractionalization			-0.109	-0.113	0.012	0.007
			(0.263)	(0.261)	(0.257)	(0.255)
Ethnic fractionalization			-0.084	-0.117	-0.031	-0.058
			(0.166)	(0.163)	(0.173)	(0.170)
Muslim			-0.000	-0.000	0.001	0.001
			(0.002)	(0.002)	(0.002)	(0.002)
Protestant			-0.004	-0.003	-0.001	0.000
			(0.004)	(0.004)	(0.004)	(0.004)
Catholic			0.004^{+}	0.003^{+}	0.005*	0.005*
			(0.002)	(0.002)	(0.002)	(0.002)
Constant	-1.655***	-1.212***	-1.491**	-0.931*	-1.624**	-1.047*
	(0.371)	(0.329)	(0.476)	(0.455)	(0.536)	(0.509)
Observations	4035	4035	4035	4035	4035	4035
AIC	2289.413	2288.962	2260.593	2259.169	2256.147	2254.577
ll_0	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768
ll	-1138.707	-1137.481	-1117.296	-1115.585	-1110.074	-1108.288

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11: Probit model – SIP as Dependent variabe (0.03 increase) – Full model

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Share	-0.079	0.125	-0.032	0.158	-0.013	0.285	-0.031	0.058	-0.037	0.063
	(0.404)	(0.436)	(0.416)	(0.483)	(0.416)	(0.600)	(0.412)	(0.418)	(0.413)	(0.423)
Economic Crisis (- 5%)	0.331***	1.153*								
	(0.090)	(0.497)								
Cap.Share * Reg.trans. diffusion				-0.319						
				(0.298)						
Pop. mob. diffusion					0.004*	0.012				
					(0.002)	(0.013)				
Capital Share * Pop. mob. diffusion						-0.011				
						(0.017)				
War outbreak							0.101	1.007+		
							(0.110)	(0.600)		
Capital Share * Outbreak								-1.294		
								(0.837)		
War termination									0.226+	1.218+
									(0.123)	(0.629)
Capital Share * Termination										-1.417
										(0.902)
Log Real GDP per capita	-0.004	-0.001	-0.009	-0.012	-0.005	-0.007	-0.002	-0.002	0.003	0.003
	(0.047)	(0.048)	(0.048)	(0.048)	(0.048)	(0.049)	(0.049)	(0.048)	(0.049)	(0.048)
Oil (dummy)	-0.110	-0.113	-0.094	-0.096	-0.099	-0.096	-0.104	-0.101	-0.109	-0.107
	(0.093)	(0.094)	(0.094)	(0.095)	(0.094)	(0.094)	(0.093)	(0.093)	(0.094)	(0.093)
Muslim	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Log Duration	-0.259***	-0.260***	-0.257***	-0.255***	-0.256***	-0.256***	-0.256***	-0.257***	-0.257***	-0.256***
	(0.030)	(0.030)	(0.030)	(0.029)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)
(%) Democracies	0.022***	0.021***	0.019***	0.019***	0.022***	0.022***	0.021***	0.021***	0.021***	0.021***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
British Colony	-0.166+	-0.163+	-0.156+	-0.152+	-0.156+	-0.156+	-0.159+	-0.158+	-0.156+	-0.156+
	(0.092)	(0.092)	(0.093)	(0.092)	(0.092)	(0.092)	(0.092)	(0.091)	(0.092)	(0.092)
Religious fractionalization	-0.000	0.002	0.011	0.009	0.012	0.003	0.014	0.016	0.019	0.022
	(0.261)	(0.260)	(0.260)	(0.258)	(0.258)	(0.258)	(0.257)	(0.256)	(0.257)	(0.256)
Ethnic fractionalization	-0.023	-0.034	-0.028	-0.033	-0.034	-0.033	-0.035	-0.034	-0.034	-0.035
	(0.171)	(0.169)	(0.173)	(0.172)	(0.175)	(0.175)	(0.173)	(0.173)	(0.174)	(0.173)
Protestant	-0.000	-0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Catholic	0.005*	0.005*	0.005*	0.005*	0.005*	0.005*	0.005*	0.005*	0.005*	0.005*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	2260.063	2259.837	2245.378	2246.122	2250.176	2251.646	2257.404	2258.156	2254.480	2254.943
ll_0	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768
ll	-1112.031	-1110.919	-1103.689	-1103.061	-1106.088	-1105.823	-1109.702	-1109.078	-1108.240	-1107.472

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 12: Probit model – SIP as dependent variable (0.03 increase) – De facto model

	(1) ACLP Democratic Transition	(2) ACLP Democratic Transition	(3) ACLP Democratic Transition			
Capital Share	-0.034	0.191	-0.023	0.263	-0.002	-0.004
	(0.408)	(0.426)	(0.415)	(0.479)	(0.414)	(0.454)
Capital Share * Strikes		-2.411*				
		(0.952)				
Demonstrations			0.235**	0.961+		
			(0.073)	(0.514)		
Capital Share * Demonstrations				-1.043		
				(0.717)		
Riots					0.213**	0.207
					(0.077)	(0.540)
Capital Share * Riots						0.008
						(0.779)
Strikes	0.529***	2.203***				
	(0.122)	(0.650)				
Log Real GDP per capita	-0.010	-0.010	-0.013	-0.013	-0.002	-0.002
	(0.049)	(0.049)	(0.049)	(0.049)	(0.048)	(0.048)
Oil (dummy)	-0.094	-0.089	-0.105	-0.104	-0.102	-0.102
	(0.089)	(0.092)	(0.093)	(0.096)	(0.091)	(0.091)
Muslim	0.001	0.001	0.001	0.001	0.001	0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Log Duration	-0.247***	-0.248***	-0.243***	-0.242***	-0.247***	-0.247***
	(0.029)	(0.029)	(0.031)	(0.031)	(0.031)	(0.031)
(%) Democracies	0.021***	0.021***	0.021***	0.021***	0.022***	0.022***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Growth	-0.014**	-0.015**	-0.016**	-0.016**	-0.016**	-0.016**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
British Colony	-0.168+	-0.169+	-0.162+	-0.165+	-0.175+	-0.175+
	(0.090)	(0.091)	(0.092)	(0.093)	(0.091)	(0.091)
Religious fractionalization	0.015	-0.001	0.005	-0.005	-0.005	-0.005
	(0.258)	(0.257)	(0.268)	(0.268)	(0.264)	(0.264)
Ethnic fractionalization	-0.037	-0.042	-0.010	-0.012	-0.031	-0.031
	(0.177)	(0.176)	(0.177)	(0.178)	(0.175)	(0.176)
Protestant	-0.001	-0.001	-0.001	-0.000	-0.001	-0.001
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Catholic	0.004+	0.004+	0.004+	0.004+	0.004+	0.004+
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Constant	-1.661**	-1.777**	-1.650**	-1.841**	-1.722**	-1.721**
	(0.544)	(0.550)	(0.543)	(0.564)	(0.539)	(0.548)
Observations	4035	4035	4035	4035	4035	4035
AIC	2238.267	2234.449	2247.398	2246.877	2249.984	2251.984
ll_0	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768	-1254.768
ll	-1100.134	-1097.224	-1104.699	-1103.438	-1105.992	-1105.992

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 13: Probit model – Autocracies to Semi-Democracies - Baseline

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.587	-2.051*	0.556	-2.760*	0.492	-2.854*
	(0.503)	(1.021)	(0.583)	(1.276)	(0.622)	(1.301)
Capital Share sq.		2.163*		2.766**		2.792**
		(0.876)		(1.043)		(1.076)
Log Real GDP per capita	-0.061	-0.055	-0.088+	-0.086+	-0.068	-0.068
	(0.045)	(0.046)	(0.050)	(0.050)	(0.057)	(0.058)
Oil (dummy)	-0.091	-0.092	-0.086	-0.088	0.057	0.048
	(0.109)	(0.111)	(0.111)	(0.112)	(0.113)	(0.115)
Log Duration	0.021	0.023	0.060	0.063	0.073+	0.077+
	(0.037)	(0.037)	(0.041)	(0.041)	(0.043)	(0.042)
(%) Democracies	0.007*	0.006+	0.011**	0.010**	0.012***	0.011**
	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Growth			-0.022***	-0.021***	-0.023***	-0.023***
			(0.006)	(0.006)	(0.006)	(0.006)
British Colony			-0.168	-0.220*	-0.170	-0.222+
			(0.119)	(0.109)	(0.128)	(0.116)
Religious fractionalization			-0.291	-0.309	-0.177	-0.188
			(0.290)	(0.286)	(0.294)	(0.290)
Ethnic fractionalization			0.095	0.030	-0.000	-0.049
			(0.207)	(0.201)	(0.224)	(0.223)
Muslim			0.001	0.001	0.004	0.004
			(0.003)	(0.002)	(0.003)	(0.003)
Protestant			0.001	0.003	0.004	0.007
			(0.005)	(0.004)	(0.005)	(0.004)
Catholic			0.006*	0.006*	0.005+	0.005*
			(0.002)	(0.002)	(0.003)	(0.002)
Constant	-2.109***	-1.381**	-2.157***	-1.192+	-2.242***	-1.285+
	(0.491)	(0.461)	(0.579)	(0.611)	(0.663)	(0.670)
Observations	4035	4035	4035	4035	4035	4035
AIC	1080.831	1078.551	1056.758	1052.630	1053.506	1049.389
ll_0	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030
ll	-534.415	-532.276	-515.379	-512.315	-508.753	-505.694

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The two next tables presents the effects of inequality on moving from autocracies to semi-democracies and democracies.

Table 14: Probit model – Autocracies to Semi-Democracies - Full model

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Share	0.425	0.635	0.497	0.788	0.497	-0.295	0.492	0.730	0.482	0.477
	(0.613)	(0.683)	(0.636)	(0.778)	(0.629)	(0.831)	(0.623)	(0.682)	(0.623)	(0.645)
Economic Crisis (- 5%)	0.398**	1.165+								
	(0.123)	(0.684)								
Cap.Share * Reg.trans. diffusion				-0.413						
				(0.370)						
Pop. mob. diffusion					0.005**	-0.014				
					(0.002)	(0.016)				
Capital Share * Pop. mob. diffusion						0.028				
						(0.022)				
War outbreak							0.086	2.547**		
							(0.162)	(0.870)		
Capital Share * Outbreak								-3.569**		
								(1.240)		
War termination									0.111	0.043
									(0.161)	(1.141)
Capital Share * Termination										0.096
										(1.583)
Log Real GDP per capita	-0.075	-0.073	-0.068	-0.072	-0.063	-0.061	-0.066	-0.068	-0.065	-0.065
	(0.056)	(0.056)	(0.058)	(0.058)	(0.058)	(0.059)	(0.057)	(0.057)	(0.058)	(0.058)
Oil (dummy)	0.041	0.038	0.067	0.064	0.054	0.046	0.053	0.064	0.051	0.051
	(0.111)	(0.111)	(0.113)	(0.114)	(0.113)	(0.114)	(0.115)	(0.113)	(0.115)	(0.115)
Muslim	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Log Duration	0.067	0.067	0.071+	0.073+	0.070+	0.070+	0.073+	0.074+	0.073+	0.073+
	(0.043)	(0.042)	(0.043)	(0.043)	(0.042)	(0.042)	(0.043)	(0.043)	(0.043)	(0.043)
(%) Democracies	0.012***	0.012**	0.009*	0.008*	0.012***	0.013***	0.012***	0.012***	0.012***	0.012***
	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
British Colony	-0.178	-0.174	-0.165	-0.157	-0.172	-0.176	-0.170	-0.172	-0.169	-0.169
	(0.127)	(0.127)	(0.130)	(0.130)	(0.129)	(0.128)	(0.128)	(0.128)	(0.128)	(0.128)
Religious fractionalization	-0.185	-0.186	-0.188	-0.192	-0.169	-0.143	-0.174	-0.172	-0.171	-0.171
	(0.295)	(0.293)	(0.296)	(0.295)	(0.294)	(0.291)	(0.295)	(0.292)	(0.295)	(0.295)
Ethnic fractionalization	0.028	0.019	0.003	-0.003	-0.006	-0.013	-0.003	-0.006	-0.000	-0.001
	(0.227)	(0.226)	(0.226)	(0.225)	(0.227)	(0.225)	(0.224)	(0.223)	(0.224)	(0.225)
Protestant	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Catholic	0.005+	0.005+	0.005+	0.005+	0.005*	0.005*	0.005+	0.005*	0.005+	0.005+
	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
Western Europe / N. America	0.384	0.396	0.507+	0.529*	0.316	0.405	0.459+	0.495+	0.451+	0.452+
	(0.254)	(0.256)	(0.259)	(0.264)	(0.271)	(0.286)	(0.259)	(0.261)	(0.265)	(0.267)
Eastern Europe/Post-Sovjet	-0.412*	-0.407*	-0.297	-0.291	-0.321	-0.324	-0.383+	-0.373+	-0.384+	-0.384+
	(0.207)	(0.205)	(0.199)	(0.200)	(0.214)	(0.215)	(0.202)	(0.201)	(0.203)	(0.203)
Sub-Saharan Africa	-0.247	-0.250	-0.223	-0.220	-0.159	-0.158	-0.215	-0.211	-0.214	-0.214
	(0.169)	(0.168)	(0.163)	(0.164)	(0.170)	(0.171)	(0.168)	(0.165)	(0.167)	(0.168)
Middle East	-0.696**	-0.702**	-0.589*	-0.579*	-0.569*	-0.579*	-0.677**	-0.693**	-0.677**	-0.677**
	(0.252)	(0.251)	(0.256)	(0.258)	(0.263)	(0.261)	(0.252)	(0.250)	(0.252)	(0.252)
Asia	-0.095	-0.108	0.001	-0.008	-0.094	-0.102	-0.048	-0.036	-0.048	-0.048
	(0.213)	(0.211)	(0.207)	(0.207)	(0.214)	(0.215)	(0.210)	(0.210)	(0.211)	(0.211)
o.Latin America	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Cap.Share*Crisis		-1.146								
		(1.004)								
Reg. trans. diffusion			0.137**	0.429						
			(0.047)	(0.271)						
Growth			-0.021***	-0.021***	-0.021***	-0.021***	-0.023***	-0.023***	-0.023***	-0.023***
			(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Constant	-2.191***	-2.326***	-2.222***	-2.383**	-2.484***	-1.983**	-2.262***	-2.420***	-2.264***	-2.260***
	(0.644)	(0.677)	(0.667)	(0.736)	(0.688)	(0.756)	(0.667)	(0.708)	(0.663)	(0.675)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	1055.880	1056.846	1046.312	1047.143	1049.359	1049.629	1055.237	1052.638	1055.069	1057.067
ll_0	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030
ll	-509.940	-509.423	-504.156	-503.572	-505.680	-504.814	-508.619	-506.319	-508.535	-508.533

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 15: Probit model – Autocracies to Semi-Democracies – De facto model

	Strikes		Demonstrations		Riots	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.482	0.557	0.468	0.649	0.494	0.608
	(0.620)	(0.672)	(0.627)	(0.796)	(0.629)	(0.770)
Strikes	0.327*	0.828				
	(0.136)	(0.884)				
Capital Share * Strikes		-0.714				
		(1.227)				
Demonstrations			0.276**	0.748		
			(0.092)	(0.751)		
Capital Share * Demonstrations				-0.671		
				(1.050)		
Riots					0.214+	0.544
					(0.111)	(0.839)
Capital Share * Riots						-0.472
						(1.172)
Log Real GDP per capita	-0.074	-0.075	-0.082	-0.082	-0.069	-0.069
	(0.057)	(0.057)	(0.057)	(0.057)	(0.058)	(0.058)
Oil (dummy)	0.058	0.059	0.063	0.066	0.064	0.068
	(0.109)	(0.111)	(0.111)	(0.112)	(0.109)	(0.110)
Muslim	0.004	0.004	0.004	0.004	0.004	0.004
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Log Duration	0.079+	0.079+	0.086*	0.086*	0.081+	0.081+
	(0.043)	(0.043)	(0.044)	(0.044)	(0.044)	(0.044)
(%) Democracies	0.012***	0.012***	0.012**	0.012**	0.012***	0.012***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Growth	-0.021***	-0.022***	-0.021***	-0.021***	-0.022***	-0.022***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
British Colony	-0.175	-0.175	-0.170	-0.170	-0.184	-0.183
	(0.128)	(0.129)	(0.129)	(0.130)	(0.129)	(0.130)
Religious fractionalization	-0.161	-0.169	-0.182	-0.193	-0.191	-0.190
	(0.292)	(0.293)	(0.303)	(0.303)	(0.298)	(0.297)
Ethnic fractionalization	-0.017	-0.019	0.015	0.015	-0.007	-0.009
	(0.224)	(0.224)	(0.226)	(0.226)	(0.228)	(0.227)
Protestant	0.004	0.004	0.005	0.005	0.005	0.005
	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.006)
Catholic	0.005+	0.005+	0.005+	0.005+	0.005+	0.005+
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Constant	-2.238***	-2.275***	-2.206***	-2.326**	-2.285***	-2.368**
	(0.666)	(0.682)	(0.661)	(0.754)	(0.660)	(0.726)
Observations	4035	4035	4035	4035	4035	4035
AIC	1051.658	1053.370	1048.197	1049.679	1051.430	1053.195
ll_0	-540.030	-540.030	-540.030	-540.030	-540.030	-540.030
ll	-506.829	-506.685	-505.098	-504.840	-506.715	-506.597

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The two next tables presents the effect of inequality on transitioning from Autocracies and Semi-democracies to Democracies.

Table 16: Probit model – Autoc. and Semi-Dem. to Democracies – Baseline

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	-0.127	-2.462	-0.769	-2.231	-0.785	-1.959
	(0.726)	(1.705)	(0.826)	(1.954)	(0.838)	(2.088)
Log Real GDP per capita	0.241***	0.244***	0.200**	0.202**	0.239**	0.239**
	(0.073)	(0.074)	(0.074)	(0.075)	(0.078)	(0.078)
Oil (dummy)	-0.322	-0.324	-0.121	-0.118	-0.051	-0.050
	(0.234)	(0.235)	(0.243)	(0.244)	(0.242)	(0.242)
Log Duration	-0.252***	-0.251***	-0.241***	-0.240***	-0.253***	-0.251***
	(0.059)	(0.059)	(0.062)	(0.062)	(0.064)	(0.064)
(%) Democracies	0.010+	0.009	0.018**	0.017**	0.017**	0.017**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Capital Share sq.		1.897		1.211		0.968
		(1.376)		(1.555)		(1.672)
Growth			-0.017*	-0.017*	-0.016+	-0.016+
			(0.008)	(0.008)	(0.008)	(0.008)
British Colony			0.515**	0.499*	0.584**	0.570**
			(0.196)	(0.199)	(0.216)	(0.219)
Religious fractionalization			-0.377	-0.364	-0.362	-0.350
			(0.290)	(0.288)	(0.340)	(0.338)
Ethnic fractionalization			-0.063	-0.099	-0.239	-0.262
			(0.282)	(0.287)	(0.314)	(0.315)
Muslim			-0.008*	-0.008*	-0.006	-0.006
			(0.003)	(0.003)	(0.004)	(0.004)
Protestant			-0.016*	-0.016+	-0.019*	-0.018*
			(0.008)	(0.008)	(0.009)	(0.009)
Catholic			0.004+	0.004	0.002	0.002
			(0.002)	(0.002)	(0.003)	(0.003)
Constant	-4.117***	-3.456***	-3.456***	-3.035**	-3.417***	-3.069**
	(0.783)	(0.829)	(0.875)	(0.948)	(0.936)	(1.016)
Observations	4035	4035	4035	4035	4035	4035
AIC	360.344	361.384	355.060	356.683	361.661	363.419
ll_0	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471
ll	-174.172	-173.692	-164.530	-164.342	-162.830	-162.709

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 17: Probit model – Autoc. and Semi-Dem. to Democracies – Full Model

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Share	-0.838	-0.796	-0.791	-0.692	-0.762	0.333	-0.781	-0.698	-0.783	-0.314
	(0.841)	(0.943)	(0.841)	(0.963)	(0.843)	(1.191)	(0.838)	(0.879)	(0.824)	(0.801)
Economic Crisis (- 5%)	0.407*	0.544								
	(0.173)	(1.039)								
Log Real GDP per capita	0.236**	0.236**	0.238**	0.236**	0.240**	0.234**	0.242**	0.243**	0.240**	0.244**
	(0.077)	(0.077)	(0.077)	(0.078)	(0.078)	(0.078)	(0.079)	(0.079)	(0.078)	(0.080)
Oil (dummy)	-0.075	-0.074	-0.049	-0.049	-0.031	-0.019	-0.054	-0.052	-0.052	-0.040
	(0.241)	(0.240)	(0.240)	(0.241)	(0.244)	(0.246)	(0.244)	(0.244)	(0.243)	(0.246)
Muslim	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Log Duration	-0.252***	-0.252***	-0.253***	-0.252***	-0.247***	-0.250***	-0.254***	-0.254***	-0.253***	-0.252***
	(0.064)	(0.064)	(0.063)	(0.064)	(0.063)	(0.062)	(0.063)	(0.063)	(0.064)	(0.064)
(%) Democracies	0.018**	0.018**	0.017**	0.017**	0.018**	0.018**	0.017**	0.017**	0.017**	0.017**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
British Colony	0.581**	0.581**	0.587**	0.591**	0.604**	0.618**	0.586**	0.588**	0.585**	0.612**
	(0.213)	(0.213)	(0.215)	(0.214)	(0.218)	(0.219)	(0.214)	(0.214)	(0.215)	(0.226)
Religious fractionalization	-0.388	-0.385	-0.362	-0.359	-0.362	-0.401	-0.358	-0.355	-0.361	-0.331
	(0.346)	(0.344)	(0.341)	(0.341)	(0.346)	(0.353)	(0.339)	(0.339)	(0.339)	(0.347)
Ethnic fractionalization	-0.211	-0.214	-0.240	-0.248	-0.279	-0.277	-0.239	-0.240	-0.239	-0.261
	(0.322)	(0.322)	(0.315)	(0.311)	(0.313)	(0.314)	(0.315)	(0.314)	(0.314)	(0.319)
Protestant	-0.018*	-0.018*	-0.019*	-0.019*	-0.020*	-0.020*	-0.019*	-0.019*	-0.019*	-0.019*
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
Catholic	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Western Europe / N. America	-0.163	-0.166	-0.111	-0.103	-0.277	-0.418	-0.117	-0.101	-0.118	-0.066
	(0.418)	(0.410)	(0.427)	(0.428)	(0.458)	(0.533)	(0.428)	(0.429)	(0.428)	(0.401)
Eastern Europe/Post-Sovjet	-0.250	-0.250	-0.217	-0.216	-0.208	-0.231	-0.226	-0.224	-0.226	-0.193
	(0.289)	(0.289)	(0.285)	(0.285)	(0.283)	(0.282)	(0.279)	(0.280)	(0.277)	(0.277)
Sub-Saharan Africa	-0.166	-0.166	-0.162	-0.159	-0.089	-0.115	-0.153	-0.148	-0.154	-0.142
	(0.178)	(0.178)	(0.176)	(0.176)	(0.180)	(0.179)	(0.174)	(0.173)	(0.173)	(0.173)
Middle East	-0.680+	-0.683+	-0.684+	-0.684+	-0.591	-0.605	-0.695+	-0.699+	-0.696+	-0.712+
	(0.399)	(0.398)	(0.399)	(0.398)	(0.404)	(0.409)	(0.393)	(0.394)	(0.393)	(0.417)
Asia	-0.330	-0.332	-0.324	-0.327	-0.375	-0.380	-0.329	-0.326	-0.329	-0.318
	(0.269)	(0.266)	(0.262)	(0.261)	(0.262)	(0.266)	(0.262)	(0.264)	(0.262)	(0.264)
o.Latin America	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Cap.Share*Crisis		-0.204								
		(1.520)								
Reg. trans. diffusion			0.026	0.122						
			(0.064)	(0.320)						
Growth			-0.016+	-0.016+	-0.014+	-0.014	-0.016+	-0.016+	-0.016+	-0.017*
			(0.009)	(0.009)	(0.009)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)
Cap.Share * Reg.trans. diffusion				-0.139						
				(0.462)						
Pop. mob. diffusion					0.005	0.029				
					(0.003)	(0.024)				
Capital Share * Pop. mob. diffusion						-0.036				
						(0.036)				
War outbreak							0.083	0.987		
							(0.319)	(1.102)		
Capital Share * Outbreak								-1.309		
								(1.579)		
War termination									0.012	3.807**
									(0.318)	(1.472)
Capital Share * Termination										-5.942**
										(2.247)
Constant	-3.463***	-3.490***	-3.402***	-3.450***	-3.649***	-4.294***	-3.444***	-3.513***	-3.421***	-3.796***
	(0.942)	(0.992)	(0.933)	(0.951)	(0.940)	(1.031)	(0.947)	(0.983)	(0.918)	(0.935)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	359.635	361.622	363.563	365.513	361.201	362.106	363.581	365.386	363.659	361.130
ll_0	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471
ll	-161.817	-161.811	-162.781	-162.757	-161.601	-161.053	-162.791	-162.693	-162.830	-160.565

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 18: Probit model – Autoc. and Semi-Dem. to Democracies – De facto model

	Strikes		Demonstrations		Riots	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	-0.731	-0.499	-0.794	-0.621	-0.774	-0.747
	(0.820)	(0.869)	(0.832)	(1.042)	(0.838)	(0.950)
Strikes	0.415^{+}	1.214				
	(0.218)	(1.282)				
Capital Share * Strikes		-1.161				
		(1.809)				
Demonstrations			0.251^{+}	0.570		
			(0.147)	(0.910)		
Capital Share * Demonstrations				-0.462		
				(1.320)		
Riots					0.071	0.135
					(0.184)	(1.134)
Capital Share * Riots						-0.093
						(1.570)
Log Real GDP per capita	0.233**	0.234**	0.233**	0.233**	0.241**	0.241**
	(0.078)	(0.078)	(0.077)	(0.077)	(0.077)	(0.077)
Oil (dummy)	-0.035	-0.027	-0.063	-0.057	-0.047	-0.046
	(0.237)	(0.241)	(0.243)	(0.243)	(0.242)	(0.240)
Muslim	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Log Duration	-0.241***	-0.241***	-0.232***	-0.231***	-0.248***	-0.248***
	(0.062)	(0.062)	(0.065)	(0.065)	(0.064)	(0.065)
(%) Democracies	0.017**	0.017**	0.017**	0.017**	0.018**	0.018**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Growth	-0.013	-0.013	-0.015^{+}	-0.015^{+}	-0.015^{+}	-0.015^{+}
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
British Colony	0.584**	0.583**	0.578**	0.577**	0.579**	0.578**
	(0.213)	(0.214)	(0.215)	(0.215)	(0.214)	(0.214)
Religious fractionalization	-0.320	-0.327	-0.355	-0.360	-0.373	-0.372
	(0.329)	(0.331)	(0.346)	(0.349)	(0.338)	(0.337)
Ethnic fractionalization	-0.258	-0.268	-0.213	-0.214	-0.241	-0.242
	(0.308)	(0.309)	(0.318)	(0.318)	(0.313)	(0.316)
Protestant	-0.020*	-0.020*	-0.019*	-0.019*	-0.019*	-0.019*
	(0.009)	(0.010)	(0.009)	(0.009)	(0.009)	(0.009)
Catholic	0.001	0.001	0.001	0.001	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Constant	-3.476***	-3.612***	-3.490***	-3.602***	-3.452***	-3.469***
	(0.919)	(0.906)	(0.925)	(1.030)	(0.927)	(0.998)
Observations	4035	4035	4035	4035	4035	4035
AIC	360.269	361.826	361.186	363.084	363.493	365.490
ll_0	-191.471	-191.471	-191.471	-191.471	-191.471	-191.471
ll	-161.135	-160.913	-161.593	-161.542	-162.747	-162.745

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The two next tables presents the main analyses with different operationalizations of inequality.

Table 19: Probit model – Different Inequality Measures – Baseline Model

	Capital Share	Family Farms	Gini
	(1)	(2)	(3)
Capital Share	0.092		
	(0.750)		
Family Farms		0.008*	
		(0.003)	
Gini			-0.009
			(0.013)
Log Real GDP per capita	0.166*	0.169*	0.150+
	(0.079)	(0.081)	(0.079)
Oil (dummy)	-0.363	-0.358	-0.356
	(0.273)	(0.269)	(0.277)
Log Duration	-0.332***	-0.335***	-0.333***
	(0.049)	(0.050)	(0.049)
(%) Democracies	0.013*	0.011*	0.014**
	(0.005)	(0.004)	(0.005)
Growth	-0.019*	-0.019*	-0.019*
	(0.008)	(0.008)	(0.008)
British Colony	0.246	0.254	0.254
	(0.163)	(0.164)	(0.166)
Religious fractionalization	-0.828*	-0.863**	-0.858*
	(0.334)	(0.325)	(0.341)
Ethnic fractionalization	0.181	0.211	0.192
	(0.261)	(0.278)	(0.265)
Muslim	-0.004	-0.004	-0.004
	(0.003)	(0.003)	(0.003)
Protestant	-0.008	-0.006	-0.008
	(0.007)	(0.007)	(0.007)
Catholic	0.002	0.002	0.002
	(0.003)	(0.002)	(0.003)
Constant	-2.786**	-2.874***	-2.231*
	(0.919)	(0.747)	(0.974)
Observations	4035	4035	4035
AIC	708.289	700.967	707.727
ll_0	-412.208	-412.208	-412.208
ll	-336.144	-332.483	-335.863

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 20: Probit model – Potential Conditional Effects of Family Farms – Full Model

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Family Farms	0.008*	0.005	0.008*	0.008*	0.005+	0.011*	0.005+	0.005+	0.005+	0.006*
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.003)	(0.003)	(0.003)	(0.003)
Economic Crisis (- 5%)	0.332*									
	(0.157)									
Family Farms * Crisis		-0.000								
		(0.007)								
Reg. trans. diffusion			0.129*	0.319*						
			(0.054)	(0.136)						
Family Farms * Reg. trans. diffusion				-0.004						
				(0.003)						
Pop. mob. diffusion					0.007**	0.012**				
					(0.002)	(0.004)				
Family Farms * Pop. mob. diffusion						-0.000				
						(0.000)				
War outbreak							0.177			
							(0.200)			
Family Farms * Outbreak								-0.004		
								(0.013)		
War termination									-0.126	
									(0.238)	
Family Farms * Termination										-0.026*
										(0.011)
Log Real GDP per capita	0.162*	0.153*	0.163*	0.156*	0.147*	0.146*	0.160*	0.159*	0.154*	0.152*
	(0.080)	(0.066)	(0.080)	(0.067)	(0.066)	(0.066)	(0.068)	(0.068)	(0.067)	(0.067)
Oil (dummy)	-0.370	-0.504+	-0.359	-0.468+	-0.471+	-0.470+	-0.501+	-0.505+	-0.489+	-0.510+
	(0.266)	(0.267)	(0.277)	(0.275)	(0.274)	(0.273)	(0.274)	(0.275)	(0.270)	(0.276)
Muslim	-0.003	-0.006*	-0.004	-0.006*	-0.005+	-0.005+	-0.006*	-0.006*	-0.006*	-0.006*
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Log Duration	-0.338***	-0.335***	-0.334***	-0.330***	-0.325***	-0.325***	-0.332***	-0.332***	-0.330***	-0.331***
	(0.049)	(0.047)	(0.049)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)
(%) Democracies	0.011*	0.012**	0.008+	0.009*	0.013**	0.012*	0.012**	0.012**	0.012**	0.012**
	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)
British Colony	0.243	0.133	0.260	0.144	0.159	0.165	0.141	0.143	0.136	0.134
	(0.162)	(0.156)	(0.167)	(0.160)	(0.157)	(0.157)	(0.158)	(0.157)	(0.157)	(0.157)
Religious fractionalization	-0.865**	-0.851**	-0.877**	-0.832*	-0.805*	-0.793*	-0.858**	-0.863**	-0.856**	-0.859**
	(0.324)	(0.321)	(0.331)	(0.327)	(0.321)	(0.323)	(0.324)	(0.324)	(0.322)	(0.321)
Ethnic fractionalization	0.236	0.315	0.210	0.278	0.297	0.312	0.294	0.298	0.286	0.310
	(0.279)	(0.261)	(0.283)	(0.263)	(0.268)	(0.273)	(0.263)	(0.264)	(0.260)	(0.260)
Protestant	-0.006	-0.007	-0.007	-0.009	-0.007	-0.007	-0.007	-0.007	-0.008	-0.008
	(0.007)	(0.007)	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Catholic	0.002	0.004+	0.002	0.004	0.004+	0.004+	0.004	0.004	0.004	0.004
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Growth			-0.017*	-0.017*	-0.017*	-0.017*	-0.019*	-0.019*	-0.020*	-0.020*
			(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)
Constant	-2.886***	-3.051***	-2.819***	-3.088***	-3.265***	-3.442***	-3.018***	-3.021***	-2.958***	-2.987***
	(0.748)	(0.647)	(0.748)	(0.665)	(0.664)	(0.684)	(0.657)	(0.658)	(0.647)	(0.650)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	702.326	708.972	697.654	701.528	700.216	700.289	707.268	709.099	707.811	706.078
ll_0	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208
ll	-333.163	-340.486	-329.827	-335.764	-336.108	-335.145	-339.634	-339.549	-339.906	-338.039

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The next tables present the main analyses with no lag-structure on the explanatory variables.

Table 21: Probit model – No lag - Full Model

	Crisis	Diffusion		War	
	(1)	(2)	(3)	(4)	(5)
F.Capital Share	-1.727*	-0.926	-1.006	-1.161	-1.432+
	(0.876)	(0.830)	(1.318)	(0.829)	(0.812)
1F. Cap. Share * Crisis	1.788				
	(1.758)				
cF.Cap. Share * Reg. trans. diffusio		-0.519			
		(0.446)			
cF.Cap. Share * Pop. mob. diffusion			-0.015		
			(0.029)		
1F. Cap. Share * Outbreak				-3.096	
				(1.905)	
1F. Cap. Share * Termination					-0.314
					(2.442)
F.Log Real GDP per capita	0.159	0.153	0.149	0.165+	0.169+
	(0.100)	(0.096)	(0.098)	(0.097)	(0.098)
F.Oil (dummy)	-0.036	-0.035	-0.014	-0.043	-0.040
	(0.255)	(0.249)	(0.250)	(0.247)	(0.248)
F.Muslim	-0.005+	-0.005+	-0.005	-0.005+	-0.005+
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
F.Log Duration	-0.632***	-0.618***	-0.615***	-0.624***	-0.625***
	(0.082)	(0.082)	(0.081)	(0.082)	(0.079)
F.(%) Democracies	0.019**	0.016**	0.019**	0.019**	0.019**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
F.British Colony	0.403*	0.463*	0.441*	0.425*	0.425*
	(0.178)	(0.185)	(0.178)	(0.178)	(0.179)
F.Religious fractionalization	-0.858*	-0.837*	-0.847*	-0.874*	-0.871*
	(0.396)	(0.391)	(0.393)	(0.396)	(0.395)
F.Ethnic fractionalization	0.071	0.052	0.081	0.052	0.073
	(0.298)	(0.292)	(0.304)	(0.295)	(0.296)
F.Protestant	-0.013	-0.016+	-0.015+	-0.013	-0.013
	(0.008)	(0.009)	(0.008)	(0.008)	(0.008)
F.Catholic	0.001	0.001	0.001	0.001	0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
F.Growth		-0.002	-0.001	-0.004	-0.004
		(0.007)	(0.006)	(0.007)	(0.007)
Constant	-1.249	-1.745	-1.901	-1.696	-1.548
	(1.164)	(1.131)	(1.274)	(1.125)	(1.113)
Observations	3960	3960	3960	3960	3960
AIC	594.455	591.673	592.679	594.572	597.271
ll_0	-399.082	-399.082	-399.082	-399.082	-399.082
ll	-278.227	-275.836	-276.340	-277.286	-278.636

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 22: Probit model – No lag – De facto model

	Strikes	Demonstrations	Riots
	(1)	(2)	(3)
F.Capital Share	-1.447	-1.950*	-1.577+
	(0.880)	(0.970)	(0.946)
1F. Cap. Share * Strikes	0.097		
	(1.706)		
1F. Cap. Share * Demonstrations		1.440	
		(1.149)	
1F. Cap. Share * Riots			0.371
			(1.097)
F.Log Real GDP per capita	0.169+	0.164+	0.165+
	(0.100)	(0.099)	(0.098)
F.Oil (dummy)	-0.024	-0.038	-0.033
	(0.252)	(0.252)	(0.248)
F.Muslim	-0.005+	-0.005+	-0.005+
	(0.003)	(0.003)	(0.003)
F.Log Duration	-0.619***	-0.626***	-0.624***
	(0.080)	(0.085)	(0.083)
F.(%) Democracies	0.019**	0.019**	0.019**
	(0.006)	(0.006)	(0.006)
F.Growth	-0.001	-0.004	-0.004
	(0.006)	(0.007)	(0.007)
F.British Colony	0.405*	0.419*	0.422*
	(0.175)	(0.175)	(0.177)
F.Religious fractionalization	-0.819*	-0.831*	-0.876*
	(0.393)	(0.390)	(0.392)
F.Ethnic fractionalization	0.062	0.061	0.071
	(0.304)	(0.295)	(0.296)
F.Protestant	-0.014+	-0.014+	-0.013
	(0.008)	(0.008)	(0.008)
F.Catholic	0.001	0.001	0.001
	(0.003)	(0.003)	(0.003)
Constant	-1.618	-1.176	-1.421
	(1.153)	(1.148)	(1.190)
Observations	3960	3960	3960
AIC	592.539	595.576	597.165
ll_0	-399.082	-399.082	-399.082
ll	-276.270	-277.788	-278.582

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The two next tables present the main analyses with a two year lag-structure on the explanatory variables.

Table 23: Probit model – Two year lag – Full model

	Crisis	Diffusion		War	
	(1)	(2)	(3)	(4)	(5)
[1em] 1L.Cap. Share * Crisis	1.748				
	(2.031)				
cL. Cap. Share * Reg. trans. diffusion		-0.504			
		(0.358)			
cL. Cap. Share * Pop. mob. diffusion			0.033		
			(0.021)		
1L.Cap. Share * Outbreak				-1.945	
				(1.920)	
1L. Cap. Share * Termination					-2.811^{+}
					(1.708)
L.Log Real GDP per capita	0.092	0.096	0.107	0.116	0.116
	(0.077)	(0.077)	(0.078)	(0.080)	(0.079)
L.Oil (dummy)	-0.302	-0.310	-0.333	-0.324	-0.320
	(0.274)	(0.275)	(0.278)	(0.280)	(0.276)
L.Muslim	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
L.Log Duration	-0.151***	-0.146***	-0.149***	-0.144***	-0.144***
	(0.043)	(0.043)	(0.044)	(0.043)	(0.043)
L.(%) Democracies	0.012*	0.010*	0.012*	0.011*	0.011*
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
L.British Colony	0.147	0.174	0.156	0.161	0.166
	(0.161)	(0.161)	(0.161)	(0.162)	(0.162)
L.Religious fractionalization	-0.698*	-0.681*	-0.681*	-0.686*	-0.671*
	(0.331)	(0.325)	(0.333)	(0.330)	(0.328)
L.Ethnic fractionalization	0.263	0.227	0.252	0.241	0.256
	(0.275)	(0.273)	(0.279)	(0.269)	(0.271)
L.Protestant	-0.002	-0.004	-0.002	-0.002	-0.002
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
L.Catholic	0.002	0.002	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
L.Growth		-0.017*	-0.016*	-0.018*	-0.016*
		(0.008)	(0.008)	(0.008)	(0.008)
Constant	-2.763**	-3.174***	-2.599**	-3.288***	-3.382***
	(0.912)	(0.908)	(0.921)	(0.915)	(0.885)
Observations	3945	3945	3945	3945	3945
AIC	759.304	758.166	751.855	755.566	753.842
ll_0	-402.614	-402.614	-402.614	-402.614	-402.614
ll	-360.652	-359.083	-355.927	-357.783	-356.921

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 24: Probit model – Two Year Lag – De facto model

	Strikes	Demonstrations	Riots
	(1)	(2)	(3)
[1em] 1L. Cap. Share * Strikes	-2.998^{+}		
	(1.567)		
1L. Cap. Share * Demonstrations		2.467^{+}	
		(1.364)	
1L. Cap. Share * Riots			2.321^{+}
			(1.381)
L.Log Real GDP per capita	0.088	0.092	0.099
	(0.079)	(0.077)	(0.077)
L.Oil (dummy)	-0.285	-0.316	-0.318
	(0.269)	(0.271)	(0.263)
L.Muslim	-0.003	-0.003	-0.003
	(0.003)	(0.003)	(0.003)
L.Log Duration	-0.134**	-0.141**	-0.144***
	(0.043)	(0.043)	(0.043)
L.(%) Democracies	0.011*	0.011*	0.013*
	(0.005)	(0.005)	(0.005)
L.Growth	-0.016*	-0.017*	-0.016*
	(0.008)	(0.008)	(0.008)
L.British Colony	0.150	0.162	0.147
	(0.166)	(0.156)	(0.156)
L.Religious fractionalization	-0.695*	-0.663*	-0.740*
	(0.324)	(0.324)	(0.324)
L.Ethnic fractionalization	0.223	0.240	0.248
	(0.272)	(0.271)	(0.274)
L.Protestant	-0.003	-0.003	-0.003
	(0.008)	(0.007)	(0.007)
L.Catholic	0.001	0.002	0.001
	(0.003)	(0.003)	(0.003)
Constant	-3.222***	-2.499**	-2.559**
	(0.922)	(0.914)	(0.941)
Observations	3945	3945	3945
AIC	750.836	755.425	752.977
ll_0	-402.614	-402.614	-402.614
ll	-355.418	-357.713	-356.488

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The table below presents the results including time-dummies for every fifth year.

Table 25: Probit model – Including time dummies for every fifth year – Full model

	Crisis		Diffusion		Diffusion		War		War	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Capital Share	-0.160	0.582	-0.171	-0.470	0.126	0.655	-0.128	-0.228	-0.128	-0.065
	(0.779)	(0.845)	(0.797)	(0.865)	(0.753)	(1.229)	(0.791)	(0.854)	(0.792)	(0.828)
Economic Crisis (- 5%)	0.241	2.556**								
	(0.166)	(0.975)								
Cap.Share*Crisis		-3.469*								
		(1.469)								
Reg. trans. diffusion			0.083	-0.208						
			(0.059)	(0.393)						
Cap.Share * Reg.trans. diffusion				0.407						
				(0.529)						
Pop. mob. diffusion					0.005*	0.017				
					(0.002)	(0.019)				
Capital Share * Pop. mob. diffusion						-0.025				
						(0.028)				
War outbreak							0.214	-0.734		
							(0.195)	(1.391)		
Capital Share * Outbreak								1.321		
								(1.961)		
War termination									-0.082	0.785
									(0.230)	(1.132)
Capital Share * Termination										-1.242
										(1.622)
Log Real GDP per capita	0.095	0.102	0.098	0.101	0.163*	0.098	0.108	0.107	0.099	0.099
	(0.087)	(0.086)	(0.088)	(0.088)	(0.079)	(0.088)	(0.090)	(0.090)	(0.089)	(0.089)
Oil (dummy)	-0.359	-0.363	-0.350	-0.357	-0.360	-0.340	-0.357	-0.357	-0.344	-0.345
	(0.277)	(0.283)	(0.280)	(0.280)	(0.277)	(0.278)	(0.282)	(0.283)	(0.278)	(0.277)
Log Duration	-0.373***	-0.373***	-0.368***	-0.369***	-0.330***	-0.371***	-0.374***	-0.374***	-0.370***	-0.369***
	(0.049)	(0.049)	(0.050)	(0.050)	(0.048)	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)
(%) Democracies	-0.063**	-0.068**	-0.068**	-0.068**	0.013*	-0.062**	-0.065**	-0.065**	-0.062**	-0.062**
	(0.022)	(0.023)	(0.022)	(0.022)	(0.005)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
British Colony	0.315*	0.334*	0.320*	0.309+	0.254	0.325*	0.325*	0.324*	0.318*	0.318*
	(0.158)	(0.157)	(0.161)	(0.159)	(0.164)	(0.161)	(0.161)	(0.161)	(0.160)	(0.160)
Religious fractionalization	-0.868*	-0.852*	-0.879*	-0.890*	-0.822*	-0.891*	-0.873*	-0.877*	-0.865*	-0.863*
	(0.357)	(0.351)	(0.361)	(0.363)	(0.339)	(0.353)	(0.360)	(0.361)	(0.357)	(0.356)
Ethnic fractionalization	0.286	0.234	0.264	0.278	0.177	0.269	0.272	0.270	0.263	0.262
	(0.301)	(0.295)	(0.298)	(0.298)	(0.268)	(0.300)	(0.302)	(0.302)	(0.298)	(0.298)
Muslim	-0.004	-0.004	-0.004	-0.004	-0.004	-0.005	-0.005	-0.005	-0.005	-0.005
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Protestant	-0.010	-0.011	-0.011	-0.010	-0.008	-0.011	-0.010	-0.010	-0.011	-0.011
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Catholic	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Western Europe / N. America	0.570*	0.606*	0.601*	0.581*	0.227	0.543*	0.605*	0.588*	0.600*	0.606*
	(0.242)	(0.257)	(0.244)	(0.248)	(0.236)	(0.276)	(0.241)	(0.248)	(0.240)	(0.242)
Eastern Europe/Post-Sovjet	-0.214	-0.174	-0.150	-0.154	-0.145	-0.205	-0.194	-0.197	-0.195	-0.193
	(0.281)	(0.276)	(0.281)	(0.281)	(0.270)	(0.276)	(0.278)	(0.279)	(0.274)	(0.274)
Sub-Saharan Africa	-0.321	-0.301	-0.309	-0.315	-0.154	-0.311	-0.292	-0.299	-0.306	-0.304
	(0.243)	(0.238)	(0.242)	(0.241)	(0.235)	(0.246)	(0.245)	(0.247)	(0.244)	(0.243)
Middle East	-0.952*	-0.993*	-0.887*	-0.892*	-0.810*	-0.964*	-0.951*	-0.953*	-0.955*	-0.956*
	(0.390)	(0.395)	(0.397)	(0.397)	(0.369)	(0.408)	(0.396)	(0.396)	(0.394)	(0.393)
Asia	-0.262	-0.267	-0.220	-0.213	-0.177	-0.245	-0.247	-0.256	-0.250	-0.249
	(0.259)	(0.252)	(0.261)	(0.262)	(0.242)	(0.257)	(0.259)	(0.261)	(0.259)	(0.259)
o.Latin America	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
dummy60	-2.439***	-2.538***	-2.570***	-2.558***		-2.395***	-2.539***	-2.546***	-2.419***	-2.416***
	(0.694)	(0.712)	(0.683)	(0.683)		(0.688)	(0.683)	(0.685)	(0.683)	(0.683)
dummy65	-2.351***	-2.448***	-2.448***	-2.444***		-2.317***	-2.422***	-2.439***	-2.351***	-2.346***
	(0.676)	(0.690)	(0.668)	(0.669)		(0.678)	(0.674)	(0.675)	(0.674)	(0.674)
dummy70	-2.697***	-2.804***	-2.816***	-2.807***		-2.647***	-2.771***	-2.792***	-2.686***	-2.680***
	(0.716)	(0.731)	(0.710)	(0.710)		(0.718)	(0.714)	(0.715)	(0.712)	(0.714)
dummy75	-2.466***	-2.586***	-2.572***	-2.555***		-2.416**	-2.541***	-2.560***	-2.452***	-2.445***
	(0.734)	(0.745)	(0.725)	(0.723)		(0.737)	(0.734)	(0.735)	(0.734)	(0.736)
dummy80	-2.109**	-2.197**	-2.261***	-2.250***		-2.057**	-2.175**	-2.195***	-2.100**	-2.093**
	(0.667)	(0.679)	(0.657)	(0.658)		(0.661)	(0.662)	(0.661)	(0.662)	(0.663)
dummy85	-1.298*	-1.404*	-1.420*	-1.416*		-1.250*	-1.370*	-1.387*	-1.300*	-1.295*
	(0.587)	(0.598)	(0.580)	(0.582)		(0.582)	(0.579)	(0.578)	(0.582)	(0.582)
dummy90	-0.493	-0.530+	-0.622*	-0.607*		-0.480	-0.552+	-0.561+	-0.509	-0.506
	(0.310)	(0.316)	(0.310)	(0.309)		(0.320)	(0.312)	(0.311)	(0.311)	(0.312)
dummy95	-0.694*	-0.685*	-0.689*	-0.685*		-0.671*	-0.727*	-0.739**	-0.695*	-0.688*
	(0.286)	(0.286)	(0.276)	(0.275)		(0.289)	(0.284)	(0.285)	(0.283)	(0.283)
dummy2000	-0.258	-0.268	-0.273	-0.266		-0.267	-0.295	-0.299	-0.276	-0.273
	(0.230)	(0.231)	(0.231)	(0.231)		(0.232)	(0.229)	(0.228)	(0.232)	(0.232)
o.dummy2005	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)		(.)	(.)	(.)	(.)	(.)
Growth			-0.013	-0.013	-0.017*	-0.013	-0.013	-0.013	-0.014	-0.013
			(0.009)	(0.009)	(0.008)	(0.009)	(0.008)	(0.008)	(0.009)	(0.009)
Constant	2.197	1.874	2.456	2.623	-2.987**	1.613	2.234	2.357	2.172	2.116
	(1.704)	(1.737)	(1.694)	(1.710)	(0.927)	(1.805)	(1.713)	(1.755)	(1.709)	(1.728)
Observations	4035	4035	4035	4035	4035	4035	4035	4035	4035	4035
AIC	687.901	683.794	687.915	689.317	706.285	690.630	688.347	689.984	689.408	691.164
ll_0	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208
ll	-316.951	-313.897	-315.958	-315.658	-334.143	-316.315	-316.173	-315.992	-316.704	-316.582

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The next tables present the results using logit and dynamic probit models.

Table 26: Logit model – Baseline model

	Baseline		Extensive		Regional dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	1.657	-7.267***	-0.129	-7.268***	0.108	-6.552**
	(1.545)	(1.815)	(1.722)	(2.119)	(1.818)	(2.331)
Log Real GDP per capita	0.375**	0.395**	0.325*	0.330*	0.394*	0.390*
	(0.132)	(0.129)	(0.149)	(0.148)	(0.177)	(0.175)
Oil (dummy)	-1.058	-1.052	-1.095	-1.099	-0.772	-0.793
	(0.692)	(0.679)	(0.680)	(0.674)	(0.675)	(0.666)
Muslim	-0.009*	-0.009*	-0.014*	-0.014*	-0.008	-0.007
	(0.005)	(0.005)	(0.006)	(0.006)	(0.007)	(0.007)
Log Duration	-0.832***	-0.833***	-0.782***	-0.776***	-0.772***	-0.764***
	(0.119)	(0.118)	(0.122)	(0.121)	(0.123)	(0.123)
(%) Democracies	0.015	0.013	0.028*	0.026*	0.028*	0.025*
	(0.009)	(0.010)	(0.011)	(0.012)	(0.012)	(0.012)
Capital Share sq.		7.217***		5.922***		5.529**
		(1.726)		(1.777)		(1.942)
Growth			-0.035*	-0.035*	-0.038*	-0.037*
			(0.016)	(0.015)	(0.017)	(0.016)
British Colony			0.351	0.229	0.541	0.424
			(0.371)	(0.368)	(0.399)	(0.397)
Religious fractionalization			-1.934**	-1.930**	-1.721*	-1.711*
			(0.733)	(0.734)	(0.773)	(0.768)
Ethnic fractionalization			0.698	0.533	0.530	0.406
			(0.567)	(0.559)	(0.600)	(0.591)
Protestant			-0.017	-0.012	-0.017	-0.012
			(0.016)	(0.016)	(0.017)	(0.016)
Catholic			0.007	0.006	0.004	0.004
			(0.005)	(0.005)	(0.006)	(0.006)
Western Europe / N. America					0.793	0.812
					(0.489)	(0.497)
Eastern Europe/Post-Sovjet					-0.409	-0.376
					(0.636)	(0.637)
Sub-Saharan Africa					-0.384	-0.414
					(0.527)	(0.531)
Middle East					-2.301*	-2.256*
					(0.961)	(0.964)
Asia					-0.224	-0.210
					(0.531)	(0.524)
o.Latin America					0.000	0.000
					(.)	(.)
Constant	-6.814***	-4.296***	-5.290**	-3.177*	-5.800**	-3.796+
	(1.487)	(1.164)	(1.739)	(1.569)	(2.192)	(2.019)
Observations	4035	4035	4035	4035	4035	4035
AIC	725.277	721.566	711.409	709.771	709.477	708.304
ll_0	-412.208	-412.208	-412.208	-412.208	-412.208	-412.208
ll	-355.638	-352.783	-342.704	-340.885	-336.738	-335.152

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 27: Dynamic Probit model – Baseline model

	Baseline		Extended		Year & Reg. dummies	
	(1)	(2)	(3)	(4)	(5)	(6)
Capital Share	0.699	-3.006***	0.085	-3.165**	0.124	-2.974**
	(0.623)	(0.892)	(0.715)	(0.973)	(0.762)	(1.073)
aclpcshare	-2.064*	3.886**	-1.154	3.998*	-0.858	4.060*
	(1.051)	(1.436)	(0.987)	(1.682)	(1.092)	(1.830)
Log Real GDP per capita	0.180**	0.189**	0.154*	0.158*	0.175*	0.175*
	(0.061)	(0.062)	(0.067)	(0.068)	(0.080)	(0.079)
aclploggdp	0.370**	0.347**	0.306+	0.314+	0.093	0.105
	(0.130)	(0.131)	(0.175)	(0.180)	(0.218)	(0.224)
Oil (dummy)	-0.597*	-0.606*	-0.508+	-0.509+	-0.403	-0.408
	(0.267)	(0.265)	(0.277)	(0.276)	(0.282)	(0.280)
aclpoil	0.987*	1.012*	1.113*	1.100*	1.072*	1.056*
	(0.434)	(0.441)	(0.451)	(0.456)	(0.459)	(0.460)
Log Duration	-0.346***	-0.347***	-0.335***	-0.334***	-0.334***	-0.333***
	(0.050)	(0.050)	(0.049)	(0.048)	(0.049)	(0.049)
aclpduration	0.433***	0.424***	0.358***	0.347***	0.358***	0.346***
	(0.087)	(0.089)	(0.091)	(0.093)	(0.098)	(0.100)
(%) Democracies	0.006	0.005	0.013**	0.012*	0.013*	0.012*
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
aclpdemoworld	0.024**	0.027***	0.019*	0.022*	0.020*	0.024**
	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
Democracy	0.536	-1.010	0.923	-0.691		
	(1.418)	(1.159)	(1.655)	(1.637)		
Capital Share sq.		3.016***		2.691***		2.559**
		(0.829)		(0.815)		(0.893)
aclpcsharesq		-4.952**		-4.382**		-4.192*
		(1.569)		(1.690)		(1.757)
Muslim			-0.007*	-0.006*	-0.004	-0.004
			(0.003)	(0.003)	(0.003)	(0.003)
aclpmuslim			0.001	0.001	-0.002	-0.003
			(0.005)	(0.005)	(0.005)	(0.005)
Growth			-0.019*	-0.018*	-0.020*	-0.019*
			(0.008)	(0.008)	(0.008)	(0.008)
aclpgrowth1			0.049***	0.048***	0.064***	0.062***
			(0.014)	(0.014)	(0.018)	(0.018)
British Colony			0.137	0.083	0.225	0.173
			(0.154)	(0.152)	(0.166)	(0.163)
aclpbritcol			0.012	0.124	0.137	0.248
			(0.304)	(0.303)	(0.318)	(0.316)
Religious fractionalization			-0.883**	-0.881**	-0.847*	-0.842*
			(0.334)	(0.334)	(0.335)	(0.331)
aclpreligion			0.871	0.828	0.520	0.479
			(0.590)	(0.580)	(0.628)	(0.627)
Ethnic fractionalization			0.287	0.216	0.223	0.167
			(0.251)	(0.247)	(0.260)	(0.257)
aclpethnic			-1.081*	-0.919+	-0.905	-0.758
			(0.539)	(0.534)	(0.580)	(0.584)
Protestant			-0.008	-0.006	-0.007	-0.005
			(0.007)	(0.007)	(0.007)	(0.007)
aclpprot			0.009	0.006	0.012	0.009
			(0.009)	(0.008)	(0.010)	(0.009)
Catholic			0.003	0.003	0.002	0.002
			(0.002)	(0.002)	(0.003)	(0.003)
aclpcatho			-0.005	-0.005	-0.001	-0.001
			(0.005)	(0.005)	(0.005)	(0.005)
Western Europe / N. America					0.359+	0.363+
					(0.215)	(0.219)
aclpwest					2.367	0.813
					(2.248)	(2.293)
Eastern Europe/Post-Sovjet					-0.118	-0.104
					(0.250)	(0.249)
aclpeasteur					4.299*	2.685
					(1.988)	(1.991)
Sub-Saharan Africa					-0.192	-0.200
					(0.228)	(0.227)
aclpsubsah					2.130	0.584
					(1.882)	(1.888)
Middle East					-0.880*	-0.859*
					(0.363)	(0.365)
aclpmideast					3.480+	1.937
					(2.025)	(2.042)
Asia					-0.127	-0.117
					(0.241)	(0.238)
aclpasia					2.084	0.513
					(1.893)	(1.918)
o.Latin America					0.000	0.000
					(.)	(.)
aclplatam					2.015	0.465
					(2.117)	(2.129)
o.Democracy					0.000	0.000
					(.)	(.)
Constant	-3.516***	-2.483***	-2.836***	-1.877**	-2.912**	-1.985*
	(0.619)	(0.521)	(0.749)	(0.694)	(0.927)	(0.875)
Observations	6658	6658	6658	6658	6658	6658
AIC	1133.963	1131.127	1111.525	1110.926	1110.427	1110.337
ll_0	-4470.073	-4470.073	-4470.073	-4470.073	-4470.073	-4470.073
ll	-554.981	-551.564	-529.763	-527.463	-519.214	-517.169

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$