

Why do some liberalized autocracies become democratic  
while others do not?

Explaining competing outcomes of liberalization by event history  
analysis (1950-2006).

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## Abstract

This thesis sets out to explain the outcome of liberalization processes across the globe during the post war period, the research question being: *When a regime liberalizes, what affects the risk of the process ending with either democratization or authoritarian reversal?*

Scholars of comparative politics have strived to explain the many regime changes throughout the post war period to the present, in particular, democratic transitions. As more and more hybrid regimes, neither fully democratic nor autocratic, has been recognized in the literature, the debate has acknowledged that the traditional transition paradigm must be modified as to disentangle the process of political liberalization from that of transitions. Rather, democratic transition is only one possible outcome of political liberalization – it might as well end with authoritarian reversal. However, despite this acknowledgement, the various outcomes of liberalization processes has not been systematically compared and explained on a global scale. Here lies the motivation of this thesis.

A process-oriented approach traces historical events of *political liberalization* by observing movements upwards along the Polity IV scale. This generates 115 spells of liberalization in the analysis period from 1950 to 2006, by which a 105 is examined due to loss of data on the independent variables. Following the perspective of *structural contingency*, the outcome of liberalization – *democratic transition* or *authoritarian reversal* – is examined by an *event history analysis*, more specifically, *Cox competing risk models*.

The analysis results imply that different endpoints of liberalization can be explained by economic growth performance, ethnic fractionalization of society, type of autocracy, presence of legislative assembly and the conflict level during liberalization periods, while the inclusion of opposition parties do not significantly affect the outcome.

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## 1.0 Introduction

The evolution of political events that have swept across the Arab world this spring poses a puzzle to all participants and witnesses: will the political opening be sustained through summer or will the regime only go back to its old authoritarian ways? Will the movements away from repression reach democracy, stabilize, or regress? What determines the outcome? No one can predict the future, but we can draw lessons from former experiences because events of political liberalization are not unique to history. Middle East-countries like Egypt and Tunisia have faced periods of political openings before, and now as then, hopes for a democratic future are blended with an anticipated risk of renewed repression. Perestroika, the silent revolution of Mexico, the fall of Franco, the Brazilian military coup d'état, the Algerian election, amongst other liberalizations during the last decades – all signified political openings of different authoritarian regimes at different times, some of which have lead to democracy, others have slid back to autocracy. Thus events of liberalization seem to repeat itself at different timings and places in history, only the conditions change, with various outcomes. As political scientists we seek to explain through comparison why some liberalized autocracies democratized while others did not. Hence, this thesis asks:

*When a regime liberalizes, what affects the risk of the process ending with either democratization or authoritarian reversal?*

Although the literature offers much descriptive theory of the “gray zone” between autocracy and democracy, testing competing explanations of what determines the outcome of liberalization processes is lacking. Political liberalization moves the regime away from authoritarianism, but it does not necessarily lead to a democratic transition of the regime. Entering the “gray zone” between autocracy and democracy does not necessarily mean that the regime is in transition (Carothers 2002), but it is a risky state for the regime to be in: it might be more prone to reach a transition and die in favor of democracy; by contrast it might slide back into autocracy. Movement *away* from autocracy is what this thesis calls the process of political *liberalization*. While democratization – the transition from an autocracy to democracy – is a highly studied phenomenon, the consequences of liberalization are still somewhat unexplored. Usually liberalization has either been a bi-subject in the study of democratization (Bratton and van de Walle, Huntington 1991, Mainwaring, O’Donnell and Valenzuela 1992, O’Donnell and Schmitter 1986, Przeworski 1991) or studied in the absence of democracy (Brumberg 2002, Howard and Roessler 2006, Levitskey and Way 2002,

Ottoway 2003, Shedler 2002). But in order to detect the consequences of political liberalization in general, one must *compare* all potential outcomes. So far, studies of liberalization have had a tendency to focus on *either* positive cases (liberalization culminating in democracy) *or* negative cases of liberalization (liberalization without democratization). Variation on the dependent variable is a basic principle of science (Geddes 1990), but in the case of liberalization, it has not been sufficiently applied. Therefore this thesis will compare all cases of liberalized autocracies in the post war period to explore whether they lead to democratization or ended in reversal.

This comparison requires conceptual clarity about the boundaries between liberalization, democratization and reversal. Although it is widely acknowledged that liberalization is a distinct phenomenon from that of democratization theoretically and empirically, they are not always treated so analytically in the literature, as Schneider and Schmitter (2004) have pointed out.<sup>1</sup> Putting liberalization and democratization in the same box obscures the relationship between the processes because it assumes that liberalization automatically spawns the other. According to Levitsky and Way (2001:51) such “democratizing bias” is found in most of the earlier democratization literature, but also in recent works (see for example Teorell 2010). However, this is far from a given development. While liberalization may be a process towards democratization, in the end it might turn away from democracy by reversal (Carothers 2002, Levitsky and Way 2002, Shedler 2002). While liberalization means a change within the regime (for example, the movement from an autocracy with very limited liberties and no elections to one with more extensive liberties and elections dominated by the incumbents), democratization means a change of the regime (indicated, for example, by the removal of the dominant incumbent party). The first one implies autocracy, the other democracy, at its minimum. Because it makes a great difference for the man in the street whether he will be able to choose his own political leaders and hold them accountable or not, scholars should not overlook this very important distinction. Therefore this thesis sets out to illuminate the conceptual boundary between the two processes of liberalization and democratization, operating with a precise threshold for democracy. Here lies the prerequisite for analyzing the consequences of liberalization and avoiding “democratizing bias”.

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<sup>1</sup> From the pioneers Rustow (1970), O’Donnell and Schmitter (1986), Huntington (1991), Przeworski (1991; 1992), Mainwaring and Share (1986), to contemporary scholars like Brumberg (2002), Carothers (2002), Diamond (2002), Gill (2000), Levitsky and Way (2002), Schneider and Schmitter (2004), there is a continuous consensus that liberalization can exist without democratization.



While qualitative analysis and inductive theorizing have explained what liberalization is, and how and why it comes about, what determines the *outcome* remains unresolved. The literature offers plenty factors that are expected to affect the chances of democracy, but how does the presence of the same factor relate to the opposite risk of reversal? The question seems almost obvious, however remains unexplored.

### **1.1 Testing theory during times of liberalization**

This thesis builds an original approach by identifying two main challenges in the study of liberalization outcomes – one theoretical and one methodological. The first one concerns combining contingent and structural explanations. Although the field acknowledges that both structures and actors matter for political change, it has seldom been combined in one analysis of liberalization. This thesis will combine methodological approaches of structures and agency with an institutional perspective. It poses questions commonly asked and answered in conventional democratization theory, but which has not been conditioned on the process of political liberalization. *Given liberalization*, do structural, institutional or contingent factors determine the outcome? Are some types of autocracies more prone to democratize than others? What is the effect of the presence of nominal democratic institutions, like legislative assembly and political parties? How will a higher conflict level affect the outcome? Are ethnic divisions bad for the chances of democratization? In short, given liberalization, what determines whether it will end with democratization or reversal?

How these questions are to be answered leads us to the second challenge in studying the consequences of liberalization, namely evaluating inductive theories and qualitative analyses with deductive, quantitative testing. Because comparative historical analysis and empirical case-studies only reach so far, testing competing explanations on a global scale is needed in order to establish general patterns.

### **1.2 A process-oriented approach**

The scope of generalization increases with empirical foundation, i.e. the amount of cases included in the analysis. Hence in this thesis I want to study all cases of liberalization in the post war period. The quantitative approach enables this kind of global study. Hopefully the results can reveal general patterns about the consequences to expect from liberalization of autocratic regimes.

The primary reason why cases of political liberalization until now have not been compared worldwide is the notion that it is not possible to measure according to a common scale (O'Donnell and Schmitter 1986). But if democratization is a comparable phenomenon across the globe at various times, so is liberalization. And if democratizations is measurable according to common theoretical criteria, then so are liberalizations. What remains is making the observations and collecting these cases before comparing them. As this thesis will show, the analytical tools are there, only the data are not ready made. This poses a challenge for all who wish to explain the consequences of liberalization, and this thesis will rise to the occasion.

Studying liberalization requires detecting movements towards as well as away from democracy. Doing so, *event history analysis* is the appropriate tool where the *process* of liberalization is treated as the history preceding the potential outcome of democratization or reversal. It allows us to test the particular effect of explanatory variables on both the risk of democratization and reversal, which has not been done conditional on the liberalization process. In contrast to other longitudinal methods, event history analysis is able to deal with uncertain outcomes by which some regimes may still be in the process of liberalizing at the time of analysis.

In order to analyse such liberalization processes and their outcomes, they must be observed according to measurable criteria for what regime change qualifies as a case of liberalization and what qualifies as democratization or a reversal. This thesis offers a suggestive approach to how this can be done, namely on the basis of movements along the combined regime scale of the Polity IV Project (see Marshall and Jaggers 2009a). Over the period from 1950 to 2006 it generates 115 observations of liberalization by which 44 is followed by democratization, 49 end in reversal and 22 are still ongoing at the end of analysis time.<sup>2</sup> Obviously, the validation of the analysis relies on the appropriateness of the operationalization of the liberalization concept. Within its own constraints, this thesis intends to take measurement validity seriously by case-oriented validation, evaluating the relation between the systematized concept and positive cases generated from the measurement procedure. Still, measurement attempts are bound to receive critique. That should not scare students of comparative politics away from making such efforts. Its innovation lies in the fact that if it contributes to any further discussions on this unresolved problem, it will hopefully be a step on the way to solve it.

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<sup>2</sup> Due to missing data on independent variables the analysis consists of 105 spells of liberalization: confer Analysis chapter p.74.

### **1.3 Structure of the thesis**

The first chapter introduces the main concepts of this thesis, where the main object is to differentiate political liberalization from democratization and develop operational criteria for measuring the process of liberalization quantitatively. The second chapter concerns the theoretical discussion of explanatory variables. The third chapter argues why quantitative analysis, particularly event history analysis, is a suitable approach for studying the outcome of liberalization, before building Cox competing risk models. The fourth chapter develops operational measurement of liberalization processes by applying the combined regime index of Polity IV (Marshall and Jaggers 2009). Furthermore, the explanatory variables and hypotheses are operationalized. The analysis is executed in chapter five, first by describing the generated observations of political *liberalization*, and tidal trends in *democratizations* and liberalization *reversals* during the period of analysis from 1950-2006, then estimating Cox competing risk models before discussing the robustness and theoretical implications of the findings from the analysis. Lastly, the conclusion offers the overall answers to the research question and provides suggestions for future research.

## 2.0 Theoretical framework

The conceptualization will follow the procedure suggested by Adcock and Collier (2001) where a background concept for political regimes is chosen on the basis of the research problem before developing a systematized concept for political liberalization of regimes. This is done through a broad evaluation of alternative conceptions. The reconceptualization extends the empirical coverage by abstraction; lessening the attributes, extending empirical coverage, while avoiding conceptual stretching by differentiation between democratization and liberalization, as recommended by Sartori (1970). These systematized concepts of liberalization and democratization will be applied later on in the operational procedure.<sup>3</sup> But first, in order to study the relationship between liberalization and democratization, we must define the conceptual borders of these types of regimes, especially what is meant by ‘*democracy*’.

### 2.1 The background concept

Studying regime change implies comparing different regimes, and also has implications for the level of analysis. This thesis understands a political regime as set of rules and procedures that regulate political decision making, defining who has access to power and resources and how political power is exercised. These power structures create a system of relations between civil society and the state.<sup>4</sup> The political unit of a regime differs from the institution of government; one can change the head of state, or the institutional arrangement, but the regime extends beyond the particular government as long as the major power structures remain the same. Thus governments are nested within the regime, the latter concept being on a higher level of abstraction. Consequently, studying regime change requires we establish conceptual boundaries on the level of regimes (and not of government).

Typically we distinguish between democracy and autocracy as the main types of regime. What defines the difference? Robert Dahl (1971:4) defines political regimes along two theoretical dimensions, namely public contestation and political participation. Public *contestation* involves the competition for the conduct of government. It distinguishes monopolistic regimes, in which political power is concentrated in the hands of the few, and

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<sup>3</sup> See section 4. Data and operationalization (p.54ff).

<sup>4</sup> This perception of regime follows Przeworski et al. (2000:18), see also Cardoso (1979:38) and O’Donnell and Schmitter (1986:73).

competitive regimes, in which power is dispersed among several institutions and groups (Bratton and van de Walle 1997:39). Political *participation* involves the citizen's opportunity to participate in public contestation. On this dimension, regimes range from exclusive or inclusive, depending on the proportion of the population involved in public decision making.

Regimes *vary* in the extent they permit public opposition to government policies and allow for popular involvement in such policies. The more effective the opportunity of the citizens to contest the conduct of government, the more competitive the regime. The larger the proportion of citizens who have the right to participate in public contestation, the more inclusive the regime. A regime may be more of one or the other, at least in theory. It is competitive but exclusionary when it allows for public contestation while excluding large segments of society in participating. Or, it is inclusive while not competitive when it suppresses all political alternatives to the regime while allowing the populace to participate in governing. In practice, these dimensions may vary interchangeably. For example, a free and fair election for legislative assembly could mean an increase in the degree of both contestation and participation in the regime.<sup>5</sup> But the executive power of regime may still be exclusive and non-competitive. According to Dahl's (1971) theory, both dimensions – contestation *and* participation – must be effectively fulfilled for the regime to be democratic. Autocracy represents the opposite extreme: they typically repress *both* political contestation and participation. But if the degrees of participation and contestation can vary, where exactly should the line be drawn between autocracy and democracy? If a regime is a set of rules and procedures that regulate the exercise of political power, what makes it democratic and not?

### **2.1.1 What makes a regime democratic?**

There are many ways to define democracy as a regime. Within a vast literature on democracy, one can find multiple definitions and the debate seems never ending. Over all, there are two schools of thought; those who define democracy primarily in substantive terms and those who have a formal understanding of democracy (Bobbio 1989). The first one implies a maximalist definition, the second a minimalist one (Munck and Verkuilen 2002). It is in between these

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<sup>5</sup> Because the distinctiveness of these dimensions is highly theoretical, while not so much in practice, political liberalization as defined in this thesis will include them both as interchangeable dimensions, conceptually and operationally.

two traditions that I place the discussion of this thesis and make a conceptual choice.<sup>6</sup> As the discussion below will show, this thesis takes a middle ground.

The first one, stressing values and ends as prerequisites for democracy, can be appropriate when studying the quality of democracy. The research question of this thesis however concerns when regimes *become* democratic, and so, we must first see to it that democracy is present before evaluating its quality (Hadenious and Teorell 2004). The problem with substantive criteria's for what is democracy is that of conceptual boundaries becoming subjective; then they are also movable depending on where one stand (literally, in the world, more metaphorically, in politics). Therefore, this kind of comparative research requires that we operate with observable criteria rather than subjective ideals (Huntington, 1991:7). For this reason, the debate on democracy in the democratization literature has lead to a consensus around some version of a *procedural* definition (see Collier and Levitsky 1995:2-5), and so will this thesis, following the Schumpeterian tradition:

“the democratic method is that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of competitive struggle for the people’s vote.”

(Schumpeter , 1947:269)

Schumpeter’s definition of democracy puts emphasis on *competition* by which rulers are selected and political power regulated. Autocratic rulers on the other hand, acquire power by means other than competitive elections. Authoritarian powers may be inherited, taken through a coup d’état or a revolution, installed by the military or foreign powers (Gandhi, 2008:7). In so far as we have established that democracy involves competition for the people’s vote, the question remains who are “the people”? That, the Schumpeterian definition does not answer. Autocracies may be characterized by competition within a limited group or class, while excluding others outside this group or class from participating. One example would be Great Britain before extending suffrage to include the working class (Dahl 1971). Although it was considered democratic in its own time, after the World War II significant exclusion was no longer deemed acceptable for democratic regimes (Huntington 1991). Therefore, in addition

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<sup>6</sup> When I told an experienced scholar about my project, she wondered: “How is that possible? For what is democracy really? No one knows.” It is my belief that all is not relative in the matter of defining democracy but that, in face of alternative conceptions, one has to make a choice, founded in theory, and consistently pursue the theoretical logic of that concept. So I replied: “It is a choice.”

to Schumpeter's emphasis on competition, a sufficient definition of democracy also involves participation:

“a political system is democratic to the extent that its most powerful collective decision makers are selected through fair, honest, and periodic elections in which candidates freely compete for votes and in which virtually all the adult population is eligible to vote.”

(Huntington, 1991:7)

This definition has two parts: “elections” and “universal suffrage”. Following Robert Dahl's (1971:4) terms, they reflect two dimensions of democracy, notably competition and participation. However, contestation and political participation is more than mere elections.<sup>7</sup> Imbedded in the concept of democracy are also the limitations on executive power (Huntington 1991:10). While the scope of political power is typically unlimited under autocracy, power does not come without *accountability* under democracy.<sup>8</sup> To enhance the abuse of power, in democracy, the rulers must subject their execution of political powers to the rules of democratic institutions. Thus democracy is not just the method of electing; it is the rules of the process of which the election is conducted and power exercised. The rules of the game may vary in different types of democracies,<sup>9</sup> but what they have in common is that they make alternation of power possible, and so, even those who apply a minimalist definition of procedural democracy acknowledge that certain criteria must be met in order for the rules to be democratic (see Przeworski et al., 2000:16):

Firstly, the outcome must be uncertain ex-ante – meaning none can control the election outcome beforehand. In autocracies, elections are typically rigged in a way that makes it impossible for the opposition to win, for example, when the most significant part of the opposition is not allowed to participate, like the exclusion of Aung San Suu Kyi in the last

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<sup>7</sup> For the citizens to have the opportunity to participate freely as voters as well as compete fairly as political actors, they must enjoy civil and political freedoms, as Dahl (1971:3) points out. Thus, freedoms are treated as an implicit feature of the procedural approach (Huntington 1991:7). Such freedoms are often translated into formal rights. This thesis chooses not to define democracy in terms of such rights in order to avoid the problem of subjectivity.

<sup>8</sup> Theoretically, one can distinguish between vertical and horizontal accountability. Elections typically provide for vertical accountability between the people and their rulers, while on the horizontal level power is separated and dispersed between state institutions which perform legal control with each others' execution of such powers. Thus democracy involves both vertical and horizontal accountability.

<sup>9</sup> *Majoritarian* and *consensus* models are subtypes of democracy (confer Lijphart 1999), among others. I will not elaborate on such subtypes any further since they are not of relevance for this level of analysis.

election in Burma of 2010. Such pre-engineering over time has been common way of controlling election outcomes in semi-authoritarian regimes like Egypt and Azerbaijan (Ottoway 2003:139). Others simply cheat with numbers. The Tunisian election where President Ben Ali won 99.91 percent of the vote in 1999 was not much credible (Howard and Roessler 2006). Without a real chance for opposition to win and the incumbent party to lose, elections per se do not make a regime democratic.

Secondly, the outcome of the election must be complied with ex-post – the winner is actually allowed to assume office as the most powerful decision maker. In autocracies the result is typically not respected if the opposition actually wins, for example, if the military intervenes through a coup d'état like in the Algerian election of 1989 or the incumbent refuses to leave office. Thus in democracy no other decision maker reigns than the democratically elected one – the military must be tucked under civilian control.

Lastly, political power is to be executed within the limits granted by pre-established rules and procedures, a principle often called the rule of law. For example, the power to rule is granted for limited period of time – rulers do not rule forever as the future holds new chances of winning and losing elections.

Such procedural criteria for democracy allow us to avoid the “fallacy of electoralism” (Karl 1995) and differentiate between democracy and other competitive or inclusionary regimes. Here lies the threshold for democracy: Once a regime passes such a procedural threshold it has *become* democratic. This is relevant for the evaluation of what is democratization.

### **2.1.2 When does a regime become democratic?**

When a regime passes such a procedural threshold it is in a state of transition towards democracy. A process where an autocratic regime becomes democratic is typically called democratization. Here, *democratization* is defined as a transition from authoritarian regime to the installation of democratic government by free and fair elections (O'Donnell 1992:18-19). One should distinguish between democratization and consolidation as two different processes of transition: While democratization is a transition *to* democratic government, consolidation is a transition *from* democratic government to the effective functioning of a democratic regime without authoritarian regression. Note that in this study, we ask when liberalization will end



with democratization, not democratic consolidation. The reader should be aware of this distinction, as it has consequences for the operationalization of “democracy”.<sup>10</sup>

But autocracies may become more inclusive and competitive without reaching democracy. For example, an autocracy may open up for opposition in parliament, without putting the executive to the electoral test. The autocratic regime may permit opposition to a very small part of the population. Or, the regime may allow people to participate in “governing” though not in public contestation. They are not fully authoritarian, nor democratic, as they feature some, although limited, participation and contestation. They are so called “liberalized” regimes (O’Donnell and Schmitter 1986:7). The process where autocracies move towards more participation and contestation, so called political liberalization,<sup>11</sup> is the main concept of this thesis. In the next section I will explain what liberalization *is* in definition and differentiate it from democratization more specifically.

## **2.2 Conceptualization**

Now that I have chosen the background concept of political regimes according to Dahl’s definition, what remains is developing systematized concepts for different types of regime *change*. As this thesis seeks universal application, the reconceptualization of political liberalization will follow the logic of Sartori (1970) – defining by extension and negation. But before moving “one step up the ladder”, one must elaborate on the different definitions and applications on a less aggregate level in order to disentangle the process of political liberalization from that of democratization.

### **2.2.1 Quite a pickle**

Following the increasing interest for regime transitions, liberalization has become a common term within political science. Note that in this study, we are only concerned with the concept of *political* liberalization which should be distinguished from the meaning of economic

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<sup>10</sup> See 4.1.2 Democracy threshold p.58.

<sup>11</sup> Dahl (1971:4) uses the term liberalization interchangeably with public contestation or about an authoritarian regime which becomes more competitive, but not more inclusive. As he admits himself (see Footnote p. 4), his terminology is rather random. In this study, we have chosen to use liberalization about an authoritarian regime which becomes both more competitive or more inclusive, but falls short of putting the executive to the electoral test or excludes some groups from participating.

liberalization.<sup>12</sup> However, the use of the term political liberalization is not straight forward. In theories of democratization, the concept of political liberalization is traditionally treated as the first step towards democratization or as an intermediate component in a transition (Dahl 1971, O'Donnell 1978, O'Donnell and Schmitter 1986, Huntington 1991, Mainwaring, O'Donnell and Valenzuela 1992, Linz and Stepan 1996, Bratton and van de Walle, 1997, Gill 2000). In contrast, empirical researches often see liberalization as a state of its own, in cases where authoritarian regimes become less authoritarian but fail to democratize (see Brynen, Korany and Noble 1995, Brumberg 2002, Cavatorta 2004, Volpi 2005, Schneider and Schmitter 2004). The argument of this thesis is that political liberalization is a distinct event for the regime that may end with other events like democracy or authoritarian regression, but not necessarily. Change *in* the regime does not necessarily lead to a change *of* the regime (Mainwaring 1992). Liberalization involves the former, democratization the latter. But the state of liberalization does pose a *risk* for the survival of the regime, the outcome being uncertain. Therefore, I argue that liberalization should be treated as an historical event with an uncertain path towards different destination states, where democracy is only one of them. The thesis aims at capturing these features of liberalization both in its theoretical conceptualization of liberalization and in the empirical analysis of its outcomes.

In order to answer what the consequences of liberalization are in general, we need to compare cases of liberalization across time and space. Accordingly, we need a universal concept that is applicable to any time and place and measurable so it is suitable for empirical testing. This poses a challenge because, to the best of my knowledge, no world-wide comparison of cases of liberalization has been done, and hence, no universal concept exists. The use of the term has varied with its application, which is limited to theory primarily, apart from regional studies and country case analysis (Africa and the Middle East especially) – political participation without contestation, contestation without participation, civil rights, civil society, nominal institutions, flawed elections – are among the things political liberalization is said to involve.<sup>13</sup> Thus the concept has been stretched and bended in ways that fit the context or the particular cases under study: *stretched* when it is being confused with democratization; *bended* when it includes only certain types of political liberalization. As stated by Schneider

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<sup>12</sup> Historically, the term “liberalization” has often been associated with “economic liberalization” as it first appeared in economic theory, referring to less government regulation and restrictions in the economy in exchange for more free market. In the second half of the 20<sup>th</sup> century, the term liberalization was adopted by political scientists as it was applied in theories of democratization.

<sup>13</sup> Among others, see works of Albrecht (2005), Bratton and van de Walle (1997), Brumberg (2002), Brynen, Kyren and Noble (1995), Cavatorta and Volpi (2006), Lust-Okar and Zerhouni (2008), Keller (1996) and Smith (2000).

and Schmitter (2004:60), there is a need for better conceptualization and operationalization overall:

“Neither liberalization nor consolidation has been consistently conceptualized, much less operationalized, in the literature on democratization. They have been used quite often (and controversially), but almost invariably in an erratic fashion – even by the same author in the same work.”

Schneider and Schmitter (2004:60)

This task demands us to develop a consistent concept that travels well, without going too far. Doing so, I follow the logic of Sartori (1970) for concept formation – defining by extension and negation. That is, to develop a definition which is *general* enough to include actual cases of liberalization across time and space, and also *limited* enough as to say what it is not, i.e. differentiate it from democratization. Thus we achieve a substantial understanding of what we are comparing. So what *is* political liberalization, in definition? The next section is a guided tour through the conceptual forest of alternative definitions in search of a systematized concept of political liberalization.

### **2.2.2 What political liberalization is, and is not**

As an analogue of economic liberalization, political liberalization reduces government intervention in the political market, breaking up monopolies of political authority and allowing a plurality of opinions and organizations (Bratton and van de Walle, 1997:159). Thus it involves the rolling back of state control in the political space, leaving room for more, albeit limited oppositional activity. One aspect of the increased participation for opposition is the liberalization of civil society. According to Przeworski (1992), political liberalization means autonomous organization of civil society because “a common feature of all dictatorships is that they cannot and do not tolerate independent organizations” (Przeworski, 1992:107-108).<sup>14</sup> This argument should be moderated, because, commonly, most authoritarian regimes allow for some degree of independent organization, only totalitarian regimes do not.<sup>15</sup>

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<sup>14</sup> Przeworski (1991; 1992) uses the term ‘dictatorship’ synonymously to autocracy.

<sup>15</sup> Totalitarian regimes per definition do not have independent civil society (Gill 2001). Most authoritarian regimes do not meddle in the private sphere as long as people do not take a public stand against the authorities. Only totalitarian regimes go so far as to require individuals to participate actively in supporting the regime through state led organization. Historical examples of totalitarian regimes are rare, but haunting, such as Germany under Hitler, the Soviet Union under Stalin, China under Mao and North Korea today.

This reflects the relative state capability of controlling civil society, which varies across autocracies. They often tolerate selectively; they may ban unions and parties, while not doing a good job in controlling religious societies or the universities. What poses a real threat to the regime is the autonomous organization of *political* forces, and not organization in itself.<sup>16</sup> Therefore, “autonomous organization” is too loose a term. The question remains how much organization must exist independent of the regime for it to be a liberalized one. More than before, but the exact extent is difficult to determine, and not so appropriate an aim if different types of authoritarian regimes are to be included in the definition and we acknowledge the fact that all types of authoritarian regimes have the potential of liberalizing. Also, the focus on civil society is too limited because it is the *system of relations* between civil society and the political regime which is liberalized, not civil society per se. As noted by Mainwaring (1992:299) and so dreadfully experienced by protesters in Syria during the Arabic spring in 2011, mass mobilization is not a sufficient condition for regime change. Although popular mobilization from below does signify an essential feature of liberalization, there must be a significant departure from the usual practise of repression in part of the regime (O’Donnell and Schmitter, 1986:7).

The contestation dimension is often thought to constitute the liberalization of *rights* (see O’Donnell 1979, Dahl 1971, O’Donnell and Schmitter 1986, Bratton and van de Walle, 1997:159, Brynen, Korany and Noble 1995:3-4). More specifically, political liberalization is described to involve the official recognition of basic civil liberties, as in the definition provided by O’Donnell and Schmitter (1986:7): “Liberalization is the process of making effective certain rights that protect both individuals and social groups from arbitrary or illegal acts committed by the state or third parties”.

Indeed, liberalization of *rights* does capture one possible part of the process, but it assumes a development where people have legal guarantees before they storm the streets, which is obviously not the case. Legalization may come later, but it need not be a part of the liberalization from the onset (Gill, 2000:47). The emphasis on rights stems from the assumption made by O’Donnell and Schmitter (1986) and others that liberalization only happens from the top-down. Here I must agree with Przeworski (1992) and Gill (2000) in that liberalization is an interaction between splits within the ruling elite on top and popular mobilization from below. Furthermore, this thesis agrees with Gill (2000) in his claim that

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<sup>16</sup> Przeworski (1992) acknowledges this very important nuance in his Notes (see p. 138), without taking it into account in his resonance about Liberalization.

the conception of liberalization in terms of rights is overly legalistic. I suspect that several authors choose a legalistic notion because it makes liberalization easy to measure in terms of formal rights. This is in line with Dahl (1971:3) who uses the term liberalization interchangeably with contestation: institutional guarantees in terms of freedoms are what effectively broaden political competition.<sup>17</sup> Understanding the degree of contestation simply as rights means climbing one step *down* the ladder of abstraction conceptually (Sartori 1970). Defining rights thus as the only attribute of liberalization makes the concept too narrow, as it excludes cases of liberalization which is not characterised by legalization. A complete notion should also incorporate the possibility for opposition to exist without being *de jure* legal, popular mobilization to happen without legal guarantees, institutions to be established before passing new laws. As Sartori (1970) advises, instead of limiting the concept to specific attributes, choosing one over the other, one should rather climb one step *up* the ladder and include all those attributes that partake contestation as well as participation. Hence, we must climb one step *up* the ladder as we acknowledge that liberalization partakes more *contestation* in the regime. But as concluded above, liberalization also involves increased *participation* in the regime. Hence, the concept must incorporate both dimensions.

In some cases the liberalization of a regime becomes institutionalized. According to Martins (in Gill, 2000:47),

“The liberalization of authoritarian rule can therefore be defined as the adoption of formal democratic institutions and the simultaneous exclusion of the four principles which give to such institutions their true democratic content: consensus concerning the rule of the game, political accountability of the rulers, the right to ample political representation, and alternation of power.”

Gills (2000) critique also goes for the exclusive emphasis on nominal institutions of this definition. The onset of liberalization is marked by state control rolling back and leaving *de facto* room for independent popular activity before adoption of democratic forms of institutions (Gill, 2000:48). Liberalization may involve institutionalization, but often the formal adoption of such institutions occur only part way through a process of liberalization, if it ever gets that advanced. On the other hand, nominal democratic institutions like legislative assembly can be present as mere “window dressing” even before a liberalization process begins, because autocracies vary in their degree of institutionalization (Gandhi 2008).

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<sup>17</sup> Dahl (1971:4) lists eight institutional guarantees (to speak, publish, assemble, and organize, among others) without discussing whether they are sufficient to provide a democratic extent of contestation and participation. Neither is that within the scope of this thesis, just note that the thesis does not treat liberalization or democratization simply as a rights chart. More important is the realization of such rights.

Therefore, institutions may be treated both as cause and effect in liberalization: the regime may establish democratic institutions as a result of the liberalization process (effect), and democratic institutions under autocracy are more likely to engage in the liberalization of civil right (cause) (see Gandhi, 2008: 138, 185). It is clear that institutions cannot be a prerequisite for liberalization. Where liberalization is marked by institutionalization, it is only one of several possible cooptation strategies of the regime which, if applied, may have an effect on the outcome of liberalization (see section on explanatory variables below for further elaboration). Obviously, an autocracy with nominal democratic institutions would make an autocracy both more inclusive and competitive *if* real opposition is allowed to participate in them. Therefore this thesis will treat institutionalization as a particular survival strategy within the process of liberalization. Hence, liberalization does not exclude institutionalization of the regime, but it cannot be a necessary criterion as it could leave out both liberalization of civil society and civil rights, depending on what comes first in time. A concept should not be so sensitive as to include only one possible order of events, as the sequence may vary amongst different cases of liberalization.

We need a definition that is broad enough to capture the oppositional participation that liberalization allows for, and which at the same time is precise enough to show the limited nature of liberalization. Therefore this thesis will follow the definition by Huntington:

“Liberalization is the partial opening of an authoritarian system short of choosing governmental leaders through freely competitive elections. Liberalizing authoritarian regimes may release political prisoners, open up some issues for public debate, loosen censorship, sponsor elections for offices that have little power, permit some renewal of civil society, and take other steps in a democratic direction, without submitting top decisions to the electoral test.”

(Huntington, 1991:9)

Thus liberalization may include a range of changes with the common effect that they broaden political participation and contestation in the regime. What liberalization does not include is change of the power structure of the regime (O’Donnell and Schmitter, 1986:9, Przeworski 1992:107, Gill, 2000:48). This is what differentiates liberalization from democratization:

“What liberalization alone does not connote is the right for citizens acting equally and collectively to hold their rulers accountable, up to and including the possibility that their citizens may remove their

rulers from power by a pre-established procedure, such as defeating them in elections. That process of inserting accountability to citizens into the political process is what we mean by democracy...”

(Schneider and Schmitter, 2004:61)

Recall Dahl’s (1971:4) definition of democracy: full public contestation and participation in such contestation. If liberalization means more participation and contestation, where does the border line to democratization go precisely? Democratization is the transition to democratic government, nothing less. As states by Linz and Stepan (1996:3): “Democratization requires open contestation over the right to win control of the government, and this in turn require free competitive elections, the result of which determine who governs.” When a regime liberalizes to such an extent that it reaches the procedural minimum of free and fair elections, the process has become so advanced that it has merged into democratization. Thus, the border line between liberalization and democratization is free, competitive executive elections. Whereas liberalization refers to the political process of reforming authoritarian rule, democratization refers to the construction of institutions of divided power (Bratton and van de Walle 1997:108). Authoritarian reform may include elections, but not according to democratic rules as defined in this thesis. Political liberalization is the increased degree of participation and contestation in the regime, without the installation of a democratically elected government. Thus the concept formation here follows Sartori (1970:1041) – making the concept of liberalization more general and inclusive, without any loss of precision: “The larger the class, the lesser its differentia; but those differentia that remain, remain precise.” This point cannot be stressed enough: Nothing beneath the procedural minimum of democratically elected government should be called democratization.<sup>18</sup>

In principle then, there is a clear difference between liberalization and democratization. In practise, the processes may shade into each other. This should not lead observers and commentators to interpret liberalization as “mini-democratization”. Much too often is liberalization confused with democratization, probably because when viewing transitions to democracy in retrospect, one can find that in some of them there was a process of liberalization before the installation of an interim or democratically elected government. In such cases liberalization has become so advanced that is has merged into democratization. But this is far from a given development. Democracy can happen without liberalization

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<sup>18</sup> It bear repeating that one should distinguish between the analytically difference processes of transition *to* democratic government, so called democratization, as oppose to transition *of* democratic regime, so called consolidation.

beforehand, and liberalization need not lead to democratization (O'Donnell and Schmitter 1986, Huntington 1991, Przeworski 1992). Such analysis suffers from selection bias by only including positive cases of democratization, without comparing with negative cases. This thesis will avoid such selection bias by comparing cases of liberalization, not cases of democratization, and show that the cases of liberalization have various outcomes, where democratization is only one of them. When does liberalization actually spawn democratization, and when does it not?

### **2.3 The process of liberalization**

This section will describe the *process* of liberalization which is the subject of this thesis, building on the inductive theories by O'Donnell and Schmitter (1986) and Przeworski (1991). Although it is not a qualitative study of the particular liberalization process of each regime, it is important to understand what happens during liberalization as to understand its potential outcomes. The transition school offers several descriptions of how the process of liberalization may evolve in different directions. These are general patterns and commonalities induced by comparing empirical cases of democratization.<sup>19</sup> The reader should be aware that the story about liberalization told here is a highly general one. Nevertheless, the pattern seems to repeat itself for different liberalization processes across time and space. It is also reveals some variables which may affect the final outcome, as will be explained below.

In face of a crisis of some sort, either in terms of external pressure like popular unrest or an internal split within the power block (or both), authoritarian rulers may choose, as a survival strategy, to liberalize the regime. The project of liberalization may be launched as a gradual attempt to democratize the regime, with promises of democratic reforms taking place eventually sometime in the future. But even more often, liberalization is intended as a controlled opening of the regime that results in the broadening of its social base, without changing its power structure (Przeworski, 1992:115). As a means of strengthening their position within the power block, the Liberalizers will seek new alliances with regime outsiders while still repressing real political alternatives to the regime. By allowing some autonomous organization of civil society and incorporating new groups into the authoritarian

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<sup>19</sup> These are commonalities and general patterns induced from empirical cases of democratization from a specific time in history, like the so called "Third Wave" from the 1970s to and 1980s (Huntington 1991) or particular areas like Latin America and Southern or Eastern Europe (O'Donnell, Schmitter, Whitehead, 1986, Przeworski, 1991) or Africa (Bratton and van de Walle, 1997), especially.



institutions, the Liberalizers want to relax social tension and broaden the support base of the regime (Przeworski, 1992:109). Thus liberalization is a partial, step-by step opening of the political system (Bratton and van de Walle, 1997:160). If successful, liberalization moves the regime towards democracy only so far, but not further, and the liberalization equilibrium prevails.

But there is a risk that once repression declines, oppositional forces may continue to mobilize, following an outburst of organization within civil society that declare their independence of the regime (Przeworski, 1992). A freer press which suffers from less censorship may want to become more regime critical, public meetings may evolve into public rallies, regime opposition may demand for further democratic reform and fair electoral rules (Gill, 2000). O'Donnell and Schmitter (1986) call this the "resurrection of civil society". If the regime loses control of the liberalization process, and popular protest takes a mass character in the streets, liberalization can no longer continue. Intended as a controlled opening from above, it is no longer considered a feasible survival strategy and the regime is forced to choose between renewed repressions or to democratise the regime (Gill 2000, O'Donnell and Schmitter 1986, Przeworski 1992).

Therefore, liberalization is considered to be an inherently unstable process which must result either in democratization or an authoritarian regression (O'Donnell and Schmitter 1986, Gill 2000, Przeworski 1992, Huntington 1991). As stated by Huntington (1991:137): "the third wave strongly suggests that liberalized authoritarianism is not a stable equilibrium; the halfway house does not stand." However, other empirical analysis has shown that some autocracies are able to sustain political liberalization over an extensive period of time without democratising or reversing of the opening process (Brumberg 2002, Cavatora 2004, Schneider and Schmitter 2004). In their study of regime transition in Africa (1988-94), Bratton and van de Walle (1997:119) found that the most common path was liberalization without democratization. Thus, liberalization can have several outcomes: some liberalized autocracies can remain liberalized, while others democratize or go back into autocratic reversal. When will the outcome of liberalization be repression and when will it be democracy?

According to the transition school, the process is likely to end with repression if the regime only wants to liberalize while ready to repress if need be, but civil society continues to mobilize because it mistakenly expects that the regime is willing to democratize and not opt for repression since it would be inefficient. The process is over once it suffers a temporary

setback or permanent reversal (Bratton and van de Walle, 1997). Democracy is only possible if regime reformers and moderates in the opposition can come to an understanding of mutual dependence in order to realize their primary goals. The alliance between regime reformers and the opposition relies heavily on their ability to control and neutralize anti-democratic forces on both sides. In short, a split regime must face a united opposition (Huntington 1991, Przeworski 1992, O'Donnell and Schmitter 1986). There are a lot of 'ifs' in this description, suggesting that something contextual can influence this game.

What then explains the outcome? Now that we have explained how the process of liberalization may develop into different directions, the question remains under what conditions these developments are likely. *Why* do some liberalized autocracies democratize while others do not? A framework for explanatory variables is what follows.

## **2.4 Bridging structures, institutions and contingency**

The theoretical literature on democratization offers a wide range of competing explanations about regime change. The first debate concerns the relative impact on political change of structural factors versus individual actions and events. Are regime transitions a result of underlying preconditions at the level of structures of the economy and society? Or does political change depend on the preferences and strategic choices of political actors and the intended or unintended consequences of their actions? In comparative politics literature overall, there is a methodological consensus that structures at the macro level are best at predicting political stability, such as the consolidation of a regime, while agency is better at explaining political change, like regime transition (Bratton and van de Walle 1997, O'Donnell and Schmitter 1986, Przeworski et al. 2000). In the analysis of liberalization, the choice between structural and actor approach is not so clear cut. On the one hand, liberalization involves regime survival, on the other, the risk of terminating into another state which involves a change of the regime. This requires a combined approach.

On the one hand, the actor approach provides for a terminology that is applicable to most transition cases independent of context. For example the categorization by O'Donnell, Schmitter and Whitehead (1986) of preferences is useful in explaining why different type of elite actors would make the choices they do, at least in retrospect. The actor approach does not explain however the set of choices available to them, or the relative power balances in the regime or between the regime and the opposition. Neither does it explain what determines the

ability of the opposition to mobilize or the need of the regime for cooperation and concession. Such contextual factors are considered exogenous to the theory. Therefore a purely actor centred analysis would be merely descriptive with little predictive power. If choices were never constrained, then any outcome would be pliable. As Bratton and van de Walle (1997:26) put it, “However uncertain the processes of regime transition may be – and they are highly uncertain – they are never purely random.” Therefore it is logical to include structural factors that may shape the preferences and set of alternative choices available to the actors at play: to relate the strategic choices of elite actors to the structural constraints and opportunities upon which they must act (Gill 2000:72, Linz and Stepan 1996). Thus strategic action is contextual: “historically created structures, while not determining which one of a limited set of alternatives political actors may choose, are “confining conditions” that restrict, or in some cases enhance, the choices available to them” (Karl, 1990:7). Indeed, people make history, and history shape politics. Here lies the core of the methodology applied in this thesis.

An analytically combined approach of structures and agents is what Bratton and van de Walle (1997:43) call *structural contingency*.<sup>20</sup> Current events are not only shaped by structures; actors can also change the rules of the game. Liberalization is exactly a period of change where actors try to redefine the rules as a response to historical created structures. The structural contingency approach understands political change as a continuous interaction between structure and agents and puts special emphasis on the *process* of such interaction. Thus liberalization is always a continuous interaction between regime and civil society, government and opposition, rulers and the people (Gill 2000, Mainwaring, 1992:301, Przeworski 1992). Furthermore, the “structure” of political contingency presupposes that historical events consist of patterns of regularities in political behaviour that makes them comparable and predictable. We cannot read minds, but we can read the structure of the game: the type of actors who are at play, the choices available to them, the institutional setting of which strategic action takes place, and thereby its potential outcome.

The process of political change involves a struggle over institutions, in particular. Institutions matter for political action because not only do institutions make the grounds of political conflict, they also mediate the battle field: “institutions shape the goals that political actors pursue and... structure power relations among them, privileging some and putting others at a

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<sup>20</sup> It differs from the structural dependence approach of “path dependence” (Linz and Stepan 1996) in that it is not only concerned with past precedent for present paths.

disadvantage” (Thelen and Steinmo 1992:2). The influence of institutions should not be confused with structural determinism – neither will this thesis pursue a strictly formalistic view of institution as I acknowledge that not all norms exist on paper, and in the end actions are made by people and not paragraphs. The institutional perspective applied here sees liberalization outcomes as a result of strategic interaction between regime elites and opposition, shaped by structural conditions under which they take place. Thus this thesis combines the better of two worlds with the approach of structural contingency.

Testing this approach, the set of explanatory variables are extricated from the conditions of the liberalization process which is expected to influence the outcome. Studying the consequences of liberalization, I do not believe in an expansive approach testing all possible theories of democratization; rather I choose to examine a parsimonious set of variables within the structural contingency framework. Within this framework, given the process of liberalization is set in motion; these are the variables I find most relevant when advising the literature for explaining not only democratization as an outcome but also autocratic reversal.

## **2.5 Theoretical expectations of explanatory variables**

### **2.5.1 Economic performance**

The relationship between economic and political change has been a major source of theorizing in studies of democratization. Following the structural contingency perspective, this thesis will explore the impact of the economic performance of a *liberalized* regime. By now there exists a consensus in the democratization literature that while economic level of development may be useful in explaining political stability, regime *change* is connected to more immediate economic trends and crisis (Munch in Berg-Schlosser 2004: 70-71; see also Bratton and van de Walle 1997, Gill 2000).<sup>21</sup> The research question of this thesis examines liberalization as a process of political change and furthermore, democratic *transition*, not democratic

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<sup>21</sup> The question of democratic *endurance* is analytically distinct from that of when democracy is likely to *emerge*, although these questions have much too often been confused from the influential work of the modernization theorist Martin S. Lipset (1959) to the contemporary democratization literature (Jackman 1975:99, 67; Munch 2004, see Footnote p.70). Furthermore Przeworski and his colleagues found that economic development only matters for the consolidation of democracy, not transitions to democracy, their analysis leaving modernization theory no explanatory power regarding democratization (Przeworski and Limongi 1997; Przeworski et al. 2000:Ch.2). True, this finding is contested by Bix and Strokes (2003) and Epstein, Bates, Goldstone, Kristensen and O’Halloran (2006), among others. However, the modernization argument for why economic level would matter for democratization falls outside the process-oriented framework of this thesis and will therefore not be examined.

consolidation, as a potential outcome. Therefore the discussion will restrain itself to consider the influence of more immediate economic trends on the outcome of a liberalization *process* rather than level of development in general.

Once the regime has liberalized, how can regime performance influence the outcome? How does economic performance affect the chances for democratization versus reversal? There are two possible versions of hypotheses on how economic performance will offset regime change: either, economic performance will make *democratization* more or less likely, or, economic upturns and downturns will make authoritarian *reversal* more or less likely. The following discussion will explain how economic performance is thought to influence regime change one way or the other.

O'Donnell, Schmitter and Whitehead (1986), among others, have implied economic performance crisis as a catalyst for democratic transitions, although this expectation is not incorporated into their models (see also Baloyra 1987; Malloy and Seligson 1987). As a matter of regime performance, economic growth is expected to influence the perceived position of the regime and its ability to sustain liberalization as a viable survival strategy. This is because economic performance can have an immediate effect on the populace and its standards of living (Gill 2000:84) and thereby induce popular attitudes towards the regime of which the regime must respond. On the downside of economic performance, Gill (2000) see economic performance crisis as a source of popular unrest and internal regime division:

“As economic growth slows, or even drops, the regime is confronted with a policy dilemma about how to respond to the economic difficulties. Within the society at large, the slowing of economic growth creates hardship for many sectors of the population, often including those upon which the regime relies for support. Confronted with both a policy dilemma and a challenge to its support base, potential divisions within the regime are likely to become manifest. As the interests of such groups suffer, mobilization independent of the regime is likely, with its transition into oppositional politics a common development”.

(Gill 2000:9)

Thus slow growth can induce internal and external pressure on the regime and thereby cause regime change in the direction of democracy. Similarly, others have argued that economic performance crisis undermine legitimacy of any type of regime, be it democracy or autocracy, and will trigger regime change in either the direction of democratic transition or authoritarian reversal (Bermeo 1990; Epstein 1984; Diamond and Linz 1989; Richards 1986; Markoff and

Baretta 1990), because this means “a reduction in the resources available to political elites for sustaining bases of support” (Haggard and Kaufman 1995:29; 1997). This view was supported by findings of Przeworski and Limongi (1997) but not in their revised version (Przeworski et al. 2000:117): “Indeed, it appears that economic circumstances have little to do with the death of dictatorships.”<sup>22</sup> Also Gasiorowski (1995) found no significant relationship between slow, negative economic growth and democratic transition.<sup>23</sup> However, Acemoglu and Robinson (2001:939) found that transitions are more likely during recession periods because the cost of political turmoil is lower in such episodes. Following this argument, (low) economic growth during a liberalization period would make democratization more likely an outcome.

On the well-to-do-side of economic performance, Huntington (1991:69) argues that “rapid, economic growth raises expectations, exacerbates inequalities, and creates stresses and strains in the social fabric that stimulate political mobilization and demands for political participation”. Thus rapid growth is also expected to have a *positive* influence on *democratization*. A different argument regarding economic upturns, pointing in another direction, is offered by Mainwaring (1992:325): if the economy has done well over a period of “political opening”, the prospects of economic chaos under democracy seems remote, hence, making repression or a coup from the military less likely. Following this argument, economic performance would have a *negative* influence on authoritarian *reversal* of a liberalization process. But this argument can be counterbalanced by an opposite logic. As Mainwaring and Share (1986, in Bratton and van de Walle 1997:36) note,

“A favourable economic situation may give authoritarian elites the confidence necessary to begin a transition, but it may also provide justification for remaining in power. An economic crisis often creates problems for transition to democracy, but it can also contribute towards the erosion of authoritarianism.”

So different logics point in opposite directions; moreover, previous findings are not conditioned on a process of regime change such as liberalization. Therefore, how economic performance influences the outcome of liberalization is still an open question.

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<sup>22</sup> Przeworski et al. (2000) use the term dictatorship synonymous to autocracy, operating with a dichotomous classification of dictatorships and democracies in 141 countries during the period of 1950-1990. Furthermore they apply event history analysis, the same approach that will be executed in this thesis.

<sup>23</sup> Gasiorowski (1995) operates with a trichotomous classification of autocratic, semi-autocratic and democratic regimes restricted to 97 Third World countries during the period of 1950-1989. Also he applies a “process-oriented” approach of event history analysis.

### **2.5.2 Type of autocracy**

Although autocracies repress political contestation and participation, they are not without competition and constraints from their own ranks (Gandhi, 2008). How they are able to protect themselves from internal threats vary with the institutional method by which they organize their rule. The competition between rival factions takes different forms in different types of autocracy with different consequences (Geddes 1999). According to Gill (2001:91) a crucial structuring element in the course of transition is the nature of the authoritarian regime in power at the time liberalization begins (see also Geddes 1999, Huntington 1991, Linz and Stepan 1996, Mainwaring 1992, Przeworski 1992, Teorell 2010). Following different patterns of authority is various potentials for regime disunity and interaction with the opposition, shaping the attitudes within the regime regarding withdrawal from power (Gill, 2000:51). Thus, the power structures of a regime reveal who are the political elites at play and the power relations between them, and hence, the threats they face and the alternative choices available to them. Therefore, regime divisions are not only important in terms of the origins of liberalization but also its effects (Gill, 2000:49). By asking who are the liberalizers, why they would opt for liberalization as a survival strategy in the first place, and analysing the cost of (re)turning to repression as oppose to the possible benefits from a democratic development, we can hypothesize whether liberalization is merely a way of stabilizing the regime or a genuine step on the path of passing power to others.

The most distinctive and most variable institutional feature of authoritarian regimes is the role played by the military in politics (Gasirowski 1995:883). The military may rule directly through the institution of the armed forces or a junta; the military may be politicized as to intervene in politics when need be; or the military may be under civilian control and take a more professional role. This creates various scenarios of military-civilian relations within the regime which is expected to influence the outcome of liberalization.

In military-led autocracies, there is invariably tension between the military as government and the military as institution (Geddes 1999, Gill 2000, Huntington 1991, O'Donnell 1978, Mainwaring and Valenzuela 1992:324, Mainwaring and Share 1986, Stepan 1971). The military as institution strives to remain above politics and to keep intact the professionalism and the unity of the armed forces. Political differences within the military as government however or between it and the military as institution can cause troublesome divisions within

the armed forces. Therefore military leaders may opt for leaving office as a means of reducing these divisions.

The military's willingness to leave office largely depends on how the military defines its mission – whether their primary interest is defined as preserving the military as government or as institution. When the military assumes a political role, they may do so temporarily. According to Huntington the military leaders during the Third Wave virtually never defined themselves as the permanent rulers of their country and therefore were better placed to terminate their regimes: “They held out the expectation that once they had corrected the evils that brought them to power they would exit from power and return to their normal military function” (Huntington, 1991;115). The cost of resigning from executive power could be less for military than civilian leaders, because they still have a permanent institutional role other than politics and governing. Those regimes that really see themselves as temporary, may embark upon a process of liberalization not as a strategy to hold on to power, but as one designed to surrender it to others (Gill, 2000:50). A commonly mentioned case in point is Brazil, where the military rule was a response to an immediate sense of threat but never intended as a durable solution in face of internal erosion of the military as an institution (Gill 2000, Mainwaring 1992:324, Stepan 1988). Handing over power to civilian elites has a cost paid in political influence. But it would be worth it if the military is able to preserve its autonomy, without having to deal with the disputes of politics.

Challenging this view, others have argued that “new professionalism” (Stepan 1974) or “idiosyncratic conditions” (Rouquié 1986) have often led military to play a more permanent role and therefore presumably more resistant than civilians to relinquish power and permitting democratization to occur. As Dahl (1989:250) notes, the military is likely to reject civilian control if they believe that the system they are obliged to preserve is endangered under democratically elected leadership. While the cost of civilian autocracy may be acceptable, the cost of a democratic elected government may be considered too high. This is especially the case if military leaders fear the influence of radical opposition forces. For example, militaries in Latin America have seized power to counter-act the revolutionary threat of the “Left” (Gandhi 2008:82), and Islamic forces in the Middle East (Esposito1998). In that case, they are only likely to step down and accept democracy as an outcome when such a “threat” is eliminated (Mainwaring 1992:325). If not, military should be much resentful towards democracy if it means that the military be persecuted for former sins, and lose significant resources. As long as the military still have a choice, it is only likely to step down voluntarily



if granted so called exit guarantees – no prosecution and continued autonomy of the military forces (Huntington, 1995).

Were the military to give up their control of government, they do not also give up their control of the instruments of violence with which they could resume control of government again (Huntington, 1991:119). Have the military gone political in the past, one can never exclude the possibility that it will intervene in the future. This is the risk that civilian rulers often face. When the military assumes a professional role, but is still an autonomous force, civilian rulers are largely depended on building the trust of the military as to avoid their intervention. During a liberalization process this largely depends on their ability to neutralize the opposition and restore social order as to show they are in control of the situation. If not, they cannot exclude the possibility that the military might intervene. To counteract the possibility that hardliners in the military will take over power by a coup, the civilian leaders might opt for an alliance with moderates in the opposition. However, they risk that moderates ally with radicals, and that the military will abort the liberalization process by a coup if it “goes too far”. That became the case when the Front Islamique de Salut (FIS) won the Algerian election of 1992 (Esposito 1998).

However, the military is likely to support whoever will preserve their integrity and prestige, and this is not always perceived to be the current regime. If the civilian leadership has not done a good job in pleasing the military, and the opposition is a united one of “the people”, the military might intervene as to assure a peaceful transition to democracy. That seems to be the case in contemporary Egypt. Here, the regime leaders could not rely on the armed forces to repress the masses on their behalf – they had to use private gangs and partisans, which was ineffective. This signified a split between the civilian leaders and the military, which in turn fed mass mobilization resulting in the eventual fall of the regime. The final outcome of the transition election however is still uncertain as of the time of writing.

Another scenario would be when the civilian regime has control over the armed forces. In that case, the military is not an autonomous actor. Then the civilian regime is likely to use the armed forces as an instrument in preserving their non-democratic rule (Dahl, 1989:250). According Linz and Stepan (1996) a civilian leadership is better placed to initiate and participate in democratic transition than a military leadership because its members are closer linked to society and are more likely to see themselves as potential winners from the transition process. On the other hand, they are better able than the military to introduce liberalization

and stop it short of democratization without undermining their position. According to Huntington (1991:120) a democracy would be more costly for civilian political actors because they cannot resume a professional role like the military – they cannot rise above politics. Not only would they have to give up monopoly of power but also the opportunity to compete for power by democratic means. Consequently, a transition from a one-party system to democracy is likely to be more difficult than the transition from a military regime to democracy. This argument may seem a bit paradoxical, because the party can remain a political actor. In this sense, the separation from politics may be less complete for civilian leaders than it is for the military when they withdraw. But as Gandhi (2008:81) points out: “In turn, dictators are dictators because they cannot win competitive elections, because their preferences diverge from those of the majority of the population”. Reformers are only likely to become Democratizers if they have sufficient strength to compete under democratic conditions given some institutional guarantees (Przeworski 1992). But that would be hard to guarantee under the uncertainty of democracy.

In summary: When the military constitutes the major leader of the regime, then the internal state of the military is decisive; if the split of the regime is one of the military, the prospects of transition will be improved compared to a split between a unified military and a civilian leadership (Gill, 2000:93). Even when the military is not the dominant element of the regime, its relations to the civilian rulers may prove to be decisive (Snyder, 1992 in Gill, 2000: 256): If the military takes a stance against democracy, its prospects are slim; if it favours regime change, it might intervene as to assure a peaceful transition to democracy or remain neutral as to not repress opposition forces in their pursuit of democracy. A civilian autocracy in control of the military forces is likely to pursue liberalization as a means of self-preservation and not a step towards democracy. However, as the discussion above has shown, these arguments can also work in other directions, so it is not a given which pattern one should presume.

Although a systematic relationship between autocracy type and democratization has not been so easy to prove in earlier historical comparative analysis (Huntington 1991, Linz and Stepan 1996), it has been confirmed by more recent world-wide deductive analysis by Geddes (1999; 2003), Brownly (2007) and Teorell (2010). However their categorizations of autocracy types are inconsistent, and moreover, none of them link this relationship to processes of regime

change such as political liberalization.<sup>24</sup> This thesis separates itself from previous attempts by testing the relationship between autocracy type and democratization *conditional* on the process of liberalization; in addition, it will test its relationship with authoritarian reversal as well; and lastly, it will do so without blurring the effect caused by military-civilian relations and other regime institutions. The discussion about how autocracy type should be operationalized with according hypotheses will follow in the Methodology section (see Data and Operationalization).

### 2.5.3 Conflict level

The fate of the regime does not only rely on relation between regime elites, it also relies on interaction with the rest of society. Following the initial “opening” signalling a departure from the usual practise of the authoritarian regime, O’Donnel and Schmitter (1986) expect a “resurrection of civil society” by which the regime must respond. Here lies the *contingency* of the process: will there be an outburst of popular mobilization? Will there be violent confrontation between regime supporters and opponents? Will liberalization prove to be a successful cooptation strategy, ore will civil society revolt, forcing the regime to redefine its strategy?

As Przeworski (in O’Donnel, Schmitter and Whitehead 1986:Ch.3) observes, movements away from the usual authoritarian practices have the effect of lowering the cost – real or anticipated – of individual expression and collective action. This in turn, will have a *multiplier* effect – “a melting of the iceberg of civil society which overflows the dams of the authoritarian regime” (Przeworski 1992:109). Mass action through outbreaks of strikes, demonstrations, riots and revolts can affect the power balance between regime supporters and defenders and thus be significant in advancing the democratic cause (Gill 2000:59). Thus civil society often plays a part in structuring the transition process through popular and radical mobilization: “Popular mobilization dictates the rhythm of transformation since it propels the regime to decide whether to repress, coopt, or devolve power” (Przeworski 1992:109).

According to O’Donnel and Schmitter (1986:7), if liberalized practices are not immediately aborted, they tend to accumulate, become institutionalized, and thereby raising the effective and perceived cost of their eventual annulment. Przeworski (1992:110) however expects that,

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<sup>24</sup> While Geddes (1999:116) chooses to exclude such processes of regime change from her analysis (1999:116), Teorell (2010:32) makes the fallacy of confusing the term liberalization with democratization despite the fact that he recognizes they are not the same type of regime change.

inevitably, liberalization will lead to mass struggle into the street because while autonomous movements emerge within civil society, there are no institutions where these organizations could present their views and negotiate their interests. Because of the closed character of state institutions, the newly organized groups have no other place to take their struggles than the streets. When liberalization takes a character of mass eruption, liberalization as a means to restore order has failed. In that case, it is likely to undermine the Liberalizers within the regime because it proves to the hardliners that they are not in control of the process. Also O'Donnell and Schmitter (1986:11) deem conflict to be harmful for the prospects of democracy:

“it is possible and desirable that political democracy be attained without mobilized violence and dramatic discontinuity. The treat of violence and even frequent strikes, protests and demonstrations are virtually always present, but where the *via revolucionaria* is taken, or when violence becomes widespread and recurrent, the prospects of democracy is dramatically reduced.”

O'Donnell and Schmitter (1986:11)

If democracy is to stand a chance, violent conflict cannot dictate the process: Just like softliners has to control the hardliners within the regime, moderate forces must be able to control the radical forces within the opposition as to not provoke the hardliners. Violent confrontation indicates that the repressive forces within the regime, and the radical elements within the opposition, have taken charge of interaction, in which case the chances for democracy are dim.

Others have argued that violent confrontation between hardliners and radicals may be conducive to democratization – the cost of democratization can decrease once the authoritarian regime has defeated the subversive threat from radical opposition forces that challenges the dominant order (Mainwaring 1992:325) – this is said to have been the case in many South American cases, where the military wiped out guerrilla organizations, thereby eliminating the threat of revolutionary upheaval before re-establishing a more open political system.

To the best of my knowledge, there has been no systematic attempt to test the impact of contingent event on the outcome of liberalization. The work of Teorell (2010) represents a part-way attempt considering the impact of popular mobilization from below on democratization. His model differentiates and thereby encapsulates the effect of strikes, riots and demonstrations on transition to democracy or democratic breakdown. The findings

regarding democratization are limited: While anti-government demonstrations had a significant, positive influence, neither violent riots nor national strikes proved to have significant effects on democratization. None of these forms of popular mobilization appear to trigger autocratic downturns (Teorell 2010:102). I however find this attempt incomplete because the events are treated as if they appear in a world without responses – more radical strategies like revolt, political purges, assassinations, and guerrilla warfare can also evolve during an opening of the political space and is likely to push liberalization towards an end. Furthermore, since the causal mechanisms of such contingent events are expected to involve multiplier effects (as explained above) their impact should not be viewed in isolation: following an anti-government demonstration is a response from the regime; it might be followed by purges of regime opponents, which again can fuel revolt, which again exacerbates the conflict level. These mechanisms cannot be captured without taking all “temperature-indicating” actions, radical and moderate, from the regime and opposition, into account. Therefore it makes more sense to treat contingent events in relation to each other and test the sum effect of the overall, aggregate conflict level on the risk of authoritarian reversal and democratization as potential outcomes of liberalization. In light of the discussion, what consequences should one expect from an increased conflict level?

What seems certain about the uncertain is that once the conflict level is turned up, it is likely to be the death of liberalization. It is however dubious whether a high conflict level will push liberalization away from or towards democracy. Visible conflict is necessary to drive the process towards democracy, but runs the risk of back firing. Thus mobilization is expected to be a two-edged sword for the masses.

Much of the reasoning by O’Donnell and Schmitter (1986) as well as Przeworski (1992) above seems to rely on whether organization becomes institutionalized, lowering the risk of reversal while increasing the risk of democratization. According to Gill (2000), institutional organization, rather than contingent events, are more likely to predict the endpoint of liberalization: “...it is clear that without organization, mass activism is unlikely to be sufficiently sustained or focused to be able to contribute substantially to the democratization process” (Gill 2000:62). The expected effects of such institutionalization under autocracy are explained below.

## 2.5.4 Legislature under autocracy

Although autocracies suppress contestation and limit political participation, they do rely on support from certain segments of society (Gandhi 2008:74): “All dictators face two problems of governance: first, how to thwart rebellion and second, how to obtain cooperation.” Autocracies just as democracies vary in their institutional arrangements. Some even adopt nominal democratic institutions such as legislative assembly and regime party. Why would they do so, if the regime is not democratic? For a long time it has been assumed that institutions under autocracy do not matter for political outcomes (see Friedrich and Brzezinski 1965, Brooker 2000). It is said to be the most neglected issue in the field (Munch 2003; Gandhi and Przeworski 2006; 2007; Gandhi 2008; Teorell 2010; Share and Mainwaring 1999).<sup>25</sup> According to Gandhi (2008) these institutions under autocracy perform functions beyond mere “window dressing”. Rather, the degree by which autocracies are institutionalized signifies their relative need for cooperation with the rest of the society. All autocracies need a support base; and liberalization of a regime is the broadening of its social base (Przewoski 1992). Not only do autocracies face threats from their own ranks as described above. They may also face considerable pressure from forces within society. When the threat from regime outsiders is considered to be large and repression of these forces seems ineffective, the regime may opt for cooperation by offering some concession. Thus, when sufficiently threatened, institutionalization is assumed to be means of regime survival. However, the inclusion of opposition into regime institutions is expected to pose a risk; once included, they provide arenas for continued opposition pressure and demands for democratic reform.

Therefore, this thesis expects a legislative assembly, as a nominal democratic institution, to be crucial for the outcome of liberalization. The degree to which liberalization is characterized by institutionalization varies across cases of liberalized regimes. What does this variation account for? What kind of effect should one expect from the adoption of legislative assembly?

Under autocracies, legislatures provide for an arena for controlled bargaining and negotiations. Incorporated groups may find that they have more to gain from cooperating

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<sup>25</sup> Authoritarian elections and hegemonic party systems are widely studied descriptively or in relation to democratization (see Reuter and Gandhi 2010; Shedler 2002; Diamond 2001; Geddes 1999;2003; Teorell 2010), but legislatures and opposition parties are less explored. Although Gandhi (2008a;2008b;2009), also with Przeworski (2006; 2007), has done some intriguing work on exploring the autocratic functions of legislative, parties and elections and their effects on autocratic government survival and specific policy outcomes (civil liberties and economic policies among others), the impact of legislative assembly on democratization or authoritarian reversal remain unexplored in relation to liberalization.

within regime institutions than rebel in the streets and risk extermination. Formally, parliament may be granted legislative powers, at least in certain policy areas or the opportunity to veto some executive policies. Informally, access to parliament provides for rents and spoils, privileges and perks. For the autocratic leaders, a legislative assembly may be an effective instrument in co-opting outsiders and inducing their cooperation, the advantage being that it is not the inner sanctum where the most important decisions are made (Gandhi and Przeworski 2006:14). For the opposition, participation in legislatures provides an opportunity to pursue its interests and values within the framework of the autocracy – to transform the regime from within when the chances of immediate dictator overthrow are slim (Gandhi and Przeworski 2006:14). Thus adopting a legislative assembly is not a null sum game, but a two way road. It does impose a cost on the rulers: by transcending some political influence to other groups, the rulers must suffer more constraints than before. But after all, it is not such a high price to pay if it neutralizes the risk of being overthrown. A legislative signifies a strong opposition relative to the regime. However, legislatures under autocracy are not without control: some may be directly appointed by the regime, others elected partly or solely by citizens, but only with candidates approved by the regime (Gandhi, 2008:35). They are not an effective constraint on executive power as a truly democratic institution would be; they lack democratic principles such as rule of law, popular sovereignty and accountability (Martins in Gill 2000: 47).

When nominal democratic institutions are present during liberalization, what kind of risk does it pose for the regime? One might expect that opening up parliament for opposition raises the risk that the opposition will use it as a channel to demand for further democratization. Therefore, it is argued, institutionalized autocracies are more likely to democratize. Hence autocratic legislators might make democracy more likely and reversal less. On the other hand, Gandhi (2008) and Gandhi and Przeworski (2007) claim the presence of legislative assembly have a stabilizing effect the survival of autocratic governments. That would lead us to expect legislatures to have a consolidating effect on the liberalized regime, moreover, making liberalization less likely to end with either reversal or democratization. These findings will be guiding for the operationalization of the hypotheses in the Methodology section.

### 2.5.5 Political parties

Although some autocracies allow participation within legislatures only as non-partisans or as members of a single regime party, other rulers choose to allow for multiple parties within parliament. In this case, the regime party has not been efficient enough as to absorb sufficient parts of the opposition and would indicate an even stronger opposition relative to a legislature without multiple parties. Still, closely controlled, multiple parties can still be an effective instrument of authoritarian rule by forming so called “fronts” of regime supporters only under different labels (Gandhi, 2008:79). Also, separating the opposition into fractions may be effective in maximizing support by pursuing the tactic of “divide and rule” while isolating those who refuse to support the regime. Thus the cost of including several parties in the regime is lower than its benefits. On the other hand, others argue that autonomous party organization does signify an empowerment of opposition forces, and a risk for the survival of the autocracy. According to Gill (2000:60,126) this empowerment lies in its *organizational* capabilities to mobilize support from civil society forces. Thus they are better positioned to confront and negotiate with the rulers and thereby to influence the course of development within the regime. Therefore, the argument goes, where such civil society forces as political parties are present, regime reformers will fear the consequences of suppressing them and rather be encouraged to bring about change that ultimately turns into democratization. Consequently, one would expect the presence of political parties during liberalization to have a positive influence on democratization, while preventing authoritarian reversal.

Empirical analyses on the subject are scarce, although some recent attempts have been made to test the effect of multiple parties under autocracy on democratization. Lai and Hoover (2004) find that party *inclusion* does not have a significant effect on democratization. This finding leads them to conclude that autocracies that do not exclude parties do however not allow them to actually compete for power, limiting parties ability to influence democratic transition (Lai and Hoover 2004:558). Only *competitive* parties are conducive to democratization (some would say it is inherently a part of democratization). Similarly, Teorell (2010) finds that multiparty elections under autocracy have a positive influence on democratization. However, I find it hard to say whether this is an effect caused by competitive elections or of parties as such. Furthermore, competitive multiparty elections are more an attribute of democratization than of liberalization.<sup>26</sup> In order to avoid endogeneity problems,

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<sup>26</sup> For reasons of endogeneity, this thesis will not test the effect of competitive elections on democratization. Even if this effect was operationalized with a technical lag, I expect one would find that competitive executive



this thesis will examine the consequences of allowing parties to *organize* in the regime (and not necessarily to compete) which signifies the limited nature of liberalized regimes while separating them from hegemonic autocracies.

### **2.5.6 Ethnic heterogeneous societies**

Besides from a divided regime, the opposition must form a united front against the regime for democracy to be the outcome of liberalization (O'Donnell, Shmitter and Whitehead 1986; Gill 2000; Teorell 2010). Under what structural conditions is a united opposition more or less likely? To what degree society is ethnically fractionalized has a potentially big role to play in the strategic evaluation of potential power under democracy. Ethnically divided societies has been theorized as a hinder for democratic engineering (Dahl 1971, Lijphart 1977, Rabushka and Sheples 1972, Horowitz 1985) because it is expected to pose a risk of increased conflict during periods of political change and thereby cause trouble for a democratization process. However, as Fish and Brooks (2004) note, the empirical evidence has been scarce, much due to lack of effective measures of group identities. Furthermore, the effect of cultural cleavages has been tested somewhat ad hoc and not conditioned on such a process of political change in which its effect is assumed to come to work. The process-oriented framework of this thesis is an improvement in this respect. Because of the structural contingency frame work of this thesis, when I ask about the effect of ethnic fractionalization I instead ask about the strategic calculation each ethnic group does during liberalization: What does ethnic groups expect to gain from supporting a move to democracy (democratization)? Do they risk gaining more or less political power and security under democracy? The mechanism is described thus:

The first reasoning why ethnic divisions should be harmful for democratization, view ethnic preferences as primordial: Socialization and identity formation is a fundamental part of human existence. From our birth our identity and rules are adopted in group belonging circumstances dominated by family, kinship and community. Thus the language we acquire bounds the individual ego to a set of ritual, habits and cultural identity of “the home range” (Rokkan 1974). The constraint of belonging to one home range raises the bar for exiting and hinders attempt to unite several different home ranges to a larger collective unite. When

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elections are inevitably conducive to democratization, because they are inherently a part of the democratization process as defined in this thesis. Furthermore, I find it hard to argue that this would indeed be an independent effect of elections, but rather that it would be spurious; there is likely to be some underlying background effect which causes some elections to be democratically successful while others not.

society becomes politicized so does the home range; such group formations create cultural cleavages based on “ideology of identity” as opposed to economically founded “ideology of chances” (Rokkan 1974). The first creates an obstacle for democratic politics because cultural boundaries are hard to overcome, making consensus on common rules harder to deliberate.

Lijphart (1999:32), writing on types of democratic engineering, takes this point further and says that if in a democracy one group consistently ends up with the power seats, the other groups are likely to protest the democratic system:

”majority rule is not only undemocratic but also dangerous because minorities that are continually denied access to power will feel excluded and discriminated against and may lose their allegiance to the regime.”

This is typically so in ethnic heterogeneous societies, because the cultural cleavage is fixed and tends to be the most conspicuous; each voter will vote the same every election based on (locked) ethnic group preferences. Hence, power alternation becomes less likely, and the minorities risk being condemned to permanent opposition. These minorities might have reasons to fear democracy as a principle of exclusion.

Forward-looking ethnic groups might oppose democratization on grounds other than merely political exclusion. Aghion, Alesina and Trebbi (2004) argue that ethnic groups, once in power, will strive not only to insulate power from other groups and but also create privileges to its own. Thus, the apprehension towards democracy is exacerbated; not only will one majority ethnic group win all elections (if we are to follow Rokkan and Lijphart), but also create socio-economic disadvantages for all others. There are also great possibilities that the majority ethnic group reverses a democratic transition as means to consolidate power and insulate other groups. This is confirmed in their empirical analysis; “...fractionalization seems to increase the probability of ending up in a more autocratic (and more insulated) regime” (Aghion, Alesina and Trebbi 2004:27). In a similar analysis Alesina, Devleeschauwer, Eaterly, Kurlat and Wacziarg (2003a) also find that the fractionalization is inversely related to democracy (the same index as applied in this thesis), and writes:

“in more fragmented societies a group imposes restrictions on political liberty to impose control on the other groups. In more homogenous societies it is easier to rule democratically since conflicts are less intense” (2003a: 12).

This thesis is not concerned with democratic reversal, but the point is still valid in a structural contingency framework: forward minded ethnic groups might resist democratization efforts in the first place because in their minds it only makes sure that the majority group gets the upper hand.

Others argue ethnicity as a source of conflict is not a function of demography, but of political choices made during times of regime change (Beissinger 2008). As Bowen (1996) argues so passionately, ethnic conflict is not a result of ethnic divisions per se, but of political choices from the top to rule and mobilize along such dividing lines. Also Mosseau (2001) finds that ethnic heterogeneity is not associated with political violence, except under conditions of political change. Following these arguments, one should expect increased ethnic mobilization in the immediate wake of political liberalization. First, since we know that liberalization is a process of increased organization and an extension of the political sphere one can assume that it will be a process of emerging group interests which tend to increase *ethnic* mobilization (Nagel and Olzak 1982). At the same time, during times of regime change political elites are prone to play emerging differences up against each other. By playing the ethnic card and mobilize on ethnic divisions as to consolidate and uphold their rule, they provide a breeding ground for ethnic conflict (Rabushka and Sheples 1972, Snyder 2000, Beissinger 2008). Under these conditions, minority-majority risks are likely to come into play.

Turning back to the questions posed initially – what do ethnic groups gain from supporting democratization; will there be more or less to political power and security to gain under democracy – the answers do not give bright prospects for democratization. First, opposing ethnic group interests are more likely to become pronounced during liberalization, and hence split them as a unified political opposition. If the regime plays its cards right they might be successful in a strategy of divide and rule, lessening the prospects for democratization. Second, because these ethnic divisions are likely to become manifest during the liberalization process, all ethnic groups, except the one in numerical majority, have a reason to fear the consequences of democratization. At best they will be excluded from political power under democracy, at worst they will be deprived socio-economic goods and rights. There is even a possibility that it will end up with a new autocratic regime, where elites are only concerned with preserving privileges for their own ethnic group. Thus ethnic minorities have nothing to gain from democratization and thus no reason to support it. Third, and finally: if ethnic conflict becomes so intense during a process of political opening, it becomes more likely that

the regime reverses the liberalization process under the pretext of restoring civil and political order.

In sum, if we assume ethnic groups consider potential cost and benefits under democracy tomorrow when they make strategic choices during the liberalization process today, the theoretical expectations regarding democratization and reversal are pretty clear cut. The fear of the empowerment of one group over the other makes the prospects for a united, pro-democratic opposition less likely. Hence, ethnic fractionalization is expected to have a negative influence on democratization and possibly a influence effect on autocratic reversal.

### **2.5.6 Summary of independent variables**

To sum up, the discussion of variables that are theoretically expected to have an impact on liberalization outcomes leaves the thesis with six independent variables: Structuring the game, *economic growth* indicates the performance of the regime, *ethnic fractionalization* the potential (dis)unity of the opposition. On an intermediate level of explanation, institutions like *type of autocracy*, *legislator* and *parties* indicate the relative strength of the regime and the opposition, considered crucial for how the actors calculate their strategies. Contingent events that evolve along the way indicate the *conflict level* during the course of liberalization of which the regime must respond and thereby its chances for endurance or termination. Together, these explanatory variables explain the continued and changing conditions during liberalization which influences its final outcome.

### **3.0 Methodology**

Now that I have explained the theoretical background for the independent variables, I will present the methodological approach for testing their effect on the outcome of liberalization empirically. In the Methodology chapter follows is a discussion of operationalization of these variables and their specific hypothesis. But first I will explain why these hypotheses should be tested through quantitative analysis, more specifically, why event history analysis is the proper approach.

#### **3.1 Why a quantitative approach?**

“...if comparative politics is conceived as a method of control, then its generalizations have to be checked against “all cases”, and therefore the enterprise must be – in principle – a global enterprise. So the reason for world-wide comparisons is not simply that we live in a wider world; it is also a methodological reason“.

(Sartori 1970:1035)

Choosing a methodological approach is about finding valid answers to the questions we are posing. This thesis aims at testing theory, namely the relationship between liberalization outcomes and a number of independent variables, and is thus an attempt of making causal inference. This implies choosing a research design which enables global comparison and to observe liberalization processes over time.

Given this task, the advantage with quantitative analysis is that it allows us to compare information from a large number of cases which provides for statistical control and hence the potential for generalization (Georg and Bennet 2005, King, Keohane and Verba 1994). Knowledge about general patterns is obtained at the expense of complexity and particularities about unique cases, which are the opposite advantages with qualitative analysis (Ragin 1987). However, as mentioned in the introduction, qualitative studies of democratization processes have already provided us with in-depth theories about the causal mechanisms at work, induced from studies of regime change in particular areas and eras. What remains is testing the validity of these theories by a worldwide comparison during the whole post war period. This must be the next step for accumulating new knowledge about why some liberalized regimes democratize while others do not, in which this thesis partakes.

The validity of generalization relies on the operationalization. Once we move up “the ladder of abstraction” (Sartori, 1970) the contextual complexity of each case is renounced for the utilization of more general concepts and causes. The danger of moving to high up the ladder is to empty it for qualitative meaning. However this thesis will avoid conceptual stretching by consistently pursuing the systematized concept in its operational measurement. Furthermore, I will evaluate the measurement validity of this operationalization by comparing the resulting sample with qualitatively established patterns of regime change during the post world war period (Huntington 1991, Brumberg 2002).<sup>27</sup>

The quality of quantitative research relies heavily on the validity of its methodological assumption. Therefore the assumptions made when choosing methodological tools should be in accordance with theory and as close to real world cases as possible. As quantitative approaches in social sciences are becoming more and more sophisticated it is possible to find an approach which reflects the temporal, gradual nature of a phenomenon such as liberalization. The substantive problem here would require a comparative analysis of longitudinal data. More specifically, a longitudinal approach such as *event history analysis* is able to capture the various histories of liberalization within regimes and its possible event outcomes. The substantive logic of event history analysis will be explained below, as will the reasons for applying it in the study of liberalization and its uncertain path towards or a way from democracy.

## **3.2 Why event history analysis?**

### **3.2.1 Modeling timing and change**

Political scientists may be concerned with studying *events* like elections, wars, policy implementation, transitions, strikes, revolutions and other events of historical or political importance. Events such as these consist of some qualitative change occurring at a specific moment in time (Allison, 1984:9). Often we are not only interested in whether something changes or not, but *when* it changes. When the research question, explicitly or implicitly, involves timing and change, event history analysis is a suitable tool. It allows the researcher to investigate not only if something happens, but when something happens and how long something persists before it changes. The concern with change is often tied to an interest in

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<sup>27</sup> See section 5.2 Tidal trends of the baseline p. 74.

“history” preceding this change. My research question involves studying liberalization as the history preceding a possible transition to democracy or authoritarian reversal. The major assumption of event history analysis is that the duration spent in one state is related to the likelihood of experiencing some event at a certain point in time. Intuitively, this assumption corresponds well to the expected relationship between liberalization and democratization; that liberalization is associated with eventual democratic transition, although with a corresponding risk of stopping short of transition and rather reversing. Investigating the relationship between these processes demands that we observe both events: “The premise of event history analysis is to model both the duration of time spent in an initial state and the transition to a subsequent state, that is, the event.” (Box-Steffensmeier and Jones 2004:8). The thesis will use event history analysis to model observations of liberalizations and their duration before they end and furthermore, record when they ended with either democratization or autocratic reversal. By doing so, we are able to investigate the risk that liberalization will end with either democracy or autocracy, as explained further below.

### **3.2.2 A substantive interest in risk**

Studying event history may involve the notion of survival, risk and failure (Box-Steffensmeier and Jones, 2004:3): As something persists, as it survives, what is the risk that it will subsequently end, or fail to survive? Originating in the field of biomedical research, the method is commonly applied in research with a substantive interest in survival or occurrence of death. Just like a medical researcher can ask what the risk is that a person will survive or die from cancer, a political scientist can ask what the risk is that a regime will survive or fail to survive from political conflict. Given some qualitative change in the regime, the liberalization, what is the risk that it will fall? Given that a regime has liberalized, what is the risk that it will fail to persist? Furthermore, what is the risk that liberalization will end in terms of democratization as oppose to a reversal of the process? Because liberalization inhibits the risk of ending with different event types it involves the concept of *competing* risk, as is introduced below.

### **3.2.3 The concept of competing risks**

In the case of liberalized autocracies, they may suffer several fates: either they become democratic, (re)turn autocratic, or stay liberalized. This implies that a liberalized autocracy faces different *kinds* of risks; that of democratization as oppose to the risk of reversal. Event history analysis allows us to investigate different kinds of risks corresponding to what *type* of event liberalization ended with - either democratization or autocratic reversal. Thus event history analysis makes it possible to answer *how* liberalization ended.

### **3.2.4 The effect of independent variables on risk**

Not only does event history analysis make it possible to answer *when* and *how* liberalization ends, but also *why* liberalization ends. This thesis aims at explaining the reason for liberalization ending with different results by examining the effect of covariates on the probability that liberalization either ends with democracy or autocracy. Event history analysis is indeed a comparative one, allowing the researcher to examine information on many observations over time and hence make comparative inference about differences and similarities across the cases (Box-Steffensmeier and Jones, 2004). Thus event history analysis allows us to make claims not only about factors that influence the risk of something happening, but also how differences across political systems are related to this risk. Hence, event history makes it possible to answer why some liberalized autocracies democratize while others do not.

However, analyzing liberalization also includes cases that do not experience any failure event, at least not within the time of observation. Fortunately event history analysis is able to deal with this problem of uncertainty also, as will be explained below.

### **3.2.5 Censoring – when history has no ending**

As noted above, autocracies may be able to stay in a liberalized state for an extensive period of time. In principle, liberalizations may never even end, at least not within the time period we are able to observe them. When a subject is observed for a period of risk, but the failure event is unknown, we are dealing with so called *right censoring*. Censoring occurs whenever an



observation's full event history is unobserved either because of missing data or the timing of the analysis (Box-Steffesmeier and Jones, 2004:16, Cleves 2010:30). For example, the process of liberalization may still be ongoing when the time of the analysis stops and we simply do not observe subjects long enough for all of them to fail. What lies in the future we do not know. Since we can only rely on information from the present, we are left with both liberalizations that have ended and those which future outcomes are unknown. How are we to deal with this problem of uncertainty?

We would not want to exclude liberalizations without termination from the analysis: Including censored cases is essential for the research results because, although the research question is concerned with the occurrence and non-occurrence of failure, it is equally interested in the history preceding such an event. The duration of liberalization is expected to have an effect on the risk of failure, in other words, the likelihood that the liberalization eventually ends. By overlooking censored cases one would lose out on important information about the most persistent systems. The censored cases might be systematically different from uncensored cases, and not including them in the analysis would render serious bias in the coefficient estimates due to the case selection process (Box-Steffensmeier and Jones, 2004:19). A lesser worse alternative to omitting censored cases from the analysis would be to use a binary indicator as the dependent variable and model the (logit or probit) likelihood of a spell terminating. But an indicator variable cannot capture variation on the duration until event, and hence, would preclude information on survival (Peterson, 1995). Therefore standard regression methods are ill suited for research questions where timing of the event is seen as equally important as its (non)occurrence: “usually we are concerned *both* with the occurrence or nonoccurrence of some event *as well as* the length of time the unit survived until the event occurred” (Box-Steffensmeier and Jones 2004:19).

Fortunately, event history modeling effectively allows us to take this nuance into account by observing right censored subjects instead of omitting them from the data set, and hence, avoid selection bias. Because event history analysis is concerned with both the *persistence* of liberalization as well as its *ending*, it can draw on information from both censored and uncensored observations: Failed cases of liberalizations, the uncensored observations, contribute to information about both survival *and* failure times. Censored cases of liberalization do not provide for information about failure since they never ended during the period of observation, however, they can still contribute with information on survival. And although we do not know the actual failure event, the estimation of risk enables us to say

something about the *probable* failure of all the liberalizations whether they have ended or not. Thus, event history methods are capable of handling the problem of uncertainty. Actually, event history analysis is unique in their capacity to cope with uncertain future outcomes like this, as they are able to account for both censored and uncensored observations (Box-Steffensmeier and Jones 2004:19).

This technical ability is often offered as a good excuse for choosing event history modeling instead of ordinary linear regressions like OLS. But in fact, linear regression are capable of handling right censoring as well, so called censored-normal regression (see Cleves et al., 2010:2). The real problem with ordinary regression methods, according to Cleves et al. (2010), is the assumption of normality. The core advantage of event history analysis is the substitution of the normality assumption with a time function more appropriate for the problem at hand (Golub, 2008). In the case of liberalization no such presumptions should be made, as will be explained further below.

### **3.2.6 When time is *not* of essence, but a *nuance***

When choosing a longitudinal research design, the researcher should be aware of the underlying assumptions about the distribution of time as it can affect the estimation of variable effects. That the results of analysis are being determined by the assumptions and not the data is always a potential problem when modeling a phenomenon quantitatively. What are reasonable assumptions to make about a phenomenon should only be chosen on strong theoretical grounds, and never simply because it proves convenient.

The problem with linear regression is that it assumes a normal distribution of time up to an event. This means to assume that a liberalization process could only have a linear development over time. That would be an unreasonable assumption to make regarding the time-path of a liberalization process, because there is no theoretical reason to assume any regularity in its nature regarding time, much less why it should be linear, or logistical for that matter. Ordinary OLS modeling is not robust to violations of the time assumption and thus such an analysis could give biased results in this analysis.

Event history analysis offers a range of parametric models assuming other distribution functions that could be more reasonable for the problem under study. However, it is hard to justify any particular shape for the underlying time distribution for most social phenomenon

(Box-Steffensmeier and Jones 2004, Golub 2008). Neither does testing the appropriate time function statistically prove to be much robust (Golub 2008). The cost of imposing the wrong assumptions could be enormous biased results, because the choice of distribution function fundamentally affects the estimated coefficients (Alison 1984; Box-Steffensmeier and Zorn 2001; Bennet 1999; Box-Steffensmeier and Jones 1997;2004). Avoiding a situation where the assumption determine the results leads us to search for methods that do not require assumptions about the distribution of the residuals (Cleves et al., 2010:3). When theory does not give us a good reason for assuming a specific development over time, and we want to know how independent variables influence the development, then a semi parametric model would be the best choice (Box-Steffensmeier and Jones 2004, Cleves 2010, Golub 2008). A semi parametric model means one which is nonparametric in sense that it makes no assumptions regarding the distribution of time, while parametric in the sense that the effect of the variables is still assumed to take a certain form (Cleves et al. 2010: 5). If however one takes interest in the underlying time-path, that is, the effect of time itself, it can still be estimated from the data without having to make any assumptions beforehand. Thus time dependency is only a statistical nuance, and not an expected essence.

### **3.3 Specifying a Cox competing risks model**

So far this chapter has explained the reasons for choosing a quantitative analysis and furthermore, argued why event history analysis is the most appropriate method for testing the determinants of liberalization outcomes. Within event history method there are several models to choose from. In this section I will explain the logic of the Cox proportional hazard model and competing events, and argue that a *Cox competing risk model* is the most appropriate one compared to other event history models. This will involve a discussion of the underlying assumptions of the Cox model and its specific interpretations.

#### **3.3.1 Cox proportional hazard model**

The most commonly used semi-parametric model is the Cox-proportional hazard model (Cox 1972, Box-Steffensmeier and Jones 2004, Cleves 2010). Actually, The Cox proportional hazard model is by far the most popular and recommended within event history methods, specifically for studying social phenomenon (Box-Steffensmeier and Jones 2004, Cleves

2010, Golub 2008). Besides computational elegance, the Cox model offers the flexibility of testing variable effects without assuming any particular time-path. In event history models the risk, or the probability, that an episode ends at a particular point in time, given that it has lasted up to this point in time, is captured by the *hazard rate*. For the Cox model, the hazard rate for the  $i$ th subject is

$$h(t|x_j) = h_0(t)\exp(x_j\beta_x)$$

where regression coefficients,  $Bx$ , are to be retrieved from the data (see Cleves, 2010:129). Thus, the hazard rate is estimated from theoretically relevant variables. The hazard over time when all variables are set to zero, the so called *baseline hazard*, is represented by  $h_0(t)$ . The baseline hazard is the underlying effect the passage of time has on the hazard rate once all independent variables in a model are controlled for (Golub, 2008:531). Here, the baseline hazard is left unspecified.<sup>28</sup> This is considered an advantage when we are unable to make reasonable assumptions about the shape of the hazard, and we want to avoid producing misleading results about  $Bx$ .<sup>29</sup> However, the baseline hazard rate, although highly adapted to the observations at hand, can be estimated from the data (Box-Steffensmeier 2004:193). Interpreting the shape of the baseline hazard rate can show what kind, if any, time dependency exists for the liberalizations under study, as will be done in the analysis chapter.

### 3.3.2 The proportional hazard assumption

Although the baseline hazard is not assumed to take any particular shape, it is assumed that, whatever the general shape, it is the same for everyone, everywhere. That is, “each observation’s hazard function follows exactly the same pattern over time” (Box-Steffensmeier and Jones 2004:132). Formally, the Cox model states that one subject’s hazard is the multiplicative replica of another’s: comparing subject  $j$  to subject  $m$ , the Cox model reveals that

$$\frac{h(t|x_j)}{h(t|x_m)} = \frac{\exp(x_j\beta_x)}{\exp(x_m\beta_x)}$$

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<sup>28</sup> Because the baseline is left unspecified, the Cox model has no intercept; rather it is “absorbed” into the baseline hazard function leaving the intercept unidentified ((Box-Steffensmeier and Jones 2004:49, Cleves 2010:131).

<sup>29</sup> If we specified the functional form of  $h_0(t)$ , the model would be more efficient in estimating the  $Bx$  (Cleves 2010:130). However, because it is unknown we must leave it unspecified.

which is constant, assuming the variables  $x_j$  and  $x_m$  do not change over time (Cleves, 2010:129). The so called *proportional hazard assumption* (PH-assumption in short) requires that the effects of independent variables are not dependent of time – that the coefficients are so called time-independent (Golub 2008:532). It maintains proportionality in the variable effects, meaning that the instantaneous risk of failure between any two subjects is constant over their entire survival time (Golub, 2008:536). This is a strong assumption which is likely to be violated when observing subjects for a longer period and the values of the variables change over time. If the proportionality assumption of coefficients holds, the estimates will be relatively easy to interpret, however, if violated; the PH-assumption could render little meaning to the estimates. Whenever time varying variables<sup>30</sup> are included in the model, the PH-assumption is likely to be violated because, in definition, the variables cannot change with time (see formula above). When time-varying variables are present, and the coding of covariates therefore changes with time, the hazard ratio is no longer constant but rather depends on time (Golub, 2008:538). The challenge is detecting whether this variation results in a proportionality violation that is significant enough to warrant correction with a *time dependent, also called time varying coefficient* (TVC).<sup>31</sup> The PH-assumption is a common problem for most event history models when including non-constant variables. Fortunately the Cox model offers a superior handling of the PH-assumption compared to other models.<sup>32</sup> For a Cox model, the PH-assumption states that the effect does not change with time except in ways that one has already parameterized (Cleves, 2010). The PH-assumption is a testable one in regards of the Cox model and can be easily handled by the method of Grambsch and Therneau (1994), which is available in the STATA software applied in this analysis. Both Box-Steffensmeier and her colleagues (2003) as well as Golub (2008) recommends testing the residuals of individual covariates in order to determine their (non-)proportionality. Such PH-testing will be performed and systematically dealt with in the Analysis chapter.<sup>33</sup> If non-

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<sup>30</sup> Time-varying *variables* (also known as time-varying or time-dependent *covariate*) should be distinguished from time-varying (or time-dependent) *coefficients*: the former depends on time in terms of the values of the variable, but the marginal effect remains the same although the variable changes, while the latter depends on time in terms of the marginal effect changes, although the values of the variable do not necessarily change (Cleves, 2010:190). According to Golub (2008:532), the political science literature on survival analysis tends to use the terms interchangeably, while in fact they are analytically distinct. Conflating them would obscure the crucial difference between state changes and decay- and accreditation functions.

<sup>31</sup> Due to these letters, time *varying* coefficients are often and mistakenly confused with time varying *covariates* (TVCs), which I will call time-varying *variables*.

<sup>32</sup> According to Golub (2008:536ff), neither parametric nor log-logistic models offers any flexibility in their (proportionality) assumptions, and therefore the Cox model should be preferred whenever one wants to include time dependent coefficients (TDCs).

<sup>33</sup> Because PH-testing requires model estimation, the results are reported in the Analysis chapter, see Model estimation p.77.

proportionality exists, the PH-assumption is relaxed by treating time as a variable in interaction with the non-proportional variable, as recommended by both Box-Steffensmeier and Zorn (2001) and Golub (2008). Thus, when the time varying effect is properly specified in the Cox model, the proportionality assumption is no longer violated (Cleves, 2010:204). Furthermore, the baseline hazard will be recovered to learn more about the general time dependency of the liberalizations under study.

### 3.3.3 Specifying failure time and likelihood function

A liberalization process can end at any point in time. It is a so called continuous time process, as oppose to events only occurring at discrete, often predetermined times, like voting on Election Day. Therefore a continuous time model is required over a discrete time model. For a continuous time model like the Cox, since failure can happen at any point in time it is the ordering rather than the actual failure time that is of essence in the likelihood calculations. The Cox model uses the *partial likelihood method* to estimate the effect of the covariates on the hazard of a liberalization ending in one year. The partial likelihood function assumes that the intervals between successive failure times contribute no information regarding the relationship between the covariates and the hazard rate (Box-Steffensmeier and Jones, 2004:51). Because the baseline hazard function is unknown, the time rate is assumed to take an arbitrary form, and is simply a way of ordering the events. The actual survival times of censored and uncensored cases are not directly incorporated into the likelihood. It is the *ordered failure times*, rather than the interval between them, that contributes information to the partial likelihood function. Thus the Cox model only uses “parts” of the available data, hence the Cox likelihood is a “partial” one. Cox regression results are based on forming, at each failure time, the risk pool or risk set – meaning the set of subjects who are at risk of failure – and then *maximizing* the conditional probability of failure (Cleves, 2010:145). Hence the name maximum partial likelihood estimation (MPLE) (Box-Steffensmeier and Jones, 2004:152).<sup>34</sup> The partial likelihood calculation presumes that liberalizations end at ordered times. The data is recorded on a yearly basis, hence, when liberalizations end in the same year, the data cannot tell the exact ordering of which liberalization ended first during that same year. Then special treatment of the likelihood calculation is required in order to produce proper estimates. How to handle simultaneous failure times is what follows.

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<sup>34</sup> Confer Cleves (2010:146) or Kalbfleisch and Prentice (2002:101-104, 130-133) for a more technical elaboration on how partial estimates are maximized.

### 3.3.4 Handling tied data

The actual times at which failure occurs are not relevant in a Cox model – the ordering of the failure is. As such, the partial likelihood function cannot account for events failing at the same time – it presumes that failures happen in ordered times. This seems to be a big restriction as cases of liberalizations can end in the same year. Therefore the likelihood function should be modified to account for simultaneously occurring failure times. When a spell of liberalization ends the same year as several other spells of liberalization, the exact ordering is unclear because the data do not tell us which one actually ended first during that year. These are cases of so called *tied* data, that is, instances of failure occurring at the same (tied) times. Tied data pose a problem for the partial likelihood calculation in the ordering of failure times, and hence makes it impossible to determine how many subjects are at risk at all times. However, it is reasonable to assume that the liberalizations did not end actually at the exact same date, day, or in the same hour. In reality, their failures occurred at separate times. Then all one needs to do is find a way of ordering. Fortunately, the Cox model can be adapted as to handle tied data by approximating the partial likelihood function, another primacy of the Cox model over parametric approaches (Box-Steffensmeier and Jones, 2004:53, Golub 2008:539). The STATA software offers several optional approximation methods. The Breslow method of handling tied data is the most common one, widely used because of its computational efficiency. However, its precision decreases as the number of ties increases. Ties are not an extreme problem in my data, the maximum number of liberalizations ending at the same time being 6 (see overview of tied data in Appendix). Nevertheless, for reasons of accuracy, I choose the Efron method of which approximations are more precise than the Breslow approximations when the risk set increases (Box-Steffensmeier and Jones, 2004:55).<sup>35</sup>

To sum up, applying the Cox proportional hazard model, survival time is specified as a function of theoretically relevant variables, and time is just a nuance. The Cox model makes no assumptions about the distributional characteristics of the baseline hazard rate, yet can provide estimates of the independent variables of interest and hence allow for testing of hypothesis. Moreover, baseline estimates, though highly adapted to the observed data, can be retrieved from Cox estimates (See Box-Steffensmeier 2004:193). Furthermore, the Cox model

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<sup>35</sup> For a more technical discussion of the approximation methods, advice Box Steffensmeier and Jones (2004:54ff) or Cleves (2010:148ff).

is extended to the case of competing events structures. The specification and interpretation of competing risks is what follows.

### 3.3.5 Cause specific hazards

Complicated social processes are much too often treated by social scientists as if they were only at risk of experiencing a single event, while in fact they are also at risk of making a transition to another state (Box-Steffensmeier and Jones 2004). One-way-transition models are easy to employ, but not always reasonable for the problem at hand. Only recording democratization as an outcome of liberalization would be acting as if we live in a world where reversals does not exists. Not taking the competing event of reversal into account would thus produce biased results. Therefore, liberalization should be treated as a process of competing risks. Furthermore, the effect of covariates need not be the same across different type of risks. Rather, we may want to test how the variables relate to *particular* risks of different event types. The Cox approach can be extended to account for competing risk by modeling cause-specific hazards. Recall how the hazard rate is the risk that liberalization will end at time  $t$ , given that it has not yet ended within time  $t$ . Similarly, a *cause-specific hazard* is the instantaneous risk of failure from a specific cause given that no failure from any cause has yet occurred (Cleves et al., 2010:366). Given  $i = 1 \dots, k$  causes, and that failure can occur for any of these causes, then at time  $t$  the cause-specific hazard for cause  $i$  is

$$h_i(t) = \lim_{\Delta t \rightarrow 0} \frac{P(t \leq T < t + \Delta t, \text{failure from cause } i | T \geq t)}{\Delta t}$$

For  $T$  equal to the time to first failure from any cause (Cleves et al., 2010:366). This is equivalent to what Box-Steffensmeier and Jones (2004:168) calls the “latent survivor time approach”. It assumes that there are  $K, k = 1, 2 \dots, r$  specific outcomes or destination states and that there is assumed to exist a potential or latent failure time associated with each outcome. The different destination states represent competing risks: they are competing because only one of them can happen *first*. Once the system has failed, the remaining lifetimes are lost to observation (Crowder, 2001:38), meaning we only observe liberalization up to the first failure before it exits the risk set. Hence, the remaining failure times are latent, but it is assumed that any of the  $K$  possible events could have occurred had the clock just kept ticking long enough (Box-Steffensmeier and Jones, 2004:168-169). In translation, one could expect that had we



continued to observe the liberalized regime for an unlimited time, one of the other competing events could have occurred, eventually.

Because liberalization can only have one outcome we assume independence among the competing events, meaning that there is no correlation between the risk of democratization and the risk of reversal. When liberalization stops, it is either because of a setback or a democratic advance. Democratization is therefore an independent cause of failure from that of reversal and vice-versa. According to Cleves (2010:366), making such an independence assumption about competing events can be tricky because it is not something we can test for or tell from the data. Evaluating how competing events are related to each other, only theory can guide us in judging their “biology”. Reversal and democratization are different events in nature; they do not belong to the same family of event types. If we however wanted to discriminate between different types of transitions to democracy (for example Huntington’s (1991) transition types; transaction, transformation and replacement) or different types of reversal (by coup, civil war, state break-down, foreign intervention), it would be reasonable to assume the outcomes (belonging to the same event “mother”) exist in conjunction with each other. If we had reasons to assume such dependent risks, we would rather want to report sub-hazards following the alternative semi-parametric model of Fine and Gray (1999).<sup>36</sup> However, it is not of substantial relevance to the research question exactly how democratization or reversal came about, just that it did, and hence, the analysis operates with two main termination states – that of democracy and that of autocracy. As democratization is a qualitatively different (or even opposite) cause of liberalization ending than that of reversal, the analysis will report cause-specific hazards.

Standard methodology and software can be applied for competing-risk-analysis if we, operationally, estimate the cause-specific hazard separately and treat the competing event as right-censored. Doing so, we estimate two single models<sup>37</sup>, that is, the coefficient estimates are allowed to differ for both events, as is the underlying baseline hazards (Cleves 2010:366, see also Box-Steffensmeier and Jones 2004:169). This is similar to standard methodology, only the interpretation changes, which must be modified to take into account that competing events can also occur (Cleves, 2010:367). There is one more caveat: in the case of competing

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<sup>36</sup> The Fine and Gray (1999) model is a direct analog to the Cox regression, only traditional hazards are replaced by subhazards and the interpretation changes (see Cleves 2010:383).

<sup>37</sup> Alternatively I could have executed a simultaneous regression of the two by stratifying on event type as well as letting the covariates interact with event type, and this would have produced the same results (see Cleves, 2010:378-380). But for the sake of simplicity I will present the coefficients in two separate models.

risks, the hazard and survivor function is not two sides of the same coin as in standard methodology, and so, the survivor function can no longer be retrieved directly from the hazard rate.<sup>38</sup> Hence, the question of survival cannot be interpreted directly from the hazard rate but demands special estimation.<sup>39</sup> For a Cox competing risk model this is computationally cumbersome. Nevertheless, this thesis is primarily interested in the question of risk rather than survival. Modeling cause-specific hazards, we obtain refined estimates of how an independent variable relates to the particular risk of democratization as oppose to reversal. In turn, I will explain how to interpret coefficient estimates in terms of hazard ratios.<sup>40</sup>

### 3.3.6 Interpreting coefficients and hazard ratios

The *coefficient* estimates report information about the change in the hazard rate associated with a change in the corresponding variable. In order to interpret how much a change in the variable affects the hazard rate, we must report the *hazard ratio*, that is, the exponential of the coefficient estimates. While the *hazard rate* reflects the *risk* of failure, the *hazard ratio* reports the impact of variables on the hazard rate. More specifically, the exponential of the coefficients shows the ratio of the hazard rates for a one unit change in the corresponding variable (Cleves, 2010:131). A coefficient of for example 0.5 means that a one point increase in the variable increases the hazard rate by 65 percent, because  $\exp(.5)=1.65$ , and  $(1.65-1)*100=65$  percent. Similarly, a coefficient of -0.5 shows that an increase in the variable by one point lowers the hazard rate by 39 percent, because the  $\exp(-.5)=.69$  and  $(.69-1)*100=39$  percent. Thus, the hazard ratio reflects how much an increase in the variable *changes* the risk of failure.

### 3.3.7 Accounting for dependence among observations

Just like common regression methods assumes independence among observations, so does the Cox model. Concretely this entails that the effect of a variable in one year is not dependent on the effect of that same variable in the previous year. This is not likely to be the case in the

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<sup>38</sup> For competing risks the survivor function is translated to the “cumulative incidence function” while the hazard function is the equivalent to “cause specific hazards”.

<sup>39</sup> If one were specially interested in the cumulative incident function rather than the cause specific hazard – one should consider applying the alternative semi-parametric model by Fine and Gray (1999).

<sup>40</sup> Note that the following discussion of interpretation is specific to the Cox model. Results from other models may have somewhat different interpretations; however they will not be treated here.

analysis of liberalizations as it is in its essence a *process*. In addition this analysis utilizes time-varying variables which require multiple time observations in each spell of liberalization, suggesting temporal or serial dependence within the spells. We also know that liberalizations occur within regions, and consequently there are possible intra-group effects. This possibility leads to the conclusion that it should be accounted for by operating with robust standard errors. By doing so the resulting standard errors are “robust” in that they produce estimates that are *robust to violations* of the independence assumption, by accounting for grouping or clustering of observations (Box-Steffensmeier and Jones 2004: 114-115). Therefore the Cox competing risk model is specified with robust standard errors.

## 4.0 Data and operationalization

Now that I have specified a Cox competing risk model, cases or spells of liberalization must be recorded. This requires quantitative observation of regimes which have liberalized before eventually democratized or reversing, if ever. The theoretical background concept and conceptual discussion has led to a systematic concept of liberalization being the process by which a regime becomes more competitive or inclusionary without reaching democracy. Based on this concept I will develop a quantitative approach to observe empirical cases of liberalization before presenting data on independent variables and the operationalized hypotheses.

### 4.1 Choosing among “same, same but different”

In order to observe and compare cases of liberalization worldwide throughout the post-war period, quantitative measurement is required. Because there do not exist any clear-cut measurement of liberalization that I know of, I will have to apply one of the available regime indices to trace different types of regime change such as liberalization, democratization and authoritarian reversal. Because liberalization is a process evolving through time, the data source had to consist of cross-sectional as well as longitudinal information on regime change. Furthermore, since the research question involves movement towards or away from authoritarian and democratic regimes, it should be a *continuous* scale of both authoritarian and democratic regime characteristics, although with a clear threshold distinguishing democratic from non-democratic regimes. Today, the most frequently employed longitudinal regime indices of democratization, which cover an extensive period of time, are the democracy index offered by Vanhanen (2000), the Polity IV combined regime index by Marshall and Jaggers (2009a), or Freedom House (2010). Also, Hadenius and Teorell (2004) offer a merged index of the Polity IV and Freedom House pin-pointed against a third indicator by Hadenius (1992). Their scores highly correlate with each other on an aggregate level, suggesting that they capture some of the same phenomenon (see Berg-Schlosser 2004; Gleditsch and Ward 1997; Hadenius and Teorell 2005).<sup>41</sup> However, their correlation vary depending on different levels of the scaling, making the choice of index imperative for the ability to observe regime changes. This is especially evident in the intermediate “grey zone”

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<sup>41</sup> For a review of these democracy indexes, confer Berg-Schlosser (2004), Hadenius and Teorell (2004), McHenry (2000), and Munck and Verkuilen 2002. Also, for a comparison of Freedom House and Polity in this respect, see Ph.d. by Knutsen (2011: Ch.2).

(Gandhi 2008, Hadenius and Teorell 2004) where we typically find the liberalized regimes. Choosing among “same, same but different indices” (Hadenius and Teorell 2005), I will assess their face validity according to the content of the systematized concepts of this thesis, overall reliability and data coverage.

The abovementioned indices all follow the theoretical back ground concept of Dahl (1971) and are frequently employed to measure democratization.<sup>42</sup> However not all of them are suited for measuring the systematized concept of liberalization. The Vanhanen index (2000) is based on mere election data, which could be an appropriate measurement of democratization, or liberalization of elections at best, but that would give poor face validity according to the broader process of the liberalization as defined in this thesis.<sup>43</sup> Freedom House (2010) could work as liberalization of rights given a theoretically narrower definition on a lower level of abstraction.<sup>44</sup> However, for reasons explained in the theoretical discussion, I consider this to narrow a definition given the broader meaning of the liberalization process. Validity assessment of the Polity (III) has shown it to be more sensitive to the contestation dimension – as are many definitions of both liberalization and democratization (Berg-Schlosser 2004, Dorenspleet 2001, Gleditsch and Ward 1997, Munck and Verkuilen 2002). On the other hand, Freedom House is more sensitive to the participation dimension (Gleditsch and Ward 1997). This trade-off could be counter-balanced by applying the merged Polity-Freedom House index by Hadenius and Teorell (2004). However, that would be to confuse different levels of measurement. Also, in order to operationalize the concepts of this thesis I have to interpret its qualitative meaning and moreover, to do that I need sufficient information on the coding and content of the index as to assess the “adequacy of content” (Adcock and Collier 2001). Therefore, the index must be chosen on the grounds of reliability as well, which should not be taken as a given.

In terms of reliability, The *Freedom House* scorings are based on mere subjective measures, the reliability impossible to assess by outsiders (Berg-Schlosser 2004, Munck and Verkuilen 2002). Not only has Freedom House been found to hold political bias in its measures (Bollen and Paxton 2000:73), but also that the scorings are inaccurate over time and that changes in

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<sup>42</sup> The Vanhanen index (2000) indicates participation and contestation in elections; The Polity Project (2010) measures authority patterns based on institutional contestation and participation with emphasis on executive constraints and openness as a part of the “contestation” dimension; Freedom House follows a lower level of abstraction where formal rights are prerequisites for contestation and participation.

<sup>43</sup> In the case of the *Vanhanen index* (2000), the process of liberalization cannot be captured by mere election data on voter proportion of total population and percentage vote on largest party\*100, obviously.

<sup>44</sup> For example, Smith (2000) applies civil liberties as liberalization while political rights as democratization, although they highly correlate, thus not treating them as autonomous processes.

the Freedom House scores over time might reflect global changes and not national institutional transformations (Neumayer 2002).<sup>45</sup> Consequently, the same goes for the merged *Polity-Freedom House* index by Hadenius and Teorell (2005) which is an average of the two pin pointed against a third, cross-sectional democracy index by Hadenius (1992) making it hard to detect what a one unit change in the score actually means qualitatively. Polity is the only one that offers a clear coding list of how the scores are weighted; making it possible to detect what qualitatively causes changes in the scores (see Marshall and Jaggers 2009a; 2009b, Gleditsch and Ward 1997, Henriksen 2010, Munck and Verkuilen 2002). Furthermore Gleditsch and Ward (1997) assess Polity to be a better indicator when it comes to observing regime change. This is a considerable strength compared to other indexes since the thesis is in search of tracking political changes such as liberalization. Moreover Polity IV offers data farer back in history, which is considered an advantage over Freedom House (from 1972) since maximizing empirical coverage is the prime reason for choosing a quantitative approach in the first place.

For these reasons, the revised and combined Polity IV index was considered the most appropriate measurement of regime change. Below I will develop the operational rules for which movements along the scale is to be recorded liberalization, democratization and reversal based on how the Polity IV index is composed (see Marshall and Jaggers, 2009a; 2009b). As the discussion below will show, the procedure is analytically straight forward and precise as to capture variations in the shape of the liberalization process, as well as its distinction from democratization. Its transparency also makes the approach reproducible for other projects concerning regime change.

#### **4.1.1 Content validity of the Polity IV**

*The Polity 2 index* is an institutional measurement of the authority patterns of political regimes and so, it is adequate for the *level* of analysis. The Polity 2 scores hold time-series data, combining measurement of both authoritarian and democratic authority characteristics. The combined score in Polity 2 then consists of a 21 point scale from – 10 to +10, -10 being fully institutionalised autocracy and +10 being fully institutionalised democracy.

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<sup>45</sup> Also I agree with Przeworski (in Munch 2003:26) who criticizes Freedom House for being formalistic and ideologically tainted, quoting Rosa Luxembourg – “the problem is not to be free, but to act freely”.

Conceptually, it follows the theoretical line of Dahl (1971), acknowledging that the authority patterns of regimes are a question of degree, and that regimes can have a mix of authoritarian and democratic attributes, ranging from institutional authoritarian, mixed to institutional democratic regimes. A regime within the score from -10 to -6 is categorized as being autocratic, -5 to +5 as “mixed” systems and +6 to +10 as democratic regimes. It is in the interim of -5 to +5 that we find so called “liberalized autocracies” which have scores on both the democratic and autocratic sub-indicators. These are the most unstable regimes that tend to experience significant changes in their polity score (Marshall and Jagers 2009a; 2009b).

Operationally, the Polity 2 index is based on weighted codings of six indicators: 1) competitiveness, 2) openness and 3) regulation of executive recruitment, 4) competitiveness, and 5) regulation of political participation, and 6) constraints in the Chief of the Executive (see Marshall and Jagers 2009b). Thus Polity follows Dahl’s understanding of democracy as institutional *contestation* and *participation*, while emphasising constraints on the exercise of power by the executive as a part of the contestation dimension.

In contrast to Dahl’s theory however, the creators of the Polity IV do not treat competition and participation as distinct but rather interchangeable dimensions, for example, *openness* of executive recruitment is defined as “the extent that all the politically active population has an opportunity, in principle, to attain the position through a regularized process” (Marshall and Jagers 2009b: 22). ‘Open’ recruitment through free and fair elections thus refers to both dimensions. Similarly, competitiveness and regulation of political participation refers to whether and how alternative political preferences are expressed and pursued in the political arena, thus involving both contestation and participation.

Earlier versions of the Polity have been criticized for not treating participation as a distinct dimension (Dorenspleet 2001, Munck and Verkuilen 2002). However, I find it reasonable to understand political participation in a broader sense than strictly that of participation in elections (see response from Marshall, Gurr, Davenport and Jagers 2002). Although it should be noted that due to the level of analysis the measurement holds participation and contestation dimensions at the level of political regimes. Consequently, it leaves out other external aspects like broader acts of participation such as organization and exercise of civil liberties in civil society.

Another critique concerns the weighting where constraints on executive power are given more weighting than other parts of the index, and that this has not been justified (Dorenspleet 2001,

Gleditsch and Ward 1997). True, this does not follow directly from the theorizing by Dahl. But given that contestation and participation are a matter of degree and we recognize that regimes can have mixed attributes, including executive constraints in the contestation dimension becomes an important aspect of accountability which differentiates non-democratic from democratic regimes, and liberalization from democratization (Huntington 1991, O'Donnell and Schmitter 1986). Therefore, I consider the indicators of Polity 2 to be reasonable reflections of the dimensions of political regimes as defined in this thesis.

A third critique goes for the *categorical* nature of the index. In consequence, regimes receiving the same score might have different types of institutional design, executive recruitment and political participation. In the case of this thesis, this is rather considered an advantage. As Gleditsch and Ward (1997:366) notes, since the index is categorical, preserves the analytical goal of allowing *multiple paths* for participatory and competitive processes in the regime institutions, thus allowing for various paths in liberalization and reversal processes as well as in democratization. That being said, observing what is democratization as oppose to liberalization requires we operate with a threshold distinguishing democratic from non-democratic regimes.

#### **4.1.2 Democracy threshold**

As a starting point of reference, we can compare this problem to how The Polity IV Project records (democratic) changes in the regime score (Marshall and Jaggers, 2009a; 2009b). For Marshall and Jaggers (2009a; 2009b), democratization consists of an increase in the polity index of six points up to and including a total polity score of 6. This means that a positive change of six points is only considered as democratization as long as it reaches a threshold of 6. I find it reasonable to have a threshold of democratization reflecting the procedural minimum of a democratic *installed* government. Not all do. In their study of survival of democracies, Kapstein and Converse (2008:38) use the Polity IV regime index to measure democratization. Instead of using “a complicated measurement with thresholds”, democratization is simply perceived as a 6 point positive change in the Polity score in a given year. Kapstein and Converse admit that theoretically this measure does not hold given that an increase from -10 to -4 is still an autocracy (the threshold for democracy being +6). But because empirically this does not happen in any of their cases, they are satisfied with the measurement. The problem with their operationalization, I find, is that it cannot distinguish



between the two qualitatively different processes of liberalization and democratization and consequently is in danger of recording cases of change as democratization while they are in fact liberalizations. In contrast to Kapstein and Converse (2008), I believe we need a minimum threshold as a point of reference for what constitutes democracy and hence, be able to judge what kind of change involves democratization and not. Only thus can we distinguish change in terms of democratic transition from that of liberalization and obtain an operationalization that is *both* theoretically and empirically valid. Therefore, a threshold of democratization is applied, following a logic where we do not know whether a regime change is a democratization before it reaches democracy (or not).

According to the authors of the Polity IV Project, a regime with a score of +6 has reached the minimum level to be categorised as a democratic regime (Marshall and Jaggers 2009b). Accordingly, the threshold for democratization is set to +6. Concretely this entails that the executive power is democratically elected through free and fair elections and constrained by democratic procedural rules. Recall O'Donnells definition of democratization: "transition from autocratic regime to the installation of democratic government" (O'Donnell 1992:18-19). A regime beneath the threshold of democracy (+6) is some version of a non-democratic regime. When an autocratic regime moves up the regime score as to pass this threshold, it has been in a state of liberalization, perhaps even a transition period of uncertainty, that finally ended with the installation of a democratic government. We cannot capture the qualitative sequence of these events or when exactly the democratization started. We can however observe a procedural threshold for the process to qualify as a democratization by recording its endpoint, namely the installation of a democratic government. Recall the four criteria's by Pzeworski et. al (2000): an unfree and unfair election will fall short of this threshold; a free and fair election without the installation of the democratically elected government will fall short of this threshold; a free and fair election of government that is not the top decision makers of the regime, will fall short of this threshold; a free and fair election of a ruler that eventually did not step down, will not reach this threshold (Marshall and Jaggers, 2009a; 2009b).<sup>46</sup> This threshold is strict, but it is precise and in accordance with the procedural minimum theory, and it makes sense.

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<sup>46</sup> This is of course an evaluation one can only do in retrospect. In real life, when observing a democratic election, its procedural reach is still a question of uncertainty which lies in the future. Judging whether we are really dealing with a democratic outcome eventually is hard to predict beforehand. However, we can study them in the aftermath.

### 4.1.3 Tracking liberalization

So far we can refer to a democratic threshold. The question remains how to translate a change in Polity IV to a case of liberalization. Liberalization can, in principle, happen at any level of autocracy, and to various degrees. So what kind of changes should be considered as liberalization? Recall from the conceptualisation that liberalization must mark a *significant* departure from the authoritarian regime. According to O'Donnell and Schmitter (1986), political liberalization signifies a qualitative change in and significant departure from the authoritarian regime, in short of reaching political democracy. Consistent with the authors of the Polity IV Project, a *substantive* change in the polity score is considered at least 3 point change during the course of three years (see Marshall and Jaggers, 2009b). Recall that in theory the liberalization is continuous and gradual in nature, though not a linear process (O'Donnell and Schmitter 1986, Bratton and van de Walle 1997). The change may come about slowly during several years or rapidly during one year. In practise then, the liberalization process may have several shapes and magnitudes: A continuous increase of 1 during three years, at minimum, a continuous increase of 2 during two years or a positive increase of 3 in one year. In principle, it may be as immense as a 16 point positive change, as long as it does not reach the threshold for democracy at +6. No matter the shape or magnitude, a political liberalization of the regime is operationalized as a positive increase of 3 points or more in the polity score up to and excluding the point where it reaches the level of democracy at +6, specifically.<sup>47</sup> After an increase of +3 or higher in one year, any further increase in the polity up to +5 is considered a continuation of the liberalization process. Furthermore, it is considered as continuous as long as the positive change in the polity score is not reversed. Should a liberalization process become so advanced as to reach the level of +6 or higher, the process of liberalization has transformed into a process of democratization, and will be recorded as a liberalization that ended with democracy. But liberalization may never reach democracy, rather, it may end with autocracy. To be consistent with theory, the liberalization process is over as soon as there is a temporary setback (even if there are positive developments after the setback) or a permanent reversal (recall Bratton and van de Walle 1997). Operationally this means that the setback may be -1 or more. As a consequence, the setback may be less substantive than the opening in the offset of the liberalization process. More importantly, it did not end with democracy.

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<sup>47</sup> An alternative measurement with a change of 2 instead of 3 during three years was considered. The cases of liberalization change somewhat in their yearly recordings, only marginally affecting the sample selection.

To illustrate, political liberalization in Albania started in 1990 when the one party rule came to an end. This is observed in the polity score as an increase from -9 in 1989 to +1 in 1990. Recall also that liberalization is a gradual step-by-step process, After an increase of +3 or higher in one year, any further increase in the polity up to +5 (democracy) is considered a continuation of the liberalization process. Like in Albania, where the liberalization process continues when it holds its first multiparty election in 1995, although the regime is still suppressive as the governing party uses its power to suppress the opposition party (a 4 point increase from +1 to +5). Had the polity score reached the democratic threshold of +6, the liberalization would have been terminated with democratization. Recall that liberalization has failed with any temporary set-backs or permanent reversal. We stop counting if the polity score decreases by at least -1 or more in one year (reversal). Then the liberalization process has terminated into autocratic reversal. In principle then, the reversal may be less significant than the opening. Its magnitude is not of importance here, only that it records liberalization terminating into some level of autocracy, and even more importantly, without merging into democratization. The first liberalization process in Albania was interrupted in 1996 by a government collapse after economic turmoil and government corruption (polity score drops to 0). However, already the next year the polity score jumps back to +5. This is recorded as a second case of liberalization and the clock starts ticking again as the government is restored and a new election is held (polity score jumps back to +5). This liberalization ends with democracy (+7) in 2002 with the installation of a democratically elected government.

Another illustrative example is the cases of Algeria. From 1989 to 1991 there was a short-lived liberalization of the Algerian political system (polity increase from -9 to -2). The process came to a sudden halt in 1992 when the military intervened and cancelled the second round of legislative elections when it became apparent that the Islamic Salvation Front (FIS) was poised to win (polity score drops to -7). Consequently, the process is recorded as one that *ended* with reversal in 1992. A *new* liberalization process is marked by presidential elections in 1995 and 1999, but, executive recruitment did not meet the threshold of a procedural democracy (+6) as polity only increases up to -3. While elections were held, the military and the bureaucracy orchestrated these events to such an extent that citizens had no real ability to change their government. The regime continues to liberalize in 2004 with a competitive presidential election. Despite the largely free election, however, the election outcome was not properly obliged as the military continues to hold nearly hegemonic power of the regime. The data set does not allow us to observe the liberalization later than the year 2006, up to which

the process of liberalization is considered continuous or one that neither ended with democracy nor reversal. Hence, the case of liberalization in Algeria from 1995 to 2006 (as far as we can observe) is recorded as right-censored.

Some reservations should be made. Although liberalization means a qualitative change in the regime it should be distinguished from a transition. Liberalization may merge into a period of transition, that is, a period where the leaders and rules of the game is unclear and therefore its coding unknown (-88 in Polity 2). As transitions is a period of uncertainty with an unknown outcome, the liberalization is considered to continue through out the period of transitions and lasts for as long as the polity score does not fall nor reach the democratic threshold of 6. Its termination follows the same logic as always: if the transition culminate in a positive direction, liberalization is still ongoing, if the polity score drops, liberalization has reversed, if it reaches the democratic threshold, liberalization merged into democratization. Also, democratization can happen without preceding liberalization. Democratic revolution or instant democratic transition is the case if polity reaches the democratic threshold instantaneously during one year. Then it is considered to be an instantaneous installation of democracy without preceding liberalization. Hence, this thesis does not consider a liberalization process as a necessary precondition for the occurrence of a democratic government.<sup>48</sup> Thus cases of democratization without liberalization are not a part of the sample.

Armed with a new measurement, I search for 3-point increases in every country through all years in the Polity dataset, currently a total sample of 163 countries.<sup>49</sup> With this measurement the data set holds a total of 115 cases of liberalization in the post-war period from 1950 to 2006. An overview of liberalization spells is reported in the Appendix. Some comments on the sample should be provided.

#### **4.1.4 The generality of the sample**

A key rule in quantitative analysis is that the sample should be drawn randomly. This thesis sets out to study the outcome of liberalization globally, in the sense that it analyzes *all* cases of liberalization according to the operational definition applied. As the case often is, the

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<sup>48</sup> On this point it disagrees with scholars who consider “liberal” as a prerequisite for “democracy” (see Gill 2000, Diamond 2001).

<sup>49</sup> Even if Polity IV has a measure for “minor democratizations” of +3 increases during 3 years up to and including the democratic threshold of +6 (see Marshall and Jaggers, 2009b), this information would have saved me little time. I would still have to search for 3 point increases during 3 years without reaching democracy, which was even more common, and also check the preceding history of the minor democratizations.

sample is influenced by the data available. The Polity IV project (Marshall and Jaggers, 2009a) provides extensive, world-wide sources of data on political regimes ranging from 2009 and as far back as the 19<sup>th</sup> century. However, the data on theoretically relevant *variables* collected from Penn World Table (Heston, Summers and Aten 2010) and Banks (2010) are only available from 1950-2006. Within the constraints of available data, I find it reasonable to compare regimes from the post world war period across various decades, considered historically distinct from the once prior to the world war. Neither does the Polity Project provide data on states with a population smaller than 500.000, excluding minor states. This affects the generality of the sample, but may increase its precision, if we consider mini-states and islands to be qualitatively distinct from larger states. Therefore it is my assessment that this does not impose serious bias in the sample selection.

## **4.2 The dependent variable(s)**

The dependent variable of the analysis is the outcome of liberalization – in “survival” terms, the failure or “death” of liberalization. The second step of the operationalization involves determining what failure consists of. Liberalization may terminate in two different states: democratization or reversal. Therefore, failure is operationalized as these two competing events of democratization and reversal. An indicator variable is created based on a three-way-categorization of event occurrence or non-occurrence; coded 1) if democratization occurred, 2) if reversal occurred and 0) if none of them occurred (right-censored). Thus the dependent variable relies both on *duration until* event and of *occurrence* of this event. The survival time contribute information about duration of liberalization, and failure time give information about the event occurrence. Censored cases (0) only contribute to information about survival times. Uncensored cases (1, 2) of liberalization contribute information on both survival and failure times. In practice then, the dependent variable looks like a three-way indicator recording occurrence of either *occurrence* of democratization and reversal or *non-occurrence* of both (right-censored).

Furthermore, the failure types – democratization and reversal – will be modeled separately as one model for each failure type will be applied, treating the competing failure type as right-censored. The analysis will apply two models for the same cases of liberalization – one modeling occurrence of democratization as the failure event of interest, and one model where occurrence of reversal is the failure event. Thus the analysis operates with two dependent

variables – democratization in one model and reversal in the other. Operationalizing the dependent variable thus will allow for testing how the independent variables affect the particular risk of democratization as oppose to the risk of reversal. The operationalization of the independent variables is what follows

### **4.3 Independent variables and hypotheses**

Below follows the operational variables and the expected effects on liberalization outcomes as such. This is visualized by formulating one main (H) and two sub-hypothesis (H.A and H.B below) for each independent variable. Since the analysis will execute two models where the dependent variable – the outcome of liberalization – is operationalized as democratization in one model and reversal in the other, the two sub-hypothesis, one for each model, are the ones to be tested in the analysis.

#### **4.3.1 Economic growth**

As discusses previously regarding theoretical expectations to the impact of economic performance, the immediate regime performance should be more relevant in explaining the outcome of liberalization than economic levels per se. Therefore this thesis will test the effect of economic *growth* on the outcome of liberalization, and not level of economic development.

The operationalization of the *Growth* variable is fairly straight forward. It measures annual growth rate of GDP adjusted for purchasing power parity (PPP). The PPP-adjustment is performed in order to make growth rates comparable across nations despite of variations in price level and exchange rates. The data is collected from Penn World Table (Heston, Summers and Aten, 2010) (version 6.3) which according to most observers is the most reliable source of economic data (Temple 1999). I have followed the recommendation of the authors and chosen the variable *RGDPL*. It has been revised from earlier versions of growth rate that received some critique (Heston, Summers and Aten, 2010.) Because the theoretical expectations implies that economic growth can have both negative and positive effects on democratization and reversal, we should examine the effect by a two tale test, meaning we hypothesise that economic performance has an effect on regime change, but we do not know the direction of the effect:

H1: *Economic performance has an effect on the outcome of liberalization.*

H1.A: *Economic performance has an effect on democratization.*

H1.B: *Economic performance has an effect on reversal.*

### **4.3.2 Type of Autocracy**

Previous analyses (Huntington 1991; Linz and Stepan 1996; Geddes 1999; 2003; Brownly 2007; Teorell 2010) operate with institutional regime characteristics which are not mutually exclusive categories: for example military compared to civilian types such as one-party, multi-party, personalist, monarchical and hybrids of these regimes. However *both* military and civilian regime may be more or less personalistic and exclusionary and more or less institutionalized and inclusionary, for example one party or multi party systems are not reserved for civilian types but may also be present in military regimes, as Teorell (2010) admits. Therefore I will choose to define autocracy types exclusively according to top decision maker, the most pronounced division being civilian and military types (further differentiation between types of military and civilian regimes would only be appropriate on a lower level of analysis).<sup>50</sup>

*Autocracy type* is an ordinal variable set up with three dummy variables applied in the analysis. Each regime year is coded either as *Civilian*, *Military-civilian* or *Military*, based on the coding of Banks (2010) variable *Type of Regime (Political02)*. All liberalized regimes included in the analysis fitted into these categories.<sup>51</sup> Any government that is controlled by a non-military component is coded *Civilian*. In *Military-civilian* autocracy, a military elite is effectively in control of the civilian government, although the top posts, including the Chief of State, is held by civilians. Military autocracy in contrast, involves direct rule by the military, often following a coup d'état, either by the use of military chain of command or a more ad hoc administrative hierarchy with the top decision making institution staffed by military personnel.

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<sup>50</sup> The institutionalizing effect of legislators and parties are treated independently below.

<sup>51</sup> No regime years in my dataset falls into the fourth category 'Other' of the Type of Regime (Political02) in Banks (2010).

Technically, an ordinal variable is included by coding a regime year according to these three dummies that is receiving 1 on say Civilian means receiving 0 on all other variables. An ordinal variable is included in the analysis by choosing a reference category which is not included in the model. The resulting coefficients (or hazard ratios) on the other variables, then, are interpreted as ‘...compared to Civilian’. For instance, a hazard ratio of 0,05 on Military-dummy means: A military regime has 5 % the hazard rate of death, compared to Civilian regimes.

Accordingly, the variable *Autocracy type* is a categorical variable with three values (military, military-civilian and civilian) and cannot be included in the model as a regular continuous variable. It is included in the dataset as three dummy variables (each country year scores 1 on one of the dummy variables and 0 on the two others). In the model the dummy *Civilian regime* is excluded and treated as reference category, that is; the effects (hazard ratios) on the two remaining dummies must be interpreted as: “the hazard of failure is ... higher/lower in military/military-civilian regimes *compared to civilian regimes*”. Note that the relative effects between the three regime types do not depend on choice of reference category.

Because liberalization ending with democratization always, as a matter of definition, will imply a change in *Autocracy type* to civilian regime (because democracies are always civilian), it creates a form of endogeneity. Thus, the variable *Autocracy type* is lagged with one year. The variable then, reflect the type of regime in the year before the failure (democratization or reversal) occurred.

In addition to the interpretation the variable cannot be tested with a regular t-test since it is now two variables in the model which in fact represents one variable, and so they must be tested as one variable jointly, not as two separate ones. In basic OLS we would perform a F-test on the joint significance of the variables. In survival analysis (and other limited/dichotomus dependent variable) the most common parallels are either a Log Ratio (LR) test or a Wald test. Since I have specified my model with a regional group effect (clustering) which produces robust standard errors model, STATA won’t perform a LR test as it is likely to be wrong. Instead I perform a Wald test (Sribney 2010).

A Wald test approximate the LR test and when applied to the whole model says whether this estimated model is better than the null model (that is; model without variables) (UCLA 2011).



In other words it tests the joint significance of the *all* variables in the model.<sup>52</sup> This will be the first step toward evaluating the two models in the analysis chapter.<sup>53</sup> In addition to testing the model as a whole, a Wald test can also test whether a group of variables are jointly significant. It is therefore also applied when we want to check the significance of the dummies representing the variable *Autocracy Type*.

Since the theoretical expectations towards the effect of military-civilian relations are somewhat divergent, the hypotheses will be formulated as two-tailed:

H2: *Military-civilian power relations have an effect on the outcome of liberalization.*

H2.A: *Military-civilian power relations have an effect on democratization.*

H2.B: *Military-civilian power relations have an effect on the outcome of liberalization.*

### **4.3.3 Conflict level**

If liberalization is a continuous interaction between regime and opposition, the relative strength between them is crucial for the outcome of liberalization. As there does not exist any direct measure of independent organization in civil society comparable for all countries in the world (Gandhi 2008), one must search for a measure indicating the interaction between regime and civil society.

The variable *Conflict level* is a duplicate of the variable *Domestic9* in Arthur Banks National Time-Series Data Archive (2010). It is a weighted<sup>54</sup> index consisting of eight conflict indicators; Assassinations, General Strikes, Guerrilla Warfare, Government Crises, Political purges, Riots, Revolts, Anti-Government Demonstrations. Banks source is daily files of The New York Times.

Together, these contingent events indicate the state of interaction between government and popular forces, in terms of both radical and less radical type of actions, and thus capture the overall conflict level during the liberalization period.

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<sup>52</sup> More precisely the Wald test answers the question of whether excluding the variables from the model will “significantly reduce the fit of the model”? (UCLA 2011).

<sup>53</sup> A Wald test can in some cases also give an indication on which of two models are best, by comparing the test statistic; the higher the number, the better the model. However these numbers can get very high and in many cases comparison based on the test statistic makes little intuitive sense. Hence, in this thesis it will only be used as a test of the model against the null-model.

<sup>54</sup> The weighting is not straight forwards and is therefore saved for the interested in the Appendix along with the definitions of the various indicators.

The conflict index has extreme variation in its values, ranging from a minimum value of 0 and maximum value of 21250 (Mexico in 1995). This reflects the internal flow-off effect of these events, responding to conflict often produces more conflict. Isolating the effect of these events would therefore make less sense than to test the aggregate effect. Because of the extreme magnitude of high values relative to low values though, the functional form of the variable *Conflict level* is transformed to a logarithm to avoid model estimation disturbance. Consequently, high values of the variable are less influential than they otherwise would be. When logging a variable the interpretation of the effect changes. First, we manipulate the estimated hazard ratios so that we get the effect of a change of 1 percentage point in *Conflict level*. This is done by dividing the estimated hazard ratio by 100 and then exponentiating this number. Say we after manipulation get a number of 1.05, the new interpretation is then: *a one percentage point increase in Conflict level increases the hazard rate by 5 percentage points.*

Thus the overall *Conflict Level* accounts for the aggregate effect of contingent events along the way, which are not captured by the structural factors. In what direction should we expect increases conflict to push liberalization? According to Przeworski (1992), an increases conflict level pushes the regime to choose between democratization or reversal. However, it does not say which way the game tips. For democratization to happen, the masses have to enforce substantive pressure on the regime, in other words, it has to get hot. But it should not get too hot; if the conflict level gets so high as to distort social order, the hardliners are more likely to intervene and reverse the liberalization process. Therefore, we expect the conflict level to have a two-sided effect:

H3: *The higher the conflict level, the more likely that liberalization will end.*

H3.A: *The higher the conflict level, the higher the risk of democratization.*

H3.B: *The higher the conflict level, the higher the risk of reversal.*

The different events imbedded in the index are likely to point in different directions, the aggregate effect of increased conflict is only likely to make liberalization short lived. Institutional organization rather than contingent events are more likely to push liberalization in a consistent direction.

#### 4.3.4 Legislative assembly

Does a legislature exist? A dummy variable is created from “*Effectiveness of Legislature*” (*Legis03*) also from the Banks (2010) dataset. It differentiates on how effective the legislative assembly is (see Appendix for definition). However, in this thesis I am interested in the effect of legislature not only as a decision maker but also as a possible legitimizing institution for the incumbent liberalizing regime. Hence the dividing line is drawn between presence or non-presence of a legislative assembly. *Leg dummy* answers Yes (coding 1) or No (0). It differentiates between whether a legislature exists or not, independently of whether this legislature is effective or not. Thus it does not measure the formal powers of the legislature but rather the de facto effect of its presence.<sup>55</sup> The effect is hypothesized as follows:

H4: *Legislative assembly has an effect on the outcome of liberalization.*

H4.A: *Legislative assembly has an effect on democratization.*

H4.B: *Legislative assembly has an effect on reversal.*

#### 4.3.5 Party inclusion

Measures of oppositional strength in terms of autonomous organization can be hard to come by on a world-wide coverage (Gandhi 2008).<sup>56</sup> The organization of parties is the closest one can get. As already discussed in the theory chapter, multiple parties are not just a phenomenon reserved for democracies, but can also exist under autocracies (Diamond 2002, Gandhi 2008, Levitsky and Way 2002, Ottoway 2003, Shedler 2002,). It will be assumed that if there is more than one party, it indicates that the opposition is relatively strong compared to the regime. However, as the theoretical discussion about whether parties are a civil society or a regime phenomenon has shown, one should distinguish between “fronts” and true oppositional parties as they are expected to have quite different consequences for the outcome of liberalization.

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<sup>55</sup> The reader might wonder why the Legislative assembly variable is not lagged, while *Autocracy type* and *Party inclusion* (see below) is. The reason is the operationalization of the variable, which does not put the dividing line between effective (democratic) and ineffective (autocratic, window dressing assembly), but rather between presence or non-presence. Thus it does not create the same endogeneity problem because a democratization will not create the same “democratization change” in this variable.

<sup>56</sup> Gandhi (2008) applies “democracies in the world”, “previous changes in executive” and “inherited parties” to indicate oppositional strength. Obviously, these indicators have poor face validity.

The variable *Party dummy* is derived from Banks (2010) variable Party Legitimacy (*Legis06*) which separates between different levels of exclusion of parties. *Legis06* has coding as follows: (3) No parties excluded, (2) One or more minor or "extremist" parties excluded (1) Significant exclusion of parties (or groups), (0) No parties, or all but dominant party and satellites excluded. I have recoded the ordinal variable into a dummy grouping together values 3 with 2 and 1 with 0. This gives the following dummy variable values: (0) Significant exclusion of parties/groups or no parties exist or all but dominate party and satellites are excluded and (1) No parties excluded or one or more minor "extremist" parties excluded.

As with *Autocracy type* the *Party dummy* could have a type of endogeneity problem, because democracies always will be coded as 1, that is no parties or only extreme parties are excluded. Accordingly this variable is also lagged with one year.

I chose to draw the dividing line between significant exclusion and minor exclusion because this is the most pronounced dividing line between autocracy and liberalized, competitive, regimes.

H5: *Oppositional parties have an effect on the outcome of liberalization.*

H5.A: *Oppositional parties have an effect on democratization.*

H5.B: *Oppositional parties have an effect on reversal*

#### **4.3.6 Ethnic fractionalization**

The variable *Eth\_frac* describes how ethnically fractionalized a society is along linguistic and racial lines. The data is retrieved from Al Alesina, Devleeschauwer, Easterly, Kurlat & Wacziarg (2003a; 2003b). The variable measures the probability that "that two randomly selected people from a given country will not belong to the same ethno linguistic group". The variable thus has the range 0 to 1, where 1 reflects the case where every person in the society belongs to different ethnic groups. In other words the higher the number the more fractionalized the society. The variable is based on data from 1979-2001 but is time constant as Alesina et. al (2003a) assumes little variation in ethnic demography with time.

The variable combines racial and linguistic characteristics, producing a higher degree of fractionalization than would a merely racial index (Alesina et al 2003a; 2003b). Because of

the consistent theoretical expectations of the directional effect, the main hypothesis of *Eth\_frac* is two-tailed, while the cause-specific hypotheses are one-tailed:

H6: *Ethnic fractionalization has an effect on the outcome of liberalization.*

H6.A: *Ethnic fractionalization has a negative effect on democratization.*

H6.B: *Ethnic fractionalization has a positive effect on reversal.*

#### **4.4 Describing an event history data set**

The data set, or the risk set, consists of 115 cases of liberalization recorded on a yearly basis. They are the units or subjects of analysis. Liberalizations are thus recorded as *spells* which enter the sample from the first year of risk, which is the first year of liberalization, and stays in the risk set until an event occurrence of either democratization or reversal or until the last year of analysis time. Once a liberalization spell has ended with one of the two events, it will exit the risk set, if it does not end with either; it is right censored, and will stay in the data set until the final observation year. The analysis time runs from 1950-2006. The dependent variable looks like a three-way category based on event occurrence or non-occurrence, and is coded as 1) if democratization 2) if reversal and 0) if right-censored. The data set also includes independent variables, which are expected to influence the occurrence of either democratization or reversal. Some of which coding vary with time and some of which coding are constant. Because time varying variables are included, the data is recorded for each unit of liberalization at each observation point in time, and the dataset will take the form of a panel.

## **5.0 Analysis chapter**

The aim of this thesis is to explain why some liberalized regimes democratize while others do not. It poses the conditional question: given a history of liberalization, what is the chance that the process will lead to democracy or reverse? In order to answer that question in a precise and generalizable manner, data is collected for *all* cases defined as liberalization during the post war period. Because of an innovative measurement of liberalization based on observed regime changes by the Polity IV project, this thesis is able to compare cases of liberalizations occurring in various decades, across different regions and political systems, ending with democratization or reversal, or still in the process. The various consequences of liberalization will be explained through a methodological approach of event history analysis, as previously explained. More specifically, a Cox competing risk model is applied in order to explore the relationship between explanatory variables and the particular risk of democratization as opposed to that of reversal as an outcome of liberalization. The former chapters have explained the theoretical background for the hypotheses of interests. The object of the analysis is to test these hypotheses empirically.

The theoretically expected relationship is analyzed through empirical evaluation of the data and hypothesis testing. Firstly, the cases are presented according to region and the underlying passage of time retrieved before the model estimation. Operationally, two models will be estimated – one modeling cause specific hazards for democratization and one modeling cause specific hazards for reversal. The model specifications will be systematically tested and sensitivity checks performed as to ensure robust results. The empirical findings are discussed and compared to the theoretical expectations in the second part of this chapter, offering some points to the future.

### **5.1 Describing the cases**

During the analysis time from 1950 to 2006, the operationalization recoded a total of 115 spells of liberalization, 44 of them ending with democratization and 49 with reversal while 22 were still ongoing at the end of analysis time in 2006 and are recorded right-censored.

Some of these liberalizations occur within the same country. While most countries experience only one spell during the analysis time, some experience two, three or even up to four (Peru and Thailand). Because each of the liberalizations is considered to be unique histories they are

not treated as repeated events<sup>57</sup>; although they occur within the same country during the course of 56 years, it is not necessarily the same regime that liberalizes.

Even more, liberalizations occur within regions (see Table 1). Since some regions are more represented than others, this has been taken into account by clustering on regions and applying robust standard errors as already explained in the Methodology section. Clustering<sup>58</sup> on region reflect that this thesis understands each liberalization as unique event histories, but it is expected that “neighboring” or “snowballing” effects can work within regions, where an event of democratization or reversal in one part of the region may influence the occurrence of an event of democratization or reversal elsewhere within the same region. Furthermore, it is assumed that this intra-group effect is hard to specify, but that it can be adjusted for by applying robust standard errors. Table 1 (next page) shows that this was a reasonable call to make, as the variation in the cases is somewhat constrained by region.

In the case of experiencing histories of liberalization, all corners of the world are represented. On first, Africa is the region with most occurrences of liberalizations, in total 44 spells of liberalization along the years from 1950 to 2006, over twice as many as Latin-America on second with 21 spells. While both Eastern Europe and the Middle have 12 liberalization occurrences, South-East Asia has 11. East-Asia with 4 and the West with only 3 liberalization events are less prone for regime changes; whereas most regimes are already consolidated democracies in the West, East-Asia holds stable autocracies as well as democracies (China would be an example of the former, South-Korea the other). Regarding the outcome of the liberalizations, there is variation in most regions, except in the West where all liberalizations ended with democratization. Notably also is the Middle East, which experienced no democratizations as a consequence of liberalization, they either terminated with reversal or were still ongoing at the last observed time point of the analysis, namely in 2006. I expect these systematic variations to be explained by the independent variables applied in this thesis.

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<sup>57</sup> Modeling repeated events would be to consider liberalizations as happening repeatedly within the same country. However, although liberalizations within the same country are phenomena similar enough as to belong to the same “universe” of historical events, one process of liberalization will be qualitatively different from another process of liberalization, hence, they cannot be treated as the same. Furthermore, as a sensitivity check, a model with repeated events was run, showing no impact on the outcome whether it was the first, second, third or up to sixth event of liberalization within the same country.

<sup>58</sup> There are several ways of accounting for group effects besides clustering, among others; stratifying, fixed effects, random effects or a combination of these approaches. According to Cleves (2010:200), in the context of survival models, only experience together with model fitting can decide how to best account for group effects in the model. Since the theorizing aims at testing the effect of variables both within and between regions, fixed effect is not an option. Furthermore, it does not warrant different baselines and different variable effects across regions, so stratification and random effects are not applied. Intuitively also, clustering on region adjusts for the (unmeasurable) expected flow-off effects between liberalizations and provides a satisfactory solution.

Table 1: Liberalization and failure event by Region<sup>59</sup>

Region	Failure event type			Sum
	Democratization	Reversal	Right-censored	Liberalizations in Region
Eastern Europe	6	4	2	12
Latin America	12	8	1	21
Middle East	0	8	4	12
Sub-Sahara	14	17	13	44
The West	3	0	0	3
East Asia	3	1	0	4
South East Asia	3	7	1	11
South Asia	3	4	1	8
<b>Sum:</b> <b>Failure type</b>	44	49	22	115

Because of missing data on independent variables (*Growth*, *Eth\_frac* and *Party\_dummy*) ten cases of liberalization was lost from observation; three of them ending with democratization, five of them in reversal, two of them being right-censored, leaving the analysis with a total of 105 spells of liberalizations where 41 ends with democratization, 44 with reversal, the rest being right-censored (see Appendix Table A1 for details). Such observation losses due to missing data are always a caveat for the grounds of generalization, although it does not represent a systematic problem for the analysis. Now that the cases at hand are described, one can take a closer look at their journey through the passage of time by retrieving the baseline hazard.

## 5.2 Tidal trends of the baseline

To view the passage of time we turn to the baseline hazard function – the independent effect of time on the risk of failure. Recall that the Cox model makes no assumptions regarding the shape of the baseline hazard function (hereafter ‘baseline’), and so it is entirely retrieved from the data of the analysis (Golub 2008, Box-Steffenmeier and Jones 2004: 88). This flexibility could be seen as a great advantage (Golub 2008: 531) or as a potential problem, as do Royston and Parmar (2002). Since the estimated baseline here is adapted to the cases at hand,

<sup>59</sup> The regional understanding of this thesis is not strictly geographical but a politico-cultural one, following the categorization of Banks (see Codebook in Appendix). For example, it includes Australia and New Zealand as a part of the West, and North Africa as a part of the Middle East. For reasons of parsimony, the Pacific is included in South East Asia and the Caribbean considered a part of Latin America.

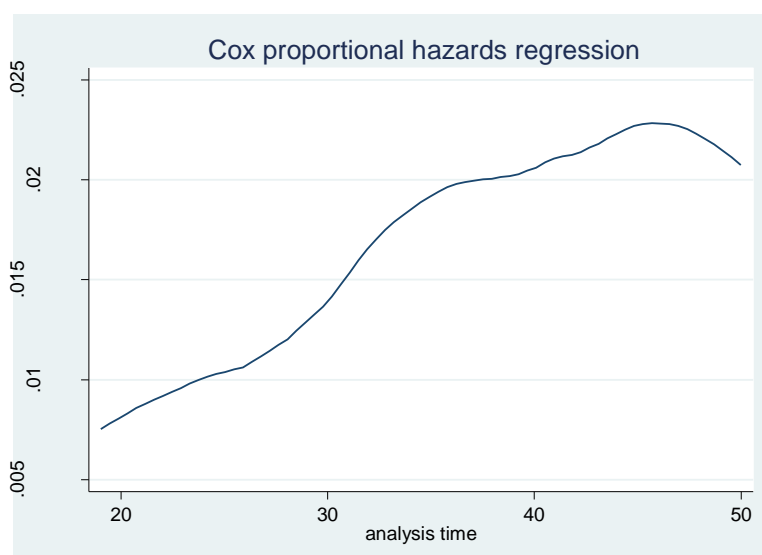


it is not necessarily useful for generalization beyond the scope of this individual analysis. However, the analysis is a global<sup>60</sup> one and need not be generalized beyond the cases in the analysis. Nor is it a purpose of this thesis to develop a theoretically “fixed” time path for all liberalizations. The passage of time is only considered relevant for the research question as far as it can reveal any historical developments that can tell part of the story why some autocracies democratize (at certain times) while others do not (at other times). In addition, it will reveal whether the liberalization measurement applied in this thesis will pass the empirical test of validation when compared to the historical “waves” of regime change as described by Huntington (1991) among others.

Since the baseline hazard function represents the passage of time, it constitutes the hazard rate when all the independent variables are set to zero (Golub 2008: 531 Box-Steffenmeier and Jones 2004: 65). All variables in my analysis have a natural zero, but it is worth mentioning that the null point for *Autocracy Type* is the reference category, namely Civilian autocracy.

For the democratization model STATA estimated the following baseline hazard rate below (Figure 1). It is the recorded failure times of democratizations during the analysis time from 1950 to 2006, hence the underlying democratization hazard for liberalizations under study when all variables are equal:

**Figure 1: Baseline hazard function, Democratization**

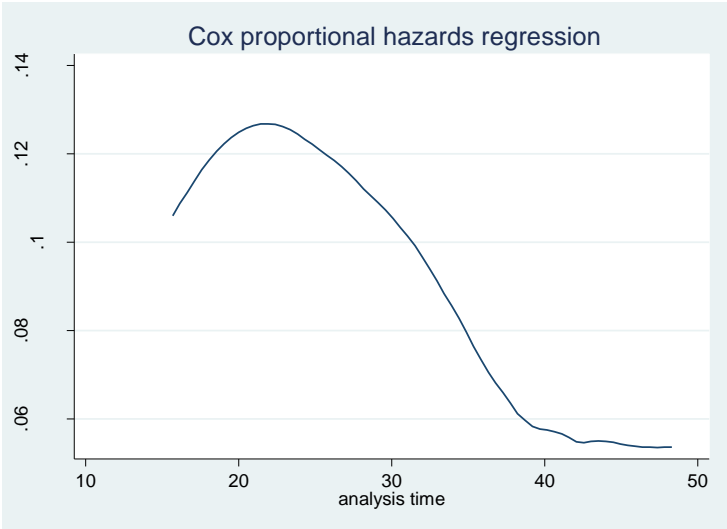


<sup>60</sup> That is ”global” in the sense that all liberalization according to my definition and operationalization of liberalization are included in the analysis, except eight lost cases due to missing data.

We see that from a fairly low starting point the democratization baseline is increasing up to time 46 then decreasing until the end of the analysis at time 57. In other words; the hazard rate of democratization is highest around 1996. This is consistent with the historical description of the Third wave. While the chances of a liberalization ending in democratization in the 60s and early 70s were rather small, at this point the Third wave had made its effect upon a large number of autocratic regimes, and can be considered at its peak (Huntington 1991). The risk of a given liberalization ending in democratization is at its highest in the mid 1990s, and then the hazard is decreasing as we get closer to the 2000s (time>46). At this point the baseline falls, meaning that the hazard of democratization falls. This only reflects the fact that a share of the liberalizations in the dataset are censored; that is they have not yet ended and consequently we do not know the outcome of those liberalizations.

Turning to the Reversal model, the baseline looks quite different (see Figure 2, next page). In contrast to the democratization baseline, starting out at a much higher hazard, the reversal baseline also reaches its peak much earlier, increasing up to time 22, that is 1972, and then steadily decreasing for the remainder of the time period. This then is yet another confirmation of Huntington’s description of democratization waves and reverse waves. This peak clearly reflects the autocratic trend – described by Huntington as the “second reverse wave” (1991: 19-21) – up to this point in time. Several attempted democratizations failed, and we might add; so did liberalizations. However, from here on the risk of reversal decreases rapidly and without ambivalence as more and more liberalizations ends in democratizations.

**Figure 2: Baseline hazard function, Reversal**



As the Third wave takes over from the Second reverse wave there are fewer and fewer attempted liberalizations failing and ending with reversal, which one sees reflected in the increase of the proportion of democracies in the world at this point in time. Up to that point in time, around 1990, the democratization waves and reverse waves suggested a two-step-forward, one-step-back pattern (Huntington 1991: 25). From where Huntington was sitting at his time of writing, one would expect a new reverse wave. The baseline show no sign of a Third reverse wave following such a prognosis. As with the democratization baseline, the reversal baseline flattens out during the nineties, but in contrast it stays at this level throughout the rest of the time span, meaning that the combined number of cases of democratization and censored<sup>61</sup> stay fairly constant from 1990 and onwards. The climate has certainly changed in the aftermath of the Cold War. The flat reversal slope implies that the pace of “two-steps-forward, one-step-back” is no longer a trend for liberalizations from the 1990s onwards. This is indeed consistent with more contemporary empirical analysis such as Brumberg’s “The Trap of Liberalized Autocracy” (2002) where liberalizations prove to be more persistent than theory would previously expect. Since this trend has lasted for almost two decades without a new reversal wave, at this point in time one sees no sign of the trend turning in the future. That however, only time will tell.

The consistency of the time pattern with the historical, qualitative “waves” described by Huntington (1991) is a good sign for the internal validity of the operationalization of liberalization, the democratization threshold and reversal threshold, as it has visibly captured the historical development of regime changes during the post war period. Now that we have explored the time development, we turn to investigating the relationship between the outcome of liberalization and explanatory variables seeking answers to why some liberalized autocracies democratize while others do not.

### **5.3 Model estimation**

Starting out, two models were estimated – one for democratization and one for reversal – which included all six independent variables (descriptive data is presented in Appendix.). Before interpreting the variable estimates one should make sure that they are reliable. In turn, the variable effects were checked for multicollinearity and specification tests were performed concerning the proportional hazard assumption and functional form of the variables.

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<sup>61</sup> Recall that democratizations and censored cases are pooled together in the Reversal model.

Firstly, one must search for high correlation between the independent variables, so called multicollinearity. Avoiding multicollinearity is important because the estimates of one variable effect rely on the assumption that all other variables are held constant; then the variables must not correlate too high with each other. That variables are collinear to a certain degree is nearly always the case in multivariate regression. However if the bivariate correlation between variables exceeds a level of 0.7 they are under so high influence of each other that the individual effects are impossible to isolate – we cannot trust that the standard errors are not a result of measurement errors (Skog 2004: 288, Pennings, Keman and Kleinnijenhuis 2006:162-163). To avoid this problem, highly correlated variables should not be included in the same model. The correlation matrix shows that multicollinearity is not a problem in the variable set meaning one can trust the variable effects are indeed independent from each other (correlation matrix is reported in the Appendix, Table A9).

Secondly, martingale residuals were estimated in STATA to assess whether any other functional forms than the linear would be more correct (Cleves 2010: 214-215). These residuals represent the difference between observed failures and failures predicted by the model.<sup>62</sup> By plotting residuals obtained by a null model (i.e. without variables included) against each variable one can determine whether some other functional form should be considered. The growth variable showed clear signs of a “U”-shape in the reversal, and possibly signs of an inverse “U” in the democratization model (see Appendix, Figures A3 and A4). Thus, the functional form needed to be specified further by including Growth squared ( $Growth^2$ ) in the models to account for this possible non-linearity.<sup>63</sup> The inclusion of  $Growth^2$  in addition to  $Growth$  requires a joint significance test of these variables and is thus, like the Autocracy variables, performed with a Wald test (Sribney 2010).

No other variables showed any sign of non-linear shapes, except the conflict variable *Conflict Level* was already logged,<sup>64</sup> and their plots are consequently not reported. As no systematic

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<sup>62</sup> For a more technical introduction on martingale residuals, confer Box-Steffensmeier and Jones (2004), see also Hosmer and Lemeshow (1999:224).

<sup>63</sup> The suspicion that Growth in fact is curve linear in the democratization model was confirmed by a linktest which tests the model specification (see below). The model *without* Growth squared included clearly failed the linktest, indicating that in fact there was some misspecification. At the same time, as we shall see in section 5.3.1 the model passes the test when  $Growth^2$  is included (see Appendix, Tables A5 and A6 for details)..

<sup>64</sup> Initially, conflict level consists of very high maximum values (as shown in the operationalization section). When the values on a variable vary immensely, they are in danger of disturbing the overall effects in the model. Therefore its functional form was specified with a natural logarithm, so that its maximum effects are less influential. The models estimated above contain the logged version of conflict level.

non-linear shapes were found comparing the two models, the initial functional forms are maintained as they are.

Furthermore, a *proportionality* test was performed as to detect whether any of the independent covariates fail the Cox models basic assumption of proportional hazards, i.e. that the effect does not vary with time. More specifically, the test performed was based on the Schoenfeld residuals, called *estat phtest* in the STATA software (Grambsch and Therneau 1994 in Cleves 2010:206-209). The individual residuals were tested for every single variable in both models, as recommended by Golub (2008) and Box-Steffensmeier and Zorn (2001). Test of the reversal model showed that no individual covariate had any indication of violating the assumption of proportional estimates in either model (test results are reported in Appendix). Globally, both models passed the proportionality test. However, in the democratization model the  $Growth^2$  variable failed the test. Thus, both  $Growth$  and  $Growth^2$  required a specification of time dependency and TVCs ( $Growth\_TVC$  and  $Growth^2\_TVC$ ) was included as in the democratization model, as advised by Golub (2008).<sup>65</sup> Hence, the two models differ in that  $Growth$  is specified to have a time dependent effect in the democratization model, while not in the reversal model.<sup>66</sup> This does not change the fact that the two models are comparable in that they contain the same variables, only their *effects* are allowed to vary in relation to different versions of the dependent variable.

Now that the set of variables are confirmed to be properly specified, one can continue interpreting the coefficient results. Finally, the analysis has the following two models as presented in the Table 2 (next page). The estimates in the tables are reported in hazard *ratios*, meaning the *change* that a one unit increase in the independent variable induces in the hazard rate. Interpreting the effect, the hazard ratios are converted to the percentage point change in the hazard rate.<sup>67</sup>

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<sup>65</sup> As Table A9 (Appendix) show, there are high correlations (0.92 and 0.93 respectively) between the  $Growth$  and  $TDC\ Growth$ , and  $Growth^2$  and  $TDC\ Growth^2$  variables. At first glance this might look like a problem of multicollinearity. However, it is *not*, because absence of multicollinearity is only relevant before executing the analysis. As Allison (2010:417) notes: "...multicollinearity is all about *linear* relations among the covariates, it is not necessary to evaluate it within the context of a survival analysis" (emphasis added), and Menard (2002: 76) thus concludes "...the functional form of the model [*i.e. squared terms and TDCs*] for the dependent variable is irrelevant to the estimation of collinearity" [*authors note*].

<sup>66</sup> It should be noted that *if* TVC-versions of the  $Growth$  variables are included in the Reversal model this severely weakens its performance according to the Wald test (see Appendix, Table A10). In addition a Wald test on the joint significance of the two TVC variables show that these are not significant, confirming that they should not be included (also see Table A10).

<sup>67</sup> See p.52 for detailed explanation of hazard rate and hazard ratios.

**Table 2: Effect of independent variables on risk of Democratization and Reversal, hazard ratios**

	<b>Democratization</b>	<b>Reversal</b>
Growth	1.109 (0.091)	0.965 (0.031)
Growth <sup>2</sup>	1.018* (0.009)	1.001 (0.001)
Military-civilian	3.637*** (0.931)	0.552 (0.258)
Military	4.185 (3.116)	0.170*** (0.073)
Conflict Level	1.061** (0.022)	1.274** (0.120)
Leg dummy	4.543* (3.094)	0.130*** (0.045)
Party dummy	2.199 (1.122)	1.159 (0.427)
Eth_frac	0.124*** (0.063)	1.195 (0.501)
Growth_TVC	0.998 (0.002)	-
Growth <sup>2</sup> _TVC	1.000* (0.000)	-
Number of country-years (N)	747	747
Number of failures	41	44
<u>Wald tests, Chi2, sign.level</u>		
<i>Autocracy type:</i>	27.94***	17.68***
<i>Growth variables</i>	13.99***	15.31***
Model	299.67***	13121.83***
Log Pseudolikelihood	-103.95869	-80.145345
Global Schoenfeld PH-test, chi2 (Prob>chi2)	2.16, (0.9504)	2.46, (0.9301)

Note: Effects are hazard ratios, Sign.level: \* p<0.05, \*\*p<0.01, \*\*\*p<0.001

Clustering on region; robust standard errors in parentheses

Efron approximation used for handling ties

Firstly, the results from the democratization model are interpreted and the hypotheses evaluated accordingly. Second, the same procedure goes for the reversal model before the findings are summed up, compared and discussed more thoroughly in light of theoretical expectations. But first, how does the explanatory variables relate to the hazard of democratization?

### 5.3.1 Democratization

The democratization model is based on 41 cases where liberalization leads to democratization. The Wald test reported above confirmed that the model as a whole is significant. Column number 2 in Table 2 reports the findings.

First, the model estimates a positive effect of *Growth* on democratization. The effect is however not straight forward, since we have specified the model with both a squared parameter and that it varies with time. Both the original variable (*Growth*) and the squared version ( $Growth^2$ ) are positive, so this means that the effect is *positive and increasing with higher growth rates* (the functional form is exponential). In other words: as growth rates reach higher levels the effect of one percentage point higher annual growth increases the hazard rate with more than one percentage point does at a lower levels. However, while the hazard ratio of  $Growth^2-TVC$  is estimated to 1 (i.e. the estimated effect on the hazard rate is zero),  $Growth\_TVC$  has a small negative effect, meaning that the exponential effect is countered by an opposite time effect. But, as the numbers clearly show, this effect is not strong enough to significantly alter the positive effect of the non-time varying hazard ratios, not even in the very long run. Thus, we conclude that the overall effect of growth is that it increases the hazard rate of democratization, and increasingly so with higher growth rates. The Wald test of the four variables together shows that the estimated effect(s) are significant at a 0.1 percent level; we reject the hypothesis that growth has no effect on the chances for democratization.<sup>68</sup> *Hypothesis 1A is strengthened.*

We recall that the categorical Regime variable consists of the dummies *Military Civilian*, *Military* and *Civilian*. As mentioned in the Data section *Civilian* is the reference category, meaning that only *Military Civilian* and *Military* is included in the model estimation and that

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<sup>68</sup> Note also that a joint Wald test on the two TVC Growth variables (that is; not including the non-TVC versions of Growth) is also significant at 5 percent level (test statistic 7.42), which is a confirmation that this specification was correct for the Democratization model.

the resulting hazard ratios are interpreted as compared to civilian autocracy. Recall also that the regime variables are lagged in order to avoid “simultaneity” or endogeneity. That is; if not lagged we would end up with regime type only reflecting how liberalization ended (democratization or reversal – democratizations would always be coded as civilian in the year), when in fact we want to examine if the regime in charge during the liberalization affects the resulting type of failure event. And it does. Model estimation shows that a *Military\_civilian* regime has more than three times the chance of ending the liberalization with democratization, compared to civilian regimes. *Military* autocracies also raise the risk of reaching democratization, and even more so than the mixed autocracy: the hazard rate for *Military* autocracy increases four times compared to the reference category civilian autocracy. This means that we can conclude that *Military* autocracies are most prone to democratization of the autocracy types. Can these results be trusted?

As already explained, t-tests are not relevant for testing the significance of the *Autocracy Type* variable(s). The Wald test takes its place. It shows that together the variables are *significant* at 0.1 percent level, meaning that we can reject the null-hypothesis that type of autocracy has no effect on the risk of democratization. This finding will be discussed further later on, but first I will interpret the remaining variables. *Hypothesis 2A is thus strengthened.*

Next is the variable *Conflict Level*. Since this variable has been logged, it gives little intuitive meaning to interpret its magnitude. However, as described in section 4.3.4 (p. 67) we can manipulate the hazard ratios so that we get the effect of a change of 1 percentage point in *Conflict Level*. After manipulation, we get a hazard ratio of 1.011; a one percentage point increase in *Conflict Level* increases the hazard rate by 1.1 percentage point. The higher the conflict level, the higher the risk of a liberalization ending with democratization. The effect is significant at 1 percent level according to a one-tailed test. The null hypothesis that it has no effect or negative effect is hence rejected. Accordingly, *hypothesis 3A is strengthened.*

The effect of *Leg dummy* – whether or not a legislative assembly is present in the regime – has an estimated strong positive effect on the hazard rate for democratization. Even though this variable does not make a difference between a “window dressing” (Gandhi 2008), non-effective legislative assembly and an effective one, there is a clear cut conclusion: a legislative assembly, in whatever form and with whatever function, positively affects the chances that the liberalization ends with democratization. In fact, according to this model it quadruples the chances compared to a regime without a legislative assembly. The effect is



significant at a 5 percent significance level, and thus we reject the null hypothesis. *Hypothesis 4A is strengthened.*

Also the *Party dummy* has a strong estimated positive effect. Having an inclusive regime with few restrictions on party organization doubles the hazard rate of democratization compared to exclusive regimes. This effect is however not significant. We cannot say with certainty that parties, like legislative assemblies, do affect the hazard of democratization. Instead we keep the null hypothesis, and *Hypothesis 5A is rejected.*

Lastly is the estimated effect of *Eth\_frac*, the index of ethnic fractionalization. It has a fairly strong negative effect on the risk of democratization, with a one unit increase leading to 88 percentage point lower hazard rate. However, what one unit consists of qualitatively is hard to say given that this is an index. The one-tailed test shows that the estimated effect is significant at 0.1 percent level, indicating that we can trust that the hypothesized effect is non-zero and negative. Thus the expectation that liberalization in heterogeneous societies runs a lower risk of democratization than in homogeneous societies is confirmed. *Hypothesis 6A is strengthened.* Table 3 sums up the findings for the Democratization model.

**Table 3: Summary of findings in the Democratization model; Hypothesis and effects.**

Variable	Hypothesis strengthened; Yes/No	Effect +/-
Growth	YES	+
Military	YES	+ +
Military-Civilian		+
Civilian		-
Conflict Level	YES	+
Legislative dummy	YES	+
Party dummy	NO	No sign.
Eth_frac	YES	-

### 5.3.2 Reversal

There are 44 cases of liberalization ending with reversal. As with the democratization model, a Wald test of the reversal model as a whole confirms that it is significant; it helps explain why almost half of the liberalizations end with reversal. As column 3 in Table 2 shows, four variables are significant – *Growth*, *Autocracy type*, *Leg dummy* and *Conflict Level*.

The model estimates a negative effect of the *Growth* (not squared) but a positive effect of *Growth*<sup>2</sup> (squared version). This implies a convex shaped effect; negative but depending on growth rate. As growth rates increases the hazard rate decreases. But the negative effect becomes *less* intense with *higher* levels of growth. More concretely the results state that at moderate levels of Growth the risk of reversal is decreasing as growth levels increase, but less so the higher the Growth level. At extreme high levels of Growth, at 30 percent to be exact, the effect turns, and increasing growth rates above this level is associated with increasing hazard of reversal.<sup>69</sup> Since growth rates above 30 percent are empirically rare, it is fairly realistic to say that generally growth has a negative influence on the risk of reversal. Like in the democratization model, the Wald test shows that the joint effect is significant at 0.1 percent level. We reject the null hypothesis that Growth has zero effect on the risk of reversal. *Hypothesis 1B is strengthened.*

Moving on to the effect of autocracy types, the reversal model partly confirms the picture established in the democratization model. Military involvement in the government during liberalization has a negative effect on the risk of ending with reversal. A pure *Military* autocracy decreases the risk of ending with reversal by 83 percentage points compared to civilian autocracy, and *mixed* regimes the same qualitative but smaller effect, reducing the risk of reversal by 45 percentage points. The Wald test confirms that the autocracy types matter *significantly*, rejecting the null hypothesis at a 0.1 percent level. *Hypothesis 2B is strengthened.*

The estimates of *Conflict Level* show a positive effect on reversal, just like it had a positive effect on democratization. The recalculated effect is that a one percentage point increase in the Conflict index increases the hazard rate with (exp[1.24/100]) 1.3 percentage points. The effect is only slightly stronger from that in the democratization model (1.01 percentage points), and is *significant* at 1 percent level according to a one-tailed test. Therefore it is

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<sup>69</sup> Turning point (min level) of the function  $ax+bx^2$  (where  $a$  is *Growth* and  $b$  is *Growth*<sup>2</sup>) is where the derivative of the function equals 0. It is calculated according to the following formula:  $-(a/2b)=-(\text{Growth}/2*\text{Growth}^2)$ . Here, it was calculated based on the *coefficients*, that is  $\ln(\text{Haz.ratio})$ .

tempting to interpret this as the more conflict the more unstable and risky is the liberalization and hence the chances of it tipping either way increases. Increased conflict between regime and civil society then positively affects the risk of reversal as it did for democratization. *Hypothesis 3B is strengthened.*

Whereas *Leg dummy* proved to have a positive effect in the democratization model, the effect in the model for reversal is the flip coin of this. Here, there is a negative effect: the risk of reversal *falls* if the regime allows a legislative assembly to be established. More precisely put, the hazard rate decreases by 87 percentage point if a Legislative assembly is present during the liberalization (as compared to not present). The effect is clearly significant; we can be 99.9 percent sure that rejecting the null hypothesis is correct. *Hypothesis 4B is strengthened.*

By contrast, this is not the case for *Party dummy* which is estimated to have a negative effect on reversal. While the hazard ratio indicates that no significant exclusion of political parties in fact *increases* the hazard rate with 16 percentage points, this effect is far from significant. So, as with democratization we cannot say that this (surprising) effect is trustworthy. *Hypothesis 5B is rejected.*

Lastly, and as a mirror of the effect estimated in the democratization model, *Eth\_frac* is estimated to have a positive effect on reversal. Intuitively, this makes sense, especially given that the theoretical expectations were met in the democratization model. This model estimates that more heterogeneous societies have a greater risk of ending the liberalization with reversal, with a one unit increase in the fractionalization index leading to a corresponding 20 percentage points increase in the hazard rate for reversal. The effect is however not significant, not even with a one-tailed test (as the hypothesis implied). *Hypothesis 6B is rejected.* Table 4 (next page) sums up the findings for the Reversal model.

**Table 4: Summary of findings in the Reversal model; Hypothesis and effects**

Variable	Hypothesis strengthened; Yes/No	Effect +/-
Growth	YES	-/+
Military	YES	- -
Military-Civilian		-
Civilian		+
Conflict Level	YES	+
Legislative dummy	YES	-
Party dummy	NO	No sign.
Eth_frac	NO	No sign.

From the numbers of significant results in both models they both seem to be explaining risk of democratization and reversal fairly well. However further model diagnostics is needed before one can assess the overall performance of the two models. Before discussing the theoretical implications of these findings, the overall robustness of the results and model fit will be evaluated below.

### 5.3.3 Robustness test and model fit

In order to evaluate the overall performance of the models several diagnosis tests were performed. As already mentioned the models maintain the proportional hazard assumption and show correct variable specification of functional form, with the exception of *Growth* in the democratization model. This was accounted for by including TVCs, which proved to be a correct treatment, considering that the *Growth* variable proved significant (Cleves 2010: 204-208).<sup>70</sup> Now remains checking the explanatory of the models, in terms of model fit and model specification. Four post-estimation diagnostics based on residuals where performed in accordance with Cleves (2010):

<sup>70</sup> A Wald test on the joint significance of the two TVC variables (and only these) showed that they were significant at 5 percent level (p value=0.02), with a test statistic of 7.42.

First, because a LR test is not available when operating with robust standard errors, the Wald test checks the overall significance of the model, that is, whether the variables included in the models significantly explain variation in outcome of liberalization. Both models were significant at levels over 99 percent. Comparing the test statistic of the two models, the reversal model performs better than the democratization model (see Table 2).

Second, we want to check that no single observation or group of observations has a disproportionately big influence on the results. This is done by comparing the model where all observations included with a model where one observation is excluded and see whether it affects the estimates. This is done one by one for all individual observations. Since this is a practical impossibility, we use the DFBETA scores as approximation. The results show some outliers on all the variables though none systematically across the variable set. Hence they do not have a dramatic influence on the results overall and are not submitted (therefore not reported). Anyhow, one should be cautious as to drop single observations on the background of the empirical data. Unless it dramatically alters the general impression, it is not advisable to “manipulate” the results (Orr, Sackett and Dubois 1991). Even outliers play a part in how the world works and should be taken into account.

Third, *the linktest* tests the model specification, i.e. whether the variables included in the model are correctly specified with correct functional form. The test is performed after model estimation, and the concrete hypotheses tested are whether the estimated coefficient for the predictor is significant and at the same time that the squared predictor is not significant. The results of the test are reported in Appendix Tables A5 and A8, confirming that both models pass the test, with the predictor significant and the squared predictor not significant. Hence one can conclude that the choice of functional form for all variables in both models are correct.<sup>71</sup> However linktest is weak in detecting omitted variables. For this purpose we must advice Cox Snell residuals.

Finally then, overall model fit was checked through the Cox Snell residuals. In short, the test plots the cumulative hazard of the Cox Snell residuals, and should form a 45 degrees line if the model fits well.<sup>72</sup> The two plots are reported in the Appendix (Figure A1 and A2).

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<sup>71</sup> As already mentioned in footnote 53, a linktest of the democratization model *without Growth*<sup>2</sup> failed (see Table A6).

<sup>72</sup> That is; Cox-Snell residuals should have a exponential distribution with hazard function equal to 1 (Cleeves 2010: 220)

Both models show a reasonably good fit, before reaching the right hand side of the panels. Here, they show a serious lack of fit. However since there are fewer and fewer cases to base the residuals on as more and more cases fail, this type of deviation is expected for all models (Cleves 2010: 222). At the same time we should note that Cox Snell residuals are not infallible: “Deviations from the assumption that the residuals are distributed as unit exponential could simply be a function of uncertainty in the data” (Box-Steffensmeier and Jones 2004:125).

Comparing the two plots, the democratization model seems to be better fitting the data than the reversal model, which contradicts the conclusion based on comparison of the Wald statistic of the two models. The Cox Snell residuals are sensitive to incorrect functional form of the variables, but other diagnostics tests showed no signs of this. In sum, while the theorizing on explanatory variables might be more directly linked to democratization than reversal, the two models show that they explain both outcomes well. It thus justifies the choice to explore the effects of the same variables in relation to democratizations as well as reversals.

Overall, the model diagnostics show good model fit and robust estimates, leaving the analysis with noteworthy results that should be taken seriously. Having reviewed the sensitivity and fitness of the model, one can conclude that results are robust according to the assumptions applied for a Cox competing risk model. With this in mind, I will continue to discuss the findings overall in light of the theoretical expectations formulated in the hypotheses. Furthermore, the findings should be considered to have theoretical implications beyond this analysis. The following discussion will elaborate further on this point.

## **5.4 Discussion**

All variables except parties significantly influence the outcome of liberalization either in the direction of democratization or reversal. Over all, the analysis results leaves us with these significant findings; (1) a positive effect of growth on democratization (and increasingly so with higher levels of growth) and a negative effect of growth on reversal (but decreasingly so with higher levels of growth); (2) Military and Military-civilian autocracy has a positive effect on democratization and a negative effect on reversal compared to civilian autocracy, with the former having the strongest effect; (3) a positive effect of conflict level on both democratization and reversal, (4) a strong positive effect of presence of legislative assembly

on democratization, and a negative effect on the risk of reversal; (5) Ethnic fractionalization has a negative effect on the risk of democratization. The findings have some interesting theoretical implications. Overall, both structural variables performed well, and two out of three institutional variables is valuable when it comes to explaining the endpoint of liberalization. Lastly, also the contingent conflict variable gives some interesting implications for liberalization outcomes. Future researchers should be advised that a combined approach proves fruitful in the study of liberalization and its outcomes.

The regimes economic performance, operationalized as economic growth, proves to be a significant factor structuring the liberalization game. It has a rather intricate interpretation, especially in the democratization model where the effect also depends on time. However the qualitative effect is roughly as follows: if a liberalizing regime increases economic growth rate in one year, this lessens the risk of reversal and increases the risk of democratization. The higher the growth rate, the higher becomes the chance that liberalization ends with democratization, and not reversal. The effect on democratization is exponential, meaning that higher growth rates increases the hazard rate relatively more than lower growth rates. Although time works in the opposite direction, it is so small that the effect is qualitatively the same, and hence the time effect is not further elaborated. The effect on reversal has a convex shape; negative (except for extreme growth rates), but the negative change in hazard rate becomes less with higher growth rates.

In sum, these results support the argument stated by Mainwaring (1992) that strong economic performance is conducive to democratization and works against autocratic reversal. Additionally, it is partly supportive of Huntington's claim (1991) in that *rapid* economic growth is conducive to democratization: actually the higher the growth rate, the larger the positive effect on democratization. However, at *extreme* levels of growth, the risk of reversal also increases.

Turning the effect on its head, a *negative economic trend* indicates no support for the claims that economic performance crisis increases the chances for democratization by delegitimizing the liberalizing regime and stirring popular unrest. This finding stands in stark contrast to the assumptions made by O'Donnell, Schmitter and Whitehead (1986) as well as the expectations formulated by Gill (2000) and findings of Acemoglu and Robinson (2001). It also contradicts the expectation that performance crisis will trigger transition in any direction (Bermeo 1990; Epstein 1984; Diamond and Linz 1989; Richards 1986; Markoff and Baretta 1990; Haggard

and Kaufman 1995). Rather, performance crisis will turn liberalization towards autocracy by reversing while reducing the chances for democratization. Furthermore it contradicts the findings by Gasiorowski (1995) that economic recessions did not significantly affect democratizations in Third World countries from 1950 to 1989. With a larger sample including all corners of the world, I find that it did during liberalization processes, but in an obstructive way. The counter-logic offered by Share and Mainwaring (1986 in Bratton and van de Walle 1997:36) seems to hold with some moderation: An economic crisis does create problems for the transition to democracy, and it will also contribute to the erosion of liberalization towards authoritarianism. In short one can conclude that all good things go together, and all bad things go together: economic growth supports democratization trends while economic crisis increases the risk of reversing liberalization towards autocracy.

The consequences of a higher conflict level in the interaction between regime and civil society are somewhat puzzling because the conflict variable has a significant, positive effect on both democratization and reversal. This may lead to a critique of the operationalization because I cannot exclude the possibility that differentiating between violent and non-violent actions by the regime and civil society would point in more consistent directions. However, since the theorizing involves multiplier effects I believe we come closer to grasping real world evolution of conflict by examining the consequences of the aggregate conflict level that such actions produce. Moreover, that conflict has the same directional effect on democratization and reversal is in accordance with how Przeworski (1992) describes the consequences of increased conflict – that it will eventually force the Liberalizers to *end* the liberalization project and choose between democratization or renewed repression. Although most scenarios described by Przeworski (1992) end with repression, this analysis shows that in fact more conflict does increase the chances for democratization, as Mainwaring (1992) suggests. The recalculation suggests a marginally stronger effect on reversal than democratization, implying that it takes shorter time to reverse the process than it does reaching democracy as implied by O'Donnell and Schmitter (1986). By taking their struggle “to the streets”, the opposition risk provoking the hardliners to restore order and control through repression, however, the risk of repression should be weighed against the fact that an increased conflict level at the same time is conducive to democratization. The advice to the regime opposition is thus ambivalent: rebel, revolt, rally, strike, and fight, do not yield – there may be all to lose, but there is also all to gain. Overall, the dubious sum effects of contingent events do not seem to be sufficient an explanation for liberalization outcomes; driving up the



conflict level might tip liberalization towards democratization; it might as well tip the game towards the adverse. Making a more complete calculation of their strategy, the opposition should take the political institutions of the regime into account, starting with the type of political elite in charge of the liberalization.

Although this analysis operates with a more parsimonious regime categorization based on a larger sample, the results of this analysis confirms the same systematic relationship between type of autocracy and democratization as found by Gasiorowski (1995), Geddes (1999;2003, Brownlee (2004) and Teorell (2010). This suggests that the effects of military-civilian power relations are robust and not sensitive to the sample or regime definitions. But because these previous analyses have put executive types and other institutional or personalistic regime characteristics in the same box, while my operationalization is based exclusively on the level of executives, I can be more certain that the pattern is indeed a result of military-civilian characteristics and not some other institutional attribute of the regime. Furthermore, the relationship between autocracy type and democratization has not been tested conditional on the liberalization process hence my finding comes closer to explaining why there exists such a pattern. The findings here regarding regime effects on democratization and reversal are a result of this frame: Given liberalization, type of autocracy governing the interaction between regime elites and opposition during the process is decisive for its outcome. The risk of liberalization leading to democratization is highest under a purely military rule. Under mixed regime of military-civilian power relations, the chances for democracy are higher than for civilian autocracies, although lesser compared to direct military rule. The results shed clarity on the theoretical expectations towards type of regime elites in contrast to the somewhat contradictive arguments found in the literature. When military and civilian elites are unified in the political regime, following liberalization is a split between them, and this type of disunity makes it easier for the military to reassume its institutional role while sacrificing the civilian puppets fronting the regime. When a military-civilian regime decides to liberalize, it signifies that the military prefers to assume a professional role rather than continue political governance. Furthermore, facing a politicized military the civilian leaders are not in control of the arms and cannot repress in order to ensure their own survival. Under a purely military autocracy one can expect that the risk of reversal will be even less, as the military elite driving the liberalization is the same as those controlling the army. When a military regime decides to liberalize, one can expect their motivation to leave office is genuine, or else they would not have chosen to liberalize in the first place. The motive of civilian autocrats however is rather

one of ensuring regime survival, willing to reverse the process if it does not prove successful. In that case, one assumes that the civilian autocrats are in control of the regime resources, including the armed forces. A second interpretation is that the civilian leaders are willing to democratize but that they are not the ones controlling the guns. Then there is a risk that hardliners within the military will intervene and reverse the process if they feel threatened by opposition forces. Which interpretation is the most plausible we do not know, it could be both, but this we cannot tell for sure given the information from the data. Nevertheless, the outcome is generally the same: when military autocrats are in the lead of liberalization, they tend to democratize more systematically and reverse less than civilians; when civilian autocrats liberalize, it involves less a democratization hazard but more of a reversal hazard.

However, the results may judge the civilian autocrats too hard. Civilian autocracies are not as rare a phenomenon as military and military-civilian regimes in the world and consequently, in this sample. Of a total of 124 cases of liberalization spells, 83 of them were civilian during the first year as compared to 28 military-civilian and 13 military initiated liberalizations. Although civilians tend to liberalize more often, given there are different types of civilians, the motives are likely to be varying. It might even be that in absolute numbers, there are more civilian autocracies that democratize than military or mixed ones. That, the analysis does not capture. It only says that, *given preceding liberalization*, military-led and military-civilian-led ones are more likely to democratize and less likely to reverse the liberalization than civilian-led ones. Thus the conclusion drawn on the impact of autocratic elites on democratization is conditional on its history of liberalization.

On account of nominal democratic institutions, the presence of a legislative assembly during the liberalization has a negative effect on reversal and a positive effect on democratization. This finding should have implications for former theorizing about the functions of institutions under autocracy. Gandhi (2008) bases her work on the presumption that legislative arrangements will promote the survival of dictatorships (what I would call autocracies). It should be noted that in her event history analysis she does not find a statistically significant relationship between legislature and dictator's tenure in office. Lacking empirical support none the less, her interpretation maintains the assumption that the degree of institutionalization is an appropriate response to the relative need for cooperation and hence will not advantage or disadvantage the survival of neither dictatorships with nor without legislatures (Gandhi 2008:178). My findings do not say anything about the survival of incumbents, but on a higher level of abstraction, it does however suggest that such

institutionalization do in fact have consequences for the survival of a liberalized *regime*. Since a legislature lessens the hazard for reversal, the isolated interpretation would have been that the legislature is initially an instrument of liberalization, and thus a support of the theoretical assumption following Gandhi (2008), namely that nominal democratic institutions under autocracy assure its survival. However, since the effect of legislative assembly on democratization was strongly positive and significant, together it indicates that a legislative assembly is a driving force in pushing liberalization towards democratization and at the same time acting as a bulwark against autocratic reversal. Thus this findings support the assumption by Gandhi and Przeworski (2007) and Gandhi (2008) that institutions such as legislatures are instruments of cooptation; only if cooptation is a “two-way street” (Valenzuela 1992:87) it shows where the road leads: it helps the liberalized regime to survive the hardliners but it helps the opposition in promoting democracy. In sum then, and in contrast to the theorizing of Gandhi (2008) and Przeworski (2007), one should expect the presence of legislative assembly during liberalization to offer good prospects for democratic transition.

Lessening restrictions on party organization as a part of political liberalization, even with a causal lag, do not significantly influence democratization or reversal. The finding regarding party inclusion is consistent with the findings of Lai and Hoover (2004) while contradicting the findings of Teorell (2010) that multiple parties in the regime will be conducive to democratization. Naturally, free party competition in elections will be a part of a democratization process. But to grasp the true impact of parties on the outcome of liberalization one should separate the effect of party inclusion and competition, as well as the process of liberalization from that of democratization.

Although the analysis found no support for the claim that a fractionalized society is at greater risk of reversing a liberalization process, it does find support for cultural structures to have a negative impact on the chances of democracy. To liberalize under the conditional constraints of a culturally heterogeneous society involves a lesser risk of democratization than under culturally homogeneous societies. Thus the underlying group structure of ethnicity and language does play a constraining role on the chances of democracy, supporting the “old school” (Dahl 1971; Horowitz 1985; Rabushka and Sheples 1972; Rokkan and Lipset 1967; Lijphart 1977; Alesina and colleagues 2002; 2004) while leaving renewed scientism towards the (negative) impact of ethnicity unjustified (see Beissinger 2008, Fish and Brookes 2004, Teorell 2010). The mechanisms at work may not be a result of demography per se, but of political choice as many have argued. Still, the Alesina data of ethno-linguistic structures is

the best indicator available (Fish and Brookes 2004). Together with a process-oriented approach I have done my best to capture the assumed mechanism that latent structures will be mobilized and exploited in the wake of liberalization (Beissinger 2008; Bowen 1996; Mosseau 2001; Rabushka and Sheples 1972, Snyder 2000). The finding that ethno-linguistic fractionalization does in fact *reduce* the chances of liberalization leading to democratization should not lead us to draw deterministic conclusions about democracy being a culture-specific phenomenon possible only for some cultures but not others. The analysis gives no information about the qualitative nature of culture; rather, the source of constraints lies in the cultural *composition* of society, where cultural cleavages make divide and rule easier for the regime and harder for the opposition to unite in a unified, pro-democratic front.

### **5.5 The explanatory power of structural contingency**

On the level of explanation, the analysis contributes to the ongoing debate about the explanatory power of contingent versus structural factors. According to these findings, O'Donnell's (1986) claim that periods of uncertainty demand contingent explanations rather than structural ones must be modified. Surely, the contingent variable of this analysis, the conflict level produced by contingent events along the liberalization process, explains when liberalization will end. But its implications are ambivalent. It is not sufficient in explaining *why* the liberalization would tip in either direction. This could suggest that scholars like Bratton and van de Walle (1997) and Gill (2000) are right in their claim that a mere actor approach would come short of explaining the endpoint of uncertainty. The institutional variables – type of autocracy, legislative assembly – do not generate the same ambivalence. Whereas military and military-civilian regimes will move liberalization towards democracy and away from reversal, legislative assembly will move liberalization away from reversal. Economic growth is found to mediate the liberalization strategies, furthermore the interaction between is structured by cultural cleavages, where ethnic and linguistic heterogeneity moves liberalization away from democracy. Structures in terms of political institutions and cultural groupings do condition conflict and thereby influence its path. The findings accumulated here should encourage future researchers to be less caught up in methodological boxes and rather build analytical bridges between actors as makers and objects of history, and structures as a product of as well as constraints on politics – the combined approach of this thesis represents an analytical improvement in this respect.

## 6.0 Conclusion

News of sudden change in face of political events of liberalization are not uncommon, and have once again drawn the attention of the whole world, this time in the Middle East (2011). What everyone wants to know is what to expect next. Searching the literature for answers, I found a striking lack of global comparative analysis of liberalizations which has resulted in democratization as oppose to those that reversed. Therefore the object of this thesis has been contributing to solving a part of the puzzle *why* some liberalized autocracies democratize while others do not. Operationally, I have asked the conditional question: when a regime liberalizes, what *affects* the risk of the process ending with either democratization or authoritarian reversal? What distinguishes this question from earlier democratization studies is that it is treated as a potential consequence of liberalization dependent on the structural, institutional and contingent “conditions” of liberalization. Finding answers requires systematic comparison of such conditions, leaving the final outcome open. Thus this thesis aims at contributing in explaining what consequences are likely to expect from real world political liberalization.

### 6.1 An original approach

Comparing liberalization cases across various times, conditions and outcomes required a concept with global reach, and well-defined boundaries. This thesis applied Dahl’s participation and contestation dimensions as a background concept for political regimes. The systematic concept drawn from the competing liberalization definitions is that liberalization is the process by which a regime moves towards greater contestation or participation without the installation of democratically elected government. Liberalization as more competition or participation without democratization is a universal concept with a clear cut boundary, applicable in the study of relationship between liberalization and democratization for other projects beyond this particular analysis. Due to precise criteria the concept can be applied to measure liberalization, which is a necessity for all projects wanting to investigate the consequences of liberalization world-wide.

Operationally, liberalization processes were traced by observing movements along the Polity IV scale, allowing recordings of liberalization processes which are multilayered with various magnitudes, lengths and effects. This operationalization has proven to hold empirical value as it reflects the historical trends of regime change along the post war period as described by

other sources, namely Huntington's (1991) waves and the modern trap of liberalization described by Brumberg (2002). The operationalization of liberalization applied in this thesis might be done differently elsewhere, but it proves O'Donnell and Schmitter (1986) wrong in their assessment that liberalizations vary in their particular shape to such a degree that it is not possible to measure them according to common scale based on defining criteria.

This thesis chose a quantitative approach in order to maximize causal leverage. Event history analysis was chosen for its process tracing and longitudinal qualities, capturing timing and change. More specifically, a Cox competing risk model allowed us to investigate the relationship between independent variables and particular risks of democratization and authoritarian reversal without a predefined time development.

This process-oriented approach was applied to test the structural contingency perspective, bridging competing explanations for why some liberalizations lead to democratization while others end in autocratic reversal. The independent variables reflect conditions of the liberalization process, expected to structure the strategies of political choice of actors, pushing liberalization towards democracy or back to authoritarianism. The findings are as follows.

## **6.2 Findings and implications**

This approach enabled a global comparative analysis of 105 cases of liberalization occurring from 1950-2006. The analysis showed that the outcome of liberalization processes is indeed variable: 44 liberalizations ended with democratization and 41 with reversal, while 20 were still ongoing at the end of analysis time. Because the thesis sets out to test the structural contingency approach, the same set of independent variables were included in both models, only the dependent variable varies between democratization and reversal as an outcome of liberalization. In contrast to previous research, these variables have not been tested in relation to liberalization or competing outcomes of this process. The expectations so far has been unclear regarding what makes liberalization likely to end with democratization as oppose to reversal. Testing the hypotheses have contributed to more certain knowledge about which direction one can expect liberalization to go given the following conditions;

*on a structural level*, regime performance in terms of economic *Growth* has a significant and consistent influence on the outcome of liberalization, but its effects depends on the level of growth. While *Growth* during liberalization *has a positive effect on the risk of*

*democratization*, and increasingly so with higher growth rates, *it has a negative effect on the risk of reversal*, but as growth rates increases the effect gets smaller. Also, the effect of *ethnic fractionalization (Eth\_frac)*, given liberalization, is *negative on the risk of democratization*, while positive, but not significant for reversal.

On an *institutional* level, purely *Military* autocracies are *more* likely to *democratize* than are both *Military-Civilian* or *Civilian* autocracies. Purely *Military* autocracies are also *less* likely to *reverse* the liberalization process than the other autocracy types. Comparing *Military-Civilian* and *Civilian* autocracies, the former is most prone to democratizations and least prone to autocratic reversal. In sum, the results imply that the more the military involvement in executive powers the greater the chance of a liberalization process ending in democratization. Conversely, civilian leaders are, given that liberalization is already set in motion, most prone to reverse it. The presence of a Legislative assembly (*Leg dummy*) has a positive effect on democratization, while a *negative* effect on reversal. The inclusion of oppositional parties (*Party dummy*) in the regime however does not have any significant effect, either on democratization or reversal.

As a proxy of *contingent* events, an increased *Conflict level* in the interactions between government and civil society increases the chances that liberalization will end. Interestingly, and in accordance with expectations, for *Conflict level* the estimated direction of the effect pointed in the same direction in both models. This variable had a positive effect on the hazards of *both* democratization and reversal.

These findings allow me to answer the research question: In general, democratization is more likely and reversal less likely to be the outcome when liberalization is led by a military regime, when a legislative assembly is present, when the regime is able to perform economically. Given liberalization, ethnic and linguistic divided societies reduce the chances for democratization. Somewhat surprisingly, political parties are not a significant driving force for democratization during liberalization as many researchers suggest.

The performance of the models suggests that the combined approach of the structural contingency framework is fruitful in explaining democratization and reversal as possible outcomes of liberalization. Both models proved to be robust in face of specification tests, and all explanatory variables except *Parties* have significant effects on either risks of democratization or authoritarian reversal. That does not exclude the possibility that there might be other relevant variables that could be applied studying liberalization outcomes. Also,

some of the liberalized systems seem more persistent than others. Due to choice of model, this analysis alone could not explain that part of the puzzle. Therefore I would suggest further research is required in part of liberalization survival.

#### **6.4 Suggestions for future research**

Some of the liberalization cases last for a significant period of time. These may be understood as cases of consolidated liberalization. Since the question of survival cannot be directly interpreted from the findings on cause specific hazards of this analysis, it is up to future research to put these types of liberalized regimes under closer scrutiny. Thus this thesis raises a new puzzle regarding survival of liberalized regime which should be fruitful for future research.

It is tempting to at least hypothesise about the link between civilian autocracies and stable, liberalized regimes. It might be that civilian autocracy is better able to sustain itself under liberalization, and therefore does not democratize or reverse the process. A military regime cannot stay liberalized as easily, they cannot participate in rigged elections; they cannot co-opt the opposition as easily through the adoption of civilian institutions like legislative assembly. Political institutions may play a part in explaining why civilian led liberalizations run a lower risk of democratization than military-led liberalizations. Civilian autocrats more often than military influenced regime, adopt political institutions like legislative assembly and parties (Gandhi, 2008). In this analysis, legislative assembly seems to promote democracy and prevent reversal, while including more parties does not have a significant effect on the outcome of liberalization. In a case of thought where both civilian autocracy and legislative assembly are present and party organized opposition absent, the liberalization process might be a sustainable equilibrium. Contrary to the claims by Huntington (1991) and others, the half-way house does stand, sometimes. Whether this is the relationship between political institutions and liberalization persistence, only further investigation can answer. Thus the analysis bears fruits for new hypothesis which can be tested in future research.

If I was to suggest a methodological approach to investigate these hypotheses further, I would opt for the semi parametric competing risk model by Fine and Gray (1999). This type of event history analysis involves the same benefits as the Cox model, only it allows examination of the relationship between competing risks and liberalization survival. Also it is fit to trace multiple transitions and reversals during a continuous spell, not just one transition during a



single spell. Thus one could treat the question of survival and death of liberalization, as well as emergence and consolidation of democracy in the very same model. The procedure would be more demanding, raising the complexity of the interpretation as would its level of sophistication, its potential innovations even more promising. Illuminating how these processes are related to one another would contribute to solve the major puzzle why some regimes become and remain liberalized while others become and remain democratic.

A prerequisite for executing such global analyses of regime changes is quantitative measurement of short- and long term regime changes. The analytical tools are available, only the measurement procedure requires more of an effort. The suggestive approach of this thesis can only be further evaluated by comparing indexes and their qualitative performance in measuring events of political liberalization. Hopefully, my experiment has shown that measuring liberalization quantitatively is possible, and will encourage students of comparative politics to continue to develop operational measures that can be applied in process-oriented research.

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## Appendix

### Spells of liberalization;

Country, enter and exit, duration and failure status

Table A 1: List of spells of Liberalization

Country	Entry (First Year in Spell)	Exit (Year of failure)	Age (Years in spell)	LSTATUS (Failure type)
Afghanistan	1964	1978	15	2
Albania	1990	1996	7	2
Albania	1997	2002	6	1
Algeria	1989	1992	4	2
Algeria	1995	2006	12	0
Angola	1991	1992	2	2
Argentina	1955	1966	12	2
Armenia	1998	2006	9	0
<b>Azerbaijan</b>	<b>1992</b>	<b>1993</b>	<b>2</b>	<b>2</b>
Bahrain	1973	1975	3	2
Bangladesh	1978	1982	5	2
Belarus	1995	1996	2	2
Benin	1970	1972	3	2
Benin	1990	1991	2	1
Bhutan	2005	2006	2	0
Bolivia	1978	1980	3	2
Brazil	1974	1985	12	1
Burkina Faso	1970	1980	11	2
Burkina Faso	2001	2006	6	0
Burundi	1992	1993	2	2
Burundi	1998	2005	8	1
Cambodia	1971	1975	5	2
Cambodia	1998	2006	9	0
Cameroon	1992	2006	15	0
Central African	1993	2003	11	2
Chad	1978	1979	2	2
Chad	1992	2006	15	0
Chile	1955	1964	10	1
Chile	1988	1989	2	1
Comoros	1990	1994	5	2
Comoros	1995	1999	5	2
Comoros	2002	2004	3	1
Congo	1991	1997	7	2
Congo, Democratic	2005	2006	2	0
Cote d'Ivoire	1999	2002	4	2
Croatia	1999	2000	2	1

Djibouti	1999	2006	8	0
Dominican Republic	1961	1962	2	1
Ecuador	1968	1970	3	2
Egypt	2005	2006	2	0
El Salvador	1964	1972	9	2
El Salvador	1980	1984	5	1
Fiji	1990	1999	10	1
Gabon	1990	2006	17	0
Ghana	1969	1972	4	2
Ghana	1991	2001	11	1
Greece	1974	1975	2	1
Guatemala	1966	1970	5	2
Guatemala	1985	1996	12	1
Guinea	1995	2006	12	0
Guinea-Bissau	1994	1998	5	2
Guinea-Bissau	1999	2003	5	2
Haiti	<b>2005</b>	<b>2004</b>	2	0
Honduras	1981	1982	2	1
Hungary	1988	1990	3	1
Iran	1997	2004	8	2
Jordan	1951	1957	7	2
Jordan	1989	2006	18	0
Kenya	1997	2002	6	1
Korea, South	1963	1972	10	2
Korea, South	1981	1988	8	1
Kyrgyzstan	2005	2006	2	0
<i>Laos</i>	<i>1956</i>	<i>1957</i>	<i>2</i>	<i>1</i>
Lebanon	1970	1975	6	2
Lesotho	2000	2001	2	1
Madagascar	1991	1992	2	1
Malaysia	1971	1995	25	2
Mali	1991	1992	2	1
<i>Mauritania</i>	<i>2006</i>	<i>2006</i>	<i>1</i>	<i>1</i>
Mexico	1977	1997	21	1
Mongolia	1990	1992	3	1
<i>Nepal</i>	<i>1957</i>	<i>1960</i>	<i>4</i>	<i>2</i>
Nepal	1981	1999	19	1
Nicaragua	1984	1991	7	1
Niger	1991	1992	2	1

Niger	1999	2004	6	1
Nigeria	1978	1979	2	1
Nigeria	1998	2006	9	0
<b>Pakistan</b>	<b>1962</b>	<b>1970</b>	<b>9</b>	<b>2</b>
<b>Pakistan</b>	<b>1972</b>	<b>1973</b>	<b>2</b>	<b>1</b>
Pakistan	1985	1988	4	1
Panama	1955	1968	14	2
Paraguay	1989	1992	4	1
Peru	1950	1961	12	2
Peru	1962	1968	7	2
Peru	1978	1980	3	1
Peru	1993	2001	9	1
Philippines	1950	1969	20	2
Philippines	1986	1987	2	1
Poland	1989	1991	3	1
Portugal	1974	1976	3	1
Romania	1989	1996	8	1
Senegal	1978	2000	23	1
Sierra Leone	1968	1971	4	2
Sierra Leone	1996	1997	2	2
Sierra Leone	2001	2006	6	0
Spain	1975	1978	4	1
<b>Sudan</b>	<b>1964</b>	<b>1965</b>	<b>2</b>	<b>1</b>
Sudan	1985	1986	2	1
<b>Syria</b>	<b>1950</b>	<b>1951</b>	<b>2</b>	<b>2</b>
Taiwan	1987	1992	6	1
Tajikistan	1998	2003	6	2
Tanzania	1995	2006	12	0
Thailand	1955	1958	4	2
Thailand	1968	1971	4	2
Thailand	1973	1975	3	2
Thailand	1976	1991	16	2
Togo	1992	2005	14	2
Tunisia	1987	2002	16	2
USSR/Russia	1989	2000	12	1
Uganda	1993	2006	14	0
<b>Yemen</b>	<b>1993</b>	<b>2006</b>	<b>14</b>	<b>0</b>
<b>Yemen, North</b>	<b>1962</b>	<b>1966</b>	<b>5</b>	<b>2</b>
Zambia	2001	2006	6	0
Zimbabwe	1999	2001	3	2

Notes: see next page for notes.

**Note: LSTAUS: 1=Democratization, 2=Reversal, 0=Censored**

**Countries in *Italic Bold* are cases lost because of missing data on failure time (9).**

**Total number of spells in the analysis (*total spells, incl. missed*): 105 (115)**

**Spells ending in Democratization in analysis (*total*): 41 (44)**

**Spells ending in Reversal in analysis (*total*): 44 (49)**

**Spells censored in the analysis (*total*): 20 (22)**

A country that experience a split due to a secession of a smaller part of the country is coded as the same country after secession, while the breakaway republic is treated as a new country which needs to fulfill the threshold for being counted as a liberalization on its own. For instance USSR and Russia is treated as the same country before and after 1990, and the liberalizing measures in the USSR during Perestroika is hence treated as the start point of a liberalization ending in democratization in Russia in 2000. And Bangladesh's break from Pakistan lead them to be treated as a new country, while Pakistan is treated as if it was the same country.



## Codebook

Table A 2: Codebook

Variable	Source	Recoding	Values	Comments
<b>Dependent variable; LSTATUS</b>	Coded by author on the basis of Polity IV		0=Censored 1=Democratization 2=Reversal	
<b>Growth</b>	Penn World Table (version 6.1), variable <i>GRGDPL2</i>	Growth <sup>2</sup> is added in both models to meet curvilinear functional form. TDC versions is added in Democ.model to meet violation of PH-assumption.	Annual growth rate (percentage) of real GDP.	Missing values leading to 6 exclusions: Azerbaijan, Laos, Nepal, Sudan, Syria, Yemen (North).
<b>Autocracy type</b>	Arthur Banks' Cross-National Time-Series Data Archive (CNTS), variable <i>Type of Regime</i>	Recoded from Categorical variable into dummy variable set. Variable is lagged by one year.	Three Dummy variables: Civilian, Military-Civilian and Military. 1 on one of the three dummy variables, 0 on the two others.	Civilian autocracy is reference category. For details on definitions of types, see below. Variable is lagged with one year to avoid the problem of endogeneity (see below).
<b>Conflict Index</b>	Arthur Banks' CNTS, variable <i>Weighted Conflict index</i>	Logged.	Original variable consists of large gaps and extreme values. Logged in order to achieve linearization. Details on the indicators composing the index see below.	Effect of variable is "one percent change in the confl.ix leads to a ... percentage point change in the hazard rate". Calculation: $\exp(\text{haz.ratio} * 100) = \text{new hazard ration}$ .
<b>Legislative Dummy</b>	Arthur Banks' CNTS, variable <i>Legislative Effectiveness</i>	Recoded from Categorical variable into dummy variable.	0=No legislature exists (Values 0 in Legislative effectiveness)  1=Legislature exists (Values 1, 2, 3 in Legislative effectiveness)	Value 1 does not differentiate whether the legislature is effective or not. That is; the variable asks merely <i>does a legislature exist?</i>
<b>Party Dummy</b>	Arthur Banks' CNTS, variable <i>Party Legitimacy</i>	Recoded from Categorical variable into dummy variable. Variable is lagged by one year.	0=Significant exclusion or no parties exist or all but dominate party and satellites are excluded (Values 0 and 1 in Party Legitimacy)  1=No parties excluded or only minor "extremist" parties excluded (Values 2 and 3 in Party Legitimacy).	Missing value leading to one exclusion; Mauritania.

Variable	Source	Recoding	Values	Comments
<b>Ethnic Fractionalization, Eth_frac</b>	Alesina et. Al (2003a; 2003b)), variable <i>Ethnic</i>	.	The probability that two randomly selected people from a given country will not belong to the same ethno linguistic group. Higher numbers reflect more fractionalized societies.	Variable is constant for each spell. Missing values leading to 3 exclusion of Pakistan ('70, '73), Yemen

## Details on original variables

### Weighted Conflict Index

The variable is described in Arthur Banks Codebook (2009b). The data for weighted conflict index according to Banks derived from The New York Times. The weighted conflict index is calculated by each indicator multiplied by a individual number (in parenthesis in definitions below) and then summed up and divided by ten in the following manner:

**Assassinations.** Any politically motivated murder or attempted murder of a high government official or politician (multiply by 24).

**General 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 (43).

**Guerrilla Warfare.** Any armed activity, sabotage, or bombings carried on by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime (46).

**Government Crises.** Any rapidly developing situation that threatens to bring the downfall of the present regime - excluding situations of revolt aimed at such overthrow (48).

**Purges.** Any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition (86).

**Riots.** Any violent demonstration or clash of more than 100 citizens involving the use of physical force (102).

**Revolutions (revolt).** Any illegal or forced change in the top governmental elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from the central government (148).

**Anti-Government 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 (200).” (Banks 2009: Codebook)

### **Autocracy Type**

The autocracy types in the dummy variable set are defined according to Banks’ definitions in *Regime Type*, and are as follows

*Civilian regime.* Any government controlled by a nonmilitary component of the nation's population.

*Military-Civilian regime.* Outwardly civilian government effectively controlled by a military elite. Civilians hold only those posts (up to and including that of Chief of State) for which their services are deemed necessary for successful conduct of government operations. An example would be retention of the Emperor and selected civilian cabinet members during the period of Japanese military hegemony between 1932 and 1945.

*Military dictatorship.* Direct rule by the military, usually (but not necessarily) following a military coup d’état. The governing structure may vary from utilization of the military chain of command under conditions of martial law to the institution of an ad hoc administrative hierarchy with at least an upper echelon staffed by military personnel.

The Variable is lagged with one year to avoid the problem of endogeneity, that is; a regime will always be coded as civilian in the year it democratizes, but this does not reflect that military regimes also might be in charge of a liberalization ending in democratization.

## Diagnostics

### Democratization model

The first PH-test implied that the Growth variable was time dependent (see **Bold**):

**Table A 3: Test of proportional-hazards assumption, Democratization model without TVC**

	rho	chi2	df	Prob>chi2
Growth	-0.20309	1.98	1	0.1599
<b><u>Growth2</u></b>	<b><u>-0.32498</u></b>	<b><u>5.98</u></b>	1	<b><u>0.0154</u></b>
military_c~2	0.10475	20.36	1	0.5474
military2	-0.13551	0.87	1	0.3508
ln_conf_ix	-0.18764	0.88	1	0.3483
Leg dummy	-0.13825	0.97	1	0.3249
party_dummy	0.13353	1.72	1	0.1901
Eth_frac	-0.12690	0.28	1	0.5954
Global test		9.03	7	0.2504

When TVCs on Growth and Growth<sup>2</sup> was included though, the same test implied that there were no longer any violations of the PH assumption:

**Table A 4: Test of proportional-hazards assumption, Democratization model with TVC**

	rho	chi2	df	Prob>chi2
Growth	-0.00245	0.00	1	0.9813
<b><u>Growth2</u></b>	<b><u>-0.16341</u></b>	<b><u>1.67</u></b>	1	<b><u>0.1958</u></b>
military_c~2	-0.15234	0.44	1	0.5073
military2	-0.08529	0.72	1	0.3956
ln_conf_ix	0.08891	0.19	1	0.6666
Leg dummy	-0.09670	0.78	1	0.3779
party_dummy	0.03887	0.18	1	0.6756
Eth_frac	0.07650	0.34	1	0.5584
Growth_TVC	-0.00412	0.00		0.9724
Growth2_TVC	0.17121	1.63		0.2021
Global test		2.16	7	0.9504

## Linktest

Linktest of the model for democratization indicated no signs of wrong specification of the parameters included in the model. However as mentioned in footnote 53, the model without Growth<sup>2</sup> failed the linktest. If the models estimated predictor is not significant or the squared predictor is significant this indicates that the model is misspecified. Table A3.1 shows the test results for the (final) model in the analysis, and that predictor, squared (hatsq) is not significant- Table A3.2 shows the test results for the model without Growth squared, and that the *predictor itself* (\_hat) is not significant. Thus, the correct model specification is to include Growth<sup>2</sup>.

**Table A 5: Linktest, Democratization model (final)**

_t	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]
_hat	.746252	.1880928	3.97	0.000	.3775969 1.114907
_hatsq	.1022172	.0618612	1.65	0.098	-.0190286 .223463

Note: LR chi2(2) = 40.10

Log likelihood = -99.561752

Prob > chi = 0.0000

**Table A 6: Linktest, Democratization model without Growth2**

_t	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]
_hat	.1802403	.6463591	0.28	0.780	-1.0866 1.4470
_hatsq	.3880706	.295295	1.31	0.189	-.1906969 .9668381

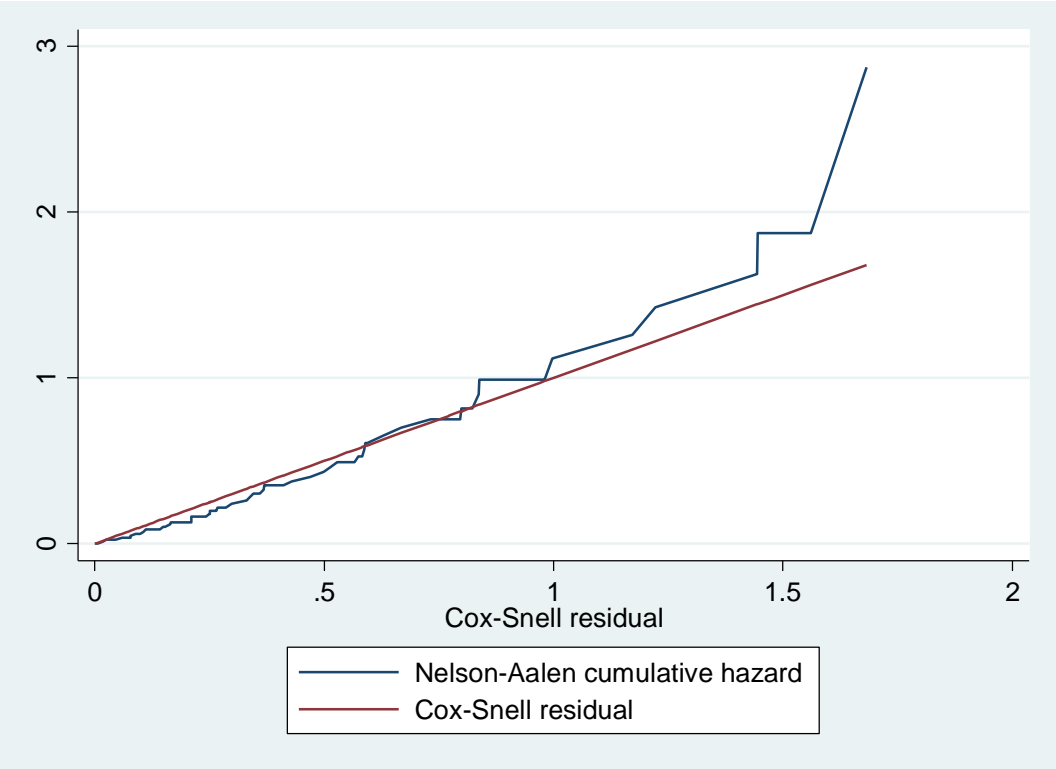
Note: LR chi2(2) = 14.80

Log likelihood = -107.16516

Prob > chi2 = 0.0006

# Model fit, Cox-Snell

Figure A 1: Model fit Democratization: Plot of Cox Snell residuals vs. 45'line



## Reversal model

### Test of proportional-hazards assumption

**Table A 7: Test of proportional-hazards assumption, Reversal model**

	rho	chi2	df	Prob>chi2
Growth	-0.02683	0.12	1	0.7285
Growth2	-0.00477	0.00	1	0.9603
military_c~2	0.05066	0.42	1	0.5166
military2	0.03422	0.10	1	0.7554
ln_conf_ix	-0.05132	0.49	1	0.4848
Leg dummy	0.10270	0.57	1	0.4505
party_dummy	-0.02917	0.17	1	0.6803
Eth_frac	-0.07355	0.52	1	0.4719
Global test		2.46	7	0.9301

### Linktest

As with the democratization model, the linktest showed no signs of misspecification with predictor significant at 0.1 percent level and predictor squared not significant:

**Table A 8: Linktest, Reversal model**

_t	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]
_hat	.947588	.1624632	5.83	0.000	.629166 1.26601
_hatsq	-.01485	.0930176	-0.16	0.873	-.1971612 .1674612

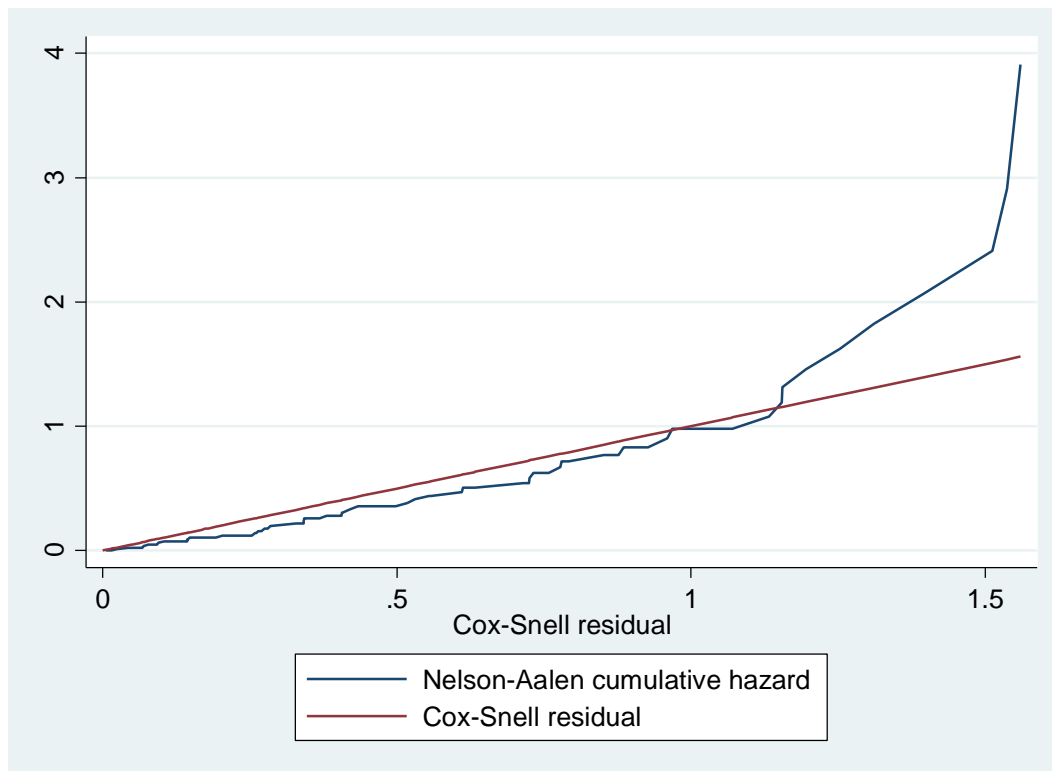
Note: LR chi2(2) = 53.61

Log likelihood = -86.009013

Prob > chi2 = 0.0000

## Model fit, Cox-Snell

Figure A 2: Model fit Reversal: Plot of Cox Snell residuals vs. 45'line



## Outliers and influential observations, both models

Martingale residuals were estimated in both models, and showed that some observations could be called outliers and possibly have a disproportionate effect on the estimated effect of individual variables. There is no consensus on the treatment of such outliers (exclude or not exclude) (Orr, Sackett and Dubois 1991). In the end it is a matter of discretion. In the case of this analysis it was a fairly easy choice since there was no single observations that systematically deviating from the others on several variables. Therefore it would be wrong to exclude them from the analysis.



## Multicollienarity

Pair wise correlations between independent variables do not reveal any problem with multicollinerarity:<sup>73</sup>

**Table A 9: Pair wise correlations between independent variables**

	Growth	Growth <sup>2</sup>	Military Civilian	Military	Conflict Level	Leg dummy	Party dummy	Eth_frac	Growth_ TVC	Growth_ TVC
Growth	1.0000									
Growth <sup>2</sup>	0.3827	1.0000								
Military Civilian	0.0293	0.0156	1.0000							
Military	0.0411	0.0035	-0.0599	1.0000						
Conflict Level	-0.0806	0.0457	0.0605	0.0239	1.0000					
Leg dummy	0.0842	0.0029	-0.2664	-0.2548	-0.1302	1.0000				
Party dummy	-0.0326	-0.0314	-0.3471	-0.1470	-0.1177	0.2399	1.0000			
Eth_frac	-0.0102	0.0454	0.1064	0.0595	-0.2043	-0.0569	0.1138	1.0000		
Growth_TVC	0.9215	0.4007	-0.0086	-0.0451	-0.1178	0.1016	-0.0037	0.0116	1.0000	
Growth <sup>2</sup> _TVC	0.3495	0.9343	-0.0177	-0.0068	0.0145	0.0103	0.0210	0.0536	0.4546	1.0000

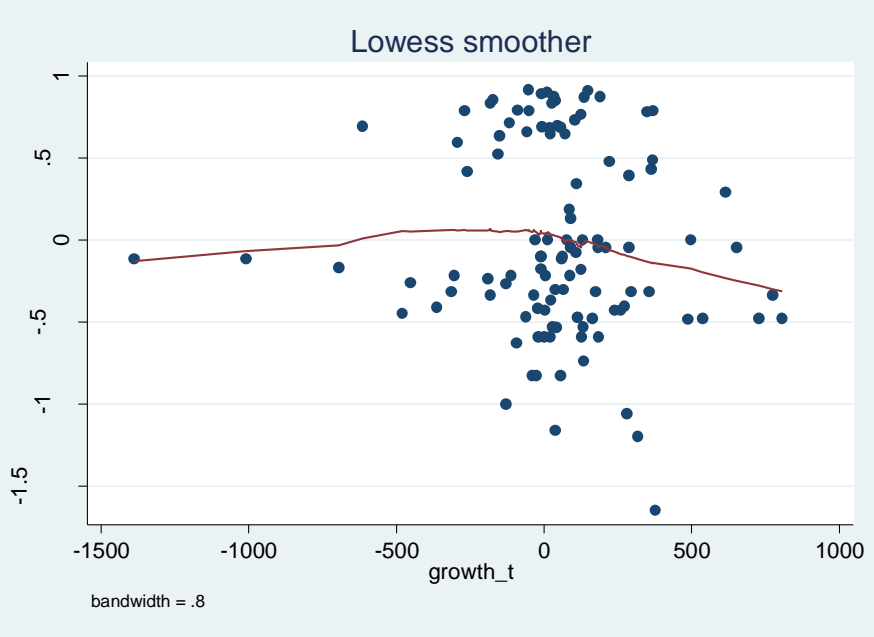
**(Obs: 766)**

<sup>73</sup> See footnote 65 p.79 for discussion on the high pairwise correlation between Growth and Growth\_TVC, and Growth<sup>2</sup> and Growth<sup>2</sup>\_TVC.

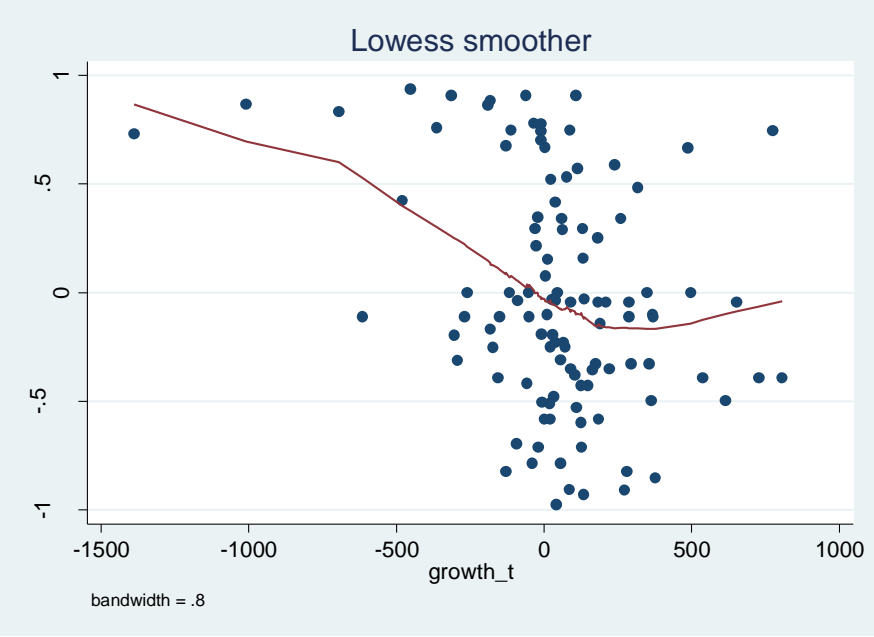
**Functional form of Growth; Martingale residuals plots, and alternative specification of the Reversal model.**

The Martingale residuals indicated that growth might have a non-linear curve-shaped effect on the risk of democratization and reversal. The plots are reported in Figure A3 and Figure A4

**Figure A 3: Martingale residuals; Functional form of Growth in Democratization model**



**Figure A 4: Martingale residuals; Functional form of Growth in Reversal model**



As seen above, the PH-test of the democratization model run with Growth2 included showed that Growth2 violates the PH-assumption. Therefore, Time Dependent Covariates of the Growth variables was included. However, neither *Growth* nor *Growth*<sup>2</sup> violates the PH assumption in the Reversal model. This is confirmed by the Wald test on the whole model where the test statistic suffers severely from this alternative specification compared to the final model without TVCs (although this model also is significant and, like the final model, passes the linktest). More importantly, a joint Wald test on the TVC-Growth variables in the Reversal model proves not significant which is a clear confirmation that the Growth variable in this model does *not* violate the PH-assumption, and consequently should not be accounted for by TVCs (Cleves 2010: 204-206). The results are reported in Table A8 (next page), where I have repeated the results from the final model in the Analysis chapter (from Table 2) for comparison. Hence the final model in the Analysis chapter includes TVCs in the Democratization model, but not in the Reversal model.

Table A 10: Reversal model with and without TVC on Growth

	<b>Rev model <i>without</i> TVC on Growth variables (Final model)</b>	<b>Rev model <i>with</i> TVC on Growth variables (Alternative specification)</b>
Growth	0.965 (0.031)	0.943 (0.0531)
Growth2	1.001 (0.001)	0.996 (0.00350)
Military-Civilian	0.552 (0.258)	0.582 (0.270)
Military	0.170*** (0.073)	0.217* (0.133)
Conflict index	1.274* (0.120)	1.278* (0.122)
Legislative dummy	0.130*** (0.045)	0.137*** (0.0482)
Party dummy	1.159 (0.427)	1.121 (0.349)
Eth_frac	1.195 (0.501)	1.197 (0.528)
Growth_TVC	-	1.000 (0.00121)
Growth <sup>2</sup> _TVC	-	1.000 (0.0000706)
<b>Wald tests:</b>		
Model	13121.83***	151.64***
Growth=0, Growth2=0 (1)	15.31***	1.89
TVC (Growth, Growth <sup>2</sup> )=0 (2)	-	2.47
(1) + (2)	-	9.72**
Linktest; significans of predictor ( $\hat{\_}$ ) and Squared predictor ( $\hat{\_}$ sq)	P>z ( $\hat{\_}$ ): 0.000 ( $\hat{\_}$ sq): 0.873 →linktest passed	P>z ( $\hat{\_}$ ): 0.000 ( $\hat{\_}$ sq): 0.202 →linktest passed

Note: Effects are hazard ratios, Sign.level: \* p<0.05, \*\*p<0.01, \*\*\*p<0.001

Clustering on region; robust standard errors in parentheses

Efron approximation used for handling ties