

ABSTRACT

Title of Dissertation: **DICTATORSHIP IN TIMES OF DEMOCRACY:
THE ROLE OF ELITES, WEALTH AND INSTITUTIONS
IN REGIME CONSOLIDATION AND CHANGE**

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The recent revival of authoritarianism and worldwide losses in democratic quality merit a reassessment of current theories of regime consolidation and change. In this dissertation, I provide four interlinked theories of authoritarian consolidation, authoritarian replacement, democratization and democratic erosion. First, I argue that dictators consolidate power after crises by expanding the ruling coalition and using formal institutions as signaling devices. Doing so weakens the coordination capacity of the plotters and reduces the likelihood of a coup. I take a political economy perspective in the remaining chapters, showing first that authoritarian turnover increases when wealth levels in the elite are low. This generates incentives for elite groups to control the state to capture rents. However, as wealth increases, elites become concerned with protecting their wealth instead of fighting each other over state rents. Democracy ensues as it provides a system of rule of law that guarantees property rights. Lastly, I provide a theory of democratic erosion based on the notion of a productivity gap between economic sectors: democracy's equilibrium breaks down when low productivity sectors seek to control the state and extract rents over reinvesting in more productive enterprises. This productivity imbalance creates the space for a 'Caesarian' leader to emerge. To probe these theories, I use a mixed methods approach that includes formal modeling, various quantitative techniques and case studies of the Dominican Republic, the United States and Spain.

DICTIONSHIP IN TIMES OF DEMOCRACY:
THE ROLE OF ELITES, WEALTH
AND INSTITUTIONS IN REGIME
CONSOLIDATION AND CHANGE

by

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Preface

I didn't enter graduate school planning to write on regime change, democratization, or why democratic quality is seemingly eroding everywhere. Rather, I wanted to stay intellectually stimulated and, most importantly, have complete power to decide which issues I would explore. This freedom came at the cost of a modest graduate school stipend –which shrinks even further in an expensive area like Washington, DC. Any rational cost-benefit analysis would discourage pursuing the path I (and so many others) chose, but as I found out before I started my Ph.D., the price of intellectual freedom is difficult to quantify and hard to appreciate. In Barcelona, after I finished my previous studies, I started and ran a satirical magazine in Catalan for over three years. We didn't change the world but we learned to appreciate the true value of our freedom of thought and expression, of being able to form criticisms, publish them and engage in discussions with close friends and complete strangers. Sadly, many of the articles and cartoons we published then could land us in trouble now –the Spanish government has passed new laws and began to enforce old ones that severely restrict certain expressions of dissent, primarily those attacking the crown. This downward trend only reinforces my belief that, in the end, there is no price to freedom. For me, academia is a refuge, a cocoon where we can express ourselves to the fullest extent in a rigorous way (at least we genuinely try). Its greatest gift is that it helps us preserve our intellectual freedom like no other sector does.

From this I think I derive my greatest fascination: to borrow from the great John Oliver, why is autocracy still a thing in 2019? If, as I believe, there is no price for freedom, why do authoritarian rulers continue to survive and why do people accept them? There may not be a clear answer to this question, and I certainly don't provide a good one in this dissertation. The way I have decided to approach answering this question is to study regime change. What makes dictators stay longer in power? What brings about a transition to democracy? What makes democracy weaker, shrinking my ability to, for instance, openly mock the Spanish crown in print? This dissertation is my first stab at answering some of these questions.

I wouldn't be mindful about the importance of my intellectual freedom and my liberty to speak out without people that did the same before me. In retrospect, the greatest gift I ever received was the daily political discussions I had with my family since I was a kid. We all know at home that my grandfather is mostly at fault for that. He may not be able to read it, but to him I dedicate this imperfect dissertation, of which I am sure he is proud. Another special dedication goes to my mother, my rock and staunchest advocate –even in

times when she shouldn't be. Brilliant and unwavering in her beliefs, she was the first Ph.D. in the family, and I am proud to say I am now the second one. My grandmother, sweet and much more street smart than me; my uncle, as headfirst, intelligent and caring as they come; and Martí, supportive and generous in ways I can only aspire to be, also deserve a heartfelt dedication and a sincere thank you.

Academically, I owe my deepest gratitude to Ernesto Calvo and Mark Lichbach, who dedicated their time and energy to my cause with a level of commitment that is any graduate student's dream. Their unwavering support and constant guidance helped me grow professionally and personally in ways I will only understand with the passage of time. I am indebted to Michael Hanmer, who was instrumental to my progress and well-being as a Ph.D. student. I also extend a heartfelt thank you to Calvert Jones and Isabella Alcañiz for their feedback and thoughtful contribution to this dissertation; to Bill Reed for his help with game theory; to Joe Wright for his support, feedback and thoughtful conversations during my time at Penn State; to Patrick Wohlfarth for being wonderful to his TAs; to Mike Spivey for the camaraderie and good times teaching undergraduate students; and to Ann Marie for her endless patience as I navigated the bureaucracy. Last but not least, a note of appreciation to my fellow grad students for endless conversations, for coming to my rescue when I needed it, and for our evenings together in DC and College Park. A special thank you to Sebastian Vallejo, friend and co-author, for being an example in academia and in life; to Jori Breslawski for being a friend in good and bad times; and to Patrick Tiney for getting me out of my office when I worked too late on Fridays. And, finally, a thank you to someone who enriched my life more than anyone else and without whom this dissertation would never have been completed. My accomplishments now and in the future will continue to be partly yours.

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Chapter 1

Introduction

History is not yet over. Autocracies continue to stabilize and strengthen, without any indication of a growing willingness to democratize. Worryingly, democracy is eroding across the globe. We are observing a degradation of civil and political rights in advanced and new democracies alike, and the likelihood of authoritarian reversals increases with every new election cycle. Indeed, democracy had not been so fragile since the end of the cold war at the very least, and neither had reformed, economically-open dictatorship been so en vogue. In twenty years, we may be living in a world with strong democracies that overcame a period of hesitation to solidify and strengthen citizen's civil and political rights. Or, perhaps, a majority of humanity may be governed by illiberal regimes that compromise on citizen rights in order to stay in power, using the need for law and order and an old, unimaginative nationalist discourse to rally a majority political coalition.

This predicament will be object of study in comparative politics for years to come, as it affects many of its debates and subareas of study. For instance, regionally, Europe and Latin

America are particularly hard hit by the recent downtrend in democracy: the oversize gains made in the 1980s and 1990s, a period during which virtually every country democratized, are now called into question in Brazil or Poland, key economic and geopolitical centers. A reversal in Poland would bring a new iron curtain right at the German border; the loss of Brazil would create a dangerous precedent for neighboring countries dealing with weakened institutions, such as Argentina. In political economy, democratic erosion is challenging the very notion that democracy is impregnable at high levels of wealth, which has been more or less considered a stylized fact in the discipline for twenty years. Similarly, autocracies are gaining stability even as they modernize and develop a business class, which runs counter to modernization theory and old arguments about state development and democratization. The list here goes on: the study of civil and political rights, protest and social movements, institutions, voting behavior, and so on.

In this dissertation I provide a theory of elite driven regime change that helps answer some of these puzzles. I take a strong stance that regime transitions are driven by elites, whose conflicts and agreements shape the outcome of events such as democratization, authoritarian consolidation and replacement, and democratic erosion. This idea was at the core of the transition paradigm of the 1980s and 1990s, which described democratization processes as originating in a cleavage between hardliners and softliners within the heavy-handed ruling elite of Latin American military dictatorships. A push by civil society led to democratization, but the key cog in the democratization engine was the receptiveness of softliners to liberalization and openness.¹ The literature on inequality and democratiza-

¹Carothers, 2002; O'Donnell and Schmitter 1986; Przeworski 1991.

tion, on the other hand, has focused primarily on the relationship between the elite and the masses, arguing that transitions are a result of redistributive class conflict.² In this dissertation I bring back elite conflict into the debate around regime change and apply to a broader spectrum of political transitions: authoritarian replacement and stability, democratization, and democratic erosion. I also incorporate the concept of wealth into the regime change discussion, and prod the interactive effect of inequality with levels of wealth on different transition outcomes. These constitute the main theoretical contributions of this dissertation.

Each of the chapters of this dissertation develops the theory as it relates to a particular type of transition. In Chapter 1, I explore how dictators consolidate power in times of crisis by expanding their coalition and using formal institutions. In chapters 2 and 3, I take a political economy approach that tries to challenge some of the traditional arguments in the inequality/democratization debate. In Chapter 4 I provide a theory of democratic erosion based on the productivity across sectors and polarization within the economic elite –as opposed to classic arguments that focus on polarization among voters or the political elite. The common thread in this dissertation is the study of regime stability and change. Figure 1.1 illustrates all possible transitions and states. This dissertation focuses on four of these: authoritarian stability, authoritarian replacement, democratization and democratic erosion. Extensions to democratic stability and breakdown will follow in the future.

²Boix 2003, Acemoglu and Robinson 2006.

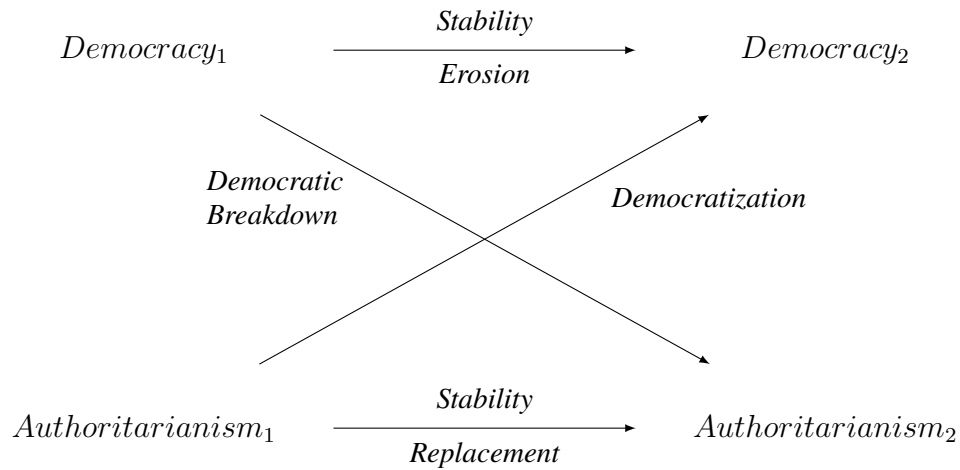


Figure 1.1: All possible transitions between democracy and authoritarianism, plus stability.

In Chapter 1, I introduce the reader to a discussion in comparative politics regarding the role of political institutions in dictatorship and their effect on authoritarian stability. The literature has tended to agree that formal and seemingly democratic institutions, such as political parties and parliaments, improve dictatorial stability by fostering power-sharing agreements that place some constraints on autocrats.³ Dictators use them to co-opt opposition groups and share governance with them.⁴ Indeed, power-sharing has been found to increase authoritarian stability.⁵ As for political parties, Brownlee has shown that large parties tend to have a binding effect on elite coalitions, which otherwise could fractionalize and destabilize regimes.⁶ Single party regimes are also the longest-lasting.⁷

I take a different view from the general consensus in the literature. I contend that formal institutions are used as *signaling* devices by autocratic leaders in times of weakness. They often emerge as a consequence of the leader expanding his ruling coalition to dissuade

³Wright 2008.

⁴Gandhi 2008.

⁵Gandhi 2008.

⁶Brownlee 2007.

⁷Geddes 1999.

plotters from launching a coup. In times of weakness, such as the outset of tenure of after an important shock, incumbent autocrats face an increased threat of a coup.⁸ This entails that, within their ruling coalition, a certain faction usually develops that plots to overthrow the ruler. The success of a coup depends on having a majority of the coalition in favor of it⁹ and on how information propagates during the brief period between the start and end of a coup.¹⁰ One of Singh's major insights is that there exist major informational asymmetries within the dictator's winning coalition, and that the fate of a coup often depends on how the leader is perceived while the coup unfolds. New information may sway sufficient numbers to join the coup even though they would not have done so before. The implication of this is that controlling the discourse and information channels is as important, at least, as having the support of at least half of the ruling coalition.

I argue that dictators oversize their coalition to break down the coordination capacity of the plotters, thus attempting to reduce support below fifty percent –or, at least, increase uncertainty regarding members' allegiances. Institutions, for their part, alter the information game with the broader coalition and broadcast support to the rank-and-file. The latter observe greater commitment by key elites to the current leader, making it less likely that they will join a coup if launched. I introduce a formal model to show the logic and implications of this argument.

In the remaining theoretical chapters –2, 3 and 4–, I investigate the role wealth inequality plays in authoritarian replacement and democratization from the point of view of elite

⁸Little 2017.

⁹Little 2017.

¹⁰Singh 2014.

cleavages. I theorize that elites decide, at each moment in time, which system best suits their long term prospects for wealth accumulation. This is based on an intuition that economic elites are at the front and center of regime change, and that their political affiliations tend to shift with changing circumstances. Indeed, Barone and Mocetti have recently found that the wealthiest families in the Italian city of Florence are descendants of wealthy families 600 years ago.¹¹ These families have gone through major political events: the vagaries of Medici rule, inclusion the Austrian crown, French annexation, and finally the unification of Italy. How do the wealthy stay wealthy, and even expand their wealth, through long periods of time and political change? I argue that elites have one goal, to accumulate wealth *in the long run*. In the short and medium term, however, they adapt their political preferences and favor the institutional arrangement that best serves their long-term objectives. They do so even if that means sacrificing certain *immediate types of wealth and power*. I call this logic *cashing in*: elites play nested games of wealth maximization and may *appear*, at times, to make a suboptimal choice in the short term, such as allow greater redistribution or political instability. This is, however, perfectly rational, as it yields the optimal payoff in the long run. Elites, I argue, *cash in* their gains after each nested game and begin anew. The logic of cashing in mirrors that of Tsebelis, who proposed the notion of nested games as an answer to the riddle that political actors often fail to make the apparently correct choice.¹² A key contention of this dissertation is that, by shifting our attention to elite splits and conflict, we can detect many of the nested games that lead to counterintuitive outcomes such as democratization.

¹¹Barone and Mocetti 2016.

¹²Tsebelis 1990.

With this broader idea in mind, I argue that when elite wealth is low, different factions seek to control the state to appropriate income. This leads to greater authoritarian replacement, as the state and its resources provide sufficiently large rents to increase wealth rapidly. Enclave economies and resource-rich countries with low levels of overall wealth are good examples of this process: elites with relatively low levels of wealth have a substantial incentive to appropriate these resources and become richer. Once a majority of elites are wealthy, incentives for conflict decrease and stability is preferred.

A common counterargument here is that, in states where replacement is common, institutions are weak and easily captured. With stronger institutions, low wealth would not be the driving force behind authoritarian replacement. In reality, this argument treats institutions as exogenous to the process of wealth accumulation, and they are not. Institutions are a function of the people that support them, and hold sway over elite and citizen relations only insofar as they are viewed to have legitimacy. The counterfactual that strong institutions could exist in countries with low levels of elite wealth is illogical, precisely because strong institutions emerge to arbitrate complex interactions among political subjects who have an incentive to compromise with other, politically equal subjects. When wealth is low among the elite, incentives to cooperate are minimal. Only as wealth increases there is a chance for better institutions. Indeed, the natural resource curse is only such in places where elite wealth is overall low, and where intra-elite inequality is high—that is, some elite groups are ultra-wealthy and many others are only above a certain income to qualify them as elite. Where wealth is high across the board, natural resources abundance is rarely a

course. Moreover, as Chapter 4 shows, even strong institutions fray when inequality among economic elites increases sharply.

The question then becomes: what happens as wealth increases? Elites have greater incentives to secure their wealth, which requires political stability and strong property rights guarantees. The argument in Chapter 3, therefore, is that democratization transpires when elites have accumulated high levels of wealth and come to regard democracy as an insurance mechanism to secure their wealth through the rule of law. In this view of *democracy as insurance*, elites prefer to pay a risk premium in democracy through higher taxes in exchange for security against expropriation by a competing elite and revolution. In Chapters 2 and 3 I develop further on two key points: first, why elites stop replacing each other in power as their wealth grows and, second, why democratization ensues as wealth increases instead of stable authoritarianism.

Lastly, in Chapter 4 I develop a theory of democratic erosion that maintains the logic of elite cleavages and wealth from the previous two chapters but incorporates a new concept: the productivity gap. I argue that democratic erosion occurs when a large productivity gap leads to a wealth cleavage among elites. Elites in low productivity sectors see their current wealth decline and their future prospects become grim. If the gap between low and high productivity sectors is large enough, reinvesting wealth into more productive enterprises is exceedingly costly for stagnant sectors, who have an incentive to seek rents from the state instead. This gap provides a space for a political entrepreneur to gain the backing of low productivity sectors and take over the state.

Methodologically, this dissertation uses a diverse array of methodologies to provide credibility and probe its theories. Chapter 1 uses a formal signaling model to show that dictators expand their coalition through formal institutions in times of weakness to prevent a coup. For Chapters 2 and 3, I have created a cross-national measure of elite wealth accumulation per country-year using available data from multiple sources. In Chapter 2 I use multi-state survival analysis to probe the hypotheses that the likelihood of authoritarian replacement increases at low levels of wealth and high levels of inequality. In Chapter 3, I use dynamic probit and linear probability models to show that the probability of a transition to democracy increases with higher levels of wealth and income inequality. Chapter 4 uses similar statistical techniques. Lastly, case study evidence is important in this mixed-methods dissertation. Chapters 1 and 2 use the Dominican Republic as a case study, delving into the country's history before and during the rule of Rafael Trujillo. Chapter 4 uses the cases of the United States and Spain to illustrate the current trend toward democratic erosion that plagues advanced democracies.

My work contributes to the field's understanding of the dynamics of authoritarian replacement from a political economy lens. While work abounds on predatory states, resource-rich dictatorships, and coups, little work has attempted to systematize the structural causes of authoritarian replacement. The theory I develop furthers our understanding of these structural factors. My work also contributes to the shift in the democratization literature toward a vision of democracy as a positive outcome for authoritarian elites, which they often actively pursue. I add a political economy angle to this debate by describing how high wealth inequality and rapid wealth accumulation promote democracy. Moreover, the research shows

that democratic erosion in developed economies is the result of higher inequality and rapid wealth accumulation. This argument contributes a political economy logic to the nascent debate around democratic erosion and breakdown. A methodological contribution of my work is to incorporate multi-state survival analysis into the study of regime transitions.

Chapter 2

Institutions as Signals: How Dictators Consolidate Power In Times of Crisis

Formal institutions in dictatorship, such as political parties and legislatures, are known to improve authoritarian governance, place constraints on the leader, and enhance survival by promoting power-sharing. Much less is known about how dictators use institutions to signal strength to the opposition. In this chapter, I advance a theory of power consolidation in dictatorship that conceives of formal institutions purely as signaling devices. I argue that, at times of weakness, dictators often follow an expand-and-signal strategy, whereby they expand the ruling coalition to decrease the power of potential plotters within it and then create visible formal institutions to signal strong support to the broader coalition and the public. Doing so directly decreases (1) the probability that a coup is launched against them and (2) that one succeeds if launched. The formal model I propose shows that strong leaders who face a crisis have an incentive to expand the coalition and create institutions, even if they know they hold the support of a majority of the coalition before a coup is launched. I use the case of the Dominican Republic before and during Rafael Trujillo's rule to illustrate my theory.

2.1 Introduction

In 1930, after a perfectly orchestrated coup, Rafael Trujillo began his thirty-year long tenure as self-proclaimed *benefactor* of the Dominican people. He moved quickly to consolidate power, creating a political party with an expansive regional and national apparatus, the *Partido Dominicano*, and strengthening the role of the country's Senate. Rural supporters were given important posts in the party, and loyal elites became Senators. In essence, what Trujillo did with celerity and skill during the first six months of his rule was to (1) expand his support coalition and (2) use formal institutions to accommodate the expansion. At a time when he apparently faced no credible challengers, why did Trujillo chose to develop these formal institutions rather than focus on establishing a strong army, secret police, and use the repressive tactics that became common in the latter part of his rule?

Formal institutions such as political parties and legislatures are known to improve authoritarian governance and place at least some constraints on authoritarian leaders.¹³ They also enhance survival by promoting power-sharing.¹⁴ By incorporating and co-opting different elites into the regime's policy-making process, autocrats can enjoy more stable tenures and better policy outcomes. Indeed, I do not intend to rebuke these assessments. Rather, my argument is that they are incomplete and that we have not yet theorized about the full range of reasons why formal institutions in dictatorship are so common and useful to autocrats. The important intuition from Trujillo's example, and which constitutes the central claim of this chapter, is that the institutions he created served as highly effective *signaling* devices.

¹³Gandhi 2008; Wright 2008.

¹⁴Boix and Svolik 2013.

In times of particular weakness, dictators expand their coalition to reduce the relative power of potential plotters within it, and use institutions to communicate strength to the rank-and-file. Since the spread of information and coordination among the coup plotters are crucial for coup success,¹⁵ dictators can reduce both the threat that a coup occurs and the probability that one succeeds if staged by employing the ‘extend and signal’ strategy that I outline in this chapter.

The reasoning behind expanding the ruling coalition is especially counterintuitive. In order to reduce the relative power of the potential coup-plotters within the coalition, leaders incorporate new members with whom plotters will have difficulty coordinating, thus reducing the probability that a coup occurs. An example illustrates my logic best: If, say, a support coalition consists of ten people, and five of them are plotting against the dictator without his knowledge, the dictator is one defection away from being deposed. However, if he expands his coalition to fifteen members by adding five new members, he weakens the position of the plotters, who no longer have the required numbers to win. The leader pays a steep cost if he expands: current members of the coalition have to share the pie with new members, and therefore loyalists may be more likely to defect.¹⁶

Leaders face two critical problems when they oversize the coalition. First, they cannot credibly expect new members to remain loyal indefinitely. The dictator needs these new members to send a credible signal of commitment to him, become invested in the regime,

¹⁵Little 2017; Singh 2014.

¹⁶Note that, in this scenario, three of the five old loyalists need to defect for the leader to lose. Provided the leader does not reduce their rents by a large amount, they are likely to remain loyal. What is important here is that strong leaders will be willing to pay this cost, and the stronger they are, the higher the cost they can afford. This will have important implications in the game.

and tie their fortunes to the fortunes of the leader. Second, he needs to communicate this gain in power to the broader winning coalition. Oversizing the coalition is much less useful if the rank-and-file are unaware of the dictator's newfound support. This is particularly important, as we know that information plays a key role in determining which actors join a coup and which do not.¹⁷ The dictator must prevent key players, such as ranking officers and soldiers, from joining the coup if one is staged. Informational asymmetries may lead officers to join a coup that may, unbeknownst to them, not have been initially viable. As Little shows, a coup attempt is likely forthcoming at the beginning of a leader's tenure.¹⁸ It is important for the leader to try to affect the officer's belief about his strength and make them less likely to join a coup if one takes place.

Key power-sharing institutions, political parties and legislatures, are useful for the dictator to solve these two problems. First, accepting a public position within an institution, such as vice-president of the senate or member of parliament, sends a signal of commitment and loyalty to the leader and carries a cost for the new member. The more closely she is associated with the regime, the more likely she will be removed or vanished should a coup occur and succeed. In this way, formal institutions reduce the probability that a coup takes place. Second, by expanding the coalition through public formal institutions, the leader communicates strength to the broader coalition, who perceive a signal that the leader is stronger than they thought he was. This makes officers less likely to defect and thus reduces the probability that a coup succeeds if staged.

¹⁷Singh 2014.

¹⁸Little 2017.

The expand and signal strategy can be superior to other traditional strategies to garner support, such as distributing rents or purges. The former suffer from a credibility problem, since the leader can withdraw funds at any time and the supporters can end their support whenever they can obtain more elsewhere. The latter, purges, carry a high cost in terms of popularity and support, since more insecurity may reduce other members' payoffs of staying in the status quo and thus induce a coup rather than stifle it. A particularly insidious cost emerges when purging is used in spurts, as described, for instance, in Svoboda: since the leader cannot be certain about the identity of the plotters, he may actually purge *loyalists* who have come under suspicion.¹⁹ This may strengthen the chances that a potential coup succeeds. Expanding the coalition, even though it forces current loyalists to share some of the pie of resources with new entrants, is a less costly and potentially more effective strategy.

This chapter contributes to the literature on authoritarian governance and power-sharing. First, by identifying the role of institutions as signaling devices, we can better understand how they originate and why they vary at different points in time. For instance, it provides an alternative explanation for co-optation: a leader may co-opt a rival faction in order to almost instantly reduce the relative power of another rival faction. If these factions are at odds, their capacity to coordinate is low and, as a consequence, the dictator consolidates power. Institutions then signal this to the broader coalition. Second, modeling how dictators consolidate power in times of evident weakness, for instance, at the outset of tenure, is an important conceptual shift. While extant work does consider the creation of formal institutions in times of crises, conclusions are often related to long-run governance – such as policy outcomes

¹⁹Svoboda 2009.

or stability.²⁰ Instead, I consider short-term solutions to short-term problems, and some of the conclusions I draw differ from those of previous authors. Lastly, a recent trend in the literature on coups is to model the coordination capacity of the opposition.²¹ In this chapter, I complement these works and show how leaders may try to anticipate such coordination by disrupting elite communication and the information that reaches the lower ranks.

This chapter proceeds in three stages. After a brief introduction to the relevant debates, I introduce a standard signaling model that shows precisely that for a certain range of relatively strong types of leaders, expanding the coalition and creating institutions is attractive. I then present evidence from the Dominican Republic that illustrates the logic put forward in this chapter.

2.2 Extant Work

The question of how authoritarian leaders consolidate power has received renewed attention in the past decade. Scholars have tended to focus on two different approaches to the issue. One looks particularly closely at the power dynamics within the regime itself. Conflict can emerge when an autocratic leader and a set of elites within the regime fight over control of executive action. Svoboda has argued that a the leader has an incentive to accumulate power in his hands and reduce the influence of the ruling coalition, whereas the latter seeks precisely the opposite.²² The resulting tension can lead to a coup or a more entrenched and consolidated leader. Others in this line of research have focused on the relationship between

²⁰Gandhi 2008.

²¹Little 2017; Singh 2014.

²²Svoboda 2009.

the dictator and the military.²³ The central dilemma here is that dictators may prefer a strong military apparatus to fight an external threat, but a strong military in turn may find it easier and less costly to conduct a coup. Powell, for instance, argues that placing structural barriers to the coordination capacity of military personnel, such as fractionalizing different branches of the military, reduces the likelihood of a military coup.²⁴ The coordination problems among the military have also been the focus of work by Geddes and Little.²⁵

The second approach to the analysis of dictatorship consolidation has revolved around the role of formal institutions in improving authoritarian governance, which falls within a broader debate on authoritarian governance pioneered by Linz and O'Donnell, among others, and reenergized more recently by seminal works by Levitsky and Way and Gandhi.²⁶ One formal institution that has received much attention are legislatures. A key argument in this line of research has been that power-sharing institutions such as legislatures help dictators co-opt opposition groups into the regime's policy-making process, which reduces conflict, solidifies the position of the leader, and helps him obtain his preferred policy outcomes.²⁷ Boix and Svobik argue that authoritarian institutions increase regime survival by facilitating power-sharing.²⁸ Gandhi and Przeworski argue that dictators who need greater cooperation make more policy concessions.²⁹ Other work has helped deepen our understanding about the relationship between dictators and their legislative bodies. Wright argued that regimes dependent on domestic investment rather than natural resource revenue

²³Acemoglu, Ticchi and Vindigni 2010; Beasley and Robinson 2010; Powell 2012.

²⁴Powell 2012.

²⁵Geddes 1999; Little 2017.

²⁶see Linz 1975; O'Donnell 1973; Levitsky and Way 2002, 2010; Gandhi 2008.

²⁷Gandhi 2008.

²⁸Boix and Svobik 2013.

²⁹Gandhi and Przeworski 2007.

create more binding legislatures, which serve as credible constraints on the leader's ability to expropriate wealth.³⁰ Wright and Escribà-Folch also show evidence that legislatures make dictatorships more stable.³¹

Another relevant institution are political parties. The debate around the role of political parties in dictatorship has reached less of a consensus than the debate around legislatures. Brownlee, for instance, argues that “[r]uling parties ... bridle elite ambitions and bind together otherwise fractious coalitions.”³² Echoing Geddes, he finds that single-party regimes tend to be the most long-lasting.³³ Slater also ties the survival of authoritarian regimes to the robustness of political parties, which are valuable mechanisms for elites to act collectively.³⁴ Opposed to this generally positive view of political parties in dictatorship, Wright and Escribà-Folch argue that political parties, in fact, may have a deleterious effect on regime survival in the long run.³⁵ The authors claim that a strong political party can generate incentives to democratize for authoritarian elites, who can find protection in a subsequent democracy. Other work has explored the role of hegemonic parties, which serve to prevent personal dictatorship and ensure long-lasting rewards for ruling elites through a vast clientelism network.³⁶

A contribution of this chapter is to provide a theory of leadership consolidation in authoritarian regimes that brings together key insights from these two literatures. On the one hand, I place strong emphasis on conflict between the ruler and his immediate elite circle,

³⁰Wright 2008.

³¹Wright and Escribà-Folch 2012.

³²Brownlee 2007, 33.

³³See Geddes 1999.

³⁴Slater 2010.

³⁵Wright and Escribà-Folch 2012.

³⁶Magaloni 2006.

rather than a more classic power struggle between a leader and an opposition group. Most coups come from within the regime,³⁷ hence the focus on this aspect of authoritarian politics. On the other hand, most of the literature has focused so far on the *substantive* value of power-sharing institutions in authoritarian regimes, that is, the constraints that they actually place on dictators to carry out their policy and the power it affords the opposition to shape policy. Here I point to the *instrumental* value of institutions in authoritarian regimes. These institutions can serve as powerful signaling devices, since they are visible and well-known in society. They can be used to communicate a signal of strength by the leader to both his most immediate elite circle as well as to the broader set of actors in the winning coalition. Thus, I do not mean to directly challenge substantive arguments. I consider that they are, in fact, complementary to the argument offered in this chapter and that, together, they can give us a more comprehensive understanding of the relationship between dictators and the power-sharing institutions under their control.

Indeed, it is important to point out that my argument in this chapter is not in support of institutions as some form of façade for authoritarian leaders to display a false sense of power-sharing. In fact, for the signal to be credible, institutions need to be given a *raison d'être*, a political purpose. In some cases, legislative powers are weak and wholly dependent on the dictator's wishes. In others, legislative freedom gives members of parliament and senators the prerogative to push a certain agenda and obtain actual concessions from the leader. Either way, institutions require a purpose to serve as credible signals. Institutions are designed to entrench new elites in their post, so that plotters have a more difficult time

³⁷Svolik 2009; Little 2017.

convincing them to switch allegiance. That may mean, sometimes, as in Trujillo's Dominican Republic, that supporters sycophantically promote legislation to score points with the dictator, such as the time when Mario Fermín Cabral proposed that the capital city of Santo Domingo be renamed to *Ciudad Trujillo*, even if the benefactor himself never requested the change.³⁸ Other times, legislative freedom may lead to reform that forces the leader to compromise.

My argument also fits well with recent literature on how coups develop from the point of view of the opposition,³⁹ which echoes earlier arguments by Geddes.⁴⁰ Little explores the coordination capacity of officers and the factors that will lead them to join a coup as global game, and argues that a coup attempt is always forthcoming at the outset of a dictator's tenure.⁴¹ Singh shows that coup success depends on officers joining it once it's already in full swing, and information exchange is key to determine allegiances.⁴² The better the plotters communicate their likelihood of success, the more likely they are to seduce potential converts and succeed. My chapter analyzes how leaders try to thwart the two channels by which the opposition may succeed in a coup.

First, by expanding the coalition, the leader prevents key top-level actors from launching a coup in the first place, since their relative strength is lower and the capacity to coordinate with new members is limited. Second, by using formal institutions as a public signal of increased strength, the dictator manipulates the information mid- and low- level officers use

³⁸Crassweller 1966.

³⁹Little 2017; Singh 2014.

⁴⁰Geddes 1999.

⁴¹Little 2017.

⁴²Singh 2014.

to make the decision whether to join a coup once it starts. We know from Singh that coup success is largely determined by how many actors joins the coup in the final stages, and the leader has a substantial incentive to prevent such a snowball effect once he coup is in full swing.⁴³ If officers believe that the leader is weak, they are more likely to join. Similarly, the more high-level officers join, the more likely are low level officers willing to join. An expanded coalition dilutes this belief and makes it more likely that the rank-and-file believe the leader is strong and the coup will fail.

2.3 Theory

My central claim is that dictators in times of crises consolidate power by using an expand and signal strategy. It consists of (1) expanding the ruling coalition and adding new members to reduce elite coordination capacity; and (2) signaling their strength to the broader coalition via formal institutions to reduce a snowball effect if a coup is launched. Thus, I conceive of formal institutions as arenas for signaling, an idea that has not yet been considered in the literature on authoritarian regimes. In this chapter, I focus exclusively on the role of a limited set of formal institutions, parties and legislatures.⁴⁴ There are two reasons for a narrow approach. First is that parties and legislatures have tended to dominate the debate on institutions in dictatorship;⁴⁵ and, second, because these are indeed highly

⁴³Singh 2014.

⁴⁴Gelbach and Keefer 2011; Gandhi 2008; Wright 2008.

⁴⁵Brownlee 2007; Gandhi 2008; Gelbach and Keefer 2011, 2012; Wright 2008; Wright and Escribà-Folch 2012.

visible institutions that lend themselves easily to the expand-and-signal approach.⁴⁶ Before introducing the formal model, I address relevant theoretical issues related to the expansion of the coalition as well as signaling through institutions.

Expanding the coalition in the midst of a crisis may be counterintuitive, since it may appear to weaken the position of the leader rather than strengthen it. Yet, introducing a set of newcomers to the coalition has the advantage of reducing the coordination power of the plotters within the coalition. New entrants need to be screened and are more likely to support the leader, at least early on. Trying to persuade them to join a coup may give the entire plot away, making coordination difficult for the plotters. Careful selection by the leader is required, but they can select members that have relatively few linkages between them, with current members of the coalition, or that are part of different opposition groups.⁴⁷ Making the coordination capacity of the plotters more difficult gains the dictator sufficient time to weather a crisis and potentially close the window of opportunity for a potential coup against him.

Formal institutions fulfill two key roles within the expand-and-signal strategy. First, they force new members of the coalition to be publicly associated with the regime. This is not an angle that has been much studied in the vast literature on co-optation examined above, or on other related literatures such as studies on co-optation and repression.⁴⁸ By extracting a public commitment to him, the leader ensures that members of the coalition are tied to his rule, which binds them in future dealings with him or with any potential successor. The

⁴⁶Extending the logic to other institutions, such as electoral processes (Gandhi and Lust-Okar 2009) or the judiciary (Ginsburg and Moustafa 2008), is beyond the scope of this chapter.

⁴⁷see Lust-Okar 2005.

⁴⁸Escribà-Folch 2013; Frantz and Kendall-Taylor 2014.

more associated a member becomes to a given ruler, the more difficult it will be to remain in power or avoid repression when a new leader comes to power.

Second, institutions signal the leader's true type to a set of members in the coalition with whom he may not be able to credibly communicate. Support from mid- and low-ranking officers and soldiers is key to the success of any coup, and they may be more likely to join one if they believe the leader is weak and the coup will succeed.⁴⁹ If the leader receives public support from new elites, the rank-and-file is more likely to believe that the leader is stronger than the plotters consider him to be. This reduces the likelihood that a coup succeeds if launched. Therefore, we should observe authoritarian leaders making fairly extensive use of seemingly power-sharing institutions such as parties and parliaments, with periods of expansion coinciding with those moments in which a leader is in a relatively weak position. Leaders tend to be particularly weak at the beginning of tenure and after growth shocks.

2.4 The Model

The formal model I introduce in this chapter seeks to reflect precisely how expanding the ruling coalition through power-sharing institutions both reduces the probability that a coup succeeds and, under some circumstances, persuades plotters to not carry out a coup in the first place.

The game takes the form of a standard signaling game with two types and a dichotomous signaling choice. The model consists of two actors, an authoritarian leader (L) and a set of

⁴⁹See Singh 2014.

plotters (P) from within the dictator's ruling coalition that seek to depose him. The leader is uncertain about who the actual plotters are, but he knows whether or not he enjoys majority support within the coalition. The game begins with Nature drawing a type of leader, who is strong with probability θ and weak with probability $1 - \theta$. While the game resembles Svulik, it differs precisely on this point, i.e. nature moves first by introducing a shock that weakens the leader.⁵⁰ The leader's strength is determined by the level of support the leader has within the entirety of the winning coalition. If at least half of the members of the winning coalition back the leader, he always fights and defeats the coup is one is staged with a certain probability. The fact that he does not win outright accounts for the possibility that the rank-and-file join the coup as it is unfolding, as Singh shows.⁵¹ The strong leader thus knows that at least half of the coalition supports him before the coup starts, but the figure may vary as the coup evolves. If, at outset, only half of the coalition minus one (or less) supports the leader, he quits and loses power if a coup is staged.⁵² The solution concept is Perfect Bayesian Equilibrium.

Costs and Commitments

Central to the model is the idea that expanding the coalition and establish certain formal institutions is costly to the leader. The cost stems primarily from the division of resources within the coalition. When new members are brought in, current loyal members relinquish

⁵⁰Svulik 2012.

⁵¹Singh 2014.

⁵²I make this assumption for simplicity since it does not alter the results of the model. Theoretically, however, leaders could survive a coup if less than half of the coalition supports him, but some do not join a coup as it unfolds. What this would do is lead more weak leaders to imitate strong types, which is already part of the set of equilibria that result from the model.

part of the benefits they receive and are forced to share them with the new members. This is risky, since it may reduce the level of loyalty of the leader's traditional supporters and make them more likely to coordinate with the plotters.

At the same time, only strong leaders can afford to expand the coalition and divide the spoils among more people without causing a rebellion. This is precisely the source of the commitment mechanism in the model. I assume that strong types, those who enjoy the support of at least half of the coalition, are always willing to fight, since their payoff is always higher than losing government and paying the cost of exile or death. On the other hand, weak types always quit. Apart from carrying a cost, a credible signal must communicate that a leader is willing to fight if he is defied. Using functioning institutions as signals does precisely that: only leaders that are in it for the long haul are willing to incur the expense of creating and maintaining complex structures such as one or multiple parties and legislatures. Sending a signal that you are willing to anything to remain in power, and that a majority of elites are willing to make their support for your regime public, communicates resolve.

Assumption 1: Oversizing is costly, since it the coalition reduces the payoff of supporting the leader for current loyalists within the coalition.

Information Structure and Timing

The leader is informed about his type at the outset of the game. Both the leader and the plotters know the probability distribution around θ , the prior belief about the strength of the leader, but the plotters do not know precisely which leader they are facing. The game proceeds as follows: after Nature has determined the type of leader, the leader decides

whether to expand the coalition through institutions or not expand at all. In either case, the plotters then have a choice between launching a coup or acquiescing in the new or current status quo. If they do not coup, the game ends. If they do, the leader can then decide whether to fight the coup or quit. The extended form of the game is represented in Figure 2.1.

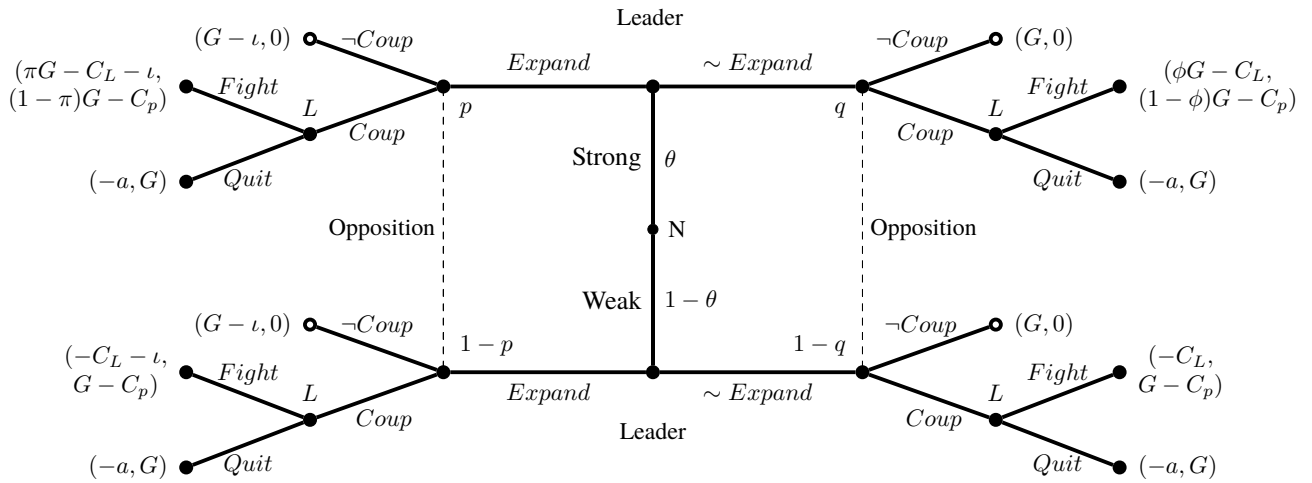


Figure 2.1: Signaling Model In Extended Form

Payoffs

The payoffs for the leader are as follows. If he decides not to expand the coalition, all leader types receive G , the value for continuing to govern the country, if no coup is staged. If a coup does indeed occur, however, strong types receive $\phi G - C_L$ if they fight, and $-a$ if they do not. ϕG is the value for the prize multiplied by the probability of winning a coup if no expansion occurs. C_p is the cost the leader pays for fighting off the coup. If he quits, he pays a cost $-a$, which captures the cost of losing control of government plus other costs associated with resigning, such as restrictions on freedom, audience costs that may preclude

him from holding office in the future, or exile. Weak types, on the other hand, would only pay $-C_p$ if they fight, since their probability of winning a coup if it is staged goes to zero. If they quit, they also pay the cost of quitting $-a$.

The payoffs differ slightly for the leader if he decides to expand the coalition through formal institutions. If no coup is staged, both types receive $G - \iota$, the value of governing minus the signaling cost. If a coup occurs, strong types get $\pi G - C_L - \iota$ if they fight. Here, π is the probability that the coup succeeds after a signal is sent. As before, weak types that fight have no chance of winning, so their payoffs of $-C_L - \iota$ (the cost of fighting and the sunk cost) are strictly negative. Both types pay a cost of $-a$ if they decide to quit after a coup is staged.

There are two important conditions to note here. First, the costs to fighting for the weak type are strictly lower than the costs of quitting, i.e. $-C_L < -a$ and $-C_L - \iota < -a$. This ensures that a weak type of leader always prefers to quit rather than fight. Conversely, strong types always fight, as they know they have enough support to defeat the coup. So $\phi G - C_L > -a$ and $\pi G - C_L > -a$. In this set up, sending a public signal that the coalition has been expanded and more elites show their support for the leader affects the probability that a coup succeeds. This is meant to reflect the channel of indirect communication mentioned above. Officers further down the chain of command may not receive credible signals that a leader is weak or strong, and may join the coup if staged. Sending the signal has the effect of persuading lower-ranking officers to not join the coup.

Assumption 2: $\frac{\pi}{\phi} > 1$. If a strong leader expands the coalition, his probability of winning is greater than if he does not expand the coalition.

As for the plotters' payoffs, they obtain a payoff of 0 in all situations in which they do not launch a coup. If they launch a coup, their payoffs will vary according to the type of leader they are facing and whether they observe the signal. If they observe a signal that the ruling coalition was extended, their payoffs for fighting are $(1 - \pi)G - C_p$ if the leader is strong and $G - C_p$ if he is weak. G is the value for controlling government and it is the same for both actors. C_p is the cost to the plotters of fighting if the leader does not quit. If they do not observe any signal and they launch a coup, their fighting payoffs are $(1 - \phi)G - C_p$ if the leader is strong and $G - C_p$ if he is weak. They obtain G every time the leader quits.

Equilibria

Before delving into the effects of asymmetric information on the expansion of the ruling coalition through institutions, I begin by analyzing the complete-information game. Under full information, strong leaders would always fight off a coup successfully, while weak ones would fall. Plotters would always coup against weak types and acquiesce against strong types. Given this, strong leaders would never be willing to pay the signaling costs, and the game would end with no expansion and no coup. As for weak types, they quit regardless of whether they send the signal. So, with complete information, a pooling equilibrium exists in which no type expands the coalition.

Things change when we give the leader private information about his true type. While a pooling equilibrium still exists in which leaders do not expand the coalition, another pooling equilibrium emerges in which both types prefer to expand the coalition under certain circumstances. These two pooling equilibria provide the main results of this chapter. Let us

start with the pooling equilibria in which all types decide to oversize the coalition and signal the expansion through formal institutions. By backward induction, and given the conditions that strong leaders always fight and weak leaders quit, then the plotters will be indifferent between staging a coup or not when

$$p[(1 - \pi)G - C_p] + (1 - p)(G) = 0, \tag{2.1}$$

$$p^* = \frac{G}{\pi G + C_p}.$$

Thus, if $p^* \geq \theta$, their prior belief about the leader's strength, a coup is launched. They do not rebel if $p^* < \theta$. This gives us the plotter's mixing strategy.

How does a strong leader respond in either case? If $p^* < \theta$, he knows that a coup will not occur, and he will obtain a payoff of $G - \iota$. This is because when the probability that the coup fails is high, the payoff to fighting is strictly negative, $(1 - \pi)G - C_p < 0$, and the plotters are better off waiting out the period. Is the leader better off defecting and choosing to send no signal at all? Off the equilibrium path, the plotters will coup after no signal is sent if

$$p[(1 - \phi)G - C_p] + (1 - p)(G) = 0, \tag{2.2}$$

$$q^* = \frac{G}{\phi G + C_p}.$$

Since, by assumption, $\pi > \phi$, plotters are more likely to coup after not observing a signal, $p^* < q^*$. If the dictator does not send the signal, the plotters launch a coup and he defeats them with probability ϕ . But if he expands the coalition and reduces the likelihood the rank-and-file join the coup, his probability of surviving the coup attempt increases to π . Whether he defects now depends on whether $q^* \geq \theta$. If this condition holds, then the plotters always coup and the leader will defect only if he is better off fighting off a coup than sending the signal. This will be true when $G - \iota < \phi G - C_L$, or $\iota > (1 - \phi)G + C_L$. Only exceedingly strong leaders, for whom the cost of fighting off the coup is really low and the term $(1 - \phi)G$ is close to zero, will prefer to not send the signal. If, on the other hand, $q^* < \theta$, the plotters never launch and the leader defects and prefers to not institutionalize.

Therefore, with asymmetric information, we obtain a situation in which strong types whose prior strength lies between p^* and q^* may still prefer to send a costly signal and expand the coalition. It is also expected that strong types for whom $\theta \geq q^* > p^*$ never institutionalize. The reason why this constitutes a pooling equilibrium is that, given the uncertainty that plotters face, weak types will always try to imitate strong types. If they do not and separate themselves, they will signal that they are weak and attract a coup, which will succeed. Hence they will prefer to send the signal, benefiting from the randomization of the plotters and surviving with probability $1 - p^*$.

Proposition 1: There exists a range of *strong* leaders that prefer to expand or oversize the coalition and pay the signaling cost when $p^* < \theta < q^*$. Strong leaders will send the costly signal if $\iota < (1 - \phi)G + C_L$, and will not otherwise.

If $p^* \geq \theta$, that is, if the plotters always coup after expanding the coalition, slightly different outcomes emerge. Since, following my previous logic, $q^* \geq p^*$, in this situation the plotters always coup no matter what the leader does. This echoes Little's argument that leaders always face a coup in period 1 after coming to power.⁵³ In these circumstances, a strong leader will always fight, while a weak one will quit. Since for the weak leader the cost of quitting is always $-a$, he is indifferent between expanding and not expanding. Yet, does the strong leader still prefer to expand the coalition? That will depend on whether $\pi G - C_L - \iota > \phi G - C_L$. More specifically, he will prefer to institutionalize when $\pi G - \phi G > \iota$, that is, when he has a chance to obtain more of his value of governing by expanding than the simple cost of creating the expansion.

Proposition 2: If $p^* > q^* \geq \theta$, strong leaders expand the ruling coalition precisely because they know a coup is forthcoming, and sending the signal improves their chances of winning the coup provided $\pi G - \phi G > \iota$. Weak types also send the signal to avoid separating themselves, and benefit from the plotter's mixing strategy.

This game also has a pooling equilibrium in which both types of leader decide not to send a signal. For this to be the case, leaders need to be sufficiently strong that plotters will not coup even in a moment of apparent weakness, or $\theta > q^*$. Another option is that, even if a coup is forthcoming, or $q^* > \theta$, then the leader is better off not institutionalizing and instead fights off the coup, or when $\phi G - C_L > \pi G - C_L - \iota$, or $\pi G - \phi G < \iota$. This may be the case if expanding is too costly, but strong leaders should be able to afford a sufficient level of institutionalization to increase the probability π of surviving a coup just enough. Thus,

⁵³Little 2017.

this equilibrium is sustained on the part of the strong leader only if $\theta > q^*$. As regards the weak type of leader, again, he has the incentive to imitate the strong type and not send any signal, as it may benefit from the plotters not launching a coup in such case. He is indifferent between expanding the coalition or not if the plotters launch a coup as his payoff is $-a$ in both instances.

Proposition 3: If $\theta > q^* \geq p^*$, neither strong nor weak leaders will expand the coalition through institutions. The strong leader is believed to have enough to survive a coup even if he does not expand the coalition.

It is important to note that this game only has the pooling equilibria described above. No separating equilibria can exist, since a weak leader never has an incentive to reveal his true type. Doing so would always lead to a successful coup. Similarly, no semi-separating equilibrium exists for the same reason. If, for instance, strong leaders use a mixed strategy, the weak leader would always want to defect and imitate a strong leader when he chooses a different strategy. Weak leaders would never mix, since their true type would be revealed at least some of the time.

In this chapter I have presented a fairly standard signaling game with discrete types and two signaling choices. In the continuous-signal form of the game, a separating equilibrium exists for a range of strong types that send a stronger signal than a weak type can ever send. That is, my model as is assumes that weak leaders can imitate strong leaders and benefit from the plotters' mixing strategy, which sometimes leads to no coup occurring. So in that form of model, (1) leaders that can survive *any* coup never expand the coalition, (2) leaders whose support is not sufficient to guarantee that they survive every coup expand the

coalition above the level at which a weak type could imitate them, and (3) weak types do not expand the coalition and fall victim to a coup. The most important takeaway from both models is the second, i.e. that there is a range of strong types for which it is better to send a costly signal, expand the coalition through formal institutions. The main result, therefore, is common across models.

2.5 Institutions Under Trujillo In The Dominican Republic

In this chapter, I contend that dictators expand the coalition in times of weakness to weaken the relative position of the plotters and use formal institutions to signal strength to the broader coalition. The case of Rafael Trujillo, which I review now, illustrates this argument well. I will focus on two specific events: Trujillo's removal of Vasquez from power in early 1930 and the steps he took to consolidate power afterward.

When Rafael Trujillo rose to power in the Dominican Republic in 1930, the country was politically and institutionally underdeveloped. Internecine power struggles between *coludo* and *bolo* caudillos had led to a period of deep political instability starting in 1899. Eleven presidents ruled the country between that year and 1914, when US occupation began. Trujillo trained with the American forces and rose through the ranks during Horacio Vasquez's six-year tenure after the US left in 1924, becoming the commander in chief of the armed forces in 1927.⁵⁴ As the great depression weakened Vasquez, whose decision to seek an extension on his term limit proved unpopular, factions developed that sought to overthrow

⁵⁴Turits 2003.

him. A nationalist movement led by Rafael Estrella Ureña launched a revolt on February 23, 1930, and Trujillo seized the moment to strike a pact with Estrella and take power for himself.

Trujillo's coup in 1930 is a vivid example of why leaders (1) are constantly under threat from other members in the ruling coalition and (2) they do not know who these plotters are. I argue that, precisely for these reasons, leaders are better off using an expand and signal strategy over other potential solutions, i.e. selective purges and co-optation through increased rents. By making Trujillo commander in chief of the armed forces in 1927, Vasquez intended for him to become his second in command and his most loyal servant. Yet, in early 1930, Trujillo began to plot against Vasquez by forming an alliance with Estrella's movement. He allowed Estrella's forces to march freely on Santo Domingo, while telling the President that he was doing everything within his power to stop them. As Crassweller describes, Vasquez refused to believe, until the very last second, that Trujillo was behind the plot to overthrow him; he only realized it when Trujillo himself appeared in his office and asked him to leave.⁵⁵

While he had the support of Estrella's coalition and the army, Trujillo's position was not consolidated. New rulers have coups launched against them more frequently⁵⁶ and the effects of the Great Depression could sow discontent quickly and erode his position. Moreover, Trujillo had one main competitor, Estrella himself, whose movement he used to depose Vasquez. Estrella was the only figure who had the prestige and political capital to pose a difficult challenge to Trujillo's rule. While Trujillo controlled the armed forces,

⁵⁵Crassweller 1966.

⁵⁶Little 2017.

Estrella had the charisma, the coalition, a small political party –the Patriotic Coalition of Citizens– and a position of power. As part of the deal, Estrella was made interim President and Trujillo would run as a candidate in the August 1930 elections, partly because the US State Department refused to recognize a potential Trujillo administration.⁵⁷ Estrella emerged, therefore, as the main threat to Trujillo’s path to the Presidency.

After becoming President in August 1930, through elections that he helped rig,⁵⁸ Trujillo set out to consolidate his power. Indeed, what Trujillo did next helps illustrate precisely the expand-and-signal strategy I describe in this chapter. Trujillo first dissolved the Patriotic Coalition of Citizens, Estrella’s party and the one which had brought him to power. He then founded the *Partido Dominicano* and established himself as its leader. The party would soon reach a membership of 1,302,751 Dominicans, as most citizens were required to sign up. The political elite that emerged was a mix of new *Trujillistas* from Santo Domingo and an old rural elite that fit uneasily in the new scheme. Trujillo held a deep disdain for the old ‘aristocracy’ and sought to undermine their power by creating a powerful urban elite made up of people whom, like himself, had risen from the lower classes.⁵⁹ He organized the party in one central, 23 provincial, and 69 communal *juntas*. Further local and district-level groups were organized. Leadership of these subgroups became equivalent to social standing, and occasional purges ensured every provincial and national leader remained alert and loyal. The expansion of Trujillo’s coalition from a small centralized group of support in the Patriotic Coalition of Citizens, in which Estrella Ureña competed for leadership with Trujillo, to

⁵⁷Crassweller 1966.

⁵⁸Hall 2000.

⁵⁹Ibid.

a wide-ranging complex organization with many more members like the Dominican Party took place in less than a year.

The relative power of Estrella and his coalition dwindled as the party elite grew in numbers and in support for Trujillo. Indeed, Estrella's downfall was precipitous. After agreeing to transfer the Presidency to Trujillo in August 1930 after 5 months as acting President, he became the Vice-President. He resigned from the position in 1932 after fleeing to Cuba in late 1931. He returned from exile in 1940 and Trujillo made him Supreme Court Justice, but tensions between them arose again after Estrella reignited his old Nationalist Party and died in 1944 in suspicious circumstances.⁶⁰

More generally, while Trujillo is remembered as one of the most ruthless and long-lasting dictators in Latin America during the twentieth century, his rule was not solely based on repression executed by a small coterie of sycophants. Quite to the contrary, he built a relatively complex network of regional and national institutions and used it to manage his power. In fact, in the Democracy and Dictatorship dataset,⁶¹ Trujillo's Dominican Republic is coded as one of the most institutionalized dictatorships. Elections were held to elect representatives, multiple parties were allowed both de jure and de facto for long stretches of time, and a functioning legislature existed that could enact its own laws –with the consent, of course, of the benefactor. This network of institutions, I argue, was useful to Trujillo not to prevent domestic conflict and improve policy-making generally. For the former, he had the Military Intelligence Service, a sharp and spineless police force tasked with repressing all forms of

⁶⁰Crassweller 1966.

⁶¹Cheibub, Gandhi and Vreeland 2010

dissent. For the latter, he could find ways to strong-arm any lawmaker into submission.⁶² Rather, institutions were used as signaling devices to members within and without his immediate support circle that any deviation from the most absolute loyalty would be greatly punished.

The Dominican Party was Trujillo's main tool for coalition expansion. Another was the Parliament, which slowly increased from 31 representatives and 12 senators in 1930 to 58 and 23 respectively in 1957, just four years before Trujillo's assassination. Why the expansion? While the legislature retained powers to enact law, and even if multiple parties were allowed at different points in time, all of its members were staunch Trujillo loyalists. In the only election in which the Partido Dominicano did not obtain one hundred percent of the vote, in 1947, no party obtained enough votes to enter either chamber of Parliament. Rather, these formal institutions were in place precisely as signaling devices. In entering them, the elites that were part of these institutions made their support for Trujillo explicit by becoming invariably linked with the regime. While many survived the country's transition to a weak democracy in the second half of the 1960s, most notably Joaquín Balaguer, the outcome would likely have been the opposite had a rival faction taken power via a coup. Moreover, the institutions convened on a regular basis and were part of the political debate of the time. Senators were important people, and scandals involving them fascinated the popular imagination. Between the elites in the party organization, and the elites in Parliament, few were left to contest the regime consistently from the outside, which explains why Trujillo was never under real pressure to co-opt domestic opposition. Plotters from inside the regime

⁶²Turits 2003; Crassweller 1966.

had the unenviable task of convincing the rank-and-file that Trujillo was weak enough that a coup against him would succeed. By creating such strong a visible institutions, Trujillo made himself look strong in the eyes of a majority of the armed forces and the broader populace. The three coup attempts he faced in the first decade in power were easily and quickly defeated.⁶³

A relevant juncture in Trujillo's dictatorship came in 1948, perhaps when Trujillo was at his strongest, with world sugar prices booming after World War II. Multiple parties were legally allowed in the Dominican Republic under Trujillo, but at different points in time, parties other than the *Partido Dominicano* were repressed in practice. For the 1947 election, Trujillo allowed multiple parties to run. World War II had a relatively negative effect on the state's finances, leading to difficulties between 1943 and 1947. Trujillo decided to create the image of integration and plurality by allowing multiple parties to run. The Democratic National Party of Rafael Espaillat, known as *navajita* (little knife), obtained 3 percent of the vote. Espaillat was a loyalist who became chief of the secret service. Another party, the National Labor Party, obtained also 3 percent of the vote. Its 'leader', Francisco Prats Ramírez, was also a loyalist who had also been President of the *Partido Dominicano*. Trujillo won the election with over 93 percent of the vote, and neither of the other two parties won sufficient votes to obtain a single seat in the legislature. After 1948, with the country's economic fortunes reversed and the election won, any party other than Trujillo's Dominican Party was not allowed to operate in practice, even if they remained legal. It was not until 1961, the year of Trujillo's death, that multiple parties operated both de jure and de facto again.⁶⁴

⁶³Crassweller 1966.

⁶⁴Cheibub, Gandhi and Vreeland 2010; Crassweller 1966; Derby 2009; Turits 2003.

2.6 Conclusion

The main theoretical contribution that this chapter wants to make is that autocrats, when faced with a particularly difficult predicament, have often resorted to a relatively unknown and counterintuitive tactic to retain power: they expand, rather than shrink, the ruling coalition and use formal institutions purely as signaling devices meant to generate commitment from new members and communicate credibly to the rank-and-file that the leader is too strong for a coup to succeed. Many instances of this exist throughout history. When Rafael Trujillo came to power, for example, in the Dominican Republic in 1930, he moved quickly in the first six months of his rule to create a large party apparatus and expand the country's senate. In the case of Morocco, which Gandhi uses in her book,⁶⁵ King Mohammed V faced strong internal opposition upon his return to the country as rightful King in 1957 just after independence from France. Within 7 days of his arrival, to counter the powerful movement that sought to impede his reign, he established the country's first Parliament and filled it with 75 loyalists. The celerity with which the institution was created, coupled with the fact that loyalists were placed in positions of influence, lends credence to the idea that the institution served as a way to expand the coalition, weaken the relative power of the opposition group, and tell potential plotters that staging a coup was the wrong choice.

The formal model I have introduced in this chapter captures both of these relevant dynamics. On the one hand, and most importantly, using institutions as a public signal that the ruling coalition has expanded directly increases the probability of winning a coup, since more members of the rank-and-file perceive the signal and decide not to join a coup if it is

⁶⁵Gandhi 2008.

staged. In doing so, the payoffs for staging a coup for the plotters are lower after the coalition has expanded, which makes them more likely to not stage a coup in the first place.

The main results of this chapter are straightforward and intuitive: very strong leaders, who enjoy enough support from their coalition to survive virtually any coup, prefer not to institutionalize. Weak leaders, who know that they will lose power if a coup is staged, try to imitate strong leaders and benefit from the plotters' mixing strategy, which is to not launch a coup some of the time. In the continuous-signal form of the model, weak types do not imitate since stronger types manage to separate themselves by sending a signal that weak types cannot afford. What is most relevant, however, is that there exists a range of strong types that are always better off sending the signal under certain circumstances.

This chapter bridges an important gap between the literature on coups and dictatorial consolidation and the one on power-sharing institutions in authoritarian regimes. I provide a new theory for the emergence of a very specific set of formal power-sharing institutions in dictatorship: formal organizations such as political parties and legislatures created or completely reconstructed by the leader. Especially important is to consider actions by a leader in times of crisis, particularly at the outset of rule and after a severe shock. In these times, fewer leaders are likely to be strong enough to survive any coup, and visible dwindling support makes more leaders likely to engage in signaling of the type advanced in this chapter. More leaders, that is, are likely to fall within the range of types that decide to expand the coalition in times of crisis. Once created, these institutions are likely to persevere at least during the leader's tenure.

Chapter 3

Et tu Brute? Wealth Inequality and Authoritarian Replacement

As the recent example of Robert Mugabe in Zimbabwe shows, transitions within dictatorship remain frequent. What motivates elite factions to seek to replace an authoritarian incumbent? In this chapter, I provide a political economy theory of authoritarian replacement. I argue that high wealth inequality fosters authoritarian replacement, but that the effect is conditional on overall wealth being low. At low wealth, elite factions have an incentive to control the state to appropriate income. As wealth grows, elites shift their focus toward securing their wealth and thus prioritize finding credible commitments and stability within authoritarianism. I test these hypotheses using data from 1960 to 2008 and employ multistate survival analysis. A case study of Trujillo's rise in the Dominican Republic illustrates the mechanisms of the theory. The evidence supports the main theoretical expectation that replacement is more likely when wealth inequality is high and wealth is overall low.

3.1 Introduction

What motivates elite factions to seek to replace an authoritarian incumbent? In this chapter, I provide a theory of wealth inequality to explain authoritarian replacement. When wealth inequality is high but wealth levels are low, competing elite factions seek to overthrow one another from government in order to capture new income through the state. As their wealth increases, they become progressively more concerned with securing their wealth, and authoritarian replacement decreases. I define authoritarian replacement as a transition from an authoritarian regime to another, which can occur as a result of a coup, a change in leadership accompanied by a substantial change in the rules of the regime, a popular uprising, a revolutionary movement followed by a civil war and subsequent new leadership, or electoral loss within autocracy.⁶⁶ To this day, the politics of authoritarian replacement remain significantly undertheorized.⁶⁷

Attention has generally focused on transitions from authoritarian rule to democracy and democratic breakdown⁶⁸ or on institutional and economic factors that improve dictatorial stability.⁶⁹ Recently, a new wave of research has focused on coups within authoritarian regimes, yielding important insights into the role of dictator-elite relations,⁷⁰ the coordination capacity of the plotters,⁷¹ and how coups unfold and the role of information diffusion in the days of the coup.⁷² A lot less is still known about the motivations of different elite factions

⁶⁶Geddes, Wright and Frantz (GWF) 2014.

⁶⁷Wright and Bak 2016.

⁶⁸Acemoglu and Robinson 2001, 2006; Ansell and Samuels 2014; Boix 2003; O'Donnell and Schmitter 1986; Przeworski et al. 2000.

⁶⁹Brownlee 2007; Gandhi 2008; Slater 2010; Wright and Escribà-Folch 2012.

⁷⁰Svolik 2009, 2012.

⁷¹Little 2017.

⁷²Singh 2014.

to replace each other, and why they appear to be more common and pernicious in certain contexts and not others. What factors lead different elite groups to overthrow each other?

Consider the Dominican Republic at the turn of the twentieth century: In the fifteen year period between 1899 and 1914, eleven different presidents were sworn in. Three of them fell victim to a coup d'état, five of them resigned their office after brief tenures, and one was assassinated. The instability resulted from quarrels between two groups, *Horacistas* and *Jimenistas*, for government control. Wealth at the time was low, but the sugar trade was booming. Greater tax revenue increased incentives for corruption in government. Moreover, a majority of sugar mills were in the hands of US and Canadian investors by the mid-1910s, generating income streams in the form of government contracts, licenses and concessions.⁷³ Governing, even for a short period of time, was profitable, and the wealth owned by elite groups was low enough to justify the risk of taking over the state.

Economic theory and empirics predicting regime transition have until now mostly focused on authoritarian to democratic transitions and the mechanism of income inequality.⁷⁴ The literature has paid much less attention to transitions from one authoritarian regime to another and to alternative economic mechanisms that may explain transitions within authoritarianism.⁷⁵ In political transitions, conflicts for power usually involve a small and relatively affluent elite, whose factions compete over power and wealth. I provide a novel political economy theory of authoritarian replacement based on the role of *wealth*, which is the main driver, I argue, of elite competition.

⁷³Bulmer-Thomas 2003, Hall 2000.

⁷⁴Acemoglu and Robinson 2006; Ansell and Samuels 2014; Boix 2003.

⁷⁵Houle 2016; Przeworski 2005.

I make two key distinctions in this chapter. The first one is between wealth inequality and levels of absolute wealth. Wealth inequality, a concept that has gained importance of late, refers to the structure of wealth in the economy at a given point in time, that is, the division of national output between capital and labor; or, in simpler terms, to differences in the ownership of capital and its profits among different classes.⁷⁶ Wealth can be more or less concentrated in the hands of a few. Wealth levels, on the other hand, refer to the total amount of wealth owned in society at any given point in time. The second distinction is between wealth and income. Wealth is a stock and income, a flow. Wealth, or capital, represents the total assets owned at any point in time, which have been saved or accumulated.⁷⁷ Income is the net influx of assets within a defined period of time, usually a year. Individuals need large amounts of income to transform into savings, which then become their wealth stock.

My theory predicts that, at high levels of wealth inequality, social actors have an incentive to capture the state in order to increase their short-term income, with their goal set at maximizing their long-run wealth. This effect for authoritarian replacement, I argue, is moderated by the level of wealth in the economy: when wealth is low overall, the incentives to capture the state and increase the flow of income are much greater, since they have relatively little wealth. As wealth levels increase, the incentive to capture the state decreases even in the face of relatively high inequality.⁷⁸ A paradigmatic example of such conflict occurred on Peru during the *guano era*, from the 1840s until the 1870s: different elite factions replaced each other in power often in order to enrich themselves by capturing *guano* income through

⁷⁶Piketty 2014; Saez and Zucman 2016.

⁷⁷I use these two concepts, wealth and capital, interchangeably.

⁷⁸Later I discuss how, at high levels of wealth, elites no longer seek to control the state, since their incentives shift from seeking new income to securing the wealth they already own through guarantees on property rights.

contracts with British companies.⁷⁹ Governing was not a medium- or long-term stable exercise but an expedient and fleeting affair intended to benefit the members of each leader's coalition. Inequalities in wealth among these groups were high, and the wealth they owned relatively low, which incentivized them to seek to control the state and redistribute income toward themselves.

In this chapter, I model and measure authoritarian replacement.⁸⁰ I define and operationalize the concept here as replacements of authoritarian incumbents by an entirely different set of elites. I contrast this type of transition with leadership replacement from within the same coalition, which often does not shift resources or generate more elite redistribution.⁸¹ If current elites stay in power in their majority, economic relations will remain the same –as was the case, for instance, under the *Partido Revolucionario Institucional* in Mexico from 1920 until 2000. Here, the interest is in authoritarian replacement between opposed elite factions, and that is why I use the GWF transitions dataset.⁸²

This argument makes important contributions to current debates. First, it helps explain key dynamics of authoritarian replacement, a topic that has been significantly undertheorized. Transitions to democracy have long been at the forefront of comparative politics research, but the recent trend toward democratic erosion and breakdown is forcing scholars to study authoritarian politics more intimately. Indeed, the share of democracies has plat-

⁷⁹Bonilla 1984.

⁸⁰In my tests, democracy and democratic breakdown are included to account for the full scope of transitions that countries can experience. This conforms with the multistate survival model used in the empirical section of this chapter. Including all transitions reduces coefficient bias. However, no theoretical contribution is offered in this chapter for democratization or democratic breakdown. This will be explained in more detail in the methods section.

⁸¹See GWF 2014; Wright and Bak 2016.

⁸²GWF 2014.

eaued in the last decade – 108 democracies existed in 2008, and 108 democracies existed in 2016.⁸³ The number of nondemocracies has not risen either – 75 in 2008 and 75 today, but a notorious breakdown in Turkey in 2016 and a worrisome trend toward reversal in countries such as Poland or Hungary foreshadow the potential for a first wave of democratic breakdowns. These events, coupled with recent transitions within authoritarianism, such as Mugabe’s ouster in Zimbabwe, underscore the importance of understanding authoritarian politics at a deeper level and from new perspectives.

Second, the political development literature has focused primarily on the effects of income inequality on regime transitions. I argue in favor of shifting the focus away from income inequality and toward the concept of wealth, which is better suited to explain structural political outcomes through the lens of intra-elite conflict. Third, this chapter places a renewed focus on intra-elite bargaining and conflict,⁸⁴ moving away from the ‘elite-vs-poor’ logic that has dominated the political development debate for well over a decade.⁸⁵ Lastly, it expands on extant work showing that new dictators expropriate competing elites to signal their exclusive reliance on the group that supports them.⁸⁶

I use multistate survival analysis to model transitions within authoritarianism and interact wealth inequality and wealth levels. The dataset includes 144 countries from 1961 to 2008. I also provide a case study of the Dominican Republic between 1900 and the fall of Trujillo in 1961 to illustrate the mechanisms of my theory.

⁸³Boix, Miller and Rosato 2013. An updated version of the dataset to 2015 is available at Harvard Dataverse.

⁸⁴Geddes 1999; O’Donnell and Schmitter 1986; Przeworski 1991.

⁸⁵Acemoglu and Robinson 2006; Boix 2003.

⁸⁶Albertus and Menaldo 2012.

3.2 Theory

High levels of wealth inequality lead to authoritarian replacement. In what follows I provide an elite-conflict logic for my argument: in dictatorship, conflict over resources increases when wealth inequality is high. Disadvantaged economic and social groups can reverse their fortunes by reaching political power and appropriating resources. However, the effect of this wealth inequality gap on authoritarian replacement is mediated by the level of wealth these elite groups already own. When elite factions have low levels of wealth, they will seek to capture the state in order to appropriate income – as happened in Peru during the *guano* era or in the Dominican Republic at the turn of the twentieth century amidst a booming sugar trade. As wealth levels increase, incentives to secure wealth become more pressing than incentives to increase income. The need for stronger property rights, in turn, reduces incentives for authoritarian replacement.

In this section, I will first survey the concept of authoritarian replacement and potential alternative explanations. I will then define wealth, elites and go on to introduce the main mechanisms of my political economy theory of authoritarian replacement. I will show that controlling the state is crucial for elites to achieve their economic goals when wealth inequality is high and wealth levels are low.

Authoritarian Replacement

Authoritarian replacement refers to elite groups replacing one another in power, and requires a change in the group that actually holds power and a shift in the distribution of resources

between groups.⁸⁷ I do not attempt to explain regular leadership transitions from within the same coalition – I reflect this distinction in the operationalization of the concept. Wright and Bak make this concise distinction and use the examples of Iran and Nicaragua in 1979 – the advent of the current clerical regime and Somoza respectively – as instances of leadership change that both the composition of the elite and the distribution of resources among elites.⁸⁸ They contrast these two cases with Mexico under the Partido Revolucionario Institucional (PRI), where leaders alternated in power in an effort to aid authoritarian survival but the coalition remained the same,⁸⁹ and with the case of the Argentine military juntas of the early 1980s. In both of these cases, leadership change amounts to a simple reshuffling of the executive and the group that holds power is the same. In this chapter, my argument and logic apply to the former set of cases – and none of the transitions under the PRI are considered as instances of replacement in the data.

The cases of Iran, Nicaragua are obvious examples of authoritarian replacement, since they shifted resources in a dramatic fashion between clearly differentiated factions. Other cases may be less clear-cut. Indeed, some replacements in my data set occur as the result of military coups, in which it may difficult to judge the extent to which a successor and his coalition differ from his predecessor and the elites that supported him. This was the case, for instance, in Ecuador in 1972, where Rodríguez Lara ousted Velasco Ibarra in a bloodless coup;⁹⁰ in the Central African Republic in 1981, where André Kolingba removed David

⁸⁷Wright and Bak 2016.

⁸⁸Ibid.

⁸⁹Magaloni 2006.

⁹⁰Acosta 2008.

Dacko;⁹¹ and in the Dominican Republic in 1930, when Rafael Trujillo toppled Horacio Vasquez, among others.⁹²

Yet all these examples differ from the cases of the PRI in Mexico or the military juntas in Argentina and Brazil in the 1970s and 80s in one fundamental aspect, namely, that the new leader, while part of the old coalition, represented interests that differed from the President he ousted. The case of Trujillo is exemplary: while he was the power player in the coup against Vasquez by virtue of controlling the military apparatus, he struck a secret pact with an opposition faction led by Estrella Ureña and the urban, nationalist elite that sought to remove Vasquez.⁹³ He shifted resources from an old aristocratic elite toward a new oligarchy deeply dependent on him.⁹⁴ Thus, Trujillo's rise as a clear example of authoritarian replacement as conceptualized in this chapter, even if he was, admittedly, Vasquez's second in command and a large majority of the army remained under his control. In the case of Kolingba, he was also Dacko's Army Chief of Staff. Once in power, he built his regime partly along ethnic lines by appointing Yokamas, his coethnics, to key positions. Yokamas, a small minority in the Central African Republic, also represented over two-thirds of the army by the end of his rule.⁹⁵

It is important to note that the boundaries between the leader's coalition and competing elite factions are often blurry. This is because, as is well known, dictators try to co-opt such rival elites to improve their own chances of survival, which can indeed be a successful

⁹¹Ghura and Mercereau 2004.

⁹²Turits 2003.

⁹³Crassweller 1966.

⁹⁴Hall 2000.

⁹⁵Ghura and Mercereau 2004.

tactic.⁹⁶ Yet problems remain for the dictator. Primarily, rival factions are fluid and constantly forming, which means that he may often not know precisely how to co-opt every potential faction that develops or becomes discontented. This problem is more acute when the leader's resources are limited and he cannot accede to the growing demands of rival co-opted factions. The literature has tended, I would argue, to see co-optation as a rigid process, but it is in fact fluid. Indeed, co-optation requires periodic renewals of the terms of agreement, as well as the right balance in the benefits offered to co-opted factions. For the dictator, this process is difficult and dangerous, even more so when some rival factions own less wealth than other factions.

One particularly perverse manifestation of state capture at low wealth and high inequality are predatory states, where rulers use their position of power to prey on the citizens and extract resources through taxation or expropriation.⁹⁷ Others may take the form of rentier states, where natural resource abundance often leads to the appropriation and misallocation of profits and anemic industrial, agricultural and service sectors –commonly known as Dutch Disease.⁹⁸ Or, as in the case of Peru in the nineteenth century, enclave economies can become unstable and see high levels of replacement as a result of elites fighting each other for political power as they try to profit from contracts with foreign companies.⁹⁹ My political economy theory of authoritarian replacement complements these existing debates and helps explain some, if certainly not all, of the common dynamics identified in them.

⁹⁶Gandhi 2008.

⁹⁷Evans 1995.

⁹⁸Karl 1997.

⁹⁹Cotler 1979.

Elites

How do wealth inequality and wealth levels affect how different economic elite factions decide to replace an authoritarian leader? Economic elites are defined here as individuals within a given society who, by virtue of their access to wealth, may exercise political power and have decisive influence on a state's executive and legislative powers. They are usually in the top one-thousandth of the wealth distribution and tend to organize themselves in groups that represent various economic interests, political beliefs, or nepotism networks. These groups also can be nested –for instance, oil producers may have a small association within a staunchly conservative block that advocates for a strong currency. Participation in these groups is often fluid, and the total set of elites expands as the economy grows. If they do not themselves nominate a member for political office, these economic elites sponsor a group of political elites to represent them and often strong-arm them into doing their bidding.

I begin with a simple assumption: elites seek to maximize wealth in the long run. In dictatorship, they face two main threats: another elite group appropriating their wealth and a revolution from below. The literature has recently echoed the importance of these two existential threats. Elites may democratize if their position in authoritarianism becomes weak but would otherwise be strong in democracy¹⁰⁰ or if they have the opportunity to game democracy.¹⁰¹ They can also stay within authoritarianism if they act as a unitary actor

¹⁰⁰Slater and Wong 2013.

¹⁰¹Albertus and Menaldo 2014; Albertus 2015.

and pact.¹⁰² The existential threat of revolution from below, on the other hand, has been noted in a majority of the social conflict literature.¹⁰³

Wealth

Wealth can be conceptualized in two distinct ways. One is structural: who owns wealth and who does not, and what are the relationships that develop over time between the haves and the have-nots. This is the idea behind wealth inequality in society. The other corresponds to the absolute level, or stock, of wealth available in an economy, i.e. how much wealth there is.¹⁰⁴ The two concepts may be related but it need not be so: Cuba, for instance, had low levels wealth inequality and absolute wealth before 1990, while many Central American nations had exceedingly high levels of inequality with low levels of wealth in the second half of the past century. Developed European nations, on their part, tend to have lower levels of inequality and high levels of wealth. China also broadly fits this category.

I define wealth at the individual level as the value of the productive capital owned by a person at any point in time. It is important to distinguish wealth from income. Income is earned in the form of salary and bonuses over a given period time, usually a year—it is, therefore, a flow. Wealth, on the other hand, is a stock that holds intrinsic value and has the potential to generate capital income. Wealth includes all productive assets that yield a rate of return but excludes human capital.¹⁰⁵

¹⁰²Slater 2010; see also Magaloni 2006.

¹⁰³Acemoglu and Robinson 2000, 2001, 2006; Boix 2003.

¹⁰⁴see Piketty 2014.

¹⁰⁵Following Piketty (2014, 72), I use the terms wealth and capital interchangeably.

I contend that the distinction between wealth and income is central to understanding authoritarian replacement and, more generally, regime change. This idea differs from current work that has emphasized the importance of income inequality in political transitions.¹⁰⁶ Income may come in the form of a salary or a payment from another person or entity, or it may be generated by capital. In both cases, income inequality may be high, but the political implications of inequality differ if personal wealth is the main source of income. I argue that if elites own little wealth, they will seek to control the state and appropriate new income. As their wealth increases and generates a majority of their income, they will become more concerned with protecting their wealth and instituting guarantees for property rights and political stability. Without being more precise about the concepts of income inequality and wealth inequality, we may miss important dynamics tied to income and wealth separately.

Two final considerations regarding wealth. Human capital cannot be owned by a different person or group of people and cannot be traded in the open market;¹⁰⁷ hence it is excluded from this theory. Also, while land remains an important theoretical mechanism in many recent works,¹⁰⁸ I focus on all forms of capital here without making distinctions by capital type explicit. While type certainly matters, and I do hope to extend the logic advanced here

¹⁰⁶Acemoglu and Robinson, 2006; Ansell and Samuels 2010, 2014; Boix 2003; Haggard and Kaufman 2012, 2016. It is important to note that these works have indeed considered the importance of wealth, but have not precisely distinguished wealth from income and considered the implications that each may have, separately, on political transitions. Boix did so more explicitly by separating the effects of income inequality and asset specificity, arguing that elites with fixed assets will be less likely to accept a move to democracy. However, within the concept of income inequality, he still included both wealth and income. Other dynamics between wealth, income and regime transitions, such as the ones I identify in this chapter, remained unexplored.

¹⁰⁷Piketty 2014.

¹⁰⁸Albertus 2015; Ansell and Samuels 2010, 2014.

to particular cases and types of economies, I leave these considerations as implicit in the certainty that my general conclusions hold across types of capital.

Wealth Inequality, Wealth Levels and Authoritarian Replacement

To show how replacement is most likely when wealth inequality is high and wealth levels are low, I introduce the following simple accounting identity, which reflects the wealth function of any given elite at any point in time:

$$W_{t+1} = (1 + r_t)W_t + \Lambda_t - T_t - c_t.$$

Wealth in period $t + 1$ is a function of all accumulated wealth in the past, W_t , multiplied by $1 +$ the rate of return r_t . To this, net income during period Λ_t is added, while taxes T_t and consumption c_t are subtracted. This calculation produces the net level of wealth of a member of the elite at any given point in time.¹⁰⁹

An elite's total wealth can increase in two ways: by increasing income (Λ_t), or by obtaining a better rate of return on capital that grows the current wealth stock ($r_t * W_t$). I assume that everyone starts with a positive level of assets W_t . If W_t is low, increasing wealth by obtaining a return on capital will prove to be especially slow, considering that it is reasonable to assume a long-run average rate of return on capital of around 5 percent.¹¹⁰ Thus, elites who find themselves with lower levels of wealth can only obtain so much in

¹⁰⁹I do not introduce a formal model explicitly; the formula below will be useful only as an analytical tool to describe how wealth grows in the long run.

¹¹⁰Piketty 2014.

terms of returns to that wealth, and their weak position relative to wealthier elites is likely to endure in time. The persistence of this weakness is even starker when we consider that capital increases *multiplicatively* in the long run, provided the rate of return is positive on average. The greater the level of W_t , the greater the income from capital, and the faster the gap between the wealthiest and least wealthy elites grows.

Disadvantaged elites are faced with a dilemma: do they prefer to remain in a weaker position, or strive to regain their dominant position as one of the wealthiest – and thus more influential – groups? Two central factors go into this calculus. First, if wealth is too low, elites must increase their discrete income – and fast. Second, they need to calculate how important it is to them to hold on to the little they already own, which is never safe in dictatorship.

Why Take the Risk?

The most effective mechanism for elites to conquer new income is by capturing the state. They can use it to capture capital from other elites through expropriation and obtain natural resources or other forms of revenue that have not yet been tapped.¹¹¹ Ruling elites can also restructure the economy in such a way that their coalition profits directly from domestic sectors such as utilities or telecommunications. Ruling is, indeed, profitable.

Yet not all groups take power in the same way. In certain instances of replacement, one elite has been removed and expropriated completely, and then forced to flee the country or

¹¹¹Karl 1997; see Ross 2001; Smith 2008.

stay at risk for their own lives – as in the aforementioned examples of Iran or Nicaragua.¹¹² Others are less violent, as in guano era Peru, where elite factions simply focused on controlling guano contracts and reining in the profits when they took office.¹¹³ However, all these transitions, as Wright and Bak argue, have one thing in common: a substantial redistribution of resources from one group to another.¹¹⁴

This shift in resources explains one important part of our central puzzle, i.e. why elites seek to replace each other and not accept the status quo and cooperate with the rulers. Given the formula above, it pays off to seek to overthrow the government if the potential income from ruling is higher than the value attached to an elite's current wealth. Since the income from takeover will always be quite high everywhere, lower levels of wealth will lead to increases in the probability of authoritarian replacement.

The only case in which this conclusion would not hold is if an individual elite was so risk averse that no level of promised income in government could be higher than its value for its current wealth. Such individual may exist, but it cannot be modal because there are no guarantees on wealth in dictatorship. One individual may find himself at the wrong end of selective purges, or without key assets should they become particularly interesting for the dictator to own or redistribute. Thus, even for the most risk averse elite member, it pays off to join a plot to overthrow the current leadership if the probability of winning is greater than the probability that he manages to keep his assets.

¹¹²Wright and Bak 2016.

¹¹³Bonilla 1984.

¹¹⁴Wright and Bak 2016.

When Replacement Ends

As elites grow wealthier, their concern shifts from generating new income flows to securing the wealth they have accumulated. Their income now stems entirely from their wealth in the form of interest on bonds or deposits, stock market gains, profit from enterprises in which they invest, and others. Since elites can take full advantage of the rapid multiplication of a well-managed and diversified portfolio of wealth investments, they no longer need to generate non-capital income through capturing the state.

The state may no longer be regarded as a tool to generate new income, but an authoritarian ruler can still decide to expropriate wealth at a moment's notice. If uncertainty is high, elites may be better off trying to replace the leader again to reach political power and thus prevent the expropriation of their wealth. I argue, however, that elites prefer a better and more stable alternative to conflict when their wealth is high and wealth inequality decreases. Attempting to take over the state is risky, and it is difficult for them to ascertain whether it is more risky to replace the leader than to be expropriated by him.

What wealthy elites require is a solution to the leader's commitment problem: can elites formalize a pact by which the leader and the ruling elite credibly commit to not expropriate other wealthy elite's property? The answer is that they can. Such agreements usually take the form of constitutional rules that guarantee and respect property rights, and institutions such as political parties and legislatures help enforce them.¹¹⁵ If the ruler reneges on his promises, the affected members will know. His failure to fulfill this commitment may thus

¹¹⁵Gehlbach and Keefer 2011; Wright 2008.

lead to his downfall, as other elites now sense uncertainty and seek to depose him. Note, therefore, that authoritarian leaders are bound by certain commitments, and even more so when they preside over an economy with wealthy elite groups that can credibly challenge their rule.

We know that, with a dictator who supposedly has the last word on every issue, it may be difficult for elites to believe he will not renege, no matter how many checks they try to place on his power.¹¹⁶ Yet, notice that a perfect credible commitment to other elites is not required. Rather, he can maintain credibility in his commitments if he acts in such a way that any rival faction becomes indifferent between mounting a challenge or acquiescing. That is, his credibility is a function of how much liberty he has to renege on commitments. At higher levels of wealth, elite groups pose a more credible threat to a dictator, and his power is thus curbed. The lower the wealth inequality and the higher the level of wealth, the more likely it is that elites force a credible commitment from the dictator to protect their property, thus reducing authoritarian replacement.

My argument is, in some ways, similar to Przeworski.¹¹⁷ His argument is that democracies are more stable when the stakes are high for a majority of players, who are too invested to revert to authoritarianism. As he puts it, “the stakes are too high to risk losing the income guaranteed under democracy”.¹¹⁸ In democracy, therefore, the costs of regime change are large, but are lower in authoritarianism. The argument can be extrapolated to countries where elites own relatively little wealth versus others where elites own a lot. When wealth

¹¹⁶Przeworski and Limongi 1993.

¹¹⁷Przeworski 2005.

¹¹⁸Ibid, 265.

levels are high, regime change is costly, as actors are too invested in the current regime. When wealth is low, on the other hand, regime change is cheaper. Not because elites are less risk averse, but because the promise of a windfall from taking control of government eclipses the utility of holding on to little wealth.

3.3 Empirics

My theory predicts that the effect of inequality on authoritarian replacement is conditional on low levels of wealth. The empirical strategy is to model nondemocratic transitions as events of authoritarian failure and calculate the probability that a regimes falls in any given year. The alternative is to consider each authoritarian spell as a separate state, that is, assign each spell its own numerical value and compute the likelihood of being on one state or another. However, this is conceptually problematic, these regimes do not transition out of dictatorship. Thus, survival analysis fits the event-based logic of this chapter, but its application poses a number of challenges. First, survival analysis can yield biased estimates if one models only one of the transitions within the full set of changes a subject may experience at some point.¹¹⁹ Here, any authoritarian regime is at some risk of experiencing democratization, and democracies are then at risk of backsliding. The challenge is to model the full set of potential transitions within a survival framework. Another challenge is truncation, since

¹¹⁹Metzger and Jones 2016; Putter et al. 2007.

some authoritarian spells enter the sample some time after becoming at risk for a transition (left truncated) or our data ends before we observe the final outcome (right truncated).¹²⁰

To address the first challenge, use multistate survival analysis to capture the full process of political transitions that countries can experience. Figure 3.1 shows the multistate process including all possible transitions conceptually relevant to our theory. A authoritarian state is at risk of transitioning to another authoritarian state or to democracy, while a democracy is only at risk of reverting to authoritarianism. While democratization or democratic breakdown may not central to the theory, they indeed matter empirically. Competing risk models can only capture parts of the process;¹²¹ in our case, a multinomial logistic model would be limited to the competing risk of authoritarian failure and democratization within each spell.¹²²

The literature has often used the dynamic probit to model political transitions.¹²³ However, the dynamic probit can only model two transitions between *states*, not events, and it is usually limited to two states since the dependent variable is dichotomous. Moreover, multistate models do not assume, as pooled models do, that the data generating process (DGP) is equal for all possible transitions. If we made such assumption, the covariate's effects would be the same for all transitions. This is why pooled models of transition produce biased estimates. Lastly, by using multistate survival model, we can better incorporate the effect of time in transitions, which has been missing from other studies of political

¹²⁰See Box-Steffensmeier and Jones 2004.

¹²¹Metzger and Jones 2016.

¹²²The results obtain if a simple multinomial logistic model is used. Tests are available from the author.

¹²³Przeworski et al. 2000; Boix 2003; Houle 2009.

transitions.¹²⁴ The methodological contribution of this chapter is to incorporate multistate survival models into the political economy literature on transitions.¹²⁵

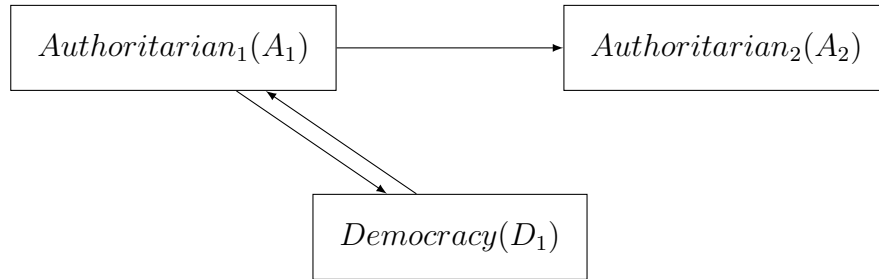


Figure 3.1: All Possible and Recursive Transitions

In the Appendix A, I provide a series of robustness checks. To remove unobservable heterogeneity and, therefore, potential confounders, I run a series of fixed effects models using the linear probability model and logistic regression. I also attempt to capture the inevitable time trend resulting from the natural increase of wealth over time and the decrease of authoritarian replacement in the data. These results are reported in Table A3 in the Appendix A.

3.4 Data

The unit of analysis in this chapter is the country-year. The dataset has 3,452 unique observations and covers 137 countries between 1968 and 2008. This is, to my knowledge, the first test of long-run wealth accumulation on structural political events such as regime trans-

¹²⁴Boix 2003; Ansell and Samuels 2010, among others.

¹²⁵The multistate model is estimated using a discrete-time stratified cox procedure. I provide a description of the particulars of the model and the dataset structure in Appendix A.

itions. As required by the multistate model, the data is duplicated for these observations that are at risk of both democratization and authoritarian replacement. This process leads to a total sample size of 5,146.

Failure, the dependent variable, is coded as 0 for those country-year observations in which no transition occurs; 1 for those in which the authoritarian regime is replaced by another; 2 for those that experience democratization; and 3 for those that saw democracy fall. Substantively, the regime failure variable is constructed using a combination of the Geddes, Wright and Frantz (GWF) dataset and the Democracy and Dictatorship (DD) dataset.¹²⁶ GWF code *authoritarian* regime failure as 1 for a country in a given year if: 1) the autocratic regime is unseated via election and the new government is allowed to take office; 2) the regime is ousted by a coup, invasion, popular uprising, rebellion or other violent means; and 3) the ruling group substantially changes the rules for selecting the leader and for adopting key policies. The variable is coded 0 otherwise. I use the DD dataset to code democratic failure. There are a net total of 116 authoritarian failures that end in replacement, 75 in democracy, and 39 in democratic breakdown.

I measure economic inequality as the share of capital that accrues to labor (wage share - WS), which captures cross-class differences between capital-holders and labor. This variable is more fitting to theories that focus on inter-group inequality and class cleavages.¹²⁷ The higher the share of output that accrues to wages, the more *equal* the society. The measure is taken from the INDSTAT2 dataset produced by the United Nations International De-

¹²⁶Cheibub, Gandhi, Vreeland 2010; GWF 2014.

¹²⁷Boix, 2003; AR, 2006; Houle, 2009.

velopment Organization.¹²⁸ For the results to be intuitive, the WS variable has been inverted. Now the greater the variable's values, the higher the level of inequality. It captures the share of output that accrues to capital holders, a concept similar to the one used by Houle.¹²⁹ The data are available for 163 countries from 1963 to 2008. The advantages of our measure are the large number of observed data points and its sensitivity. Another widely used measure of inequality is the Gini coefficient, which captures the distance between the largest and smallest individual incomes in society. However, the Gini coefficient does not measure differences across groups or classes. Houle provides a good account of this distinction.¹³⁰

No yearly cross-national variable exists, to the author's knowledge, that measures elite wealth accumulation. Ideally, our measure should capture the total amount of asset stock owned by the economic elite.¹³¹ One option is to obtain the total amount of wealth in an economy and multiply it by the share that belongs to the top centile. The closest approximation to this variable can be obtained from Piketty's data (WID) by multiplying his measure of total private wealth by the share of wealth owned by the top decile or centile.¹³² Unfortunately, the sample of countries in the WID data is small and dominated by countries that have not experienced any recent transitions to democracy.

I construct a new measure using widely available data from the World Bank and contrasting a subsample with the WID data. First, I take yearly cross-national Gross Fixed Capital Formation (GFCF) in current dollars from the World Bank to estimate the total new wealth

¹²⁸See Knutsen, 2015; The dataset can be found at <https://stat.unido.org>.

¹²⁹2009, 2016.

¹³⁰Houle, 2009.

¹³¹The economic elite is broadly defined as top centile of an economy.

¹³²Alvaredo et al., 2018.

generated by capital each year.¹³³ This variable captures a country's yearly total domestic investment in fixed assets. It includes land improvements, machinery purchases, private infrastructure construction (i.e. residential, commercial and industrial buildings), and the net acquisition of valuables.¹³⁴

For each country, I obtain the cumulative sum of new wealth for all years in the sample. This gives us the amount of wealth generated in a given country-year from the time the country is first observed. It does not capture total wealth accumulation, as we cannot estimate an initial value for wealth. GDP or some similar proxy of national wealth could be added as the initial value, but that would introduce noise and generate its own set of issues, such as lumping in population. To avoid these identification issues, I simply capture the pattern of elite wealth accumulation within countries since the moment they are observed, rather than estimating some initial value of wealth. If elite wealth grows rapidly, elites are more likely to cash in and transition to democracy. If it does not, elites have an incentive to remain in the status quo.

I make three substantive improvements to the cumulative sum of wealth described above. First, countries generate increasing yet similar amounts of wealth year-to-year. The cumulative sum of GFCE, therefore, experiences rapid growth the first few years and linear growth

¹³³Data accessed on April 2018. It can be found at: <https://data.worldbank.org/indicator/NE.GDI.FTOT.CD>

¹³⁴An in-depth description of the variable is included in Appendix A, including the World Bank's own detailed definition.

thereafter.¹³⁵ To make wealth increase linearly across time, as in the WID data, I replace each country's first value of accumulated wealth with its fifth.¹³⁶

Second, rather than dealing with gross numbers of wealth that are abstract and do not truly represent the total amount of wealth available, we create a ratio: I divide each year's cumulative wealth by the amount of wealth the country produced the first year. Generating a ratio of wealth allows us to capture precisely within-country elite wealth accumulation and minimize the effects that cross-national variation may have in generating the variable. The reason for this is simple: elites in one country are unlikely to compare themselves with elites in other countries when deciding whether to transition to democracy. Wealth is not the same in every country, given differences in prices and in pressures on consumption and savings. It is more useful to net out these differences for the logic we advance in this chapter.

Lastly, I adjust the cumulative sum of wealth for depreciation and state investment. I subtract 10 percent from each year's wealth to account for depreciation¹³⁷ and another 15 percent to account for the share of total investment by the government. The share of wealth that belongs to the non-elites cannot be netted out, but this is a small part of the measure. New wealth is largely generated by capital holding elites. To make sure these assumptions are substantiated, I run a series of stress tests on our final variable. I compare WID's data on

¹³⁵Consider a country that creates 100, 110, 120, and 130 units of wealth in four years. The sum will be: 100, 210, 330, and 460 units. Growth from the first period to the second is 110 percent; from the second to the third, 55%; and from the third to the fourth, 35%. After a few years, growth is linear on average both in our data and in the WID measure. I refer to the WID measure sometimes as Piketty's variable for reference.

¹³⁶I chose the fifth value as growth becomes linear in the data on average after the fifth value of wealth.

¹³⁷Piketty, 2014

total private wealth and elite wealth with a subsample from our dataset.¹³⁸ A high correlation with these known measures should provide some external validity for our proxy.

The WID's *net private wealth* variable captures the total level of wealth owned by private citizens in a country-year. The correlation between this measure and our proxy is $r = 0.949$ on a subsample of 770 observations from 21 countries.¹³⁹ I then multiply the WID's net private wealth variable by the share of wealth owned by the top 5, 1 and 0.1 percent. These measures directly capture the wealth owned by different sets of elites. The correlation is high for all three measures. We obtain $r = 0.913$ for the total wealth of the top 5 percent, $r = 0.925$ for the 1 percent, and $r = 0.946$ for the 0.1 percent. These correlations include 389 observations for 11 countries.¹⁴⁰ These high r values are indicative of the strength of our variable in measuring our theoretical concept of elite wealth accumulation.

3.5 Results

I begin by showing the relationship between the two main variables of interest and authoritarian replacement descriptively. Figure 3.2 plots the observed probability of replacement

¹³⁸Our variable cannot capture all forms of wealth that elites may have, such as financial assets, stocks and savings. Neither does it account for foreign ownership of assets. However, I contend that these omissions do not harm the validity of our measure. The level and growth of these assets tend to be highly correlated with the ones in the measure, and foreign ownership, while important, appears to have a small impact on our measure overall. I provide as evidence of our logic the correlations with Piketty's private wealth data for a subsample of countries. These are all above 0.9 and are detailed below.

¹³⁹These are the US, Canada, China, Russia, the United Kingdom, Australia, Czech Republic, Japan, Mexico, South Africa, Netherlands, South Korea, Denmark, Germany, France, Greece, Italy, Spain, Norway, Finland and Sweden. Within-correlation scores are stable across groups, with the exception of South Africa and, to a lesser extent, Greece. The correlation stays high if each or both countries are excluded from the test.

¹⁴⁰The US, Canada, Australia, Japan, Netherlands, South Korea, France, Germany, Italy, Spain and Sweden. Within-correlation scores are stable across all groups.

at different levels of wealth and wealth inequality. This is obtained by dividing the number of observed instances of replacement by the total number of observations that fall within 20 different quantiles of both independent variables. Authoritarian replacement is more frequent at very low levels of wealth. It then experiences a sharp decline before reaching more or less the median, with the relationship largely flat at high levels. The effect of wealth inequality is more ambiguous. Replacement seems, on the one hand, more likely at low levels of wealth inequality, but the variability is also much higher as shown in the scatterplot. After a low point at middle levels of inequality, the relationship appears to be again stronger at higher levels. The difficulty in assessing the potential effect of inequality on replacement further suggests an interactive effect. Moreover, the descriptives for both variables show complex and non-linear relationships. This may complicate the interpretation of the interaction coefficients in the survival models, but plotting the survival curves and the joint effect of the two covariates should reveal how and when they are statistically and substantively significant.¹⁴¹

Table 1 reports the main results of this chapter. Models 1 through 3 estimate the effect of the independent variables on each possible type of transition: authoritarian replacement ($A_1 \rightarrow A_2$), democratization ($A_1 \rightarrow D$), and democratic breakdown ($D \rightarrow A_1$) without controls, whereas Models 4 through 6 include all controls and decade dummies. Each set of three models is estimated jointly in a single Cox stratified model, in which each strata represents a transition. The model displays the coefficients and not the hazard ratios. Our theoretical interest lies in authoritarian replacement (Models 1 and 4).

¹⁴¹I do not include multiple interactions with square or cubic splines, which overly constrain the data.

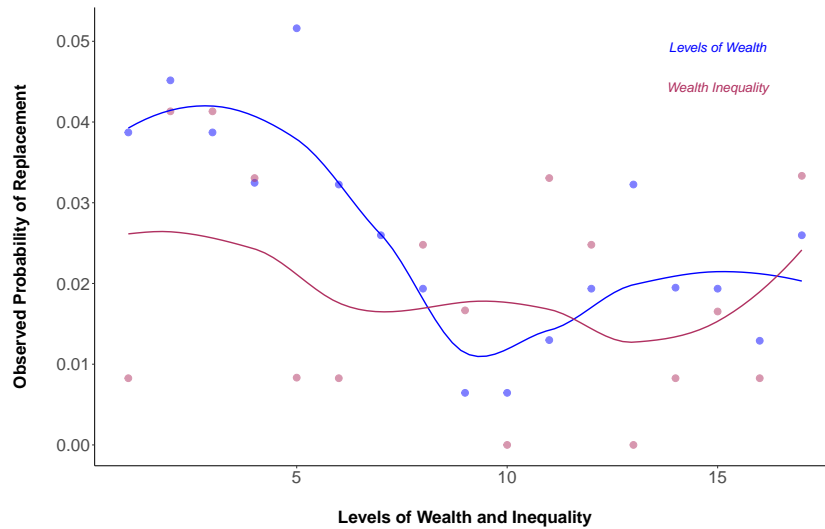


Figure 3.2: Observed probability in the data of replacement at different levels of wealth

In all models, capital share (inequality) is interacted with wealth, which is *inverted* here. The reason for inverting the variable is that it is easier to interpret the sign of the interaction in an intuitive way that fits the main hypothesis if wealth is inverted, i.e. the effect on authoritarian replacement as wealth levels become lower or decrease, while inequality increases. As shown in Models 1 and 4, the sign of the interaction is positive, as predicted. As wealth decreases, increases in inequality lead to a higher probability of replacement; or, conversely, as inequality increases, lower levels of wealth make authoritarian replacement more likely –increasing the log-odds by 1.067 for every one-unit change, a relatively large effect in the log-odds scale. For complex continuous interactions, statistical significance can only be ascertained by plotting the joint effect.

Figure 3.3a shows precisely this. Since wealth is inverted, it displays the marginal effect of *decreases* in absolute wealth on authoritarian replacement at various levels of wealth inequality. As expected, at higher levels of inequality, a decrease in wealth will have a

	<i>Multistate Survival Model (MSSM)</i>			<i>MSSM (With Controls)</i>		
	1	2	3	4	5	6
	$A_1 \rightarrow A_2$	$A_1 \rightarrow D$	$D \rightarrow A_1$	$A_1 \rightarrow A_2$	$A_1 \rightarrow D$	$D \rightarrow A_1$
Wealth (Inv.) t_{-1}	-0.355 (0.336)	-0.034 (0.300)	0.566 (0.952)	-0.225 (0.436)	-0.218 (0.448)	0.828 (0.773)
Inequality (CS) t_{-1}	-5.624 (3.578)	-0.876 (2.618)	13.860 (8.768)	-5.017 (4.585)	-2.408 (4.456)	17.375 (6.341)
Wealth (Inv.) t_{-1} x Inequality (CS) t_{-1}	1.024 (0.671)	0.251 (0.525)	-1.305 (1.668)	1.067 (0.903)	0.634 (0.892)	-2.272 (1.350)
GDPpc t_{-1}				0.008 (0.351)	0.948 (0.348)	-1.277 (0.461)
Growth t_{-1}				-0.033 (0.025)	-0.042 (0.032)	-0.097 (0.121)
Oil t_{-1}				-0.082 (0.082)	-0.150 (0.094)	0.440 (0.181)
Ethnic Frac. t_{-1}				0.001 (0.007)	-0.001 (0.008)	-0.026 (0.016)
Trade Open. t_{-1}				-0.002 (0.004)	-0.015 (0.005)	-0.007 (0.015)
Previous Fail. t_{-1}				0.658 (0.134)	0.327 (0.153)	0.220 (0.665)
Polity t_{-1}				-0.070 (0.084)	0.002 (0.046)	-0.190 (0.253)
Polity Sq. t_{-1}				-0.003 (0.011)	-0.016 (0.010)	-0.056 (0.023)
Time Trend				0.001 (0.052)	0.033 (0.084)	0.159 (0.114)
1980s				-0.674 (0.904)	0.050 (0.999)	-4.827 (2.099)
1990s				-0.088 (1.140)	0.113 (2.017)	-5.208 (2.551)
2000s				0.126 (1.359)	-1.301 (2.610)	-6.559 (2.666)
Observations		5592			5146	
Pseudo R^2		0.028			0.207	
Log-Lik.		-350.30			-274.281	

$A_1 \rightarrow A_2$ - Authoritarian Replacement; $A_1 \rightarrow D$ - Democratization; $D \rightarrow A_2$ - Democratic Breakdown

Model: Stratified Cox with 3 strata, one for each of the transitions above. SEs in parentheses

Table 3.1: Effects of Wealth Inequality on All Transitions Conditional on Levels of Wealth

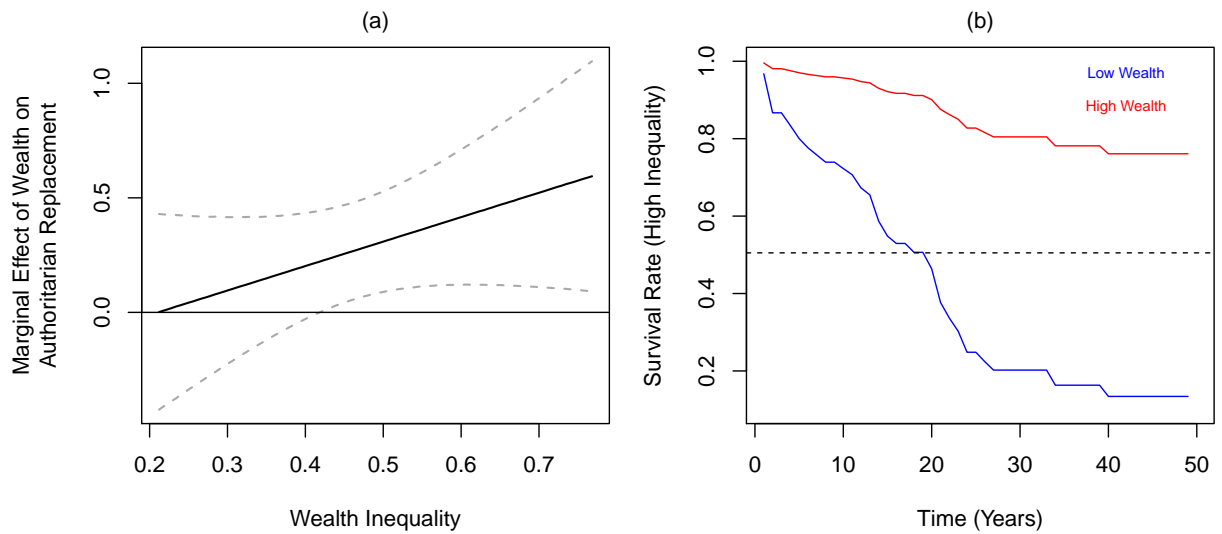


Figure 3.3: Joint effect of wealth and inequality on authoritarian replacement (a). Survival curves at high levels of inequality (b).

statistically significant positive effect on the probability of replacement. The lower bound of the 95 percent confidence interval crosses zero when inequality is at 0.43 in the capital share share, which is close to its mean of 0.47. For instance, at high levels of inequality (0.69), a change of 0.516 in the log-odds of replacement means that countries with 14 percent less wealth will be 70 percent more likely to experience replacement.¹⁴² Or, for instance, countries with 28 percent less wealth are almost two and a half times more likely to see an authoritarian incumbent replaced by a competing faction at high levels of inequality. This is because the wealth variable ranges between 0 and 7, so a 1 unit change represents around a 14 percent difference.

The results are strongly significant in substantive terms. To show this with more clarity, Figure 3.3b displays the survival curve for regimes with low wealth and high inequality

¹⁴²The results of the Cox proportional hazards model are presented in log-odds, not hazard ratios.

versus all others.¹⁴³ An authoritarian incumbent presiding over a country with low levels of wealth and high inequality can expect his reign to be relatively short-lived. Within five years, one in five regimes have already been replaced – the survival rate drops to 80 percent. In seven years, the survival rate tumbles further to 75 percent, and within fifteen years regimes have reached toss-up levels, with only 54 percent probability of survival. Conversely, all other regime types take a full 20 years to drop to a survival rate of 75 percent, and never reach toss-up levels.

3.6 Robustness Checks

The following robustness checks have been performed and are included in Appendix A unless otherwise stated. First, note that the main model includes a time trend, which is important because wealth tends to grow naturally in time. Second, the reason why I report the naïve model with no controls in Table 3.1 is to show that adding the controls and the time trend does not generate spurious significance. I include the equivalent of Figure 3.3a using the model without controls in Appendix A (Figure A1), and the results are unchanged. Third, to ensure that the results are not a function of the statistical model used in this chapter, I perform tests with the following alternative models and include the results in Appendix A: (1) OLS and logistic regression with random effects and (2) a more traditional logistic regression with clustered standard errors and without random or fixed effects. I develop

¹⁴³The curve for all other regimes is a weighted average. No CIs are shown as statistical significance has been defined in Figure 3.3a; survival curves are sufficient to show substantive significance.

on the reasoning for these models further in Appendix A. The results obtain with these alternative specifications.

3.7 The Rise of Trujillo in the Dominican Republic

The Dominican Republic before and after the rise of Rafael Trujillo illustrates the relevant mechanisms and intuitions underpinning my theory. Before the benefactor, internecine conflict ravaged political stability in the Caribbean nation. Factions often replaced each other in power, with eleven presidents sworn into office in a period of fifteen years. Trujillo's coup in 1930 ushered in an era of authoritarian stability, which meant high levels of political repression but large increases in private wealth. I now describe these two periods of Dominican history to illustrate the political economy theory of authoritarian replacement.

Wealth inequality was high in the Dominican Republic between the turn of the twentieth century and 1930, the year of Trujillo's coup. The country ranked within the top quartile or tercile in all of Boix's historical measures on family farms, knowledge distribution and diversification.¹⁴⁴ Data on levels of wealth at the time is not available, but given the country's lack of development after independence in 1844, its low GDP, and its incipient institutions, it is fair to assume that wealth among the elite was low.¹⁴⁵ Quarreling elite factions around this time were primarily rural, so cleavages did not form around factors of production. Rather, they reflected different regional interests within the landowning class,

¹⁴⁴Boix 2003; from Vanhanen 1997.

¹⁴⁵Turits 2003.

divisions which resulted in caudillo power struggles between the *Horacistas* and the *Jimenistas*, each named after their respective leader. In the fifteen year period between 1899 and 1914, eleven different presidents were sworn in. Three of them fell victim to a coup d'état, five of them 'resigned' the office after brief tenures, and one of them was assassinated – Ramón Cáceres in 1911. American intervention between 1914 and 1924 provided a hiatus, and Horacio Vasquez then ruled from 1924 until Trujillo deposed him in 1930.¹⁴⁶

One important aspect of my theory is that elite groups seek to control the state to gain short term income when their wealth is low. This is precisely what we see in the Dominican Republic during this time. The Jimenistas represented the heritage of Ulises Heureaux, President until his assassination in 1899. The Horacistas, on the other hand, were the more liberal wing of the elite and initially emerged as opposition to Heureaux. Important figures within these two groups replaced each other in power during the tumultuous 1899-1914 period, even if they were all rural elites with common economic interests. Their vehicle to greater wealth was the sugar trade and government corruption. Sugar exports expanded rapidly between 1900 and the start of the World War II, reaching 5 percent annual growth on average between 1913 and 1928.¹⁴⁷ Domestic wealth was low and highly concentrated among rural landowners, with the peasantry increasingly destitute. Rural elites benefitted from the windfall and, in this context, controlling the state ensured direct profits from a booming sugar trade.¹⁴⁸

¹⁴⁶Ibid.

¹⁴⁷Bulmer-Thomas 2003.

¹⁴⁸Turits 2003.

The sugar economy also became increasingly foreign dominated. Indeed, ingenios were largely owned by US, Canadian, Cuban and Spanish interests in the first decade of the twentieth century. These companies quickly controlled most plantations in the Eastern provinces. By the mid-1910s, most sugar mills were in the hands of US and Canadian investors after Cuban and Spanish companies sold their stakes.¹⁴⁹ The expansion of foreign-owned plantations and the booming trade of the commodity created an income stream particular to enclave economies. Governing was not only profitable because revenue from the sugar trade could find its way to the pockets of elites in power, but also because the management of foreign contracts, licenses, and concessions became a large source of income for the ruling class. This is similar to what happened in Peru during the guano era, where foreign contracts to extract the resource generated large amounts of revenue for elites in power. In turn, these profits create incentives for different elite groups to take over government.¹⁵⁰

The rise of Trujillo after direct American intervention (1914-24) and Vasquez's relatively peaceful tenure (1924-30) also illustrates precisely the type of elite struggles that I describe in my theory and how they unfold. Trujillo was, since 1927, the chief of the Dominican armed forces, the highest military position, and effectively Vasquez's second in command. His meteoric rise forebode his ambition to take the presidency for himself, but he need a coalition for a coup to stand on firm ground. Coincidentally, a rift began to develop again among the rural elite. Vasquez was an old politician – he was first President in 1899 – and became associated with foreign interests and US control. New nationalist elites, led by Rafael Estrella Ureña and his Republican Party, disapproved of foreign domination in the

¹⁴⁹Hall 2000.

¹⁵⁰Bonilla 1984; Cotler 1979.

economy and the President's attempt to extend his term limit.¹⁵¹ They launched a revolt that, according to Crassweller, would have gone nowhere had it not been for Trujillo's cunning move to allow Estrella's forces to march into the palace unopposed.¹⁵² Trujillo, who as Chief of the Armed Forces controlled the country's scant military defenses, struck a pact with Estrella beforehand, allowing Estrella to become President first while Trujillo retained *de facto* power.

Whomever took power eventually (Trujillo) matters less than the fact that elite factions struggled to control the state and increase their income, and that such conflict bred a staggering number of authoritarian replacements up until that point. Estrella Ureña's faction wanted to take control of the state to wrestle power away from foreign interests and an old and entrenched ruling elite who appropriated the income generated from the sugar trade. They sought to capture the existing corruption streams linked to the government, and redirect policy to benefit Dominican landowners such as Estrella himself. Trujillo, initially his ally, consolidated power on himself and replaced Estrella after one year – a presidency that was symbolic at most.¹⁵³

A potential explanation for Trujillo's abnormal longevity in the Dominican context is that he was a better dictator. He quickly built a political party to support him, propped up the army, and created an efficient and ruthless secret police. He was subject to at least three known coup attempts in the first ten years of his rule, which he swiftly repelled. Yet his survival was not solely due to skill. Challenges to his rule were much less frequent after

¹⁵¹Turits 2003.

¹⁵²Crassweller 1966.

¹⁵³Turits 2003.

this initial period, and an important reason is that overall wealth had skyrocketed among a majority of sectors within the elite.¹⁵⁴ No one was richer or owned more businesses than Trujillo himself, but the dictator was deft at distributing riches among elites. Rural elites continued to reap large profits from the sugar trade, even if now Trujillo owned a majority of the assets used in its production. High level urban supporters either obtain large sums for their political support in public office, such as Senators, or for helping run the businesses he expropriated. Everyone depended on the Benefactor, and everyone profited from the dependence. To get an idea of the levels of wealth involved for a relatively underdeveloped Caribbean island, Trujillo's own fortune is indicative. By the time of his assassination, Trujillo amassed the seventh largest fortune *in the world* by some calculations.¹⁵⁵ His son Ramfis was the ostentatious sidekick to many a Hollywood star, and drove – and ruined – multiple Ferraris in Madrid, Paris, and the United States. By co-opting a large majority of elites, he diminished resentment and increased his overall level of support. Other elites were not better off replacing Trujillo, and the small minority that may have benefitted were powerless to attempt any uprising due to lack of sufficient support.

3.8 Implications and Concluding Remarks

In this chapter, I have advanced a new theory of wealth inequality and authoritarian replacement. I find that the probability of authoritarian replacement increases at high levels of wealth inequality, but the effect is conditional on overall wealth being low. When inequality

¹⁵⁴Crassweller 1966.

¹⁵⁵Crassweller 1966; Turits 2003.

is high and wealth is low, elites have an incentive to capture the state to appropriate income. Consequently, authoritarian replacement is more likely. As the level of wealth increases, elites become more concerned with securing their wealth, seeking greater guarantees for property rights. In turn, replacement decreases.

This chapter makes an important contribution to the literature on authoritarian transitions by providing a new theory of authoritarian replacement based on wealth inequality and elite conflict. Transitions within authoritarianism that involve groups replacing each other from power and significantly altering the distribution of resources remain understudied. With the recent trend toward democratic backsliding, a deeper understanding dynamics within authoritarian regimes is increasingly important. It also complements recent efforts to explain authoritarian transitions¹⁵⁶ and the economic relationship between the leader and the elite that supports him.¹⁵⁷

Methodologically, this chapter is the first one, to my knowledge, to use multistate survival analysis in long-term structural political outcomes such as regime transitions. This method can help us model the entire set of transitions that countries may experience and, as has been shown, obtain more accurate estimates.¹⁵⁸ Also, I find a new proxy for private wealth accumulation that correlates highly with Piketty's measure and is built on theoretically consistent grounds using World Bank data on gross capital formation per country-year.¹⁵⁹

Lastly, I also contribute to the political development literature by making an explicit distinction between *wealth*, which is the total accumulated capital stock at any given point

¹⁵⁶Wright and Bak 2016.

¹⁵⁷Albertus and Menaldo 2012.

¹⁵⁸Metzger and Jones 2016; Putter et al. 2007.

¹⁵⁹Piketty 2014.

in time, and *income*, which is the flow of new assets every fiscal period. So far, the broader debate has mostly revolved around the effects of income inequality on regime transitions.¹⁶⁰ Wealth and income have been used synonymously, which has made it difficult to unveil certain important dynamics during political transitions. A shared argument, for instance, in Boix and Acemoglu and Robinson is that transitions to democracy are less likely at high levels of income inequality, since the redistribution cost of democracy for elites will be high if the poor get to set the tax rate.¹⁶¹ However, if we consider this situation in terms of wealth maximization rather than income maximization, we realize that elite preferences related to inequality and transitions will differ according to how much wealth they own. Indeed, if they own a lot of wealth, individuals are likely to be at least as concerned with securing this wealth as with expanding it. Thus, democracy could be a very attractive –if expensive– system, since it places emphasis on property rights and separation of powers. I contend that wealth is a more expansive concept that helps us model elite preferences and intra-elite conflict in transitions better.¹⁶²

Understanding the dynamics of authoritarian regimes is more pressing today than at any point since the end of the Cold War. Some authoritarian regimes are surviving modernization pressures better than many scholars expected, and replacement within dictatorship remains common, as the recent case of Mugabe in Zimbabwe shows. Most importantly, however, recent democratic backsliding and breakdowns in Poland, Turkey and Venezuela, among others, urge us to demand better knowledge of authoritarian politics that expands

¹⁶⁰Przeworski et al. 2000; Boix 2003; Acemoglu and Robinson 2006; Houle 2009; Ansell and Samuels 2010, 2014; Haggard and Kaufman 2012, 2016.

¹⁶¹Acemoglu and Robinson 2006; Boix 2003.

¹⁶²O'Donnell and Schmitter 1986; Przeworski 1991.

on and goes beyond issues such as formal institutions, power, economic growth, and trade. This chapter aims to provide some fresh answers to the problem of authoritarian replacement, but new work is urgently required to explain the sharp downturn in the expansion of democracy and the revival of dictatorship.

Chapter 4

Cashing In: Elite Cleavages, Wealth Inequality, and Democratization

with Sebastián Vallejo

Recent evidence suggests that transitions to democracy are more likely at high levels of inequality. To explain this pattern, we develop a theory of democratization in which elites transition to democracy to secure their accumulated wealth through the rule of law. When inequality is high, the threat of expropriation by a rival elite or revolution is greater. The rule of law in democracy works as an insurance mechanism, providing security for elite wealth in exchange for redistribution. Thus, elites see democracy as insurance and decide to 'cash in' their wealth to secure it by extending the franchise. We illustrate the theory through a formal model and evaluate it using data from 112 countries from 1966 to 2008. We find that transitions are more likely at high inequality conditional on high levels of accumulated elite wealth. We add a new dimension to the debate on inequality and democratic transitions by exploring the role of wealth in the decision making of elites in the process of democratization.

4.1 Introduction

In the 1980s and 90s, countries such as Brazil and Chile in Latin America and Thailand and the Philippines in Asia expunged dictatorial rule in favor of democracy after decades of industrialization. Especially striking about these transitions is that they occurred in countries with high levels of inequality, a fact that runs counter to prominent theories in the political development literature.¹⁶³ Indeed, recent cross-national empirical studies have shown that high levels of inequality are linked to democratization,¹⁶⁴ but our understanding of this phenomenon remains limited. Why is high inequality associated with transitions to democracy?

We address this puzzle by identifying a mechanism that explains why transitions occur more often at high inequality.¹⁶⁵ Since high inequality increases the threat of expropriation by a competing autocrat or revolution, risk-averse elites prefer to transition to democracy and secure their wealth through the rule of law. Thus, elites ‘cash in’ their accumulated wealth and use democracy as insurance. They prefer to pay a premium in terms of redistribution in exchange for guarantees on property rights. The Latin American democratization experience during the third wave informs our logic. Before the 1982 debt crisis, the region had experienced decades of economic growth through state-led industrialization and commodity booms. With high levels of economic inequality, profits accumulated to a small set of elites who grew exceedingly rich by the 1980s and 90s after benefiting directly from authoritarian rule. Instead of risking their wealth to a competing autocrat or to revolution,

¹⁶³AR 2006; Boix 2003.

¹⁶⁴Ansell and Samuels 2014.

¹⁶⁵Ansell and Samuels 2014.

elites preferred to democratize and safeguard their wealth through the rule of law in democracy.

Our research addresses two key questions in the field of political development: (1) why greater levels of wealth lead to stable democracy¹⁶⁶ and (2) how economic inequality affects democratic transitions.¹⁶⁷ Key questions remain in these debates. In particular, even though some consider it a stylized fact,¹⁶⁸ no consensus exists around a mechanism that explains why countries tend to democratize as they grow wealthier. Neither have we achieved clarity regarding the precise role of economic inequality in democratic transitions.¹⁶⁹

In this chapter, we answer these questions by introducing a theory that connects the roles of wealth and economic inequality in the process of democratization. We argue that as wealth levels increase, economic elites become more risk averse to expropriation by an autocrat or by revolution and see democracy as insurance to protect their stock of capital through the rule of law. They prefer to pay a risk premium in democracy through higher taxes in exchange for securing their wealth. Economic inequality, for its part, acts as a destabilization trigger:¹⁷⁰ the higher the inequality, the higher the threat of authoritarian replacement or revolution. Since established elites risk losing nearly everything after a successful revolution or autocratic takeover,¹⁷¹ they prefer democracy when both their levels of wealth and economic inequality are high.

¹⁶⁶Acemoglu et al. 2008; Geddes 1999; Kennedy 2010; Lipset 1959; Przeworski et al. 2000; Rueschemeyer, Stephens and Stephens 1992.

¹⁶⁷AR 2006; Ansell and Samuels 2010, 2014; Boix 2003; Houle 2009; Haggard and Kaufman 2012, 2016.

¹⁶⁸Geddes 1999; Kennedy 2010.

¹⁶⁹Haggard and Kaufman 2016.

¹⁷⁰AR 2000.

¹⁷¹Albertus and Menaldo 2012.

An important contribution of our argument is to conceptualize democracy as insurance for elite wealth. When wealth is high, democracy is *less costly* for elites than previously theorized. What democracy does, in essence, is provide a complex formal standard for expropriation via taxation and security through the rule of law. Since the level of risk aversion for elites is increasing in wealth, they will be more willing to accept democracy when they have a higher level of accumulated wealth stock than when they do not. The novel intuition here is that the value of democracy for economic elites changes as their preferences move from a narrow focus on generating income toward protecting the wealth they have accumulated.

A parallel contribution of this chapter is to problematize the costs of transitioning to democracy for elites. Elites are assumed to pay a high price of redistribution when they accept democracy.¹⁷² Yet, the influence they maintain over the political process allows elites to reduce their total tax outlays by gaming democracy¹⁷³ or by transitioning from a position of strength.¹⁷⁴ They pay more than in dictatorship and thus satisfy the redistributive demands of the democratic society, but they still manage to preserve a majority of their wealth. We introduce a term in our formal model to define precisely this capacity to ‘capture’ democracy once a transition has occurred. This term allows us to analyze how a lower expectation of future taxation creates additional incentives for elites to democratize through our insurance mechanism.

¹⁷²AR 2006; Boix 2003.

¹⁷³Albertus and Menaldo 2014

¹⁷⁴Slater and Wong 2013.

4.2 Democracy as insurance

The core idea of our theory is that elites transition to democracy in order to secure their wealth and pay a cost of redistribution as insurance. The assumption is that democracy provides greater security for elite wealth through the rule of law than dictatorship. We identify two reasons for this: a lack of long-run credible commitments to property rights by autocrats and the benefits of the rule of law *for elites* in democracy.¹⁷⁵

The first problem that elites face is the inability to reach a credible commitment on property rights with the political elite in dictatorship, who have different incentives.¹⁷⁶ Economic elites might have a certain preferred policy agenda, but the dictator may favor a subset of the elite that launched him into power at the expense of others.¹⁷⁷ He can also keep his preferences secret, which exacerbates the informational asymmetries among elite groups. Both the favoring of a subset of the elite as well as information asymmetries create incentives for conflict over power and uncertainty over the future of the regime. This argument is related to Olson's classic claim that autocratic leaders cannot be forced to keep their promises,¹⁷⁸ and that uncertainty over succession implies that commitments cannot last more than one generation.¹⁷⁹ Elites currently benefiting from the favor of the autocrat are not guaranteed the same position of power under a new dictator. In line with these arguments, we contend that long-term credible commitments for elites in dictatorship are unattainable, and thus when faced with a potential for an insurrection from below, democratization solves both

¹⁷⁵Albertus and Menaldo 2014; Olson 1991.

¹⁷⁶Albertus and Menaldo 2014.

¹⁷⁷Albertus and Menaldo 2012.

¹⁷⁸Olson 1991.

¹⁷⁹Olson, 1993.

sides of the commitment issue: the commitment to redistribute resources to the poor and the commitment among elites to secure property rights.¹⁸⁰

The literature has shown that institutions can solve commitment problems in dictatorships. Autocracies that rely on domestic investment over natural resources protect property rights through binding legislatures¹⁸¹ and those with strong political parties tend to offer more credible commitments to investors.¹⁸² Yet, these mechanisms tend to be limited in scope and cannot fix the long-run credibility problem that autocrats face.¹⁸³ We also have relatively little idea of how they apply after an exogenous shock and in contexts of high inequality. Our argument is that democratic institutions, primarily when transitioning from a position of strength,¹⁸⁴ can be designed to protect the wealthy elite in a way that ensures a long-term credible commitment to a set of established rules protected by the rule of law.¹⁸⁵

The second argument is that democracy provides a long-term credible commitment to property rights through the rule of law. As argued by Przeworski, certain issues are agreed upon and specified in formal constitutions, which lay down the rules that everyone will follow.¹⁸⁶ Electoral competition offers different political factions the possibility to alternate in power, and with this, a random probability of holding control over residual issues. Randomness over holding office represents a repeated game in which actors accept the outcome of an election with the expectation of triumphing some time in the future. Thus, democracy

¹⁸⁰AR 2006.

¹⁸¹Wright 2008.

¹⁸²Gehlbach and Keefer 2011.

¹⁸³Albertus and Menaldo 2014.

¹⁸⁴Slater and Wong 2013.

¹⁸⁵The literature has tended to identify the poor as the main beneficiaries of the rule of law in democracy, but we argue that elites benefit as well.

¹⁸⁶Przeworski 2005.

reduces conflict through alternation in power. In Przeworski's terms, democracy allows for conflict "to be regulated, processed according to rules, and thus limited."¹⁸⁷ This argument ties together the idea that elites transition from a position of strength and the use of the rule of law in democracy to protect property rights, which is the overarching interest of elites and a central part of the specified rules of the game.¹⁸⁸

Moreover, recent literature has identified key mechanisms that reduce the cost of democracy for elites; or, within our theory, the cost of insurance for elite wealth in democracy. Following Albertus and Menaldo, elites can game democracy by setting roadblocks to redistribution *ex ante*, which makes democracy less expensive.¹⁸⁹ Similarly, Slater and Wong have claimed that elites transition from positions of strength and continue to thrive in democracy.¹⁹⁰ This idea echoes other claims that conservative elites gradually accept and promote democracy.¹⁹¹ Indeed, an important contribution of our argument is the idea that at high levels of inequality elites will be more adept at gaming democracy and thriving in it. Inequality allows a compact and small elite that owns vast amounts of resources to dominate democracy and ensure that the poor do not exceed themselves in their redistributive demands. In purely rational terms, the poor should accept any offer which improves their situation in autocracy, and thus the likelihood that wealthy elites dictate the terms of the transition in high inequality is high. Moreover, high inequality gives an advantage to elites

¹⁸⁷Przeworski 2005, p. 270.

¹⁸⁸Democracies can certainly expropriate through land reform, nationalization and high estate or corporate taxes (Albertus and Menaldo 2014; AR 2006; Boix 2003). However, such actions are a product of the political context and can be reverted in the future through the alternation of power. These forms of expropriation test the limits of property rights, but their essence is respected. This is not the same in autocracy, where property rights can be fully violated without a formal procedure and there is no expectation that the actions can be reverted by contesting power through elections.

¹⁸⁹Albertus and Menaldo 2014.

¹⁹⁰Slater and Wong 2013.

¹⁹¹Ziblatt 2017; see Cox 2016.

in the democratic process through greater resources and impedes the poor's ability to compete on an even playing field. This new finding from the literature is incorporated into our formal model through a 'capture' term that reduces the effective tax rate that elites pay in democracy.

Lastly, an important insight from the democratization literature is the role of external shocks in the early stages of democratic transitions. O'Donnell and Schmitter contend that transitions to democracy usually begin with an exogenous shock to the authoritarian regime, which splits the elite between Hardliners, who seek to preserve the status quo or increase repression, and Softliners, who prefer to liberalize.¹⁹² External shocks, in their view, create the opportunity for a transition to democracy. Without directly addressing inter-elite competition in our model, we do incorporate the importance of exogenous shocks. We model these shocks as a stochastic term that changes the cost of opportunity of transitioning for the elite.¹⁹³

4.3 Inequality, Repression and Democratization

Why would elites adopt democracy as insurance for their wealth? We argue that high levels of inequality threaten elite wealth in autocracy through two channels. First, high inequality increases mobilization by the poor and, consequently, the risk of revolution from below. Second, it allows for the rise of a populist or caesarian leader that capitalizes on popular

¹⁹²O'Donnell and Schmitter 1986.

¹⁹³AR 2001.

discontent and challenges established elites. These threats prompt the elite to extend the franchise and secure their wealth.

Inequality increases the demand for redistribution and thus rises the incentives for the poor to mobilize. Venieris and Gupta, as well as Alesina and Perotti, have empirically shown that there is a positive correlation between inequality and political instability and civil unrest.¹⁹⁴ AR also argue that inequality is a mobilizing factor for the poor, which may lead to revolution if they collectively organize.¹⁹⁵ In response to unrest, elites may choose to increase repression-¹⁹⁶ However, elites must also take into account the risk that repression may fail, leading to democracy or, potentially, to revolution —as AR suggest.¹⁹⁷ A failure to repress effectively sends a strong signal that the ruling elite and their supporters are weak. If democracy ensues, authoritarian elites may be shut out of the transition process and lose the capacity to impose, or at least negotiate, their terms.¹⁹⁸ This is related to an argument by Houle, namely, that repression costs need not increase monotonically with inequality.¹⁹⁹ Repression has a high probability of success at low and medium levels of inequality, but may be riskier and more costly at high levels.

Elites are also threatened by the rise of a new autocrat that capitalizes on popular discontent and expropriates their wealth once in power. Albertus and Menaldo have shown that new dictators obtain political stability by relying exclusively on their supporters.²⁰⁰ A strong signal of this reliance is to expropriate the established elite. New autocrats emerge

¹⁹⁴Venieris and Gupta 1986; Alesina and Perotti 1996.

¹⁹⁵AR 2000, 2006.

¹⁹⁶AR 2006; Boix 2003.

¹⁹⁷AR 2006.

¹⁹⁸see Albertus and Menaldo 2014; Slater and Wong 2013.

¹⁹⁹Houle 2009.

²⁰⁰Albertus and Menaldo 2012.

by capitalizing on the discontent that economic inequality creates. Repression may increase discontent, providing further support for a rising autocrat rather than stabilizing the regime. Thus, wealthy elites in contexts of high inequality prefer a transition to democracy from a position of power over a costly challenge to a rising populist autocrat.

Chile illustrates well how elites process the risks and rewards of repression versus transitioning from a position of strength. When Pinochet lost his 1988 referendum, the military junta was faced with a conundrum: repress or democratize. Inequality was high²⁰¹ and the referendum had mobilized the disaffected, making repression uncertain and costly. The solution was simple: transition from a position of strength and ensure that elements within Pinochet's regime could continue to thrive in democracy.²⁰²

4.4 The Model

We introduce a formal model to capture the central dynamic of our argument: Elites transition to democracy to secure their wealth through the rule of law when inequality is high. We define inequality as the differences in the distribution of resources across classes within a given economy.²⁰³ Inequality is low when wealth is evenly distributed between capital holders and labor. In this conceptualization, we fall in line with recent literature.²⁰⁴ Elite wealth, on the other hand, refers to the total amount of resources held by the elite.

²⁰¹The wage share in Chile in 1990 was only .17, placing it well with the lowest 10 percent of values in our dataset. That is, it was more unequal than 90 percent of the country-years in our data.

²⁰²see Munck and Leff 1997.

²⁰³AR 2006; Houle 2009.

²⁰⁴AR 2006; Boix 2003; Houle 2009; Haggard and Kaufman 2012.

Our model consists of one agent, the economic elite (E), who decides whether to transition to democracy or remain in autocracy. The initial state is always an authoritarian regime. The elite decide the tax rate in autocracy and have an expectation regarding the tax rate in democracy based on the demands of the median voter if they extend the franchise. To reflect their capacity to capture democracy, we allow the elite to have a discount on their expected tax rate in democracy.²⁰⁵ Since we are only interested in democratic transitions, we assume that democracy is a terminal or absorbing state. The levels of income and wealth in the economy are stochastic, capturing the importance of exogenous shocks in democratization processes.²⁰⁶ These exogenous shocks act as triggers to possible revolutions, changing the opportunity cost for the elite to remain in autocracy.

The tax rate τ in democracy is increasing in inequality. There is a final good y and a unique asset with total stock α . We begin our analysis of the economy at time $t = 0$, where the elite's assets are derived through income from capital and the capital stock:²⁰⁷ $\alpha = i(w) + w$. The final good y of the elite will be affected by exogenous shocks to the economy, which we denote with the term ϵ_t , and thus $y_t = \epsilon_t \alpha$. We assume ϵ_t to be a stochastic term that can take two values

$$\epsilon_t = \begin{cases} \epsilon^g = 1 & \text{with probability } 1 - s \\ \epsilon^b = a & \text{with probability } s \end{cases}$$

²⁰⁵The results of the model hold without this discount parameter, but transitions require higher levels of wealth. We discuss this in Appendix B.

²⁰⁶O'Donnell and Schmitter 1986; Przeworski 1991.

²⁰⁷For wealthy elites, labor income is low in comparison to the rest of their assets. For simplicity, we assume it to be zero in our model.

where $\epsilon^b = a < 1$ is a period of recession after an exogenous shock, superscripted b for ‘bad’. When no exogenous shock occurs, the economy is not in recession and everyone knows times are ‘good’, or g . Periods of recession change the opportunity cost of a revolution by the poor.²⁰⁸ We capture this logic in our model by assuming that the risk of revolution will only exist after an external shock, following the classic democratization literature.²⁰⁹ We also assume that $s < 1/2$, so that shocks can be considered rare occurrences.

Post-tax income for the elite is given by $\hat{y}_t \equiv (1 - \phi\tau_t)[i(w_t) + w_t]$, where ϕ is a discount factor on taxes to wealth, a term that reflects the capacity of the elite to ‘game’ democracy. For simplicity, we assume that the tax rate, τ_t , is set to zero by the elite in dictatorship. The expected tax rate in democracy for the elite is the median voter’s preferred rate. The post-tax income of the elite can be re-written as a function of wealth, w , changing the income from wealth to the rate of return of wealth, r . We also add a term, c , to the income of the elite that captures consumption. After rearranging the terms, the final equation for post-tax income for the elite is: $\hat{y}_t \equiv w_t((1 - \phi\tau_t) * (1 + r_t) - c)$.

At any point in time, the expected utility for the elite is represented by $E_t \sum_{j=0}^{\infty} \delta^j U(\alpha_{t+j})$, where δ is the discount factor, and E_t is the expectations operator conditional on all information available. Furthermore, $U(\alpha) = \ln(\alpha)$ such that elites are risk averse, and are willing to pay a higher risk premium (in the form of taxes), as wealth increases. The society starts in an authoritarian regime (A), where the probability of revolution $\gamma(\theta)$ in any period $t \geq 1$ is conditional on the level of inequality, θ , and differentiable with $\gamma(0) = 0$ and $\gamma'(\theta) > 0$ for all $\theta > 0$.

²⁰⁸see AR 2001.

²⁰⁹O’Donnell and Schmitter 1986; Przeworski 1991.

The timing of events within a period can be summarized as follows: 1) The state ϵ_t is revealed; 2) the elite decide whether to transition to democracy or stay in dictatorship as a function of the probability that a revolution succeeds; 3) consumption takes place and the period ends.

The state S is one of (ϵ, A) or (ϵ, D) , where ϵ is the stochastic term mentioned above and can take the values of $\epsilon = \epsilon^g$ or $\epsilon = \epsilon^b$. For each period, the elite decide whether to stay in dictatorship, $\pi = 0$, or transition to democracy, $\pi = 1$. The state variables that condition this decision are wealth, w , and inequality, θ . Following AR,²¹⁰ there is no threat of revolution in $S = (\epsilon^g, A)$. In period t , ϵ_t is revealed and the elite decide whether to extend the franchise $\pi = 1$, or not, $\pi = 0$. We start the analysis by introducing an external shock. Thus, in bad times, the value function for the elite is defined by

$$V(\epsilon^b, A, w, \theta) = \max_{\pi \in \{1,0\}} \{(1 - \pi)\tilde{V}(\epsilon^b, A|w, \theta) + (\pi)\tilde{v}(\epsilon^b, A, w, \theta)\}. \quad (4.1)$$

Here, $\tilde{V}(\epsilon^b, A, w, \theta)$ is the continuation value to the elite of remaining in autocracy, and $\tilde{v}(\epsilon^b, A, w, \theta)$ is the continuation value of extending the franchise. If the latter term is greater than the former, elites decide to democratize, so $\pi = 1$. The Bellman equations are defined as follows:

²¹⁰AR 2000.

$$\tilde{V}(\epsilon^b, A, w, \theta) = (1 - \gamma(\theta)) [\ln(\epsilon^b w_t (1 + r_t - c))] + \delta W(A, w, \theta) \quad (4.2)$$

$$\tilde{v}(\epsilon^b, D, w, \theta) = \ln[\epsilon^b w_t (1 - \phi\tau_t)(1 + r_t - c)] + \delta W(D, w, \theta), \quad (4.3)$$

In dictatorship, elites maintain their current level of wealth with probability $1 - \gamma(\theta)$, and take into account the discounted value of future periods in authoritarianism if they decide to remain in the current state. For simplicity, we assume that elites lose everything after a successful revolution. The expected continuation function of remaining in an authoritarian regime is

$$W(A, w, \theta) = (1 - s)(1 - \gamma(\theta)) [\ln(\epsilon^b w_t (1 + r_t - c))] + s [\ln(w_t (1 + r_t - c))]. \quad (4.4)$$

In good times we assume that no revolution occurs. Also, as before, the value for the elite of a successful revolution is simplified to zero. Note that in authoritarian regimes, the elite set the tax rate to zero.

$$W(D, w, \theta) = (1 - s) [\ln(\epsilon^b w_t (1 - \phi \tau_t) (1 + r_t - c))] + s [\ln(w_t (1 - \phi \tau_t) (1 + r_t - c))]. \quad (4.5)$$

Equation (5) is the continuation function of remaining in democracy. The probability of good and bad times is defined by s and $(1 - s)$, respectively. In bad times, $\epsilon^b = a$, and in good times, $\epsilon^g = 1$.

The elite will prefer to transition to democracy in state (ϵ^b, A) , maximizing π to 1, if $\tilde{V}(\epsilon^b, A, w, \theta) < \tilde{v}(\epsilon^b, D, w, \theta)$. Solving this, elites in bad times will transition to democracy when

$$(\gamma(\theta)) \ln(\epsilon w (1 + r - c)) \geq - \left[1 + \frac{\delta s}{1 + \delta(1 - s)} \right] \ln(1 - \phi \tau), \quad (4.6)$$

that is, when the cost of remaining in an authoritarian regime is greater than the cost of transitioning to democracy. On the one hand, as the risk of revolution $\gamma(\theta)$ increases, greater wealth w makes the status quo more costly for elites. On the other hand, a higher capture term ϕ reduces the cost of democracy by lowering the effective tax rate τ .²¹¹ Note that when

²¹¹The right hand of the inequality will always be positive. The $\ln(1 - \phi \tau)$ is negative, as $0 < (1 - \phi \tau) < 1$, and the term $\frac{\delta s}{1 + \delta(1 - s)}$ is positive.

there is no threat of revolution, i.e. $\gamma(\theta) = 0$, the cost of staying in autocracy is zero and the cost of democracy is always positive,²¹² so a transition never occurs.

Proposition 1: After an external shock, elites opt for democracy when wealth and the risk from inequality $\gamma(\theta)$ in autocracy are greater than the cost of discounted taxation in democracy $\phi\tau$.

We now solve the formal model when no external shock occurs. In this case, the value function is given by

$$V(\epsilon^g, A, w, \theta) = \max_{\pi \in \{1,0\}} \{(1 - \pi) \mathbf{V}'(\epsilon^g, A|w, \theta) + (\pi) \mathbf{v}'(D|w, \theta)\}, \quad (4.7)$$

where $\tilde{\mathbf{V}}^e(\epsilon^g, A, w, \theta)$ is the continuation value to the elite after remaining in autocracy and $\mathbf{v}'^e(\epsilon^g, D, w, \theta)$ the continuation value of democracy. These are given by

$$\mathbf{V}'(\epsilon^g, A, w, \theta) = \ln[w_t(1 + r_t - c)] + \delta W(A, w, \theta), \quad (4.8)$$

$$\mathbf{v}'(\epsilon^g, D, w, \theta) = \ln[w_t(1 - \phi\tau_t)(1 + r_t - c)] + \delta W(D, w, \theta). \quad (4.9)$$

²¹²Even if the cost of revolution were zero, inequality can never be zero and thus the taxation cost is assumed to always take a positive value.

The expected continuation functions of remaining in authoritarian regime or transitioning to democracy are the same as in bad times: $W(D, w, \theta)$ and $W(A, w, \theta)$. Elites in good times will transition to democracy when

$$\delta(1-s)(\gamma(\theta)) \ln(\epsilon w(1+r-c)) \geq -(1+\delta) \ln(1-\phi\tau). \quad (4.10)$$

In (10), as was the case in bad times, a higher probability of revolution increases the costs of staying in autocracy as wealth rises. However, as the threat of revolution only emerges in future periods of bad times, the term $\delta(1-s)$ reduces the overall cost of autocratic rule in good times.²¹³ As with bad times, taxation costs in democracy are reduced by the capture term ϕ , but the term $1+\delta$ makes the overall cost of democracy higher.²¹⁴ Thus, transitions in good times are less likely.

Proposition 2: If no external shock occurs, elites opt for democracy when wealth and the future risk from inequality $\delta(1-s)\gamma(\theta)$ in autocracy are greater than the cost of discounted taxation in democracy $\phi\tau$.

Comparative Statics

To solve this Markov decision process, we assign values to the parameters, as informed by the literature.²¹⁵ We set the future discount parameter to $\delta = 0.9$; a consumption parameter

²¹³ δ is the future discount and $(1-s)$ is the probability that there will be bad times in the future.

²¹⁴This is because $\delta > \frac{\delta s}{1+\delta(1-s)}$.

²¹⁵AR 2001; Przeworski and Limongi 1993.

to $c = 0.02$; the net rate of return to $r = 0.05$;²¹⁶ the penalization term after an external shock $\epsilon^b = 0.7$; the probability s of remaining or transitioning to good times to 0.707 ;²¹⁷ and the discount factor to taxes in democracy to $\phi = 0.75$, which means that elites manage to avoid paying 25 percent of their fair share.²¹⁸ We have a total of four states, and all states except for regime type can take multiple values. That is, the economy can be in good or bad times, inequality can be low, medium, or high,²¹⁹ and wealth is a continuous set of positive values. We produce value functions for each combination of states, and a decision rule for elites in all possible states.

Figure 4.1 reports the decision rules for the elite after an external shock. The wealth parameter w in the model is on the x -axis and the expected cost in each state on the y -axis. The straight lines report the cost of remaining in authoritarianism at different levels of inequality and wealth (left side of equation 6.) The dashed lines represent the cost of transitioning to democracy, which is not a function of wealth (right side of equation 6.) When the cost of remaining in autocracy surpasses the cost of democracy, elites choose to transition to democracy. We represent this with a shaded gray area.

The curves show that, provided an external shock, elites are more likely to choose to transition to democracy at high levels of inequality as wealth increases. The elite decide to extend the franchise when the risk to their wealth is high, but only after they have already

²¹⁶Both terms, c and r are net of depreciation. In the model, we adjust these terms to account for a depreciation of around 10 percent (Piketty 2014).

²¹⁷We estimate the probability of having a recession from the data.

²¹⁸Changing the values given to each parameter, within reasonable theoretical expectations, does not alter the results of the model.

²¹⁹For the probability of revolution, we set $\gamma(\theta)$ at 0.025, 0.075, 0.2, for low, medium, and high inequality, respectively. For the tax rate in democracy, we set τ at 0.4, 0.2, and 0.1 for high, medium, and low inequality, respectively.

Transitions to Democracy at Levels of Inequality and Wealth

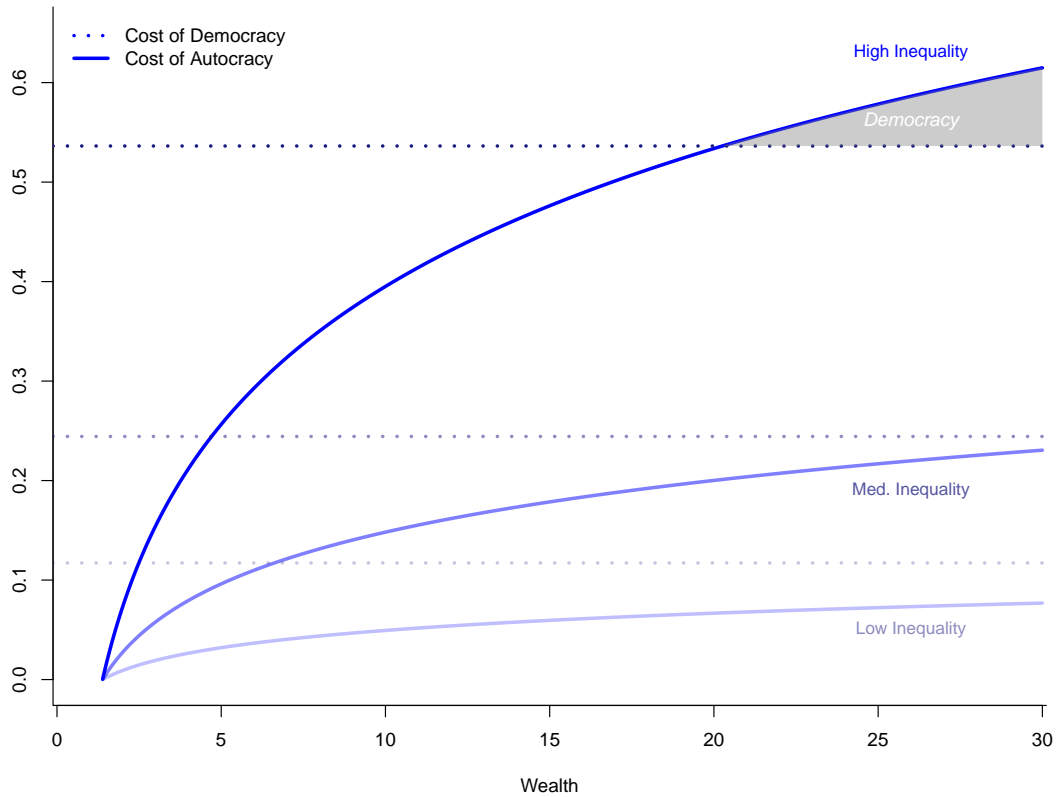


Figure 4.1: Democratization as a function of wealth and inequality

accumulated a certain amount of wealth. The cost of remaining in dictatorship is lower than the cost of democracy in both medium and low inequality, and elites do not transition.

These results mirror the democratization processes we have observed, for example, in Ecuador and Brazil. In Ecuador, the commodity booms during the military dictatorship led to urbanization and the “deepening of social and regional inequalities.”²²⁰ Elites accumulated large amounts of wealth, leaving the social and economic conditions of the poor mostly unchanged and giving rise to opposition from unions and indigenous organizations.²²¹ The strengthened unions and the growing indigenous movement made elites more than willing to

²²⁰Larrea 1994.

²²¹Acosta 1995.

avoid turmoil by supporting a democratic transition, an elegant way to preserve their wealth and establish a democracy on which they would attempt to exert control.

In Brazil, economic growth averaged 7 percent a year from 1960 until 1980 during ISI and under military dictatorship. The development model stimulated demand through a “deliberate effort to skew income distribution in favor of upper income groups,”²²² which led to a fragmented multi-class state, supported by the economic elite (and by international actors). The economic crisis of 1982-85 provided the necessary destabilization to the military regime, and labor strikes led by Lula da Silva sent a clear signal that the working class demanded profound political and institutional change. This spurred Figueiredo’s administration to try to “carefully control Brazil’s transition from dictatorship to democracy and, in the process, distribute political capital among the sectors of society that it deemed fit to govern.”²²³ At that point there were few downsides to democracy: it would appease worker demands, lessen conflict and, more importantly for elites, protect the huge wealth they had accumulated under ISI and military rule at a modest redistribution cost.

Two additional results from the model merit mention. First, democratization is unlikely without an external shock, which confirms the hypotheses of O’Donnell and Schmitter and Przeworski.²²⁴ Second, the model lends credence to the intuition that capturing democracy is relevant to democratization processes.²²⁵ Increasing the ‘capture’ term ϕ in our model makes democracy more attractive to elites, as it reduces the cost of democracy (it shifts the dashed lines downward.) However, the effect is more pronounced at high levels of inequality,

²²²Kohli 2004.

²²³Skidmore and Silva 1988.

²²⁴O’Donnell and Schmitter 1986; Przeworski 1991.

²²⁵Albertus and Menaldo 2014.

where transitions become more likely with less accumulated wealth, especially when $1 - \phi$ is high.

4.5 Empirical Analysis

4.6 Data

Our primary hypothesis is that high levels of inequality and rapidly increasing elite wealth foster democratization. To test it, we require valid measures of economic inequality, elite wealth, and democracy. For the latter, we follow the literature and use a dichotomous measure of democracy for each country-year observation in our dataset.²²⁶

We measure economic inequality as the share of capital that accrues to labor (wage share - WS), which captures cross-class differences between capital-holders and labor. This variable is more fitting to theories that focus on inter-group inequality and class cleavages.²²⁷ The higher the share of output that accrues to wages, the more *equal* the society. The measure is taken from the INDSTAT2 dataset produced by the United Nations International Development Organization.²²⁸ For our results to be intuitive, we have inverted the WS variable. Now the greater the variable's values, the higher the level of inequality. It captures the share of output that accrues to capital holders, a concept similar to the one used by Houle.²²⁹ The

²²⁶Boix, Miller and Rosato 2012. We use these authors' expanded measure to 2015, which can be found at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/FJLMKT>. The results hold using alternative datasets such as Democracy and Dictatorship by Cheibub, Gandhi and Vreeland (2010).

²²⁷Boix 2003; AR 2006; Houle 2009.

²²⁸see Knutsen 2015. The dataset can be found at <https://stat.unido.org>.

²²⁹Houle 2009, 2016.

data are available for 163 countries from 1963 to 2008. The advantages of our measure are the large number of observed data points and its sensitivity.

Another widely used measure of inequality is the Gini coefficient, which captures the distance between the largest and smallest individual incomes in society. However, the Gini coefficient does not measure differences across groups or classes. Houle provides a good account of this distinction.²³⁰ In Appendix C, we include alternative models using (1) Houle's capital share variable and (2) Solt's disposable income GINI index.²³¹ More information regarding these measures is provided there.

No yearly cross-national variable exists, to the authors' knowledge, that measures elite wealth accumulation. Ideally, our measure should capture the total amount of asset stock owned by the economic elite.²³² One option is to obtain the total amount of wealth in an economy and multiply it by the share that belongs to the top centile. The closest approximation to this variable can be obtained from Piketty's data.²³³ We can multiply his measure of total private wealth by the share of wealth owned by the top decile or centile.²³⁴ Unfortunately, the sample of countries in the WID data is small and dominated by countries that have not experienced any recent transitions to democracy.

We construct a new measure using widely available data from the World Bank and contrasting a subsample with the WID data. First, we take yearly cross-national Gross Fixed

²³⁰Houle 2009. In Appendix C, we provide an alternative test using Solt's (2016) variable of inequality, constructed using an adjusted Gini index and multiple imputation. More detail on this variable is provided there.

²³¹Houle 2009, 2016; Solt 2016.

²³²We broadly define the economic elite as top centile of an economy.

²³³WID from Alvaredo et al. 2018.

²³⁴Alvaredo et al. 2018.

Capital Formation (GFCF) in current dollars from the World Bank to estimate the total new wealth generated by capital each year.²³⁵ This variable captures a country's yearly total domestic investment in fixed assets. It includes land improvements, machinery purchases, private infrastructure construction (i.e. residential, commercial and industrial buildings), and the net acquisition of valuables.²³⁶

For each country, we obtain the cumulative sum of new wealth for all years in the sample. This gives us the amount of wealth generated in a given country-year from the time the country is first observed. It does not capture total wealth accumulation, as we cannot estimate an initial value for wealth. We could add GDP or some similar proxy of national wealth as the initial value, but that would introduce noise and generate its own set of issues, such as lumping in population. To avoid these identification issues, we simply capture the pattern of elite wealth accumulation within countries since the moment they are observed, rather than estimating some initial value of wealth. If elite wealth grows rapidly, elites are more likely to cash in and transition to democracy. If it does not, elites have an incentive to remain in the status quo.

We make three substantive improvements to the cumulative sum of wealth described above. First, countries generate increasing yet similar amounts of wealth year-to-year. The cumulative sum of GFCF, therefore, experiences rapid growth the first few years and linear

²³⁵Data accessed on April 2018. It can be found at: <https://data.worldbank.org/indicator/NE.GDI.FTOT.CD>

²³⁶An in-depth description of the variable is included in Appendix C, including the World Bank's own detailed definition.

growth thereafter.²³⁷ To make wealth increase linearly across time, as in the WID data, we replace each country's first value of accumulated wealth with its fifth.²³⁸

Second, rather than dealing with gross numbers of wealth that are abstract and do not truly represent the total amount of wealth available, we create a ratio: We divide each year's cumulative wealth by the amount of wealth the country produced the first year. Generating a ratio of wealth allows us to capture precisely within-country elite wealth accumulation and minimize the effects that cross-national variation may have in generating the variable. The reason for this is simple: we consider that elites in one country are unlikely to compare themselves with elites in other countries when deciding whether to transition to democracy. Wealth is not the same in every country, given differences in prices and different pressures on consumption, savings and so on. It is more useful to net out these differences for the logic we advance in this chapter.

Lastly, we adjust the cumulative sum of wealth for depreciation and state investment. We subtract 10 percent from each year's wealth to account for depreciation²³⁹ and another 15 percent to account for the share of total investment by the government. We cannot remove the share of wealth that belongs to the non-elites, but we contend that this is a small part of the measure. New wealth is largely generated by capital holding elites. To make sure these assumptions are substantiated, we run a series of stress tests on our final variable. We compare WID's data on total private wealth and elite wealth with a subsample from our

²³⁷Consider a country that creates 100, 110, 120, and 130 units of wealth in four years. The sum will be: 100, 210, 330, and 460 units. Growth from the first period to the second is 110 percent; from the second to the third, 55%; and from the third to the fourth, 35%. After a few years, growth is linear on average both in our data and in the WID measure. We refer to the WID measure sometimes as Piketty's variable for reference.

²³⁸We chose the fifth value as growth becomes linear in the data on average after the fifth value of wealth.

²³⁹Piketty 2014

dataset.²⁴⁰ A high correlation with these known measures should provide some external validity for our proxy.

The WID's *net private wealth* variable captures the total level of wealth owned by private citizens in a country-year. The correlation between this measure and our proxy is $r = 0.949$ on a subsample of 770 observations from 21 countries.²⁴¹ We then multiply the WID's net private wealth variable by the share of wealth owned by the top 5, 1 and 0.1 percent. These measures directly capture the wealth owned by different sets of elites. The correlation is high for all three measures. We obtain $r = 0.913$ for the total wealth of the top 5 percent, $r = 0.925$ for the 1 percent, and $r = 0.946$ for the 0.1 percent. These correlations include 389 observations for 11 countries.²⁴² These high r values are indicative of the strength of our variable in measuring our theoretical concept of elite wealth accumulation. We provide further information about the variable and a detailed country-by-country comparison between these variables in Appendix C. A description of the control variables is also included in Appendix C.

²⁴⁰Our variable cannot capture all forms of wealth that elites may have, such as financial assets, stocks and savings. Neither does it account for foreign ownership of assets. However, we contend that these omissions do not harm the validity of our measure. The level and growth of these assets tend to be highly correlated with the ones we use in our measure, and foreign ownership, while important, appears to have a small impact on our measure overall. We provide as evidence of our logic the correlations with Piketty's private wealth data for a subsample of countries. These are all above 0.9 and are detailed below.

²⁴¹These are the US, Canada, China, Russia, the United Kingdom, Australia, Czech Republic, Japan, Mexico, South Africa, Netherlands, South Korea, Denmark, Germany, France, Greece, Italy, Spain, Norway, Finland and Sweden. Within-correlation scores are stable across groups, with the exception of South Africa and, to a lesser extent, Greece. The correlation stays high if each or both countries are excluded from the test.

²⁴²The US, Canada, Australia, Japan, Netherlands, South Korea, France, Germany, Italy, Spain and Sweden. Within-correlation scores are stable across all groups.

4.7 Methods

We test our theory by interacting economic inequality and wealth accumulation and estimating their joint effect on democratization. The expectation is that the interaction will be positive and the marginal effect of wealth accumulation will be statistically significant at high levels of economic inequality. These tests are reported in the results section.

Two modeling techniques are employed. First is the dynamic probit,²⁴³ which is commonly used to explore the relationship between inequality and democratization.²⁴⁴ We interact each explanatory variable with the lag of the response variable and produce two coefficients, one for democracies and one for nondemocracies, for each independent variable. We are not interested in democratic breakdowns, and therefore we only report the coefficients for transitions to democracy in the tables. We use the dynamic probit over other logistic regression specifications for two reasons: including both types of transitions in the model reduces bias,²⁴⁵ and including the lag of the dependent variable accounts for state dependence. The second model we use is the linear probability model with country fixed effects (LPMFE). Even though the dynamic probit's autoregressive nature does away with much unobservable heterogeneity, it still exploits between-variation. The LPMFE uses within-variation and helps us be certain that time-invariant unobservables are not affecting the relationship of interest. We present models with year fixed effects to net out any heterogeneity related to specific years. We also include a time trend to account for the fact that wealth and events of democratization increase naturally with time.

²⁴³Przeworski et al. 2000.

²⁴⁴Boix 2003; Houle 2009.

²⁴⁵see Metzger and Jones 2016.

We use six models in each test. The first four are dynamic probit specifications and the last two are LPMFE models. First, we provide a naïve model, which describes the basic relationship between the main variables of interest. It also discards the option that the relationship is spuriously created by adding controls, which inevitably remove variation. Second is a full dynamic probit model with the relevant controls. The third model adds year dummies and the fourth model includes both year and region dummies.²⁴⁶ The fifth model is the fully specified LPMFE. The sixth adds year fixed effects to the LPMFE.

4.8 Results

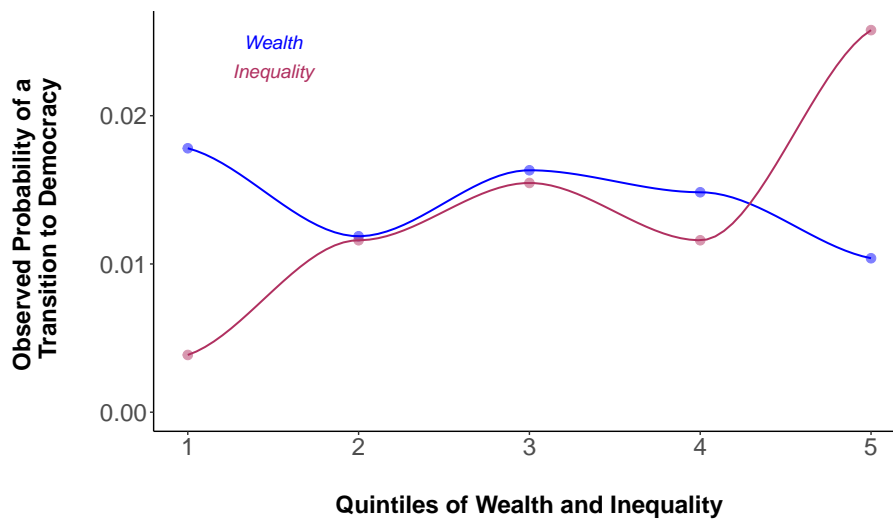


Figure 4.2: Frequency of Transitions to Democracy at Different Quintiles of Wealth and Inequality.

We begin by showing the relationship between the two main variables of interest and democratization descriptively. Figure 4.2 plots the observed probability of a transition to democracy at different levels of wealth and inequality. This is obtained by dividing the number of

²⁴⁶Houle 2009; Miller 2012.

observed instances of democratization by the total number of observations that fall within 5 different quantiles of both independent variables. Democratization seems more likely at high levels of inequality, although the probability begins to increase at medium levels. This suggests a complex nonlinear effect. The effect of wealth accumulation is less conclusive on its own, which matches our theory well. The relationship is nonlinear but differences are inconclusive throughout. The difficulty in assessing the potential effect of both variables on democratization suggests an interactive effect could be at play.

Our central hypothesis is that high inequality leads to democratization conditional on rapid wealth accumulation among the elite, who seek to secure their wealth against expropriation through the rule of law. We test it by interacting wealth accumulation with economic inequality, using the models described above. Table 4.1 shows the results. All variables have been centered at the minimum for easier interpretation. The two constitutive terms of the interaction represent the effect of the variable on democracy when the other is at the lowest observed value in our sample.²⁴⁷

The first two coefficients represent the effect of wealth and economic inequality on democracy when the other variables are at their minimum values. The statistical and substantive significance of the two terms is trivial. The test of our theory lies in the interaction terms, which are positive and statistically significant in all models, as our theory predicts. The coefficient shows that a marginal increase in wealth has a statistically significant and positive effect on democratization conditional on higher levels of inequality, and viceversa. The

²⁴⁷Whether these terms are significant is not relevant for our theory, as we are not interest solely on the effect of each variable at the lowest value of the other. The interaction term, coupled with the marginal effects plot that follows the table, strongly support our theory.

<i>DV: Democracy</i>						
	<i>Dynamic Probit</i>				<i>LPMFE</i>	
	1	2	3	4	5	6
Elite Wealth	-0.829** (0.414)	-0.967*** (0.355)	-1.239*** (0.376)	-1.148*** (0.423)	-0.018 (0.030)	-0.037 (0.032)
Inequality	-0.194 (0.122)	-0.327*** (0.110)	-0.413*** (0.110)	-0.437*** (0.119)	-0.022* (0.012)	-0.027** (0.012)
Elite Wealth × Inequality	0.112** (0.055)	0.128*** (0.047)	0.165*** (0.050)	0.156*** (0.055)	0.008** (0.004)	0.009** (0.004)
GDPpc		-0.082 (0.082)	-0.091 (0.091)	-0.128 (0.095)	-0.049*** (0.012)	-0.054*** (0.014)
Growth		-0.026* (0.013)	-0.022 (0.014)	-0.021 (0.015)	0.000 (0.001)	0.000 (0.001)
Oil		-0.102*** (0.037)	-0.113*** (0.042)	-0.095** (0.038)	-0.007* (0.004)	-0.007* (0.004)
Previous Trans.		0.276** (0.140)	0.240 (0.146)	0.203 (0.161)	0.031** (0.014)	0.034** (0.014)
Time Trend		0.019** (0.009)	0.008 (0.014)	0.013 (0.014)	0.001 (0.001)	0.002 (0.004)
Ethnic fract.		0.042 (0.369)	-0.014 (0.381)	-0.039 (0.340)		
Religious fract.		0.207 (0.414)	0.074 (0.443)	-0.163 (0.450)		
British Colony		-0.109 (0.206)	-0.066 (0.219)	0.149 (0.217)		
New Country		-0.656*** (0.179)	-0.727*** (0.188)	-0.484** (0.211)		
Constant	-0.363 (0.901)	1.080 (0.983)	2.005* (1.086)	1.941* (1.041)	0.518*** (0.114)	0.572*** (0.216)
<i>Country FE</i>	-	-	-	-	<i>Yes</i>	<i>Yes</i>
<i>Year FE</i>	-	-	<i>Yes</i>	<i>Yes</i>	-	<i>Yes</i>
<i>Region FE</i>	-	-	-	<i>Yes</i>	-	-
Observations	3336	3037	3037	3037	3050	3050
Pseudo R^2	0.853	0.869	0.880	0.884		
Overall R^2					0.874	0.873
Log-Lik.	-329.472	-266.877	-243.458	-236.403		

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.
All time-varying IVs have been lagged. GDP, elite wealth, and oil are logged.

Table 4.1: Effect of Wealth Accumulation and Income Inequality on Democratization

coefficients are consistent across dynamic probit specifications (Models 1-4), which means that the interaction is robust to the addition of controls and year and region dummies. They are also consistent in the LPMFE (5 and 6).

The coefficients for the control variables also display interesting findings and lend credence to the model specification. Growth is negative and close to statistical significance in all dynamic probit models, and oil is negative and significant in all models.²⁴⁸ Both variables are known to affect democratization negatively.²⁴⁹ GDP per capita has a weak negative effect in the dynamic probit models, as shown in Houle,²⁵⁰ and a stronger negative effect in the LPMFE.²⁵¹ Previous transitions, as expected, have a positive effect on democratization, as countries that have democratized in the past are more likely to experience democratization again. New countries that attained independence after de-colonization are also less likely to democratize, which is consistent with previous research.²⁵² We now assess the substantive significance of these findings.

Figure 4.3 shows the marginal effects using Models 3 and 6 from Table 4.1. In Model 3, the marginal effect of increases in income inequality on the probability of democratization is significant at high levels of wealth accumulation. More specifically, a one unit increase in inequality will generate a statistically significant change on the probability of democracy when wealth accumulation surpasses a value of 4.1 in our data, which corresponds to the 83rd percentile. For a country with a value of wealth accumulation of 4.5, such as South Korea in the mid-1980s, any one-unit increase in income inequality will lead to a seven

²⁴⁸The effect of growth is not significant in the fixed effects models because the controls are not interacted with the lag of the dependent variable, only the interaction terms are. The effect cancels out for growth in democratic survival (positive) and democratization (negative). The variable plays the same role as a control.

²⁴⁹Wright 2008; Houle 2009; Ross 2001.

²⁵⁰Houle 2009, 2016.

²⁵¹This is explained by the strong negative effect for nondemocracies after adding the wealth variable, which has never been done in a previous analyses. Indeed, we are extending our work to understand whether the endogenous effect of greater development is associated to democratization only insofar as elites become wealthier and seek to democratize for safety. GDP may be best described as having an exogenous effect (Przeworski et al. 2000), but further research on this issue is needed.

²⁵²Houle 2009.

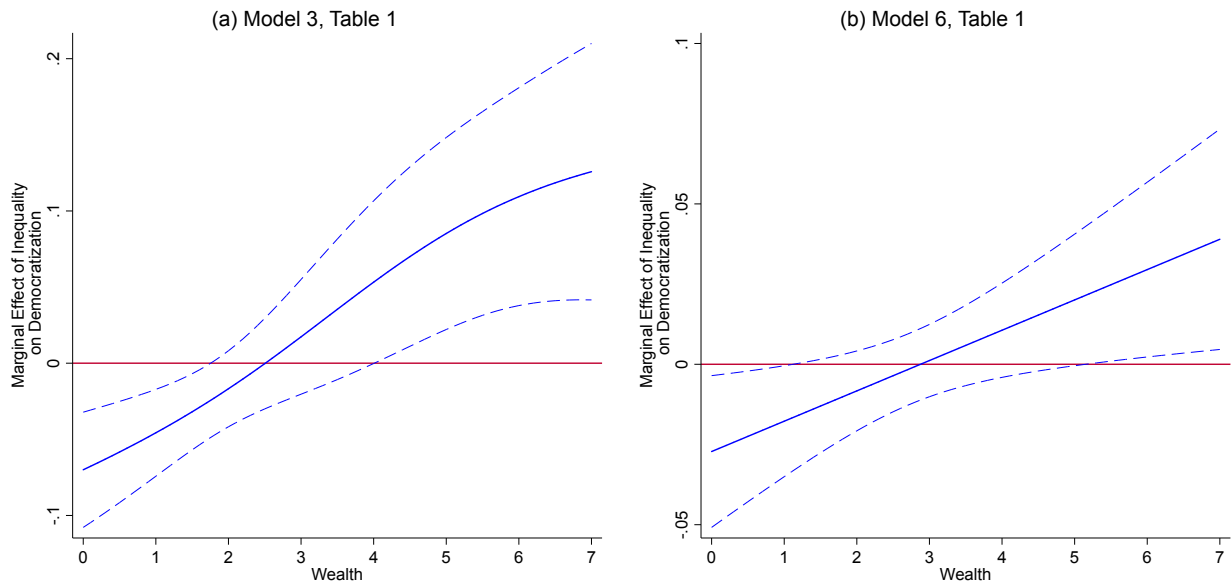


Figure 4.3: Marginal effects of inequality on democratization at different levels of wealth accumulation.

percent jump in the probability of democracy. If a country were to go from medium (50th percentile) to high inequality (80th percentile), its probability of democratizing would increase by 10 percent, a remarkably high probability for a rare event such as democratization. The prediction in Model 6 is also substantively significant: for countries that reach exceedingly high levels of wealth, such as 5 in our scale, the probability of democratizing climbs 20 percent with every one unit increase in inequality. These results serve as strong confirmation of our theory. At higher levels of wealth accumulation, increases in the level of income inequality have a significant positive effect on the probability of democracy.²⁵³

²⁵³We show the marginal effects of inequality on democratization at different levels of wealth to model precisely what the formal model shows: as the risk of expropriation increases, elites decide to transition as a function of their accumulated wealth. We could also show the marginal effects of increases in wealth at different levels of inequality, and we do so in Appendix C.

4.8.1 Alternative Hypotheses and Robustness Checks

Perhaps the empirical relationship we identify in this chapter is driven by a particular form of inter-elite conflict, namely, a new bourgeoisie that pushes for democracy against an established elite that dominates political power. The politically disenfranchised elite obtain a credible commitment against expropriation through democracy. This is in line with a theory proposed by Ansell and Samuels.²⁵⁴ However, this theory only partially explains the empirical findings in this chapter. It cannot fully explain the strong association between wealth accumulation and democracy at high levels of inequality. This alternative explanation would hold only if we assume that wealth accumulates primarily in the new rich, which is unlikely. Rather, all elites continue to accumulate, and autocracy cannot be arranged in such a way that it secures everyone's riches from expropriation. The existence of multiple wealthy elite groups creates uncertainty over who may take power. Once in power, new dictators rely on their own coalition and expropriate the rest.²⁵⁵ If the established elite does not transition to democracy, they risk losing everything to a new autocrat or revolution. Indeed, many transitions are led by conservative elites in power.²⁵⁶ The risk of expropriation and high wealth lead these elites to democratize and safeguard their wealth.

Our relationship could also be a function of time. The argument could be made that accumulated wealth increases over time and, eventually, international pressures force countries with greater wealth to democratize. We would still observe the effect of high wealth, but it would in fact be trivial. Theoretically, this is difficult to justify given that, first, countries

²⁵⁴Ansell and Samuels 2010, 2014.

²⁵⁵Albertus and Menaldo 2012.

²⁵⁶Loxton 2015; Ziblatt 2017.

do not naturally democratize as their wealth increases. As we saw in Figure 4.1, there is no apparent linear relationship between wealth and democracy. A threat to expropriation needs to exist to persuade elites to cash in and democratize. We argue that inequality provides that threat after an external shock. Empirically, we include a time trend in our model to rule out this hypothesis. As expected, the time trend is positive in all models and statistically significant in the fully specified model without time dummies.

Third, good institutions help elites accumulate wealth faster and also make it easier for countries to transition to democracy, as they establish democratic qualities to a country *ex ante*. While this argument makes intuitive sense, it does not appear to hold empirically. British colonies would be expected to have better democratization outcomes, as the British Empire generally replicated its institutional structure in their colonies. However, in our models the association between British colonies and democratization is generally negative or weakly positive in some models.²⁵⁷ It never reaches statistical significance. The same occurs in Houle and Miller.²⁵⁸ To lend greater credence to the idea that institutions do not drive democratization on their own and could explain the relationship we observe in this chapter, we replicate Acemoglu, Johnson and Robinson's seminal piece on the effect of institutions on development,²⁵⁹ but using democracy in 2015 as the dependent variable. The sign is positive but not significant in any of the models except for the model with no controls. We show this in Tables C4 and C5 in Appendix C.

²⁵⁷AR 2013.

²⁵⁸Houle 2009; Miller 2012.

²⁵⁹Acemoglu, Johnson and Robinson 2001.

A final argument is that our relationship is driven by GDP per capita and the underlying correlation between GDP and our wealth variable. It is true that countries with greater GDP will generate more wealth, and that countries with greater GDP are more often than not democracies. We control for GDP to rule out this hypothesis, but a high correlation between GDP and elite wealth could lead to multicollinearity. Here, the correlation is quite low at $r = 0.207$. This low r value rules out multicollinearity and makes it unlikely that the relationship is driven by the similarity between these two variables. In the regression, the variance inflation factor for the GDP control is 3.2, below any value that would be cause for concern.

4.9 Conclusion

In this chapter, we propose a theory of democratization based on the role of democracy as insurance for elite wealth. We argue that transitions to democracy occur when economic elites seek to secure their wealth against expropriation in authoritarianism, and pay a premium in terms of higher taxes in exchange for the security of the rule of law. Democracy is more likely at high levels of economic inequality because there exists an increased threat to property. These threats are revolution from below and expropriation by a competing autocrat who capitalizes on popular discontent.

The implications of our theory are substantial. First, this is the first works in the field to address the interrelated role of wealth accumulation and economic inequality. Empirically, we provide an alternative approach to testing these relationships, modeling the effect of

time more precisely and incorporating fixed effects specifications into the debate. We also provide a novel proxy measurement for wealth accumulation.

Democracy is often understood as an equilibrium between competing forces that limits conflict. Distinguishing the impact of modernization as a function of the benefit it brings to the elite better elucidates the motivations of the actors vying to reach that equilibrium. In doing so, we not only connect the bourgeoisie's role in the process of democratization that we find in Moore,²⁶⁰ but also explain why these groups remain powerful in new democracies. In a 1919 letter to Hungarian workers, Lenin wrote that the "bourgeois democracy is just a specific form of bourgeois dictatorship," in which groups with greater resources impose their will on those who own less. We contend that elites are interested in democracy insofar as it guarantees their economic interests better than any alternative system. Understanding how democracy may benefit all elites rather than harm them helps us see democratization in a new light.

²⁶⁰Moore 1966.

Chapter 5

The Productivity Paradox: How Sharp Increases in Productivity Motivate Rent-seeking and Erode Democracy

Why are developed democracies, which appeared impregnable just a few years ago, backsliding? This chapter provides a theory of democratic erosion from a political economy perspective that explains this puzzle. The central argument is that a large productivity gap between economic groups motivates those with low productivity to use the state for rent-seeking. Expectations of lower wealth in the future force these groups to seek control of the state, in an attempt to compensate for their losses and prevent high productivity groups from continuing to increase the wealth gap. A Caesarian leader emerges from within the party system or as a political outsider and provides a political base and promises of rents to these elites in exchange for political power. I use both quantitative and case study evidence from the US and Spain to support my main hypotheses.

5.1 Introduction

Democracy's expansion is over. No new democracies have emerged since 2008.²⁶¹ Recent autocratic reversals in Venezuela and Turkey, coupled with the election of leaders like Donald Trump in the US and Andrzej Duda in Poland, have sent political scientists and the public in general into a frenzy. Why are developed democracies, which appeared impregnable just a few years ago, backsliding?

This chapter provides a theory of democratic erosion from a political economy perspective that explains this puzzle. The logic I advance is as follows. First, a political opportunist capitalizes on the discontent among the middle class created by increasing wealth inequality. He then requires a certain level of elite support to win power, but elites are alienated by sharp anti-establishment rhetoric. However, when the productivity gap among economic sectors is large, groups whose wealth comes primarily from low productivity capital have an incentive to capture the state and appropriate rents. A Caesarian leader exploits the situation by providing a political base and the rents to these elites in exchange for political power.

Consider the cases of Spain and the United States, two countries that have experienced some level of democratic erosion in the past few years. In Spain, leftist political party *Podemos* emerged in 2014 to channel the political discontent caused by the domestic housing crisis of 2007 and the global financial crash of 2008. Government spending cuts and labor market reform in the private sector targeted low productivity sectors and workers, who bore the brunt of the adjustment. Pablo Iglesias, *Podemos*' charismatic leader, shot up

²⁶¹See Boix, Miller and Rosato, 2012. Expanded to 2015 by the authors of the original dataset. Expanded to 2018 by the author of this manuscript.

in the polls with promises of a large increase in minimum salaries, the nationalization of utility companies, and guaranteed monthly income for all citizens. His anti-elite discourse crystallized in popular catchphrases such as *la casta*, a slight against individuals with ‘pedigree’ and influential family lineage. Given the historical roots of the conservative Popular Party (PP) party in Franco’s Spain, most of the *casta* has direct or indirect ties to the PP. In Spain’s case, the struggle for state control was between low productivity workers and a set of elites that remained fairly united –no sectors were particularly productive in comparison to others. These united elites gave the conservative Popular Party greater leeway to crack down on opposition, increasingly restricting the right to protest through the *ley mordaza* and free speech.²⁶²

In the United States, on the other hand, the productivity gap took the form of a pronounced elite cleavage, brought on by globalization and technological progress: high productivity sectors in technology and finance versus low productivity sectors in natural resource extraction, industry and, more specifically, manufacturing. The latter sectors were against the reelection of the Obama-Clinton coalition, and eventually threw their support behind Donald Trump rather than form a protective wall against a candidate with non-democratic traits. Thus, in the US, polarization was most pronounced in the *economic* elite, as opposed to among voters²⁶³ or the political elite.²⁶⁴

I use the term ‘democratic erosion’ to reflect the gradual process whereby democracy drifts toward autocracy.²⁶⁵ It must be distinguished from democratic breakdown, which

²⁶²Gomez-Reino and Llamazares 2015, Orriols and Cordero 2016, Sola and Rendueles 2018.

²⁶³Svolik 2018.

²⁶⁴Bermeo 2003; Linz and Stepan 1972.

²⁶⁵Bermeo 2016; Lust and Weldner 2015.

reflects the return of an authoritarian regime where a country had been fully democratic. For instance, Venezuela suffered a breakdown in 2006 and Turkey in 2016. Certain democratic practices still exist in these countries, such as multi-party elections, but freedoms have been curtailed to such an extent that competition is patently unfair and all parties know ex-ante the result of the election. Conversely, while democratic quality is decreasing in advanced democracies such as the US, Poland, France or Spain, these countries remain democratic. In these countries, we are not discussing democratic breakdown, but the potential breakdown of the democratic equilibrium. Nor are we observing the full dismantling of democratic procedures, but the reshaping of institutions and systematic attacks on democratic norms. Thus, to study democratic erosion or ‘backsliding’,²⁶⁶ a more expansive vision of democracy is required.²⁶⁷

This chapter makes a few important contributions to the emerging debate on democratic erosion and informs the debate on democratic breakdown.²⁶⁸ It is the first one, to the author’s knowledge, to address the political economy angle of the recent trend toward democratic erosion. It ties many important processes that have developed since the end of the Cold War, such as greater globalization, factor mobility and technological innovation, into the simple concept of the productivity gap. Indeed, one can think of the productivity gap as the result of a global economic shift brought on by globalization, in which old industrial sectors in developed economies are losing out to new and innovative sectors that yield high profits in the global market. It also provides an explanation that links wealth inequality to both voter

²⁶⁶I use these two concepts synonymously.

²⁶⁷Lust and Weldner 2015; Svobik 2018.

²⁶⁸Bermeo 2016; Diamond 2015; Lust and Weldner 2015; Miller 2018; Svobik 2015, 2018.

mobilization by political entrepreneurs and the role of the elites as democratic gatekeepers. In doing so, it places special emphasis on the ‘choices and choosers’ involved in backsliding while accounting for important economic factors that influence institutional change.²⁶⁹ I proceed as follows. After describing and defining the recent process of democratic erosion, I develop my wealth inequality argument and support it using both quantitative and case study evidence from the US and Continental Europe.

5.2 Democratic erosion in developed economies

Widespread democratic erosion in advanced economies is a recent phenomenon.²⁷⁰ Various measures show that democracy expanded in the developed world until around 2012, when

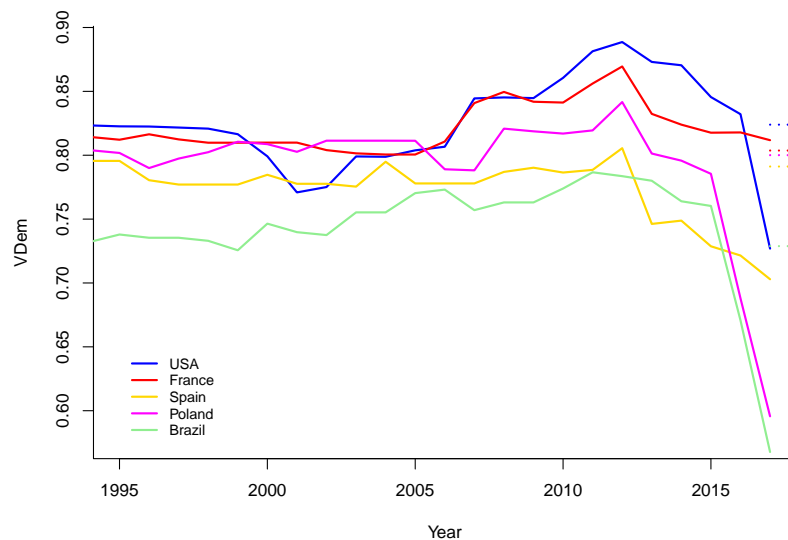


Figure 5.1: Evolution of V-Dem scores by country since 1995.

²⁶⁹Bermeo 2016.

²⁷⁰Bermeo 2016, Lust and Waldner 2015.

a process of deterioration began.²⁷¹ Democracies such as Poland or Hungary marched decisively toward autocracy, while liberties were curtailed in other established democratic polities. In France, the fight against terrorism by French nationals who joined ISIS prompted the state to surveil its own citizens, often with weak evidence of wrongdoing. EU states have responded to the new influx of immigrants fleeing conflict in Africa, the Middle East and Central America with solutions of questionable democratic quality that contravene various international treaties. Free speech is becoming less free. In Spain, in a rather comical twist, two puppeteers were jailed for invoking the name of defunct Basque terrorist group ETA in a 2015 show. A rapper was recently given a 3 year prison term for inflammatory lyrics against the Crown. Poland's Duda has been systematically attacking the judiciary in an effort to wean its powers and act with greater impunity, a similar strategy to Orban's in Hungary. Figures 1 and 2 confirm this pattern. Figure 5.1 shows the evolution of V-Dem's continuous measure of liberal democracy for five developed countries. Democracy kept on its slow but steady progress until around 2012, when a decline begins.²⁷² Most countries' scores have since decreased to unprecedented levels, and some to historical lows, as in Spain and Poland. The US score is the lowest since Nixon's presidency.

However, while democracies are losing their luster, the number of democracies and autocracies in the world has remained stable in the last decade, as Figure 5.2 illustrates. Plot (a) shows the evolution of democracy since 1950 and the sharp uptick in the number of democratic states during the third wave from the 1970s until the 1990s. Plot (b) then displays

²⁷¹See the Varieties of Democracy (V-Dem) and Polity datasets.

²⁷²There may be a certain degree of coder bias in the V-Dem measures, which are scored retrospectively, but broadly accurate patterns can be gleaned from these scores.

two flat lines that depict the worldwide democratic halt of the past decade. No democracies are coming into existence, and no autocratic regimes are failing. Part of the explanation for this puzzle is that declines in democratic quality are not sufficient for countries to lose their democratic status. Democracies are becoming more like autocracies in weakening the judiciary and curtailing civil and political rights, but they remain democracies. Thus, the evidence shows that this is a problem of democratic *erosion*, not *breakdown*—at least not for time being. While we may be on the way to notorious breakdowns, we are not observing them yet.

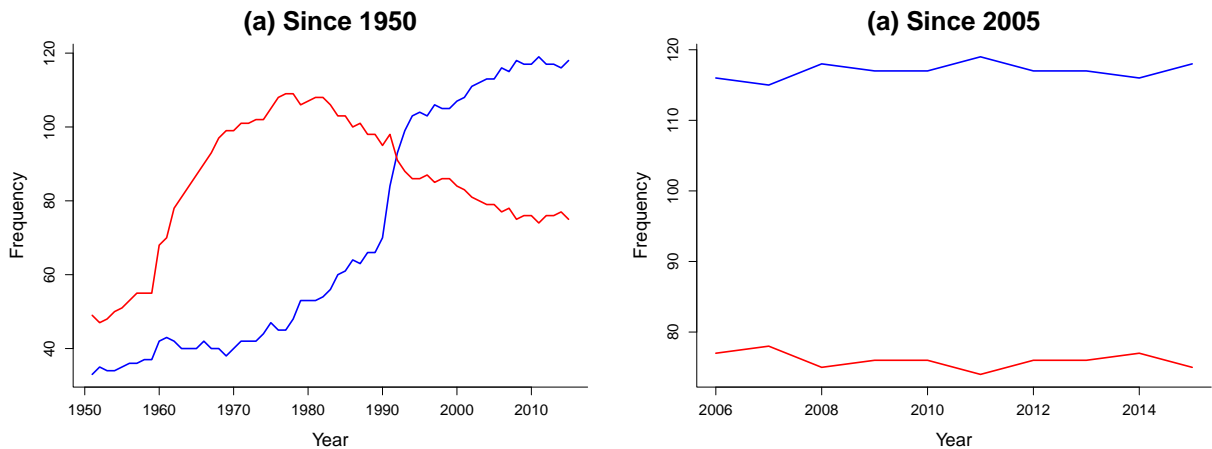


Figure 5.2: Evolution in the number of democracies from 1950 and 2005.

What is democratic erosion? Part of the problem is that, at least among developed economies, backsliding is a novel phenomenon. As such, its theoretical boundaries are fluid. Lust and Waldner define it as “a change in a combination of competitive electoral procedures, civil and political liberties, and accountability.”²⁷³ Adopting a minimalist approach, focusing only on elections, cannot help describe the myriad ways in which incumbents at-

²⁷³Lust and Waldner 2015.

tack the liberal aspects of democracy.²⁷⁴ Adopting too expansive a view of democracy would lead to the conclusion that no democracies are such in the first place. I share Lust and Waldner's 'middle ground' approach, as it helps us analyze democratic erosion in terms of both procedures as well as civil and political liberties.²⁷⁵

One thing is common across backsliding democracies: elections remain mostly free. Cases of voter intimidation exist but are few and far between, and the vote is secret. Votes are tallied up truthfully and electoral fraud is virtually nonexistent. Indeed, it has become rare to steal elections on election day.²⁷⁶ However, elections are increasingly less fair. Incumbents are using their power to capture the process around elections, or what Bermeo calls 'strategic manipulation'.²⁷⁷ Incumbents seek to tilt the playing field in their favor, using the media, government funds, or intimidation of the opposition as tactics. In the contentious Catalan elections of December 2017, which came in the wake of a controversial independence referendum in October, the Spanish government used its executive powers over the region²⁷⁸ to tilt the election in favor of unionist parties. Pro-independence parties had little or no access to advertisements on media outside regional outlets, which were in turn banned from broadcasting any event, organized by political parties or civil organizations, that had a pro-independence message. Prime political advertisements in Catalonia Square in Barcelona's center were reserved exclusively for unionist parties, which in turn had 1.5 times the budget of their rivals despite only having 36 seats in the Catalan Parlia-

²⁷⁴Zakaria 2011.

²⁷⁵Lust and Waldner 2015.

²⁷⁶Bermeo 2016.

²⁷⁷Bermeo 2016.

²⁷⁸As a result of the application of Article 155 of the Spanish constitution, the conservative government of Mariano Rajoy took full control of Catalan institutions on October 27, 2017. The region had until then been ruled by a pro-independence coalition that won the September 2015 elections.

ment—to the pro-independence coalition’s 72. Moreover, Catalonia’s two most influential political figures, Oriol Junqueras and Carles Puigdemont, were unable to campaign: the former was jailed without trial on November 2, while the latter avoided jail and fled to Belgium and then Germany. Both countries refused to extradite him back to Spain on armed rebellion charges, which carry a prison sentence of 30 years.

An important aspect of defining the recent downtrend in democracy as ‘erosion’ instead of breakdown is that we can judge what is happening irrespective of its outcome for democratic survival. This is especially important in advanced democracies with strong institutions, as incumbents require time and effort to subvert democracy. Incumbent takeovers as a form of democratic breakdown exist but are rare, precisely because it is difficult to determine when the process is complete.²⁷⁹ In Poland, for instance, Duda’s ruling right wing Law and Justice Party (PiS) has sought to reorganize the country’s court system, reducing judicial independence and increasing the party’s influence over key institutions such as the constitutional court. In July 2017, Parliament passed a law that effectively dismissed all justices on the constitutional court not appointed by Duda. Met with fierce public protests, Duda vetoed the bill, but a new one was introduced in December 2017 lowering the justices retirement age to 65 from 70, forcing 21 members, including its Chief Justice, to step down. It also created a disciplinary committee for the constitutional court, which could be used by the PiS to intimidate judges. Thus, defining *attempts* at a takeover is also complicated, as we do not know the real motivations of suspicious incumbents such as Trump or Duterte. What

²⁷⁹Svolik 2018.

we can indeed observe is the fact that democratic quality is decreasing, and that is usually accompanied by the rise of a political opportunist that concentrates power in his hands.

5.3 Shocks, economic inequality and the rise of a political entrepreneur

The economic shock of 2008 had broad repercussions for developed democracies. Inequality rose to unprecedented levels, primarily because wealth accumulated in the elite at the fastest rate since the late 1800s.²⁸⁰ Economic growth was slow in Europe during the recovery and faster in the US. In general, however, growth slowed in the period 2008-2018 as compared to the previous decade. New wealth accumulated to the richest individuals in society and the middle class felt the economic squeeze through higher unemployment and stagnant salaries. They are worse off in purchasing power today than before the crisis.

Moreover, the 2008 recession came at a time of deep transformation in the global economy. Emerging markets have concentrated production for industries that used to be based in developed economies, offering higher productivity levels and cheaper costs. Since the turn of the new millennium, globalization and technological progress have shifted the productivity spectrum, with high value added in services, technology and advanced financial management, and low productivity in industry, manufacturing, and mining. The shift had visible consequences for communities that, for years, had relied extensively on the latter. Industrial and manufacturing jobs disappeared as industries settled in emerging markets;

²⁸⁰Piketty 2014.

retirement plans tied to stock prices, such as General Electric's, lost half or more of their value. The 2008 crisis compounded on these issues, accelerating the deterioration of these communities through the loss of property values and widespread foreclosures. The sense of loss that follows a crisis or a period of deep transformation fostered political discontent, primarily in communities where low productivity sectors are located and the consequences are more visible. Indeed, the rise of unemployment was marked in areas where populist movements, from the left or the right, gained the most ground. It was also where traditional parties or candidates were hit the hardest.

The discontent brought on by economic transformation and loss creates an opportunity for the rise of a political entrepreneur. Traditional parties have difficulty capturing these voters because they are accustomed to building broad coalitions that include a large portion of moderate voters. With the belief that losing moderate voters is the death knell of any political campaign, these parties are slow to react to a rapidly changing political landscape. On the other hand, new, alternative candidates have an opening to capture these voters' support by way of a new political brand that promises credible change. Not all succeed, but the ones that do establish a base of support through on which they can build for future election cycles.

Why do some political entrepreneurs develop an intent to subvert the system and take power for themselves, i.e. become Caesarian candidates? Indeed, the 2008 crisis and its aftermath has led to a proliferation of Caesarian leaders in advanced democracies, with Trump in the US and Duda in Poland as standard-bearers. These candidates or leaders

use personal charisma or prestige as outsiders to gain the popular favor of the masses and accumulate power in their hands once they take office.

I argue that deep crises like the Great Recession merge economic malaise with a profound lack of belief in the system by voters, who blame it for bringing on the crisis. Traditional political candidates and elites lose the faith of many voters, who begin to blame them for their travails. Outsider candidates who champion democracy as is are less likely to woo these supporters. Fiery anti-establishment candidates, on the other hand, hit this nerve forcefully and are able to build solid coalitions around this message. When economic troubles are the result of regular economic cycles or external shocks for which foreign countries can be blamed, democracies (and political systems in general) are better able to cope with discontent. For instance, one of the reasons Cuba survived the special period in the early 1990s was that the leadership was hardly at fault for the fall of the Soviet Union. It was surely to blame for creating the alliance in the first place, but not for the fall. It was easier for the leadership to distance itself from the cause of the crisis and sell a message of unity and perseverance against adversity.

The 2008 crash is, in many ways, the great failure of regulation and, to a lesser extent, of democracy. It was perceived as a domestic issue in many countries, even though the crisis originated in the US. Banks suffered globally because of their lax lending practices, and bailouts were required in a majority of developed democracies. Bailouts, and the perception that the rich got off unscathed and became even richer, were particularly harmful to people's view of democracy. In Spain, Bankia and other smaller institutions were rescued through a private-to-public debt conversion mechanism orchestrated by the European Central Bank.

Public debt ballooned from 50 percent to 100 percent of GDP within one year. Bankia's case was particularly harmful, as it cost taxpayers 23 billion euros and the perception was widespread that the bank paid few costs for its malpractice.²⁸¹

This lack of belief in the system generates an opening for a new leader to propose strong leadership to replace the weak and greedy political class; in essence, to offer voters less traditional democracy in exchange for a potentially better future. Promises to rid the state of corruption, replace the political elite, improve economic prospects with large-scale reform, are common threads in these emergent leaders. Explicit voter support for these positions paves the way for them to take office and accumulate power in their hands in a way that previous leaders could not.

5.4 Economic elites and why Caesarian leaders triumph

Once Caesarian candidates have built a coalition of voters that can challenge in an election credibly, they require elite support to win. Elites, however, are usually loathe to give it precisely because these leaders are independent, unpredictable, and often espouse an anti-establishment message. As the case of Podemos in Spain shows, it is difficult for alternative candidates to win office and subvert the system if elites present a united front against them. In other cases, candidates have been victorious partly because a set of favorable elites has

²⁸¹Adam Przeworski points out that “something is wrong when a plurality of citizens in a democracy, asked which institutions have most power in their country, answer ‘banks.’ Access of money to politics is the scourge of democracy” (Przeworski 2016). He was referring precisely to the case of Spain, where a survey found that 32 percent of citizens considered banks to be the most powerful institutions, followed by government at 26 percent.

supported them or, at least, allowed them to win. Why would elite groups support such a candidate?

I argue that support from the elite is driven by the degree of polarization in the *economic elite*. Classic works by Linz and Stepan and Bermeo identified elite polarization as the central mechanism for twentieth century democratic breakdowns in Europe in Latin America, but their accounts in fact reflected divisions among the *political elite*.²⁸² Recent work by Svolik focuses on the role of voter polarization in democratic backsliding.²⁸³ He argues that highly polarized voters will opt for a candidate that fulfills their policy preferences over a more democratic candidate that does not. However, considering the growing importance of money in politics and the crucial role of democratic institutions in managing the diverging interests of economic elite groups, a renewed emphasis on the motivations of the economic elite may yield important insights into democratic erosion.

Economic elites are highly polarized when important subgroups cannot accept the electoral victory of another group. In normal times, they may rue another group's triumph over theirs, which occurs frequently in democracy. But when polarization is high, they cannot tolerate it. This is precisely what has occurred in the US, where a subset of the conservative elite decided it could not accept the victory of the Obama-Clinton coalition in 2016, whatever the cost. Whether these groups' beliefs are substantively justified is beyond the point; to them, the Obama coalition and its debt-inducing policies, with universal health care at the forefront, was an existential threat. Trump capitalized on this polarization to obtain

²⁸²Linz and Stepan 1978; Bermeo 2003.

²⁸³Svolik 2018.

the necessary backing of an elite group that saw him as the redeemer of the conservative cause after Obama.²⁸⁴

In Spain, the rise of Podemos in late 2014 and early 2015 led to a delicate balancing act by established economic elites. Podemos at the time were on the far left, inspired by the popular protests of the 15th of May, 2011 and the movement they spawned. The party shot up in the polls, becoming the favorite to win the national elections in most surveys around November 2014. An *El País* poll had them ahead of the socialists at 27.7 and 26.2 percent of the vote respectively. The right-wing Popular Party's share decreased from 44.6 in the 2011 elections to 20.7 in that same poll. Another survey in January 2015 revealed that they would beat the Popular Party in the general election by 3 points. At the time, Podemos spoke of nationalizing industries and drastic increases in taxes on the rich to revert the post-crisis fortunes of a battered middle class. The rise of an alternative, populist party put all elite sectors on alert, and very few if any supported Podemos. Rather, a majority of elites saw the need for a new conservative party to compete against Podemos and replace the traditional Popular Party, whose corruption scandals were only adding fuel to the populists' fire. As a consequence, many established elites threw their support behind Ciudadanos and Albert Rivera, a party built around two core concepts: rid the state of corruption and defeat the nationalists movements in the Basque Country and, more importantly, Catalonia. As of mid-2018, Rivera is leading in the polls.²⁸⁵

Thus, both in the US and in Spain, conservative elites at one point in time faced the prospect of an intolerable opposition triumphing in an election. The rhetoric in conservative

²⁸⁴See Inglehart and Norris 2016.

²⁸⁵Gomez-Reino and Llamazares 2015, Orriols and Cordero 2016, Sola and Rendueles 2018.

circles, misguided or not, was that the Obama-Clinton coalition or the Podemos coalition would wreak havoc on taxes, jobs, the national debt, and investment. It would lead to greater centralization and bigger government, through nationalization (Spain) or greater debt, climate change policy, and universal health care (US).

5.5 Wealth, the productivity gap, and elite polarization

What makes elites polarized to the extent that they are willing to accept an alternative candidate who defends certain anti-democratic and anti-establishment positions? Following Przeworski's idea that money in politics tends to undermine democracy, I contend that a particular type of cleavage in the *economic* elite fosters the rise of Caesarian leaders that undermine democracy: the productivity gap.²⁸⁶

The basic idea around the productivity gap is that certain groups whose capital is tied to low productivity sectors turn to the state for rent-seeking. Conversely, groups in high productivity sectors continue to accumulate new wealth through innovation, and require only favorable trade and monetary policy to continue expanding. The productivity gap among economic sectors, therefore, generates divergent trajectories for their long-run wealth accumulation. High productivity sectors can expect high returns in the future, and thus their expectation is that they will be much wealthier down the line. Low productivity sectors are generating little new wealth from their capital investments. Low returns now and in the future translate into an expectation for decreasing wealth and influence on policy.

²⁸⁶Przeworski 2016.

It is useful to think of this elite choice in game theoretic terms. Elite groups must consider two broad states: the present state and some future state. Two main considerations exist in these two states. First are returns to wealth and the second is policy influence. For low productivity sectors, the present state is comprised of low returns on wealth, as defined precisely by their low productivity. However, their political clout is still high, given the important position they occupied in the economy for so long, their high current wealth, the number of people they employ, and the lobbying connections they developed over time. The future state, on the other hand, promises to be lower on both fronts if productivity stays low.

For high productivity sectors, the picture is reversed. They have high levels of productivity but exercise less political influence in the present state; these groups tend to be the result of innovation and technology shocks and are thus newer, with a less well-developed lobbying infrastructure. However, they expect their wealth and political clout to be higher in the future provided their productivity stays high.

The diverging productivity paths for both groups affect their political calculus in the present time. Low productivity sectors have to choose between the status quo or seeking alternative ways to generate income and compensate for the low returns on their capital. High productivity sectors face a similar choice, i.e. status quo or find alternative ways to generate capital and maintain power, but their large gains in the present and high expectations for the future eliminate any incentive they may have to depart from the status quo.

Low productivity sectors, on the other hand, are less convinced about the status quo. All else equal, they would rather remain in a democratic system in which they have full guarantees on their property against the whims of an autocrat. But they see their social

and economic position so threatened in the future state that they need to seek alternatives. Reinvesting capital into more productive enterprises is one option. If the productivity gap is large, new investments will require a long time to produce sufficient returns to close the gap, and there is no guarantee that the gap will close. Another alternative is to take over the state and rent seek.

Economic elites in democracy prefer to seek rents from the state when their payoff from doing so in the future state is higher than investing in more productive assets. If they consider that they will benefit more from rent-seeking than productive investments in the future, low productivity groups seek to capture the state in the present period. This is contingent on their ability to do so, but their greater political influence in the present time enables them. Indeed, an added incentive to capture the state early is to have a first-mover advantage in reallocating money and taking control of the coercive apparatus. Thus, one can think of a continuum along which low productivity elites decide whether to support a democratic candidate or one that helps them rent seek, as a function of their current ability to influence the system. As low productivity makes a dent in these groups' wealth, political influence decreases and they no longer possess the ability to influence the system. Their optimal strategy is to capture the state and rent seek before they lose the ability to do so if they expect to gain more from rent-seeking than productive enterprises in the future.

5.6 Why Caesarian leaders subvert democracy

A high productivity gap provides incentives for some economic elites to take over the state and obtain rents. However, these elite groups continue to face two issues: a collective

action problem, which stems from the doubts that certain elements may harbor about directly subverting an established democratic system; and uncertainty over the outcome. I contend that Caesarian leaders emerge to solve these two problems and provide low productivity elites with a political platform to obtain state rents.

Caesarian leaders gain power by exploiting the situation created by greater elite polarization and offering one group of elites certain policy concessions. Their rhetoric is often pro-democracy as much as Caesar's was pro-Republic. The latter famously stated that he only established his Emperorship in order to fix the Republic's ills, but that it was his intention all along to restore the Republic as soon as he could. Modern strongmen follow a similar tactic: they claim to be the only leaders suited to save the system from itself, but find themselves concentrating greater power and undermining democracy once they win office. Established elites, faced with the prospect of an unacceptable opposition triumph or a Caesar, choose the latter.

So far I have argued that polarization in the economic elite through a large productivity gap facilitates the emergence of a Caesarian leader, who capitalizes on popular discontent. But we need more clarity as to why these leaders, once in power, subvert democracy. Character and personality certainly play some role, and it is no coincidence that candidates with weaker democratic convictions emerge in times of crisis, as I argued before. However, I contend that there are two structural factors that drive incumbents to take over democracy: (1) the platform that allowed the leader to rise is built precisely in such a way that the leader accumulates power and enacts vast reform and (2) worries about post-tenure legal troubles.

First, political opportunists that emerge in a post-crisis scenario tend to espouse anti-establishment rhetoric because rallying against the establishment wins votes. These challenges, however, require that these candidates make grandiose promises of reform. The system must be changed wholesale, not piecemeal. Candidates raise the stakes to such an extent that, should they win office, they must follow through on at least some of the more notorious promises. Quick, wholesale reform is not possible within the bounds that strong democratic institutions place on elected officials. Shortcuts are needed, and these shortcuts are precisely what erodes democracy. I will go into these shortcuts in detail in my case studies.

Another important and often overlooked reason why leaders have a necessity to fully subvert the system once in office are preoccupations regarding their legal status after they leave office. These leaders are likely to have committed certain illegalities either to reach power or to achieve meaningful reform. While in office, they are faced with a choice to subvert the system to the point that they can control reelection or, at least, maintain a faithful following in the top echelons of the state apparatus, or place themselves at the mercy of the opposition if the latter triumph. In this situation, Caesarian leaders stay the course and continue to subvert democracy as much as they can to ensure their freedom and the safety of their wealth once they leave office.

5.7 Empirical Analysis

Quantitative evidence is presented first, with tests for democratic erosion and breakdown.

Two case studies, on the United States and Spain, follow.

5.8 Data

The primary hypothesis is that, in democracy, high levels of inequality and a growing productivity gap among economic sectors lead to democratic erosion. To test it, valid measures of economic inequality, elite wealth, and democracy are required. For the latter, I use V-Dem's continuous measure of liberal democracy to probe whether wealth inequality and accumulation interact to produce democratic backsliding.

I use two measures of economic inequality. First, I use the share of capital that accrues to labor (wage share - WS), which captures cross-class differences between capital-holders and labor. This variable is more fitting to theories that focus on inter-group inequality and class cleavages.²⁸⁷ The higher the share of output that accrues to wages, the more *equal* the society. The measure is taken from the INDSTAT2 dataset produced by the United Nations International Development Organization.²⁸⁸ For the results to be intuitive, I have inverted the WS variable. Now the greater the variable's values, the higher the level of inequality –it captures, in essence, the share of output that accrues to capital holders, a concept also by

²⁸⁷Boix 2003; AR 2006; Houle 2009.

²⁸⁸See Knutsen 2015. The dataset can be found at <https://stat.unido.org>.

Houle.²⁸⁹ I use data for advanced democracies from the end of the cold war until 2008 –the last year for which data are available.

Another widely used measure of inequality is the Gini coefficient, which captures the distance between the largest and smallest individual incomes in society. I use Solt’s adjusted Gini index, which is one of the few measures to capture inequality levels in advanced democracies until 2017.²⁹⁰ This compensates for the fact that WS data is available only until 2008, and thus misses the period in which we have observed the greatest amount of democratic backsliding. More information about this variable is included in Appendix A1.

I use productivity data from the OECD to estimate the productivity gap among sectors. Data are available for the following sectors: finance, information and communication, professional services, and retail are classified as high productivity sectors that fall under the broader ‘business excluding agriculture’ umbrella; and industry, manufacturing and mining which are group under industrial sectors. I compare the aggregate productivity of these two broad sectors, business services and industry. I use data available from the end of the cold war until 2017.²⁹¹ To create the final productivity gap measure, I calculate the difference in productivity between business services and industry for each observation (the unit of observation is the country year).

²⁸⁹Houle 2009, 2016.

²⁹⁰Solt 2016.

²⁹¹A majority of countries have data only up to 2015.

5.9 Methods

Tests for democratic erosion use V-Dem’s continuous democracy measure. I use random effects OLS models to leverage both within- and between-variation across different countries. The main models are country random effects with clustered standard errors,²⁹² with year and region fixed effects. I also present the analysis using only OLS models with fixed effects.

	(1)	(2)	(3)	(4)	(5)	(6)
Prod. Gap	0.174 (0.628)	-0.029 (0.160)	0.084 (0.200)	0.808*** (0.154)	0.311*** (0.106)	0.433*** (0.113)
Inequality (WS)	-0.001 (0.006)	0.001 (0.001)	0.000 (0.002)	-0.001 (0.003)	-0.001 (0.001)	-0.003 (0.002)
Prod. Gap × Inequality (WS)	-0.030 (0.143)	-0.001 (0.031)	-0.017 (0.044)	-0.138*** (0.031)	-0.056*** (0.020)	-0.079*** (0.023)
GDPpc		0.002* (0.001)	0.004* (0.002)		0.003** (0.001)	0.006** (0.002)
Growth		-0.000 (0.000)	-0.000 (0.000)		0.000 (0.000)	0.000 (0.000)
Oil Prod.		0.001 (0.000)	-0.001 (0.001)		0.002*** (0.001)	0.001 (0.001)
VDem Lag		0.953*** (0.012)	0.828*** (0.042)		0.728*** (0.057)	0.581*** (0.043)
Constant	0.760*** (0.025)	0.021 (0.016)	0.096** (0.039)	0.836*** (0.015)	0.205*** (0.046)	0.309*** (0.045)
Observations	499	474	474	249	243	243
Ovr. R^2	0.051	0.983	0.980	0.247	0.906	0.854

Table 5.1: Effect of the productivity gap and inequality on democratization

²⁹²Clustering is important in both random and fixed effects because nonrandom selection and treatment continue to affect the standard errors substantially (Abadie et al., 2017).

5.10 Results

Table 5.1 presents the results for the effect of the productivity gap on democratic erosion, conditional on levels of inequality as measured by the WS. Models 1 through 3 show the results for the full sample, which includes all democracies irrespective of their VDem score. Models 4-6 include advanced democracies only. The subsample in the latter models includes countries with a V-Dem score greater than 0.8: Australia, Austria, Belgium, Canada, Chile, Costa Rica, the Czech Republic, Denmark, Estonia, Finland, France, Greece, Ireland,

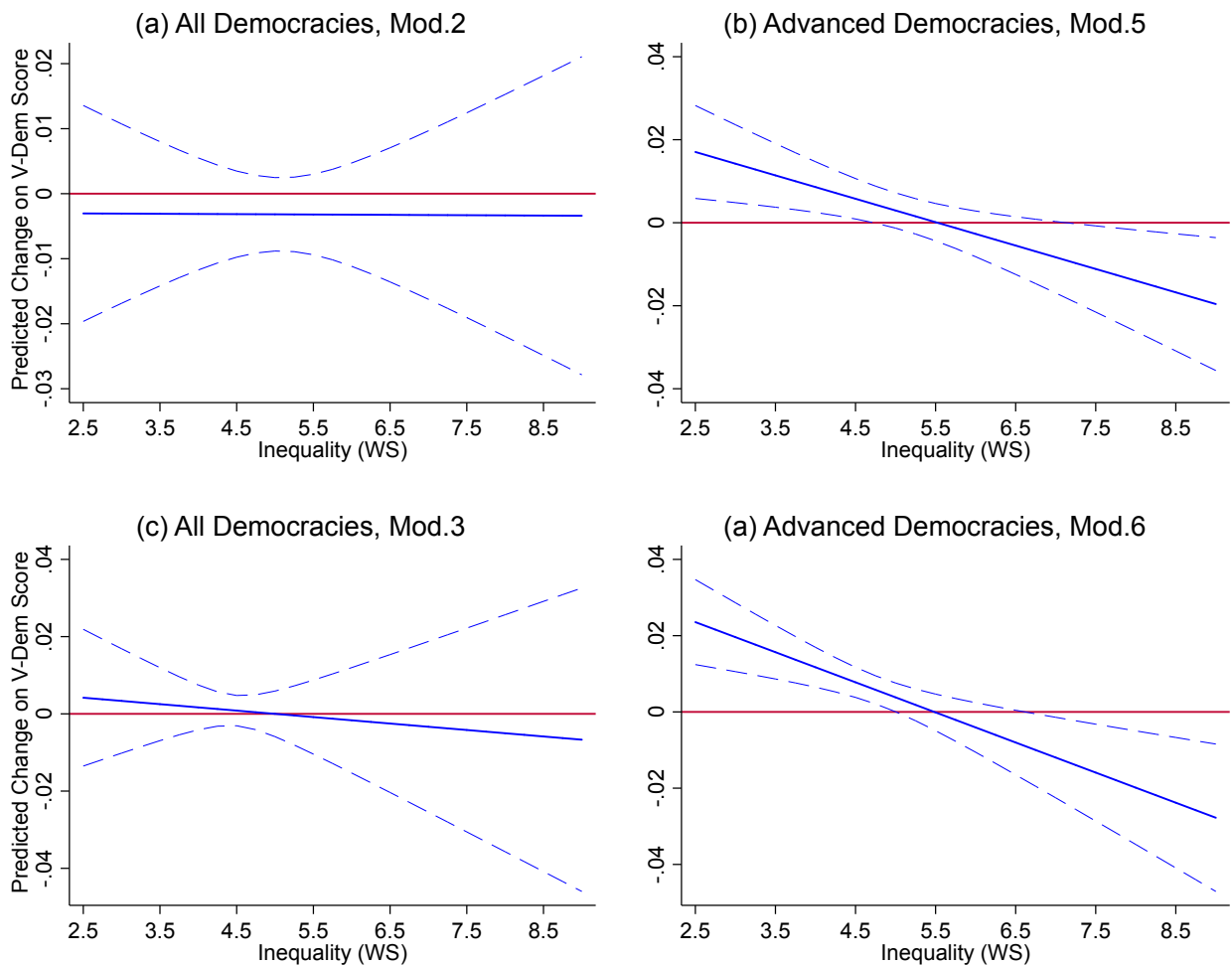


Figure 5.3: Effects of the productivity gap on democracy conditional on inequality.

the Netherlands, New Zealand, Norway, Poland, Portugal, Sweden, the UK and the US.²⁹³ The differences are stark, primarily in the interaction term between the productivity gap and inequality. The effect of greater differences in productivity as inequality increases is slightly negative and not statistically significant for the full sample, but it becomes steeply negative and statistically significant when we include only the subset of advanced democracies. In Models 4-6, greater elite wealth as inequality increases significantly decreases the predicted V-Dem score for a given country.

Figure 5.3 displays the results from Table 5.1 substantively. Plots (a) through (d) show the marginal effects of increases in the productivity on the V-Dem score at different levels of inequality. For all democracies, the effect is weakly negative and is not statistically significant at any level of inequality, both the the random effects –plot (a)– and fixed effects –plot (c)– specifications. In the subsample for advanced democracies only, however, the effect is sharply negative and statistically significant for countries with high inequality, consistent with Table 5.1. In plot (b), as inequality increases in an advanced democracy, any one unit increase in the productivity will produce a substantive negative change in the V-Dem score. For instance, an advanced democracy with inequality levels at 7.5 will see its V-Dem score decrease by 0.012 units for each unit increase in the productivity gap. In the sample for advanced democracies, the V-Dem score ranges from 0.8001 to 0.8922, so a decrease of 0.012 represents a 13 percent change in the dependent variable. If the productivity gap increases from 1 to 3, the loss in the V-Dem score grows to 0.024, or 26 percent.

²⁹³A score of 0.8 represents the median score for the sample.

In plot (d), the model with country fixed effects, the interactive effect of differences in productivity and inequality is even starker. A one unit change in the productivity gap at high levels of inequality (7.5) will produce a decrease of 0.016 in the predicted V-Dem score. A two unit will lead to a loss of 0.032 in the value of democracy. These figures represent, respectively, a 17.4 and 34.7 percent change within the range of the V-Dem score in the sample. The results are consistent with country-specific evidence: for example, the US peaked at 0.88 in its V-Dem score in 2012, and decreased to 0.83 in 2016, a substantive decrease that is similar to the one predicted by the model.²⁹⁴

Results obtain if we use Solt's Gini index measure of inequality, which extends until 2017, as shown in Table 5.2. For the full sample of democracies, the effect of the productivity gap on democracy is positive as inequality increases, as the interaction term shows. It is statistically significant at the 0.1 level for the two fully specified models (1 and 2). However, as with the results in Table 5.1, the sign of the relationship reverses when only advanced democracies are included in the sample. For these countries, as inequality increases, a larger productivity gap leads has a negative and statistically significant effect on democracy –models 4-6.

5.11 Wealth Inequality and Democratic Erosion in Spain

Democratic declines in Europe are apparent: since 2012, a majority of countries have suffered a regression in their democratic quality. Figure 5.4 displays the evolution of V-

²⁹⁴ Again, remember that the inequality measure using WS is only available until 2008, but the predictive power of the model is consistent with events that occurred after the crisis. I use Solt's measure to produce results that are time-consistent with the events of the past decade.

	(1)	(2)	(3)	(4)	(5)	(6)
Prod. Gap	-0.078 (0.103)	-0.063** (0.032)	-0.049* (0.026)	0.166*** (0.052)	0.096** (0.047)	0.110* (0.054)
Gini Market Income	0.182 (0.227)	-0.034 (0.023)	-0.013 (0.064)	0.198*** (0.053)	0.011 (0.020)	0.050 (0.057)
Prod. Gap \times Gini Market Income	0.175 (0.218)	0.126* (0.068)	0.098* (0.056)	-0.348*** (0.110)	-0.205** (0.104)	-0.234* (0.119)
GDPpc (log)		-0.001 (0.001)	-0.004 (0.003)		0.002*** (0.001)	0.003 (0.002)
growth1		-0.000 (0.000)	-0.000 (0.000)		-0.000 (0.000)	-0.000 (0.000)
vdemlib1		0.972*** (0.022)	0.872*** (0.037)		0.676*** (0.055)	0.485*** (0.053)
Constant	0.669*** (0.110)	0.054*** (0.017)	0.147*** (0.035)	0.760*** (0.025)	0.257*** (0.047)	0.392*** (0.039)
Observations	899	867	867	238	235	235

Table 5.2: Effect of the productivity gap and inequality on democratization using Solt's Gini.

Dem scores for the UK, France, Denmark and Spain. All countries decline after 2012, two of them to the lowest levels since 1995 – Denmark and Spain. France is close to its 1995 score after dropping by almost 7 percent since the election of François Hollande. The UK has decreased 11 percent since 2012, and Spain's V-Dem score of 0.7 puts it on par with France, the UK or Ireland in the *1960s*.

My theory predicts that an inequality shock provides an opportunity for a political opportunist to obtain popular support and attempt to take power, but that elite support is required to win a general election. Elites support an outsider when levels of elite wealth are so high that groups believe they can obtain their preferred policy from government and no longer need to compromise. This increases polarization among the economic elite, who prefer a less democratic candidate over the victory of the opposition. A Caesarian leader exploits

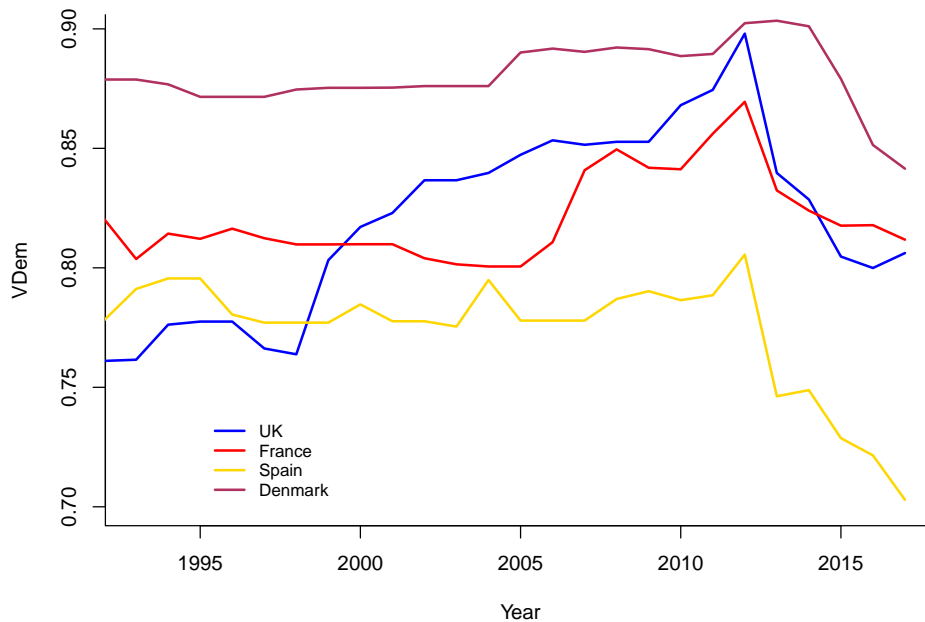


Figure 5.4: Evolution of V-Dem scores by country since 1995.

this situation to obtain both popular and elite support, win an election with a certain probability, and subvert democracy once in power.

The case of Spain is a good example of when the lack of elite support prevents a populist, potentially Caesarian leader from emerging. This shows precisely why the second stage of my argument, elite polarization through high levels of wealth, is so important in fostering or hindering democracy. Spain suffered a double crisis between 2008 and 2010. First, the housing bubble began to burst in late 2007 after years of rapid growth. The ECB had maintained interest rates low at 2 percent from 2003 to 2006 to help Germany recover from its recession.²⁹⁵ With growth at over 4 percent for the period, Spain's economy overheated through the housing market, as banks borrowed cheap money from the ECB and packaged

²⁹⁵Reisenbichler and Morgan 2012.

it into easy to obtain loans for consumers. This left banks over-leveraged and consumers unable to pay back their mortgages after the bubble burst and the effects of the Great Recession began to be felt. The recipe for recovery by the ECB were cuts in public spending, labor market reform, and the nationalization of private bank debt.²⁹⁶

These reforms cut deep into the middle class' pockets and clawed back some of the welfare gains that had been made since the advent of democracy in 1978. The discontent erupted into large scale protest on May 15, 2011. Millions of citizens marched onto the streets in the country's main cities and occupied the main squares for months. The movement coalesced around a new political party, Podemos, founded in January 2014 under the charismatic leadership of Pablo Iglesias. At inception, the party espoused radical left wing views, some of which were hotly debated. Among these were the nationalization of large corporations in the energy sector, a large increase in the minimum wage, and a guaranteed minimum income. Its discourse was overtly anti-establishment, popularizing the concept of *la casta*²⁹⁷ to describe established elites who, in their view, had ran the country to the ground.²⁹⁸

The party first burst onto the scene in the May 2014 elections to the EU parliament, just three months after it was created. It won 5 seats and 8 percent of the vote, finishing fourth. General elections loomed in late 2015, and it appeared that Podemos would sweep into power. Polls in late 2014 and early 2015 had them comfortably ahead of established parties like the conservative Popular Party (PP) and the socialist PSOE. Pablo Iglesias was

²⁹⁶See Sinn 2014.

²⁹⁷Casta refers to pedigree, to aristocracy, to the elite, and also to chastity and purity. Podemos popularized it as a pejorative label for established elites.

²⁹⁸Gomez-Reino and Llamazares 2015, Orriols and Cordero 2016, Sola and Rendueles 2018.

the most popular leader in the country, had constant media presence, and the sense was that he would become, in all likelihood, the next president.²⁹⁹

However, Podemos' project attracted few elites. Promises to nationalize large corporations were particularly harmful to build an elite coalition, as they increased uncertainty around which companies would be placed on the state's books should the party govern. Large-scale wage redistribution became one of Podemos' core messages, but few elites warmed up to the idea of a substantial increase in costs. The party's elite connections were also initially weak. Pablo Iglesias was a university professor before his switch to politics, and most of the executive committee came from similar non-elite backgrounds. Most were university professors, researchers, and activists. Among the first representatives Podemos sent to the European Parliament were a high school teacher, a small business owner, and a researcher, all of whom had no previous experience in politics.

In essence, Podemos represented the low productivity working class who suffered the brunt of the economic readjustment imposed by the European Union after the financial crisis. Thus, its appeal was based on a logic of class struggle, in which low productivity workers from the middle and working classes saw their wages slashed and social benefits cut as elites sought to create a leaner and more productive economy. Elites, however, were united in how they approached their future wealth generation and the role of democracy in that process. No industries were obtaining the ultra high productivity margins of US technology corporations, and all were more or less affected by the double set of crises that affect the Spanish economy – the housing crash of 2007 and the global financial crisis of

²⁹⁹Sola and Rendueles 2018.

2008. Banks were particularly weakened by large amounts of toxic mortgages handed out during the 2003-07 boom. Realignment was inevitable, and an entire network of local and regional savings banks were dismantled or absorbed by national banks after large bailouts. A majority of the country's top banks required assistance, with Bankia's 23 billion bailout package the most conflictive of all. To a lesser extent, La Caixa (now CaixaBank) and Banc Sabadell also required assistance, and only Banco Santander navigated the crisis relatively unscathed.

Large Spanish construction corporations were heavily affected by the housing crisis and the temporary slowdown in public projects in the years that followed. National utility and telecom corporations, such as Telefonica or Gas Natural, continued to enjoy dominant market positions that would continue no matter the party in power. Clothing giants like Inditex (known for their Zara brand) and Mango had their sights in the global market and looked at Spanish politics with relative disinterest. Thus, perhaps in part because the housing crisis had ripple effects on almost every part of the economy, there was no obvious elite cleavage that Podemos and its Caesarian candidate, Pablo Iglesias, could exploit.

Elites, however, did see the danger that he posed should he obtain sufficient electoral support to govern –or at least wield influence within a multiparty coalition government. To prevent this, elites presented a united front and used the tools in their disposal to stop Podemos from rising further. Established political elites contributed to this. Socialists were particularly weary of Podemos, who were agitating their core base of supporters and threatening to win them over. Conservative elites saw Podemos as an outside movement that threatened to break up the constitutional order, which had long been upheld by the traditional parties,

PP and PSOE. It certainly did not help matters that Podemos was unapologetically republican, and in multiple occasions intimated that the royal family should be removed from their ceremonial office. National newspapers from the left and the right equally attacked or ignored Podemos, as did all television outlets except, to some extent, La Sexta. The media were particularly keen on the romantic and practical attachment that some members of Podemos had with Venezuela. Iglesias' personal admiration of Hugo Chavez and Fidel Castro was duly reported and debated ad nauseam. The beginning of the end for Podemos were multiple allegations against Juan Carlos Monedero, who at the time was the party's most influential member after Iglesias and his number two, Iñigo Errejón. On January 27, 2015, with Podemos leading the polls, El País alleged that Monedero's academic background and degrees were false, and even reported that professors he cited as references claimed not to know who he was. The accusation was recanted by the newspaper just three days later. Then, on January 28, came the most damning report: Monedero had received payments from Chavez's government and other ALBA countries, for consulting services. Monedero resigned in March, 2015, from his post within the party.

5.12 Wealth Inequality and Democratic Erosion in the United States

According to V-Dem, democratic erosion in the United States began during Barack Obama's second term –see Figure 5.1. Democratic quality declined steadily between 2012 and 2016 before a sharper downturn in 2017. In popular discourse, democratic erosion in the US is often associated with the rise of Donald Trump, but its roots run much deeper. The fast

rise of the Tea Party in the early 2010s increased political polarization in congress, forcing President Obama's hand into signing a slew of executive orders that would previously have been resolved within the legislative branch.

Increased polarization within the legislative seemed to have played a key role in the early phase of democratic erosion in the US. This is reminiscent of arguments by Linz and Stepan and Bermeo.³⁰⁰ However, greater use of executive action, while constitutive of democratic erosion and thus reflected in the data, is not a systematic attack on democratic institutions and values. There is more evidence that this is occurring under Donald Trump³⁰¹, and the rise of the current President is intimately tied to polarization within the *economic* elite rather than the political elite.

Indeed, the steepest decline in the United States' V-Dem score takes place in 2017, the first year of Trump's presidency. Trump has attempted to reshape institutions in a way that nullifies referees, such as courts, push out actors that could threaten him, and slowly unbalance the playing field. Indeed, the tactics and discourse employed by Trump closely resemble the classic authoritarian script.³⁰² More importantly for our theory, these traits already were in full display during the 2015/6 republican primary and presidential campaigns. A populist, nationalist message resonated with a portion of the electorate that identified their economic travails with perceptions of increased immigration, cheap imports, and eight years of rule by Democrats in Washington, DC.³⁰³ Furthermore, as happened with Spain's Podemos at the earliest stages of its emergence, Trump promised to 'drain

³⁰⁰Linz and Stepan, 1972; Bermeo, 2003.

³⁰¹Levitsky and Ziblatt 2018.

³⁰²Levitsky and Ziblatt 2018.

³⁰³Inglehart and Norris, 2016.

the swamp’, a catchphrase akin to *la casta*. Both describe the intention to change the elite make-up of the upper echelons of political power in Madrid and Washington. Thus, as the theory predicts, Trump exhibited all the traits of a Caesarian leader during the presidential campaign, in a way not dissimilar to Pablo Iglesias –even if both leaders were, at least in principle, at different points in the left-right ideological spectrum.

In Spain, as we saw, economic elites were fairly compact and blocked Podemos’ rise with campaigns aimed at decreasing its popularity among voters. They then backed *Ciudadanos* extensively in an attempt to create the right-wing equivalent of Podemos, using a similar populist discourse around calls for cleaning up corruption and democratic ‘regeneration’. However, in the United States, not only did Donald Trump capture the Republican nomination, but he also won the Presidency in October 2016.

I contend that cleavages among the elite were at the core of Trump’s emergence and eventual victory in the United States. In particular, an increasingly large productivity gap between technological/financial elites and industrial/natural resource elites produced an opening for Trump to obtain sufficient elite support to mount a credible challenge to establishment Republican (and Democratic) elites. Among Republicans, the push by Charles and David Koch to make the Republican party embrace libertarian ideology took a practical turn in the mid-2000s, when the brothers set their minds to capturing Republican majorities in state legislatures. They observed that a majority of regulation affecting their direct business interests was produced in the states, not in Washington. Dominating state lawmaking bodies would translate into fewer regulations and lesser government meddling into business affairs. The focus on the states, however, left the national party leadership hollow, and it

became too late to pivot toward greater national presence late in Barack Obama's second term.³⁰⁴

While the ideological elite of the Republican party abhorred the rise of political outsiders –Trump and Ted Cruz– in the primaries, and the Koch brothers were no exception, two subsets of the Republican elite favored the nationalist rhetoric that the candidates offered. The first were primarily natural resource extracting elites in states such as West Virginia and Texas, as well as others who wanted to see projects such as the Keystone Pipeline not sidelined by environmental regulations. The second subset of elites amenable to Trump were US manufacturers who had lost out with globalization and who saw potential tariff increases and trade disruptions as a positive for their future standing.³⁰⁵ These elites stood in stark contrast with a high productivity technology sector that is largely behind Democratic candidates and who espouse openness both in terms of trade and social values. To gain an idea of the differences among sectors, the five most valuable companies in 1990 were all industrial, manufacturing and natural resource giants –companies such as General Electric, General Motors, Ford, Exxon and Mobil. In 2015, the five most valuable companies in the United States were all located in Silicon Valley or were part of the new post-2000 technology wave –Apple, Google, Amazon, Microsoft and Facebook.³⁰⁶

For elites that were early Trump supporters, the calculus was not only about maximizing wealth in the present time. Indeed, the productivity gap across sectors makes differences in

³⁰⁴See Skocpol and Hertel-Fernandez, 2016, for a detailed account of the Koch brothers' effect on Republican ideology and strategy in the last two decades.

³⁰⁵See <https://www.nytimes.com/2016/03/28/us/politics/donald-trump-republican-voters.html>

³⁰⁶According to Fortune 500: http://archive.fortune.com/magazines/fortune/fortune500_archive/full/1990/; and Forbes Magazine: <https://www.forbes.com/powerful-brands/list/>.

wealth larger across time, given that wealth grows exponentially. Supporting a Caesarian candidate that espouses certain undemocratic views may be accepted by low productivity elites in exchange for state rents that help cover the productivity gap with other sectors. In sum, the case of the United States illustrates how large productivity differences among the economic elite provide an opening for a Caesarian candidate to obtain sufficient elite support to mount a credible political challenge to established political elites. In both Spain and the United States, high levels of inequality fueled voter discontent, which in turn gave new candidates like Pablo Iglesias and Donald Trump a political base.³⁰⁷ However, differences in elite support for these candidates determined their different political fates. A large productivity gap created an opening for Trump, whose nationalist rhetoric translated into early support from elites in manufacturing and natural resource sectors. Other Republican elites later joined his cause rather than shut him out of the process precisely because it was too late; the early support was sufficient to push him through. In the case of Pablo Iglesias, a compact economic elite suffering from a small productivity gap made a concerted effort to prevent Podemos from reaching power and succeeded, even if at some point Iglesias had a larger share of voter support in Spain than Trump did in the United States for most of his campaign.

³⁰⁷Inglehart and Norris, 2016.

Chapter 6

Appendices

6.1 Appendix A

Table A1: Snippet of the Data with Examples from The USA and Cuba (after expanding)

Country Name	Year	t	t0	Capital Share 1->2	Capital Share 1->3	Capital Share 3->1	Strata
United States	2000	42	41	0	0	65.935	3
United States	2001	43	42	0	0	68.011	3
United States	2002	44	43	0	0	69.585	3
.....
Cuba	2000	42	41	65.603	0	0	1
Cuba	2000	42	41	0	65.603	0	2
Cuba	2001	43	42	64.966	0	0	1
Cuba	2001	43	42	0	64.966	0	2
Cuba	2002	44	43	65.260	0	0	1
Cuba	2002	44	43	0	65.260	0	2

Building the dataset:

We set our time counter, t , is set to increase by 1 every year within each spell. Then, a variable t_0 is generated to represent the time at which each observation enters a new spell of one year –it is akin to, quite simply, $t - 1$. This way, instead of collapsing each spell into one single observation and setting t to be the entire duration of that spell, we give t a starting value of 1, and t_0 a starting value of 0. They both then increase by 1 each year within the spell and are reset once a new spell begins. Each independent variable is then forked into three separate variables, each representing every possible transition. These variables are set to zero for the irrelevant ‘strata’ (for instance, the value for the United States for the authoritarian replacement capital share variable is 0 because the country is not at risk of experiencing a transition to democracy). The *actual* values of the independent variables are kept for the transition for which they are relevant (again for the United States, its capital share values are kept only in the variable that represents transitions from democracy to authoritarianism, as this is the only transition the country is at risk of experiencing). The full

model, therefore, produces coefficients for three different variables, one for each transition, for each independent variable in the sample. Since the process is modeled in its entirety, and each type of transition (the strata) receives its own baseline, we can produce more accurate estimates for each coefficient.

Two additional variables are created: a dichotomous *status* variable, coded 1 for country-years in which an event occurs and 0 otherwise. A second variable, for the *strata*, is created grouping all those observations that are at risk of suffering each type of transition and is coded 1 for country-years at risk of transitioning to authoritarianism, 2 for those at risk of democratization, and 3 for those at risk of democratic breakdown. These ‘strata’ will be used to construct our independent variables as well.

Summary Statistics:

Variable	Mean	Std. Dev.	N
Wealth	8.043	2.55	6912
Capital Share	65.157	10.896	7362
GDPpc	2.739	1.091	6817
Growth	1.776	6.152	6809
Oil	0.204	0.403	8306
Ethnic Frac.	30.05	24.436	7944
Trade Open.	74.925	46.567	7301
Previous Repl.	0.363	0.888	10764
Polity	0.165	7.484	6617
Polity Sq.	56.032	31.953	6617

Table A2: Summary statistics (before expanding)

As Figure A1 shows, the results are unchanged if all controls are removed. Significance was not induced by any one specific variable or set of variables into the model.

Alternative models

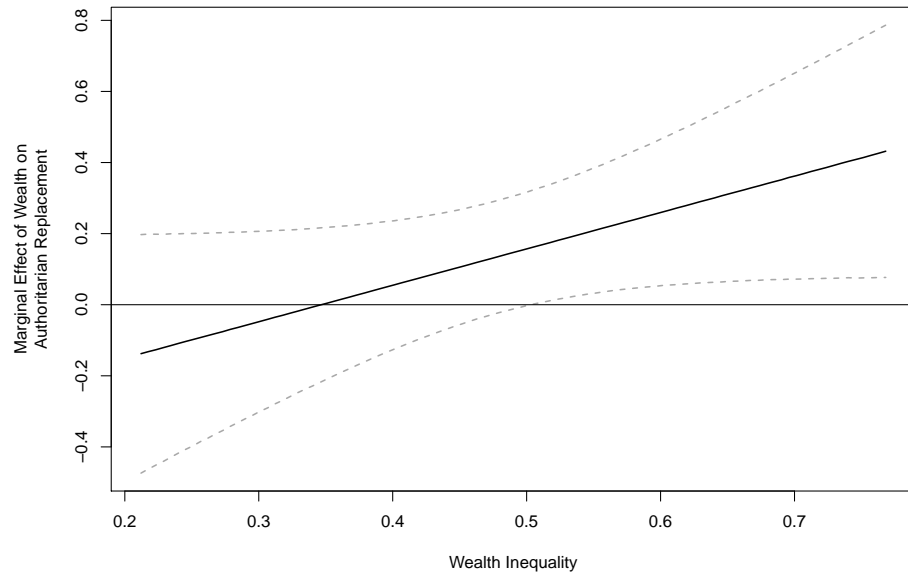


Figure A1: Marginal effect of decreasing levels of wealth on replacement at different levels of wealth inequality, no controls.

Figures A2 and A3 present the results of random effects models, which are my main robustness check. Here I run a linear probability model with random effects by country (A2) and a logistic regression model also with random effects by country (A3). The dataset for these models includes only transitions from one authoritarian regime to another—that is, only those observations in the first strata of the sample used in the main results section. Consequently, the sample is reduced to 2,455 observations. I use a random effects model over a fixed effects specification. An F-test of the null hypothesis that the fixed effects are not zero indicates that it cannot be rejected. This means that the primary assumption of the fixed effects model is violated, and a random effects model is preferred. This is confirmed by a Hausman test, which shows that the random effects and fixed effects estimates are not significantly different from each other. The null hypothesis that the individual effects are uncorrelated with the variables of interest cannot be rejected and, therefore, the random effects model is more efficient. The results are consistent with Figure 3 (a) in the main pa-

per. At high levels of wealth inequality, a lower level of wealth will increase the probability of authoritarian replacement significantly (remember that the variable that captures wealth levels is flipped, and the line is thus positive).

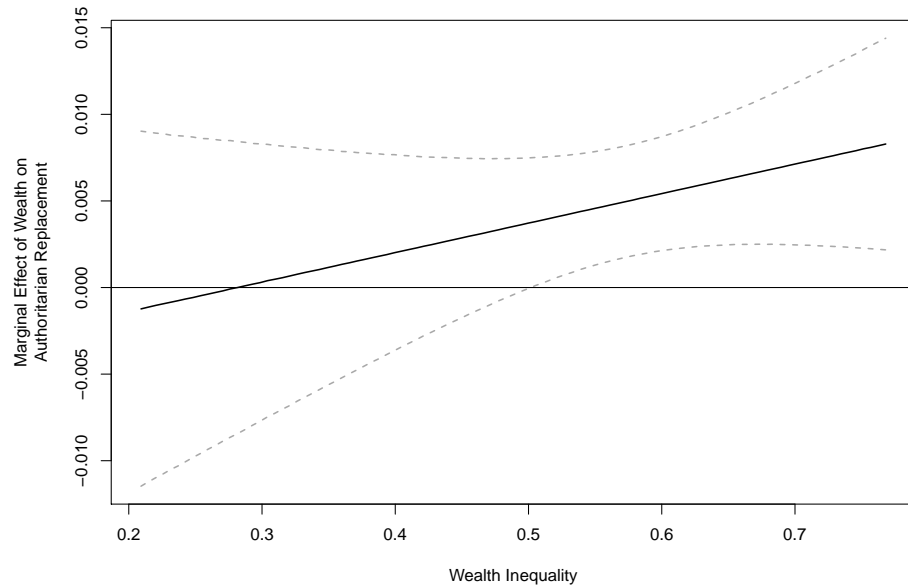


Figure A2: Joint effect of wealth and inequality on authoritarian replacement. Displays the predicted probability of replacement using an LPM with random effects and clustered standard errors.

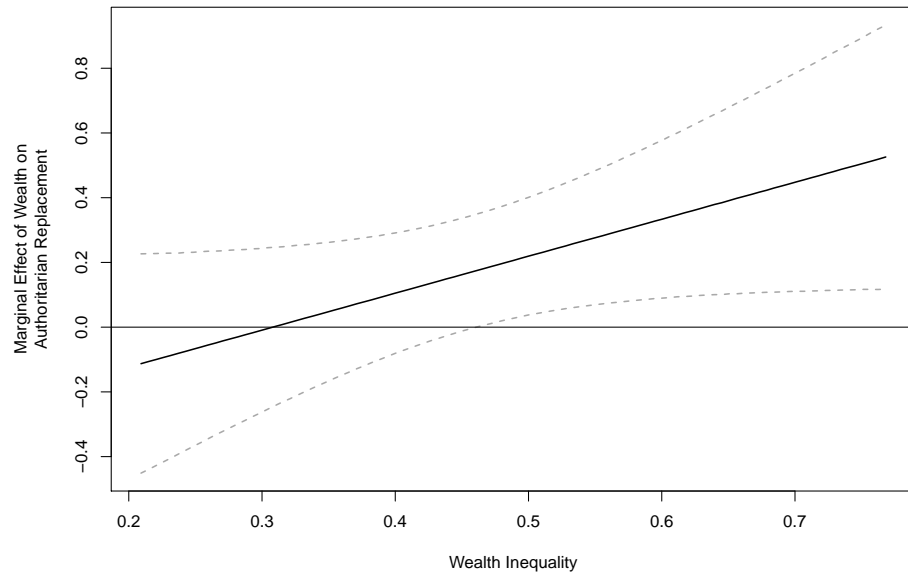


Figure A3: Joint effect of wealth and inequality on authoritarian replacement. Displays the predicted probability of replacement using logistic regression with random effects and clustered standard errors.

Below, in Figure A4, I report the predicted probabilities using a simple logit specification without random effects. The reason for showing the results of a simpler model is to reject the possibility that the findings are generated solely as a function of the more complicated models used. The results are also consistent with what we found using the other models.

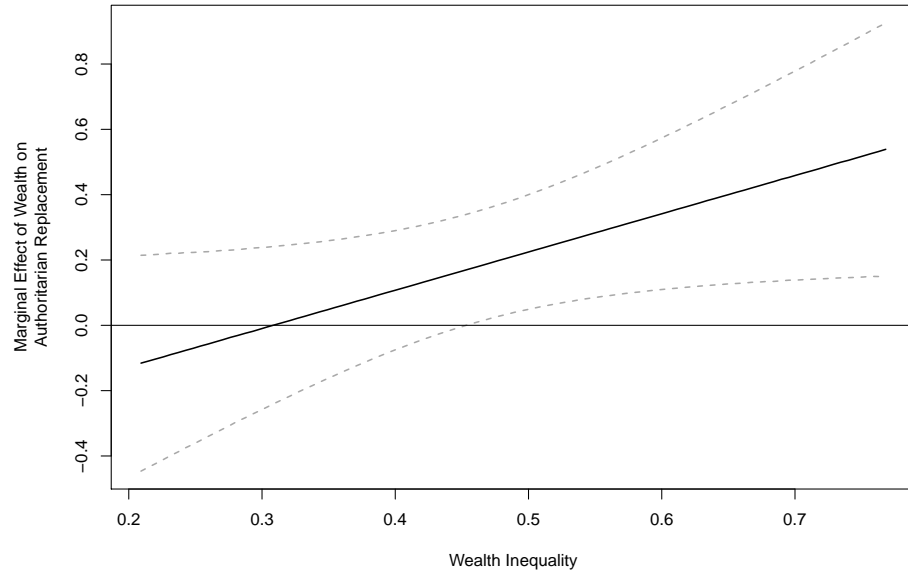


Figure A4: Joint effect of wealth and inequality on authoritarian replacement. Displays the predicted probability of replacement using logistic regression.

6.2 Appendix B

Model with no ability to capture democracy

To further test our formal model, we assume that elites are not able to capture democracy by giving a value of 1 to the capture term, ϕ . In this scenario, elites pay the full tax rate in democracy. Thus, similar to equation 6, elites will prefer to transition to democracy in state (ϵ^b, A) , maximizing π to 1, if $\tilde{V}(\epsilon^b, A, w, \theta) < \tilde{v}(\epsilon^b, D, w, \theta)$. Solving this, elites in bad times will transition to democracy when

$$(\gamma(\theta)) \ln(\epsilon w (1 + r - c)) \geq - \left[1 + \frac{\delta s}{1 + \delta(1 - s)} \right] \ln(1 - \phi), \quad (6.1)$$

that is, when the cost of remaining in an authoritarian regime is greater than the cost of transitioning to democracy. Figure A1 reports the decision rules for the elite after an external shock, assuming there is no capture term. Following Figure 1 in the manuscript, the wealth parameter w in the model is on the x -axis and the expected cost in each state on the y -axis. The straight lines report the cost of remaining in authoritarianism at different levels of inequality and wealth (left side of equation 1.) When the cost of remaining in autocracy surpasses the cost of democracy, elites choose to transition to democracy. We represent this with a shaded gray area.

The curves show that the relationship between levels of inequality and transitions at different levels of wealth is maintained. Note, however, that it takes more wealth for democracy

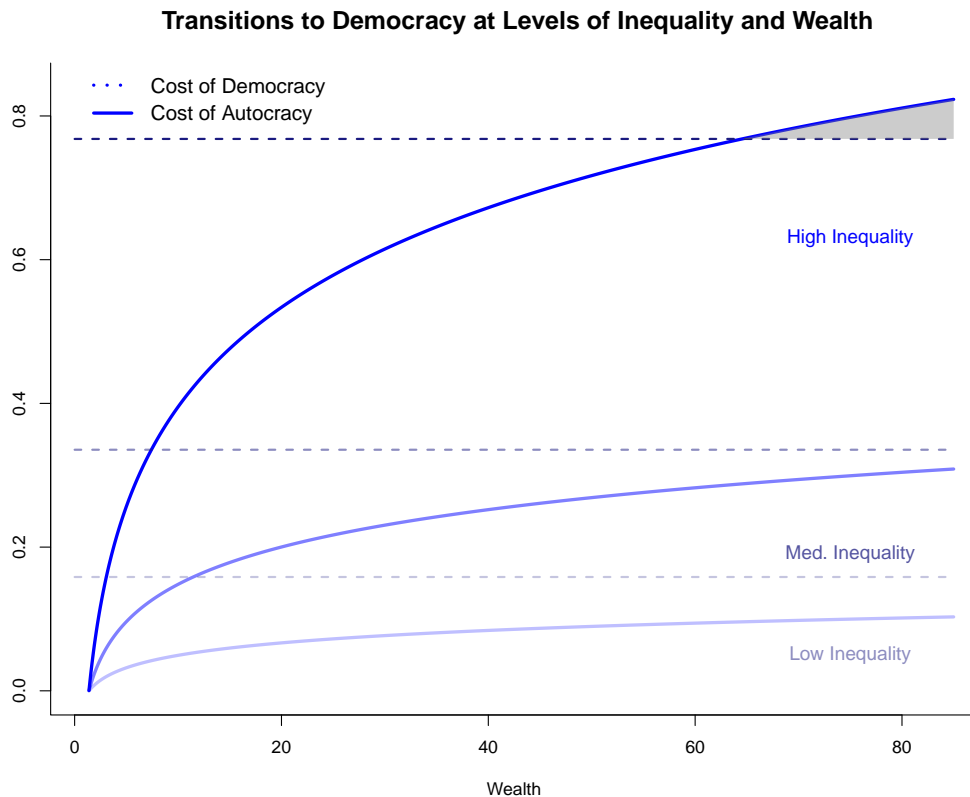


Figure B1: Democratization as a function of wealth and inequality

to be attractive enough for elites to decide to transition, which makes intuitive sense. The less beneficial democracy is to elites, the less likely they are to transition. Thus, our theory holds for this specification of our model, but we still believe that a more realistic assumption takes into consideration the limits of nascent democracies at providing a leveling playing field for all participants in society. It is more likely that elites manage to create a system from which they benefit in some way, however small. If assuming a cost $1 - \phi$ of 95 percent, they transition when our theoretical value for w is 50.4. This is in contrast with $w = 64.55$ if $1 - \phi = 1$, meaning no capture at all. If elites manage to save 10 percent, the threshold for wealth decreases to 39.74. Even with small levels of capture, the likelihood of democratization increases sharply. However, what is most relevant about this extension of the model is that countries still only transition to democracy at high levels of inequality and wealth.

6.3 Appendix C

We first describe our set of control variables and provide descriptive statistics for all measures used in the analysis. Further tests and robustness checks are then provided. We conclude with more information on our measure of wealth.

Control variables and descriptive statistics

In this chapter we follow Boix (2003), Houle (2009) and Miller (2012) in the selection of controls. First, we incorporate the lag of GDP per capita and economic growth. Income levels or economic trends could impact the relationship between inequality and democratization, as these variables are known to be related theoretically to our main independent and dependent variables. We control for ethnic and religious fractionalization, following Boix (2003) and Houle (2009). Religious and ethnic cleavages could be driving the relationship between inequality and democratization, affecting both variables systematically. We also incorporate a continuous variable for oil production taken from the World Bank. Oil should have a negative relationship with democratization (Ross 2001). From Houle (2009) and Miller (2012), we control for whether a country was a British colony; whether the country was formed after World War II (new country); and previous transitions to democracy. A descriptive summary of the variables used in the analysis follows in Table C1.

Table C1: Summary statistics

Variable	Mean	Std. Dev.	N
Democracy	0.465	0.499	8915
Elite Wealth	2.581	1.419	7153
Inequality	6.427	1.399	3857
GDPpc	7173.877	14704.487	8831
GDPpc (log)	7.504	1.703	8831
Growth	3.906	6.416	8506
Oil Production (log)	0.26	2.469	7836
Ethnic fract.	0.434	0.254	7656
Religious fract.	0.428	0.234	7598
New Country	0.604	0.489	11426
British Colony	0.244	0.429	11426
Time Trend	28.5	16.741	11426
Previous Trans.	0.205	0.468	11229
Decade	1984.138	16.717	11426

Robustness checks 1: alternative measures of inequality

We corroborate our results using three measures of inequality from two sources: Houle (2009, 2016) and Solt’s SWIID data (2017). Table C2 shows the results of our models using Houle’s Capital Shares variable. This measure represents the share of output that accrues to capital holders, and captures inter-class inequality well. The interaction term is significant at the 0.5 level in 3 of the models and at the 0.1 in the other 3. However, even in those models where significance is lower, the size of the probit and LPMFE coefficients indicates that the relationship is likely significant at the 0.5 somewhere in the marginal effects curve. This is shown in Figure C1. Both plots (a) and (b) report the marginal effect of increases in income inequality at different levels of wealth. The conclusion that democratization becomes more likely at high levels of wealth as inequality increases is common to both, even though only Model 3 is significant at the 0.05 level in the table. The results obtained in the chapter hold using Houle’s variable.

	<i>DV: Democracy</i>					
	1	2	3	4	5	6
Elite Wealth	-0.635* (0.335)	-0.636** (0.317)	-0.672** (0.311)	-0.527 (0.339)	-0.022 (0.023)	-0.040* (0.024)
Inequality (Houle)	-0.707 (1.119)	-1.261 (1.170)	-1.359 (1.147)	-1.284 (1.260)	-0.161* (0.096)	-0.202** (0.097)
Elite Wealth × Inequality (Houle)	0.896* (0.461)	0.911** (0.421)	0.961** (0.411)	0.826* (0.440)	0.059* (0.030)	0.072** (0.030)
GDPpc		-0.050 (0.061)	-0.048 (0.063)	-0.107 (0.069)	-0.032*** (0.009)	-0.034*** (0.010)
Growth		-0.016* (0.008)	-0.014 (0.009)	-0.013 (0.010)	0.000 (0.000)	0.000 (0.000)
Oil		-0.069** (0.033)	-0.068** (0.033)	-0.066** (0.034)	-0.005* (0.003)	-0.005 (0.003)
Previous Trans.		0.253** (0.104)	0.241** (0.107)	0.214* (0.114)	0.035*** (0.011)	0.036*** (0.011)
Time Trend		0.007 (0.006)	-0.016 (0.019)	-0.011 (0.020)	0.001*** (0.001)	0.002 (0.004)
Ethnic fract.		0.026 (0.283)	0.023 (0.285)	0.024 (0.261)		
Religious fract.		0.157 (0.298)	0.143 (0.299)	-0.037 (0.311)		
British Colony		-0.059 (0.173)	-0.049 (0.174)	0.100 (0.178)		
New Country		-0.536*** (0.155)	-0.541*** (0.157)	-0.334* (0.196)		
Constant	-1.417* (0.792)	-0.534 (0.928)	-0.200 (0.905)	-0.317 (0.943)	0.351*** (0.082)	0.375* (0.193)
<i>Country FE</i>	-	-	-	-	<i>Yes</i>	<i>Yes</i>
<i>Year FE</i>	-	-	-	-	-	<i>Yes</i>
<i>Region FE</i>	-	-	-	<i>Yes</i>	-	-
<i>Decade FE</i>	-	-	<i>Yes</i>	<i>Yes</i>	-	-
Observations	5192	3899	3899	3899	4608	4608
Pseudo R^2	0.857	0.870	0.870	0.874		
Overall R^2					0.901	0.901
Log-Lik.	-513.678	-347.227	-345.779	-335.293	2540.811	2589.560

Table C2: Dynamic Probit results using Houle’s Capital Shares variable

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Table C3 reports the results of our models using Solt’s adjusted disposable income Gini index. The measure “incorporates data from the OECD Income Distribution Database, the Socio-Economic Database for Latin America and the Caribbean generated by CEDLAS

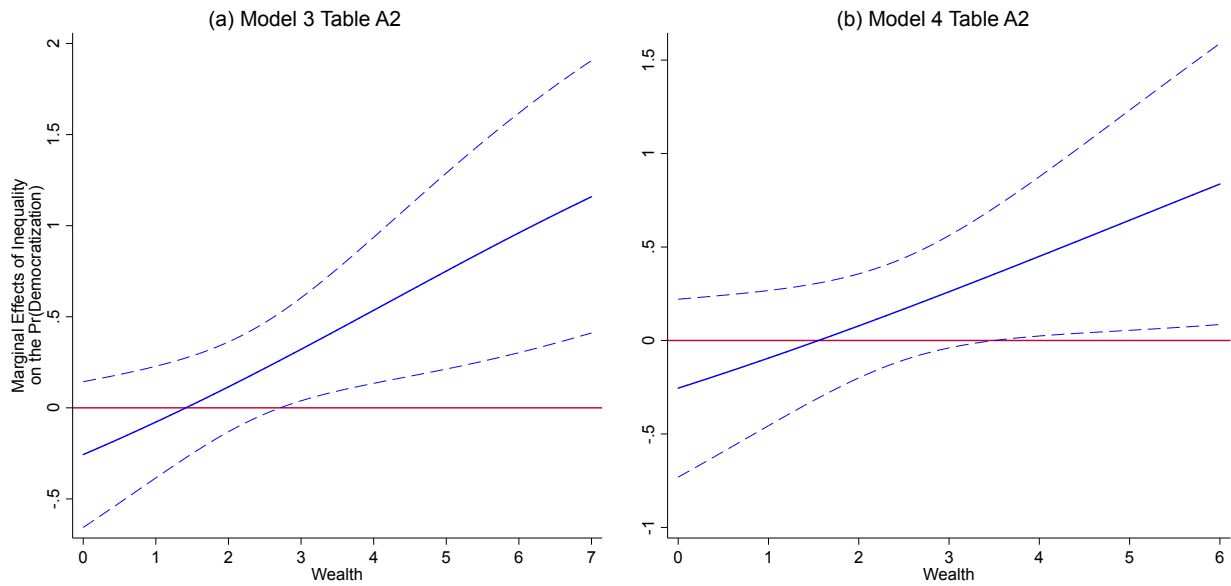


Figure C1: Marginal effect of inequality on democratization at different levels of wealth, using Houle’s Capital Shares data.

and the World Bank, Eurostat, the World Bank’s PovcalNet, the UN Economic Commission for Latin America and the Caribbean, national statistical offices around the world, and academic studies while minimizing reliance on problematic assumptions by using as much information as possible from proximate years within the same country.”³⁰⁸ The data are the result of a multiple imputation procedure, and our models are run using the ‘mi estimate:’ command in Stata 13. The dynamic probit models (1-3) show no statistical significance for the interaction term between inequality and wealth. However, the relationship is strong and in the predicted direction in all fixed effects specifications (Models 4-6). Figure C2 plots the marginal effects using Model 5 from Table C3, and the results are similar to the fixed effects specifications using UNIDO’s variable from the main chapter or Houle’s capital shares measure.

³⁰⁸<https://fsolt.org/swiid/>. See Solt (2016) for more information.

	(1)	(2)	(3)	(4)	(5)	(6)
Elite Wealth	-0.525 (0.338)	-0.279 (0.433)	-0.199 (0.426)	-0.082*** (0.024)	-0.050* (0.028)	-0.054* (0.028)
Gini Disp. Income	-2.848 (2.196)	-2.378 (3.113)	-2.066 (3.108)	-0.887*** (0.195)	-0.792*** (0.210)	-0.780*** (0.211)
Elite Wealth × Gini Disp. Income	1.244 (0.810)	0.876 (1.019)	0.685 (1.001)	0.234*** (0.058)	0.202*** (0.062)	0.197*** (0.062)
GDPpc		-0.158* (0.089)	-0.139 (0.092)		-0.029*** (0.010)	-0.023** (0.012)
Growth		-0.015 (0.010)	-0.013 (0.011)		0.000 (0.000)	0.000 (0.001)
Oil		-0.098*** (0.035)	-0.095*** (0.036)		-0.007** (0.003)	-0.006 (0.004)
Previous Trans.		0.285** (0.116)	0.286** (0.118)		0.019* (0.011)	0.018 (0.011)
Time Trend		0.004 (0.007)	-0.041** (0.016)		0.000 (0.001)	0.000 (0.001)
Ethnic fract.		0.054 (0.356)	0.053 (0.364)			
Religious fract.		0.045 (0.361)	0.020 (0.365)			
British Colony		-0.221 (0.217)	-0.217 (0.220)			
New Country		-0.530*** (0.204)	-0.547*** (0.209)			
Constant	-0.641 (0.906)	0.281 (1.279)	0.486 (1.383)	0.434*** (0.079)	0.565*** (0.098)	0.511*** (0.107)
Observations	4237	3598	3598	4237	4095	4095

Table C3: MI Estimate results using Solt's disposable income Gini.

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Robustness checks 2: alternative hypotheses

We replicate the analysis by Acemoglu, Johnson and Robinson (2001) in which they instrument 'institutions' through settler mortality. We have taken their publicly available replication materials from their website (<https://economics.mit.edu/faculty/acemoglu/data/ajr2001>), and added a variable for whether a country was a democracy in 2015 from the Boix, Miller

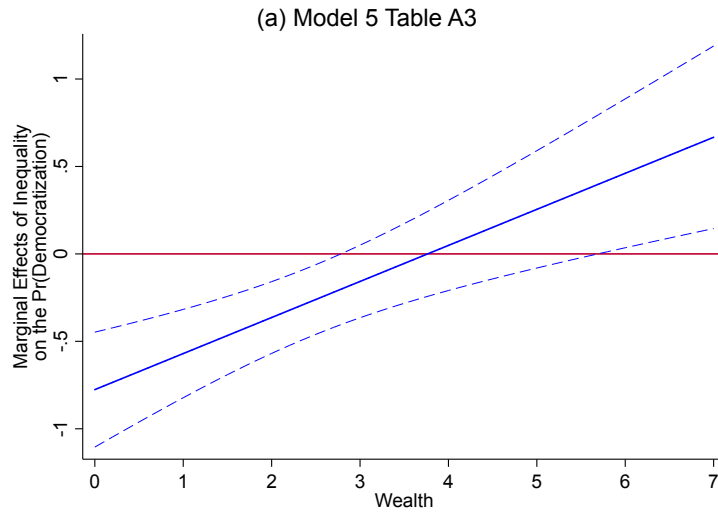


Figure C2: Marginal effect of inequality on democratization at different levels of wealth, using Solt’s Disposable Income Gini Index.

and Rosato dataset. We use this variable in the second stage instead of log GDP per capita, which the authors use in the original. We then do the same but with VDem’s continuous measure of democracy (v2x_polyarchy). Thus, we do not estimate the effect of institutions

	(1)	(2)	(3)	(4)	(5)
Old Institutions (Instrument: Settler Mortality)	0.191** (0.090)	0.153 (0.126)	0.185 (0.186)	-0.105 (0.086)	-0.037 (0.193)
Latitude		0.487 (0.721)	0.849 (0.633)	1.179** (0.493)	0.584 (0.592)
Africa dummy					-0.617*** (0.171)
Asia dummy					-0.539** (0.224)
Other Continent dummy					0.053 (0.318)
Constant	-0.670 (0.592)	-0.506 (0.717)	-0.753 (1.124)	1.274** (0.552)	1.045 (1.197)
Observations	64	64	60	37	64

Table C4: Replication of Acemoglu and Robinson’s (2001) Table 4 using BMR’s dichotomous measure of democracy as DV.

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

on economic development today, but their effect on democracy today. Results are in Tables C4 and C5. We do not report the first stage as it is the same as in the original chapter.

The models used are the same as in the original chapter, as well. Model 1 is the naïve model with no controls, Model 2 adds latitude and Model 3 removes the ‘Neo-Europes’, i.e. the United States, Canada, Australia, and New Zealand, from the sample. Model 4 runs the model without African countries and Model 5 includes the full sample and uses continent dummies instead. As we can see from both results, only the first model is positive and statistically significant. As controls are added, the relationship loses statistical significance and reverses sign in Models 4 and 5. This provides evidence that strong institutions are important for development but they do not necessarily lead to democratization.

	(1)	(2)	(3)	(4)	(5)
Old Institutions (Instrument: Settler Mortality)	0.087** (0.036)	0.062 (0.045)	0.048 (0.066)	0.018 (0.034)	-0.043 (0.082)
Latitude		0.330 (0.262)	0.333 (0.247)	0.487** (0.223)	0.416* (0.233)
Africa dummy					-0.241*** (0.084)
Asia dummy					-0.193* (0.098)
Other Continent dummy					0.241 (0.211)
Constant	0.001 (0.236)	0.105 (0.257)	0.184 (0.409)	0.426* (0.216)	0.889* (0.520)
Observations	60	60	56	34	60
R^2	0.120	0.213	0.075	0.234	0.261

Table C5: Replication of Acemoglu, Johnson and Robinson’s (2001) Table 4 using VDem’s continuous liberal democracy index as DV.

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

More on our wealth proxy

This is the definition of the raw Gross Fixed Capital Formation (GFCF) data from the World Bank, according to the organization:

“Gross fixed capital formation (formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation. Data are in current U.S. dollars.”

Our variable cannot fully net out non-elite wealth accumulation from the variable, but we suspect it does not affect the measure much. The high correlation with Piketty’s measure of total elite wealth provides some external validity for this assumption. To emphasize this point, we plot the evolution of both variables in countries that match between samples in Figure C3. Time in years is in the x-axis. The blue line represents our wealth proxy, whose values are in the left y-axis, and the red line plots Piketty’s variable, with its values in the right y-axis. In most countries, the variables evolve close to each other. Only in Canada, and to a much lesser extent Australia, the line becomes sharper for Piketty’s variable earlier than for ours. For the rest, the trend for both lines is similar and only vary in their response to some growth shocks, such as Japan in 1990. The correlation between both variables is above $r = 0.88$ for all these countries, and the within correlation averages $r = 0.92$. The between correlation figure for these two variables is $r = 0.946$.

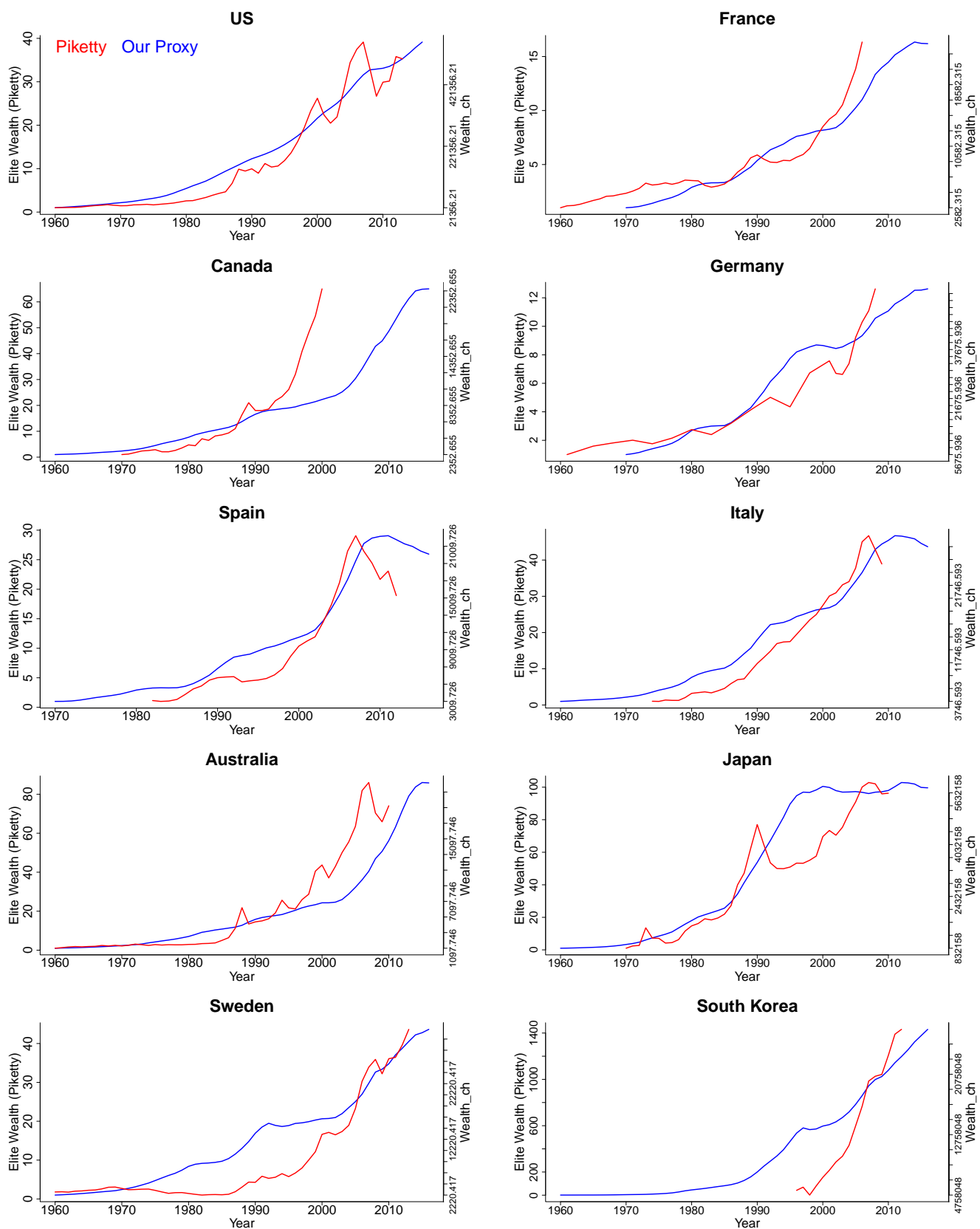


Figure C3: Evolution of Piketty's elite wealth variable and our proxy by country.

Marginal effects of wealth at different levels of inequality

Lastly, as we mention in footnote 26 in the main text, we include the marginal effects of wealth at different levels of inequality in Figure C4. Both models show a positive slope that is statistically significant at high levels of inequality. The effect of wealth on democratization when inequality is high is statistically and substantively significant. We refer to reader to the main text for our argument regarding substantive significance, which applies here as well.

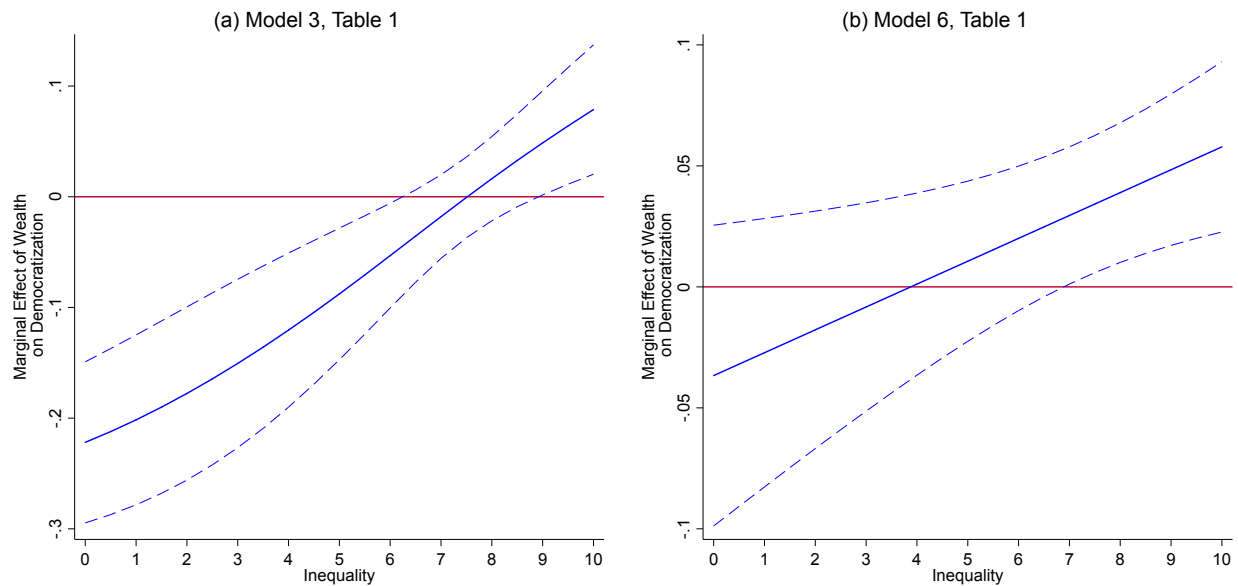


Figure C4: Marginal effect of wealth on democratization at different levels of inequality, using UNIDO inequality data as in the main chapter. Table 1 is from the main text.

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