RECASTING REFORM:
AN ANALYSIS OF ELECTORAL REFORM INITIATIVES IN FOURTEEN PARLIAMENTARY DEMOCRACIES

by

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A thesis submitted to the
Department of Political Studies
in conformity with the requirements for
the degree of Doctor of Philosophy

Queen’s University
Kingston, Ontario, Canada
June 2017

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Abstract

While successful electoral system change has received considerable scholarly attention in recent years, comparatively little is known about the vast majority of cases where reform was unsuccessfully attempted or never attempted at all. Yet understanding these outcomes is vital to explaining the phenomenon of electoral reform. This dissertation illuminates the important spectrum of outcomes between stasis (no-change) and successful reform. In doing so, it examines the first step toward any potential voting system change: reform proposals and investigations. It asks how and when governments investigate electoral reform. Do reform investigations follow the same patterns as successful reforms? Using survival analysis of original data from 14 parliamentary democracies, this dissertation tests two complementary sets of hypotheses inspired by empirical studies of successful electoral reform and informed by different theoretical approaches to the study of institutional change. The first is a functionalist argument that suggests reform tends to occur in order to bring “poorly performing” electoral systems closer to a better-functioning ideal. The second is a path-dependent explanation that emphasizes the self-reinforcing nature of political institutions. The analysis finds that reform is rarely proposed in response to apparent “failures” of the electoral system. Instead, the nature of the party system and the degree of institutional consolidation appear to be far better predictors of reform investigation.
Acknowledgements

I would like to thank my supervisors, Elizabeth Goodyear-Grant and Jonathan Rose, for their encouragement, support, and thoughtful critique at every stage of the project. Their sometimes contrasting but more often complementary points of view have contributed greatly to the shaping of this dissertation and of my own approach as a scholar.

Thanks also to my partner, Carsten-Andreas Schulz, for his unwavering confidence both in me and in this project, which never faltered even when my own was lacking. And Fuzzle, whose enthusiastic and energetic “assistance,” although occasionally counterproductive, was always a source of inspiration.

Thank you to Alan Renwick and the participants of the Instituto de Ciencia Política seminar series at the Pontificia Universidad Católica de Chile for their insightful feedback on some of my early results. All remaining errors are my own.

Finally, I would like to thank David Orr for his invaluable assistance with the coding of election results and related data.

This research has been supported by the Social Sciences and Humanities Research Council of Canada.
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Chapter 1

Introduction

How and when do governments investigate electoral reform? This is the motivating question behind this study. While successful electoral system changes have received considerable scholarly attention, comparatively little is known about the vast majority of other cases where reform was unsuccessfully attempted or never attempted at all. Using an analysis of original data from 14 parliamentary democracies, this dissertation sheds light on the hereto obscure categories of reform proposals and investigations. It tests two complementary sets of hypotheses inspired by empirical studies of successful electoral reform and informed by different theoretical approaches to the study of institutional change. The first reflects a functionalist, ideational argument that suggests reform tends to occur in order to bring “poorly performing” electoral systems closer to a better-functioning ideal. The second is inspired a path-dependent explanation that emphasizes the self-reinforcing nature of political institutions. The analysis finds that reform is rarely proposed in response to apparent “failures” of the electoral system. Instead, the nature of the party system and the degree of institutional consolidation appear to be far better predictors of reform investigation.
1.1 Electoral Reform and the Illusion of Rarity

It is well known that electoral systems have far-reaching political, social, and economic consequences. Their myriad effects on everything from the behaviour of politicians to the design of economic institutions leads Sartori (1968, 273) to aptly characterize electoral systems as “the most specific manipulative instrument of politics.” Given the importance of electoral rules, it is no surprise that their study has yielded a large collection of work on the mechanisms and effects of electoral systems.

The roots of this vast literature are generally traced to Duverger (1946, 1954), whose celebrated articulation of the rule that plurality elections tend to favour a two-party system sowed the seeds from which an entire sub-field of political science has sprouted. A majority of this literature continues to grapple with the relationship between electoral systems and party systems (Sartori, 1986; Lijphart, 1994), but refinement and criticism of Duverger’s original thesis has opened important avenues of research into the areas of coalition-building (Riker, 1963; Strøm, 1990), political psychology (Blais, 1991; Benoit, 2002) and electoral strategy (Downs, 1957; Cox, 1997). More recent work has since branched out to consider the wider effects of voting systems on public policy (Lijphart, 1999; Powell, 2000; Iversen and Soskice, 2006), political and economic institutions (Hall and Soskice, 2001; Swank, 2002), and representation, more broadly (Lipset, 1960; Ezrow, 2010)—especially of women and minorities (Rule and Zimmerman, 1994; Bowler et al., 2003). All this leads Riker (1982, 753) to uphold “the discovery, revision, testing, and reformulation” of Duverger’s law as a clear example of the advancement of knowledge in the study of political science, while Shugart (2005, 31) even goes so far as to say that the body of research that formed in response to Duverger’s law has formed “the core” of electoral
studies.

It now seems strange to recall a time not so long ago when the study of electoral systems was once regularly bemoaned as a tragically underdeveloped area (see: Rokkan 1970, 166, Taagepera and Shugart 1989), leading Lijphart (1985, 3) to lament that “the most striking characteristic of the literature on electoral systems is that there is simply very little of it.” Worse still, he argued at the time, was the “little impact” that the existing studies of voting systems had outside the subject, leading journalists and even academics to frequently misrepresent or misunderstand electoral rules (Lijphart 1985, 5). Today, Lijphart’s remarks appear quite dated; given the richness of the literature on electoral systems that has sprung up over the past three decades, it is difficult to imagine a time when the field was ever as barren as he describes. Indeed, the study of electoral systems is now widely considered to be among the richest bodies of work in the discipline of political science (see: Shugart 2005), and Duverger’s ground-breaking book has become one of the most cited works in the discipline.

Yet in at least one important respect, Lijphart’s criticism of the study of electoral systems remains as relevant today as ever: at present, an overwhelming majority of the literature on electoral systems is devoted to the study of their political consequences. Far less attention has been dedicated to examining the origins and determinants of electoral systems themselves. At the same time, much of the work that does examine electoral systems as dependent rather than independent variables is still vulnerable to the same criticisms that Lijphart levelled when he was writing in 1985: “a large part of this limited literature consists of work that is mainly descriptive instead of analytical, focused on only one country instead of comparative, or highly polemical
and biased in favor of a particular election system” (3).

Almost every well-known study of electoral system change goes to great pains to emphasize the fact that the study of electoral reform is complicated by the rarity of major reforms (Nohlen 1984b; Lijphart 1985; Norris 1995; Katz 2005). Katz (2005, 59) puts the number of major electoral reforms at just 14 since 1950. By Colomer’s (2004b, 57) count, the number is 19 in the postwar period. And for Renwick (2009b, 367), who uses a narrower definition, there have been just six reforms in established democracies in the last 50 years. The apparent infrequency of reform is similarly invoked by the rational choice literature on the origins of PR in Europe as evidence of the difficulty of changing the electoral system except during periods of extreme crisis or upheaval (see: Katz 1980; Nohlen 1984b). It also helps to explain why much of the contemporary case study literature on electoral system change remains myopically focused on a small and unrepresentative sample of successful reforms. And while this qualitative literature has offered valuable insight into the process at work in a handful of interesting cases, it largely suffers from a troubling tendency to study only those cases that have experienced the outcome of interest. The result is a lopsided literature, which, despite an enviable diversity of theoretical and methodological approaches, continues to suffer from a common limitation whereby scholarship has gravitated toward the extreme values of the dependent variable: stasis (no change) and success (change).

Our collective emphasis on the rarity of reform conceals the fact that this so-called stasis is frequently interrupted by periods of serious and sustained debate. That these debates did not ultimately lead to reform is not sufficient reason to ignore them. In doing so, not only do scholars risk overlooking the vast majority of the

\footnote{This figure only includes reforms in advanced industrial democracies between 1950 and 2004.}
phenomenon, but the conclusions they reach may also be on methodologically shaky ground. If we do not examine unsuccessful reforms, how can we be sure that the causal mechanisms identified exist only in successful cases and not elsewhere without considering those cases as well? If we know that successful electoral reform is rare, as the prevailing literature strongly suggests, is it rare because attempts to change the electoral system are rare, or because such attempts rarely succeed? Because the current literature does not adequately consider unsuccessful reforms, this deceptively simple question is surprisingly difficult to answer at present.

This dissertation illuminates the important spectrum of outcomes between stasis and successful reform that has so far received almost no attention in the larger literature. In doing so, it examines the first step toward any potential voting system change: proposals and investigations of electoral reform.\footnote{The terms “reform investigation,” “reform proposal,” and “reform initiative” are used interchangeably throughout the text to describe (proposed) government-sponsored plans to change the electoral system, consistent with the “Proposed/Investigated” category of the conceptual framework in Chapter 4. Although the conceptual framework and the analysis of \( H_6 \) and \( H_7 \) distinguish between these categories (especially the difference between reform proposals and investigations), most of the analysis uses aggregate data that includes both categories. For a more detailed explanation, see (section in Methodology on conceptual framework).} The central research question of this dissertation asks: how and when do governments investigate electoral reform? To answer this question, the dissertation looks to the larger literature on successful electoral system change and stasis. Do reform investigations follow the same patterns as successful reforms? If not, what differences exist, and might account for these differences? If so, what can this tell us about the reform process?

Apart from a small and relatively recent body of work that explores the involvement of ordinary citizens in deliberative democracy projects, virtually nothing has been written on the subject of reform investigations. Even unsuccessfully attempted reforms have received comparatively short shrift. This unnecessarily restrictive focus...
on successful cases is especially puzzling given the very small sample of successful reforms versus the apparent abundance of proposals and investigations. In the 800+ country-years of data analyzed for this project, only two democratic reforms occurred. Yet reform was proposed or investigated by the same countries in the sample about once every 12 years. In ignoring these outcomes, the literature is not only missing a valuable opportunity to examine an important part of the reform process, but also taking its evidence from a highly distorted sample.

The contribution of this dissertation is both substantive and methodological. By focusing on the under-explored category of reform proposals and investigations, this project fills an obvious empirical void in the literature. Just as importantly, the dissertation also seeks to dispel the myth that electoral system change is rare. That so many studies of electoral reform continue to repeat this fiction reflects a deeper methodological pathology within the discipline that is not unique to the study of electoral institutions. Although this project doesn’t claim to offer a panacea, it does prescribe an approach to institutional change that conceptualizes reform as a series of stages or outcomes, which should be useful to scholars of institutional change, more broadly.

Perhaps because it is usually true that it is easier to study something that happened than something that did not, non-events remain a generally under-studied phenomenon throughout the discipline of political science. Yet reform proposals and investigations are, in themselves, kinds of events, akin to “failed critical junctures”—that is, moments in time where it appeared as though change was possible even though it did not ultimately occur. Accordingly, the conceptual framework outlined in Chapter 3 encourages researchers to conceive of reform as an ongoing process and
not merely a discrete result by distinguishing between distinct types of outcomes where electoral reform did not occur. In that sense, the conceptual framework represents a broader methodological contribution to the study of institutional reform.

In addition to this conceptual contribution, the dissertation also approaches the issue of electoral system change from a new methodological perspective, using survival analysis of an original dataset on reform investigations in 14 parliamentary democracies to model the conditions under which reform is likely to be investigated. Originally developed for use in demography and biology, this statistical technique is rapidly gaining popularity in the social sciences. This project is the first to apply it to the study of electoral reform. The method is particularly well suited to the research question, as it is specifically designed to measure the timing, number, and order of events and transitions between states or categories (see: Box-Steffensmeier and Jones 1997; Allison 2014). This includes, for example, the transition between stasis and investigation of reform, or between investigation and attempted reform. It therefore allows for the identification of the degree to which certain predictors make a system more or less vulnerable to reform.

The project adapts seven well-known hypotheses from the literature on successful reforms and tests their applicability to the investigation of reform using an original dataset on reform proposals, investigations, and attempts. The hypotheses explore two central, complementary themes. The first cluster probes the relationship between

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\[A note on terminology: much of the technical vocabulary associated with survival analysis (also called event history analysis) comes from the fields of biology and medicine, where it is widely used to measure such things as mortality and the efficacy of medical treatments versus placebos. Hence, the use of terms such as “failure,” “risk,” “hazard,” “vulnerability,” etc. should not be seen as implying judgement about the legitimacy of electoral system reform investigations. Quite the contrary, given the wide-reaching effects of electoral rules, disagreements about the nature of the electoral system reflect deeper debates on democratic values, and should therefore be seen as a healthy part of public discourse.\]
1.1. ELECTORAL REFORM AND THE ILLUSION OF RARITY

the (dis)proportionality of an electoral system and the likelihood that it will consider reform. This includes the commonly held (if largely anecdotal) assumption that majoritarian systems—especially multiparty majoritarian systems ($H_2$)—are inherently more vulnerable to (investigating) reform than proportional or mixed systems due to their tendency to produce unfair results ($H_{1a}$). If dissatisfaction with the disproportional effects of majoritarian systems is an important driver of reform, it therefore follows that those systems that produce the most disproportional results are at the greatest risk of investigating reform at a given time ($H_{1b}$), and that reform proposals are also generally more likely to propose an alternative that is more proportional than the current system, whenever possible ($H_6$).

The second, more loosely related cluster of hypotheses considers the effects of institutional consolidation and path dependency on the vulnerability of electoral systems to change. This includes an examination of the relationship between an electoral system’s age and its likelihood of investigating reform ($H_4$), as well as the effects of recent prior experience investigating reform ($H_5$). It also includes a critical assessment of the common assertion that developing democracies are inherently more vulnerable to (investigating) reform. A final hypothesis ($H_7$) examines the nature of reform investigations and the changing ways in which reform has been investigated by governments over time.

The analysis challenges the functionalist, ideational explanation for reform. It finds that reform is rarely proposed in response to anomalous election outcomes. Moreover, reform proposals that do follow these aberrant outcomes are no more likely to propose a more proportional alternative than proposals that do not. Rather, the nature of the party system and the degree of institutional consolidation appear to be
far better predictors of reform investigation.

1.2 Chapter Overview

The remainder of the dissertation proceeds as follows. The next chapter offers a critical review of the treatment of electoral system change in the existing literature. It begins by examining the most widely used theoretical approaches to the study of institutional change, and the way in which these have been applied to the study of electoral system reform. This discussion leads into a methodological critique that focuses on the problems associated with selection bias and the way in which selecting cases on the dependent variable has driven (and perhaps distorted) debate around the drivers of electoral reform. After situating the aims of this project within these larger literatures, Chapter 2 concludes by arguing that the pathologies of the electoral reform literature are characteristic of the much larger body of work on institutional innovation.

Chapter 3 describes the way in which this project has operationalized “electoral reform” as a dependent variable. In particular, this includes a detailed discussion of the conceptual framework referenced above and according to which the dependent variable is coded. The framework distinguishes between at least three different types of outcomes where electoral reform did not occur: stasis, in which reform is not seriously considered by any branch of government; proposed/investigated, in which government actors indicate a commitment to move forward with reform; and unsuccessfully attempted, in which a government’s attempt to change the voting system fails due to lack of legislative support or the veto of another actor. Given a sufficiently long observation period, a single country-case will likely experience some or
all of these stages at different points in time.

Chapter 4 provides a blueprint of the nuts and bolts of the methodological design of the study. It begins developing the seven hypotheses that form the core of the analysis:

\[ H_1 \] Disproportional systems are at a greater risk of investigating reform than more proportional systems;

\[ H_2 \] Within the same electoral system family, cases with a more fragmented party system are at a greater risk of investigating reform;

\[ H_3 \] Developing states are likely to be at a higher risk of proposing/investigating reform than developed states at a given time;

\[ H_4 \] Younger electoral systems are at the highest risk of proposing/investigating reform;

\[ H_5 \] Systems that have recently experienced/attempted/investigated reform are at an increased risk of (re-)investigating reform;

\[ H_6 \] Reform investigations are most likely to propose a more proportional alternative;

\[ H_7 \] Over time, the nature of reform investigations has changed, with fewer reforms being controlled by governmental actors and increased involvement from experts and citizens.

The chapter then proceeds to outline the random case selection procedure and provide a justification for the inclusion of developing democracies in the sample—another important contribution of the project. Chapter 4 also elaborates on the construction of the original dataset. It details the observation period for each case, which has been determined based on a set of minimal democratic criteria. It goes on to describe the type of primary and secondary source material used to gather information about reform initiatives in each case, and includes a detailed discussion of the way in which the independent variables have been defined, operationalized, and measured. The
chapter concludes with a brief explanation of the statistical logic of survival analysis and the model-building procedure used in Chapter 5.

The results of the statistical analysis are presented in Chapter 5, which begins by considering the overall shape of the survival curve. The data show that reform is investigated ten times more often than it is attempted, and that reform is attempted twice as often as it succeeds. After conducting several preliminary univariate tests as part of the model-building process, the results inform a series of five Cox proportional hazards models that assess $H_1$ to $H_5$. While the resulting analysis gives some support to the ideational claim that proportional systems are generally less likely to investigate reform than majoritarian systems, the data also suggest that some majoritarian systems are more vulnerable to investigating reform than others. In particular, consistent with the rational choice hypothesis, multiparty majoritarian systems appear to experience a higher risk of investigating reform than two-party majoritarian systems. In a further blow to the ideational argument, and contrary to expectations, the findings also show that anomalous election outcomes do not appear to make a subject (country) more vulnerable to investigating reform.

The analysis in Chapter 5 also finds no evidence to support the commonly held assumption that reform is more common in developing democracies, but it does confirm a differently formulated path-dependent claim that recurs throughout the case study literature: electoral system age appears to be inversely correlated with a subject’s risk of investigating reform—the older and more established the system, the less likely it is to consider reform. At the same time, once reform is proposed it tends to linger on the agenda, as more than one investigation is often required in order to advance a reform proposal.
Chapter 6 assesses the two remaining hypotheses about the nature of reform investigations themselves. It suggests that to the extent that there has been a trend toward increasing proportionality, the evidence for this trend appears to be far stronger among successful reforms than among reform proposals and investigations. In particular, proposals and investigations that follow anomalous disproportional election results are less likely, on average, to propose a more proportional alternative, which casts some doubt on the ideational explanation for reform. The analysis also indicates that investigations tend to be more conservative than proposals, favouring the status quo at a much higher rate.

The data also show that there has been a clear increase in the involvement of experts and citizens in the process of investigating reform over time. This trend has been well documented by recent work examining the rapid rise in popularity of tools such as deliberative mini-publics. However, less attention has been paid to the more gradual but no less seismic shift toward the involvement of experts and independent investigative bodies. While relinquishing control over the design of a proposed alternative system appears to violate the basic assumption of the rational choice hypothesis, it remains true that governments retain a high degree of control over the reform process.

Finally, the conclusion considers the implications of the results for the study of electoral reform and the larger literature on institutional change. It locates the contributions of the project with relation to the theoretical approaches to the study of institutional reform and the different perspectives from which electoral reform has been approached. While the results of this analysis support a variety of explanations for reform from different methodological and theoretical traditions, they also call into
question several widely held assumptions. Chapter 7 concludes by considering the practical implications of the project and offering suggestions for future research. In particular, the availability of data on reform proposals, investigations, and unsuccessful attempts collected for this study opens the way for myriad analyses exploring the institutional obstacles to reform at each stage.
Chapter 2

Literature Review:

Electoral Systems as Dependent Variables

Despite describing the literature on electoral systems as having fully matured since Lijphart’s scathing assessment in 1985, Shugart’s (2005) survey of the field twenty years on nevertheless notes that the bulk of this research continues to be devoted to studying the consequences of electoral laws, with comparatively little space reserved for exploring the origins and determinants of electoral systems themselves. Importantly, however, there are some notable exceptions to this trend. This chapter provides an overview of the different ways in which the literature has approached electoral systems as the explanandum rather than the explanans.

The remainder of this chapter is dedicated to examining theory-driven accounts that seek to explain the origins and determinants of electoral systems and the conditions under which electoral system change occurs. Section 2.1 examines the most popular theoretical approaches to the study of institutional change, with a particular emphasis on the way in which these approaches have been applied to the study of electoral systems. It identifies the five most popular approaches, which alternately
emphasize the importance of interests (rational choice theory), individuals (agential approaches), ideas (the ideational advocacy literature), and institutions (historical and sociological institutionalism).

Section 2.2 then offers a methodological critique of the literature on electoral system reform, which is currently characterized by a narrow focus on an unrepresentative sample of cases in which reform occurred. The more numerous cases of unsuccessfully attempted reform—including unsuccessful attempts that occurred in the cases that are the subject of most scholarship on reform—remain largely overlooked, while reform investigations and proposals that were never followed through have been almost entirely ignored.

Section 2.3 considers the limited treatment that non-reform has received in the literature on electoral system change. It also highlights some of the most important contributions in this area, several of which serve as inspiration for the hypotheses tested in this project. Returning to the original discussion of the relevant theoretical approaches to reform, Section 2.4 situates the theoretical contributions of the dissertation within the larger literatures on electoral and institutional reform. Setting-up the methodological analysis that follows in the next two chapters, it also argues that this project’s focus on reform proposals and investigations represents a particular strength because it allows for a much clearer, more direct test of the theoretical claims described in this chapter than current methods of analysis, which mostly remain restricted to successful reforms.

Finally, Section 2.5 concludes by arguing that the pathologies of the electoral reform literature are characteristic of the much larger body of work on institutional
innovation. As such, the project also makes a clear contribution to the larger institutional reform literature by emphasizing the importance of proposals, investigations, and attempted reforms and providing a conceptual approach to these outcomes.

2.1 Major Theoretical Approaches to Institutional Change

Considering the variety of theoretical approaches within the larger literature on institutional reform is a useful place to begin any deeper discussion of electoral reform, as many of the theoretical approaches employed in the study of electoral system change have been adapted from this larger literature, which has itself adapted these approaches from other fields, including economics, sociology, and psychology. Understanding the origins and limitations of these approaches helps to explain the evolution of the literature on electoral reform and the challenges that it continues to face.

Blais and Shugart (2008) identify three reasons why a government may keep or change its electoral system: interests, ideas, and institutions. These broad categories can be decomposed into five distinct theoretical approaches: rational choice theory, agential approaches, ideational arguments, sociological institutionalism, and historical institutionalism. The insights and challenges associated with each approach are examined in detail below, as are the most relevant causal claims from each tradition regarding the determinants of electoral systems and electoral system change.

2.1.1 Rational Choice Theory: Reform as Self-Interest

Game theoretic approaches tend to conceive of institutions as equilibria that arise in infinitely iterated games (Shepsle, 1986; Milgrom et al., 1990; Greif et al., 1994). From this perspective, institutions, including voting systems, are seen as frameworks
within which actors pursue self-interested goals; these frameworks both inform and constrain actors’ choices. Rational self-interest explanations have traditionally been among the most popular approaches to the study of electoral systems as dependent variables. Before the reforms of the 1990s drew increased attention to the topic of electoral reform and shifted the focus of the literature, many of the earliest and most celebrated comparative works on the subject took the origins of proportional representation systems in Europe as their starting point. As noted in the introductory chapter, this established body of literature is built around the idea of stasis as norm. For the most part, these accounts suggest that voting systems reflect the interests of those who are in power (Benoit 2004; Colomer 2005). Not surprisingly, elites who benefit from the existing system are therefore hesitant to change it. As Katz (2005, 60) rightly asks, why would politicians in government change the rules of a game that they are currently winning? But if elites are predisposed to favour the status quo, how does reform happen at all?

The rational choice literature offers two theoretical reasons why elites may consider reform. Both explanations can be traced back to Braunias (1932), whose early account attributes the initial popularity of PR in nineteenth-century Europe to two primary causes: the protection of linguistic and religious minorities in ethnically heterogeneous states, and the extension of the franchise.

Echoing themes from the much larger literature on the effects of electoral systems, some rational choice accounts observe that different electoral rules result in different types of representation. Specifically, PR systems offer much more effective political protection for linguistic and religious minorities than majoritarian systems. This relationship is noted in some of the earliest and most celebrated works to explore the
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consequences of voting systems. Rae (1971), for instance, notes the importance of electoral rules for the representation of cultural, ethnic, and linguistic minorities as being among the most significant consequences of voting systems. This relationship leads Rokkan (1970, 157) to recognize a strong correlation between the depth of ethnic and religious cleavages and the early adoption of PR:

It was no accident that the earliest moves toward proportional representation (P.R.) came in the ethnically most heterogeneous European countries: Denmark in 1855; the Swiss cantons in 1891; Belgium in 1899; Moravia in 1905; Finland in 1906. In linguistically and religiously divided societies majority elections could clearly threaten the continued existence of the political system. The introduction of some element of minority representation came to be seen as an essential step in a strategy of territorial consolidation.

Yet despite the correlation observed by Rokkan (1970) and others, as the historical spread of PR indicates, there was also considerable demand for proportionality in ethnically homogeneous states at the beginning of the twentieth century, making the minority protection thesis a compelling but insufficient explanation on its own.

Thus, while the minority protection thesis has developed a strong following interested in the merits of proportional representation as an ideal (this literature is developed further in 2.1.3), it is Braumias’ (1932) second, “anti-socialist” explanation that is generally favoured by rational choice scholars. Lipset and Rokkan (1967) provide the most frequently cited account of this theory, which states that established parties, threatened by the extension of the franchise and the emergence of new, working class parties of the left, abandoned the plurality system from which they
had long benefited in favour of more proportional formulae in order to mitigate their expected seat losses. According to this rational actor argument, in countries where the right had traditionally been divided (due to the presence of religious and other non-economic cleavages), these parties feared losing control to a stronger, more unified left that would be popular with newly enfranchised voters (Rokkan 1970; Boix 1999). Although they were obliged to accept universal suffrage, parties on the newly fragmented right nevertheless had some control over the design of electoral system, and thus backed the adoption of proportional representation in order to prevent being permanently dominated by the emergent left. Hence, where a weak workers’ party emerged on the left, or where the right failed to coordinate in order to change the electoral system, there was no need (or, at least, no will) to modify the original plurality rules. But where the right remained divided by religious and other cleavages, PR was adopted as a means of counteracting the socialist threat (Boix 1999). Thus, as Rokkan (1970) explains, the self-interested explanation for reform suggests that when the electoral equilibrium is disrupted and established parties are threatened, party elites are likely to initiate reform in order to preserve their advantage (Boix 1999; Colomer 2004b, 2005; Benoit 2006).

This causal claim, of course, runs somewhat contrary to Duverger’s law and the multitude of work that has followed in that tradition, which clearly specifies that proportional representation systems tend to result in multipartism and not the other way around. While there is no dispute in this literature as to the existence of a relationship between the party system and the electoral system, the direction of causality remains contested, resulting in an ongoing chicken-and-egg debate. While Grumm (1958), for instance, takes the self-interest view described above, which suggests that
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multipartism preceded the adoption of proportional representation, other authors are not convinced. Riker (1982) and Sartori (1986), on the other hand, suggest that “most of the changes to PR were from two-ballot majority systems, for which Duverger’s law does not predict a two-party system, rather than single member plurality (SMP), for which it does” (Katz, 2005, 57). This appears to have been the case in Belgium, where Ahmed (2010, 4-5) explains that not only was PR adopted despite a high degree of coordination of parties on the right, but in fact party fragmentation was a result of the implementation of proportional representation, and not the other way around. Critics have also observed that the self-interest account fails to explain other important cases such as Denmark and Switzerland (Andrews and Jackman, 2005; Blais et al., 2005; Calvo, 2009).

These cases notwithstanding, the self-interest based approach to reform gained popularity in part due to its apparent ability to explain both stasis and change. Positing that politicians are unlikely to change the voting system unless doing so would preserve or improve their chances of forming government, this rational actor argument provides a compelling explanation for the infrequency of major reforms, which it implies are only likely to occur in times of great upheaval when a nation appeared to be “on the verge of collapse” (Katz, 1980, 123) or other “extraordinary historical situations” (Nohlen, 1984b, 217).

While this helps to account for the high degree of stability observed pre-1990, it offers relatively little insight into the major empirical cases that have become the focus of much of the literature. Although several contemporary reforms did coincide with the sort of major crises predicted by this hypothesis (e.g. collapse of the Fourth French Republic in 1958), most did not. Moreover, many of these reforms
do not appear to have directly benefited the established parties that enacted them. As such, these reforms have helped to expose some of the shortcomings for which rational actor arguments have been long criticized, more generally. Specifically, because game-theoretic equilibrium is, by definition, self-reinforcing, this approach can face great difficulty when it comes to explaining change except as the result of an exogenous shock. Yet, as Katz (2005) explains, the now well-scrutinized cases of Italy, Japan, and New Zealand show that these places were able to dramatically alter their electoral systems without experiencing the kind of corresponding upheaval that the self-interested accounts of Rokkan, Boix and others had predicted.

The logic of the self-interested rational actor approach has also been challenged by Shugart (2001), whose work on the popularity of mixed electoral systems suggests that all that is needed for reform to succeed is dissatisfaction with the effects of the current electoral system, which may never reach the point of crisis. Cusack et al. (2007) offer a different critique altogether, arguing that the self-interest argument overestimates the ease with which rational actors can manipulate existing institutional arrangements to their benefit. Their account, which is discussed below in 2.1.4, raises some important questions about the causal argument at work in the self-interest explanation of reform; for instance, if the divided parties of the right adopted proportional representation to prevent their permanent exclusion, why did they not attempt to return to a more advantageous plurality system once religious cleavages became less salient? If manipulation of the existing electoral system were merely a matter of self-interest, one would expect major electoral reform to occur on a regular basis. That it does not suggests other factors impede change.

The literature on the origins of PR in Europe remains relatively small, and few
accounts seek to generalize their historical findings to speak to more contemporary reform efforts (for a notable exception, see: Pilon 2013). Given the limitations described above, more recent scholarship has increasingly turned to other theoretic approaches, including some that incorporate elements of game theory, such as the veto players approach discussed in 2.1.5. Yet the elegance of the self-interest approach continues to make it attractive to scholars, and the rational choice framework remains relatively popular, even with case study approaches (see, for example: Chi 2014).

Although this project does not look at nineteenth century Europe, it does take some inspiration from the literature on the origins of PR. While the dissertation does not consider the role of exogenous shocks, it does weigh in on the causal chicken-and-egg debate on the relationship between multipartism and proportional representation. It does so by examining party system fragmentation as a predictor of reform investigation. If multiparty majoritarian systems are more vulnerable to successful reform than their two-party counterparts, it follows that the antecedent step (investigation of reform) should also be evident, since investigation of reform is far easier to do.

2.1.2 Agential Approaches: The Importance of Actors

Like the rational choice approach outlined in 2.1.1, agential explanations of the origins of electoral reform are also actor-focused. However, generally speaking, unlike rational actor arguments that tend to emphasize rules and constraints, agential models of institutional change emphasize actors’ creativity and personal motivations, depicting agents of change as “institutional entrepreneurs” rather than purely rational beings acting within a prescribed institutional context (DiMaggio 1988; Fligstein and McAdam 2011).
Agential explanations are popular in the case study literature on electoral reform. For example, former Prime Minister Geoffrey Palmer is often cited as having played a critical role in the 1992-1993 New Zealand reform. His personal passion for electoral reform was widely known, and despite strong resistance even from his own party, Palmer is often credited for using his influence first as a cabinet minister and then as prime minister to keep reform on the agenda long enough for it to gain traction (Vowles, 1995; Jackson and McRobie, 1998; Vowles, 2008; Renwick, 2010). Other agential accounts from New Zealand point to the importance of Prime Minister David Lange’s now (in)famous misreading of his notes during the 1987 election campaign, which led him to inadvertently promise a referendum on reform in the next election—a promise which then appears to have pressured National Party leader Jim Bolger to make a similar pledge, thereby ensuring that a referendum remained on the agenda despite the fact that neither party leader was in favour of reform at the time (Nagel, 1994; Ingle, 1995; Malone, 2009).

These explanations notwithstanding, no account of the New Zealand case goes so far as to suggest that either Palmer or Lange alone are responsible the reforms, or even that either man was necessarily a primary driver of change (Denemark, 2003; Nagel, 2004; Renwick, 2009a). In fact, every account of the New Zealand reforms, including all of those just cited, underscores the fact that the reform process unfolded over many years and involved the participation of successive governments from both major parties and many other individuals, as well. Furthermore, these accounts also emphasize the importance of other factors, such as the back-to-back plurality reversal elections of 1978 and 1981 (Renwick, 2009a) and the extreme concentration of executive power caused by the absence of an upper chamber or other effective check
on the prime minister (Palmer, 1979, 1992; Palmer and Palmer, 1997).

In this sense the actor-centric approach faces the opposite challenge from game theoretic explanations, as it can struggle to explain the institutional constraints that condition the actions of reform-seeking individuals. For this reason, while many case studies emphasize the important contributions of individuals, few argue that these were the exclusive drivers of change. Finally, it is worth noting that this approach is often found in case study and small-N comparative analyses, the formats of which naturally lend themselves to the type of detailed microanalysis necessary to consider agents’ motivations. Quantitative analyses, like the one attempted in Chapter 5, are ill suited to this approach. While it may be possible to operationalize elements from the other theoretical approaches described in this section (e.g. veto players, “extreme” election outcomes, etc.), it is very difficult to effectively measure the influence of an individual on the reform process in a quantitative analysis.

2.1.3 Ideational Arguments: Advancing the Merits of Proportional Systems

It is often difficult, if not impossible, to disentangle arguments about democratic values from discussions of the mechanics of electoral system design and operation. This helps to explain the strong advocacy tradition in the field of electoral studies that often combines empirical and even comparative analysis with normative claims about democratic values and representation, including calls for reform. Well-known works in this vein include the early and passionate advocacy of the principles of proportional representation by Mill (1861) and Hare (1865), as well as the more comparative work by Hoag and Hallett (1926) that makes a strong case for the adoption of list
PR. Of course, not all advocacy work agrees on which electoral formula is best. Hermens (1941), for example, cautions strongly against what he describes as the dangerous and even anarchical tendencies of the near-pure list PR used in the Weimer Republic. Lakeman and Lambert (1955), on the other hand, argue the merits of the Single Transferable Vote with a passion that Shugart (2005, 26) describes as “almost missionary zeal.”

Lijphart (1985) is highly critical of much of this early advocacy work, dismissing it as largely descriptive, inward-looking, and lacking methodological rigour, but Shugart (2005) notes that these contributions often offer valuable empirical observations. Shugart’s thinking is perhaps reflected in the fact that the question of which electoral system is best continues to be debated both explicitly and implicitly in the literature (see: Blais 1991; Dunleavy and Margetts 1995). The tradition of advocacy work in the study of electoral reform certainly appears to be alive and well, with a host of relatively recent books explicitly aimed at promoting electoral reform in the USA, for instance (Barber, 2001; Amy, 2002; Bowler et al., 2003). It is also certainly true that some of the most widely cited literature in the genre—including well known works by Lijphart himself—offer a more subtle but nevertheless unmistakable opinion on this issue (see: Lijphart 1994, 1999). There is now a substantial body of work dedicated to examining the proposition that different electoral systems correspond with different visions of democracy due to the wide variety of political phenomena that they influence (Finer, 1975; Duverger, 1984; Nohlen, 1984a; Lijphart, 1999; Powell, 2000). According to this view, majoritarianism, on the one hand, is intended to enact the will of the majority (or plurality) by producing legislative mandates that offer accountability, while proportional systems, on the other hand, are intended to be
responsive to and inclusive of diverse interests (Powell 2000). While there are some authors who advocate for the merits of plurality rule (Hermens 1984; Horowitz 2003), the ideational literature in general has been more concerned with a focus on fairness, and, in particular, on the merits of proportional representation formulae.

Disagreement about the relative merits of electoral systems has also been taken up in the literature on social choice theory, which examines the issue from a more formal perspective. This includes a lively and long-standing debate regarding the mathematical merits of different electoral systems. Beyond the basic mathematical fairness of PR, however, many of its advocates have long been persuaded of its merits based on its ability to facilitate the representation of minority groups. This relationship is also central to some rational choice accounts described above, and forms the first part of Braunias’ (1932) classic hypothesis discussed in 2.1.1. There is broad consensus in the literature (with a few notable exceptions) that PR systems are better at representing diverse interests than majoritarian systems because of their tendency to produce coalition governments (see: Powell 2000).

As Braunias (1932) and Rokkan (1970) observe, the effects of PR systems seem likely to have been a primary motivation for the early adoption of PR in European states with sizeable linguistic and religious minorities. And, indeed, it was states with large minority populations that were the first to introduce PR in the late nineteenth

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1For example, while the Single Transferable Vote is celebrated for being resistant to manipulation and strategic voting (Bartholdi and Orlin 1991), it is criticized for its potential (improbable but mathematically possible) to fail to elect a Condorcet winner (Doron and Kronick 1977; Doron 1979). Similarly, while list PR is praised elsewhere for its ability to encourage compromise (Lijphart 1969), it is criticized in the social choice literature for being vulnerable to strategic manipulation, especially where district magnitude remains low (Cox and Shugart 1996), and a mathematically possible (though, again, improbable) potential to elect a Condorcet loser (Van Deemen 1993).

2Horowitz (2003) maintains that plurality systems can be quite effective at protecting minorities under certain circumstances, and may even be better suited to fostering interethic cooperation, for instance in cases where proportional systems would not produce an incentive for parties to appeal to voters outside their base group.
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century. The ideational approach therefore argues, as Braunias did, that the ability of PR formulae to protect minorities explains why countries would abandon their majoritarian systems in favour of more proportional ones. This relationship between proportional systems and minority protection continues to be a popular subject of study, especially since the development of Lijphart’s (1969, 1977) popular theory of consociational democracy (see, for example: Lijphart 1992; Reynolds 1995; Bieber 2004).

Katz (2005) construes the ideational, minority protection thesis as being in direct competition with the rational choice, interest-based account. But for Braunias (1932) and Rokkan (1970) it appears to be more of a complement than a challenge, with each theoretical lens illuminating a different part of the puzzle. However, insofar as explaining electoral system reform is concerned, like the interest-based account, the idea-based explanation of the origins of PR also implies that unless a country has a pre-existing minority group in need of protection, only an exogenous shock can disrupt the status quo to make room for a new paradigm. We should therefore only expect reform to occur in response to “deep-rooted ruptures in the historical and political development” of the countries involved (Nohlen 1984a, 217).

While there is little evidence of this sort of crisis in most of the best-studied cases from the 1990s, an alternative version of this hypothesis, articulated by Colomer (2004b, 55), suggests that “changes to electoral systems should be expected to be produced in favour of increasingly inclusive formulas rather than against.” The claim that plurality and majoritarian systems are increasingly being challenged as unfair, and that there is a corresponding trend toward reform in favour of more proportional
electoral systems, is common throughout the literature (see: Shugart and Wattenberg 2003; Blais and Shugart 2008). Thus, rather than being focused on minority protection, this pseudo-functionalist argument recalls the fairness claims of the earlier advocacy literature; if the function of an electoral system is to produce a fair result, it follows that systems which “fail” to do so will eventually be replaced with “better-functioning” alternatives.

Another, more nuanced formulation of the functionalist, idea-based explanation is reflected in the suggestion of Shugart (2001) that “extreme” results on either the intraparty or interparty dimension may be sufficient to produce public dissatisfaction with the effects of the current electoral system that could ultimately lead to reform. This is because the electoral system has not produced the most “efficient” result in such cases. For example, on Shugart’s (2001) interparty dimension, a majoritarian system that consistently produces manufactured majority governments (with only a plurality of the votes) may be seen by some actors in the system as failing to represent the true wishes of the majority. On the other side of the spectrum, a “hyper-representative” proportional system that results in a fragmented party system may be seen to be robbing voters of the chance to select from competing possible government alternatives, since the actual composition of the government will be decided in post-election bargaining (Shugart, 2001). Consistent extremity on either this or the intraparty dimension is likely to make a system vulnerable to reform.

Shugart (2003, 2008) defines “extreme” systems based on two dimensions: interparty and intraparty. The intraparty dimension captures the spectrum between systems that produce either exceptionally strong candidates (these tend to be majoritarian systems) or strong parties (these tend to be proportional systems). The interparty dimension, on the other hand, refers to the degree to which governments tend to be formed by a single party, governing with a majority of the seats but only a plurality of the vote (majoritarian), or a multiparty coalition (proportional). Shugart argues that extremity in either direction on either dimension is sufficient to predispose an electoral system toward reform.
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though it may take a catalyst event to bring about change. In that sense, much as the early reformers advocated PR based on its minority protection tendencies, Shugart (2001, 2008) suggests that extreme outcomes are likely to drive both majoritarian and proportional systems toward a mixed alternative, as both Mixed-Member Proportional and, to a lesser extent, parallel mixed systems are inherently predisposed to produce a more balanced result on both the inter- and intra-party dimensions.

These functionalist, ideational arguments form the core of the hypotheses tested in this dissertation. If majoritarian systems are indeed inferior and out-dated, from a functionalist point of view, we should expect to see evidence of attempts to modify them in a way that should bring them closer to the more proportional ideal. Thus, $H_1$ and $H_6$ explore the assumption that majoritarian systems are inherently more vulnerable to reform than proportional ones, and that they are most likely to reform in a more proportional direction.

2.1.4 Sociological Institutionalism: Electoral Systems and Society

Among the several branches that have sprouted from the new institutionalism approach, sociological institutionalism is, as the name suggests, concentrated on the relationship between society and institutions. This theoretical perspective emphasizes the cultural origins of institutional arrangements, particularly the ways in which institutions shape society, and are shaped by it in return (Meyer and Rowan 1977, Meyer and Scott 1983). Given the many complex effects of electoral rules, this approach seems particularly well suited to the study of voting systems, as evidenced by the considerable literature dedicated to establishing their societal effects. With arguments that sometimes mirror the ideational debate summarized in 2.1.3, several
notable works in this tradition have posited that electoral systems may be unique among political institutions in their ability to dramatically shape the character of a democracy. Powell’s (2000) analysis of more than 150 elections shows a clear link between electoral system family and policymaker selection: while the majoritarian vision of democracy provides for decisive action and clear accountability, the contrasting proportional vision, with its focus on representation, can lead to better policy congruence between citizens and legislators. Similarly, Lijphart (1999) shows that the “kinder, gentler” brand of democracy associated with proportional electoral systems is evident in lower incarceration rates, stronger environmental protection, and greater funding for foreign aid.

Other authors, including Swank (2002) and Hall and Soskice (2001), have extended these findings even further, showing a deep relationship between the electoral system and policy outcomes that has wide-ranging societal implications, including those related to the organization of economic institutions and the welfare state. In their cutting critique of the rational choice approach, Cusack et al. (2007) instead counter that the organization of a country’s economy largely explains political parties’ preference for electoral rules, with coordinated market economies (e.g. Germany) tending toward proportional formulae and liberal market economies (e.g. Britain) maintaining plurality systems (Cusack et al., 2007). Citing a strong correlation between electoral system type and varieties of capitalism, the authors argue that the remarkable resilience of economic institutions offers a more convincing explanation for the stability of electoral systems.

Following Lijphart and Grofman (1984), studies that have adopted this perspective suggest that electoral reform occurs when the bond between institutions and their
societal foundations is lost due to major social change, usually as a result of a major exogenous shock (Rahat, 2008, 22). Hence, reform occurs when the legitimacy of the system, measured in terms of popular democratic satisfaction, is jeopardized (Dalton, 2004). According to this explanation, pressure for reform is “an elite response to popular demands for new forms of participation” (Donovan and Karp, 2006, 672).

Like the rational actor approach, this perspective therefore also helps to explain the rarity of reform. Since electoral institutions are so deeply embedded in other political and social institutions, they are unlikely to undergo major reform independently. For example, the near-perfect institutional alignment between electoral systems and economic institutions observed by some authors suggests that these are mutually reinforcing (Hall and Soskice, 2001; Cusack et al., 2007). It would therefore take a serious disruption to result in major electoral system reform, and, by the same token, major electoral system reform is unlikely to occur unless it is also accompanied by the reform of other, related institutions.

This sort of radical institutional change as a part of major societal transformations is evident in some of the reforms of the 1990s. New electoral systems accompanied major constitutional reforms in post-communist Eastern Europe (Lijphart and Waisman, 1996; Birch et al., 2002; Birch, 2003; Rose and Munro, 2003; Millard, 2004) and Russia (Dunleavy and Margetts, 1995; Remington and Smith, 1996; Shvetsova, 2004; Moraski, 2007), as well as post-apartheid South Africa (Reynolds, 2004), and post-authoritarian rule in Latin America (Shugart, 1992; Cason, 2000; Mayorga, 2003; Negretto, 2004; Remmer, 2008). Yet there is little evidence of major societal upheaval in accounts from the other important cases of Japan and New Zealand, for example, which do not appear to have experienced the sort of other radical institutional changes
that a sociological institutional perspective might predict. This suggests that while sociological institutionalism offers a compelling explanation for some reforms, these accounts share some of the same limitations as earlier rational choice scholarship, placing disproportionate emphasis on the notion of stasis as norm.

None of the hypotheses tested in this dissertation explore the societal change phenomenon emphasized by this explanation of reform. That said, it would certainly be possible to use the data collected for this project to test a sociological institutional explanation of reform, for example, by combining it with additional data on social movements, revolutions, and even aggregate data on democratic satisfaction. Thus, this represents a possible avenue for future research.

2.1.5 Historical Institutionalism: Path Dependency and Institutional Context

Historical institutionalism, another branch of the new institutionalism, has been the most popular approach to the study of electoral system reform in recent years. This approach is interested in identifying the specific mechanisms and processes that guide institutional change over time. As such, it focuses on identifying paths and events that influence the development of institutions, emphasizing the fact that decisions taken early on tend to determine the trajectory of future development (Mahoney and Rueschemeyer 2003; Pierson 2004; Thelen 2004; Mahoney 2010; Mahoney and Thelen 2015). It is associated with a variety of specific methodological techniques, including process tracing (Bennett 2008; Mahoney 2012) and its attendant tests, such as establishing necessary and sufficient conditions (Seawright 2002; Mahoney and Thelen 2015), as well as the analysis of critical junctures and counterfactuals
The historical focus and attention to context advocated by historical institutionalists is evident in some of the early work on the origins of electoral systems described in 2.1.1. In fact, the works by Lipset and Rokkan (1967) and Rokkan (1970) are widely cited as cornerstones of this literature, which have helped to establish ideas like critical junctures and path dependency in comparative politics. Today, however, single-case analyses and small-N comparisons of the reforms in France, Italy, Japan, and New Zealand currently represent the lion’s share of the empirical study of electoral system change. This cluster of major reforms in long-established liberal democracies appears to have captured the imagination of political scientists, which perhaps is not surprising given that Norris (1995, 4) describes these reforms as “electoral earthquakes” that shook the discipline. Most of the work that has emerged in response to these reforms has avoided the rational actor arguments that characterize the earlier literature, instead tending towards a more historical, path-dependent approach, emphasizing the fact that the existing institutional and political context necessarily conditions much about the nature and limitations of possible change.

Historical institutionalism is also particularly well suited to case study analyses, and has been employed in many of the most influential analyses of the reforms of the 1990s. Renwick’s (2009a) process tracing analysis of electoral reform in New Zealand is an excellent examples, as it dispels an important myth about the importance of the back-to-back plurality reversal elections of 1978 and 1981: despite being widely (and anecdotally) cited as having been a crucial catalyst for reform, he finds that they were, in fact, neither necessary nor sufficient on their own. Taking a more comparative perspective, both Renwick (2010) and Pilon (2013) adopt a historical, path-dependent
approach in their recent work. This type of path dependency thinking is also evident in Colomer’s (2004b, 66-68) deceptively simple hypothesis that the older an electoral system is, the less susceptible it is to reform, since electoral rules (provided they are fair) create a stable and self-reinforcing system.

An increasing number of authors appear convinced of the relative merits of historical institutionalism as a theoretical approach. Kreuzer (2010), Capoccia and Ziblatt (2010), and Ahmed (2010) have all recently proposed process tracing as a way forward for the study of electoral system change. Not only has historical institutionalism dominated recent analyses of reform, but its proponents have also offered some pointed criticism to scholars from other theoretical traditions. Kreuzer (2010), in particular, makes an impassioned plea for analyses of reform to consider historical evidence more carefully. He condemns Cusack et al. (2007, 373) for suggesting that “the causal mechanisms we proposed will have to be corroborated through detailed case studies,” and remains highly sceptical of their “bold, new, but historically unvetted hypothesis” about the endogeneity of electoral systems (discussed in 2.1.4), citing it as a methodologically dubious example of putting the academic cart before the horse by “quantitatively testing hypotheses and only later establishing causal plausibility” (Kreuzer, 2010, 383). At the same time, however, he offers some qualified praise for the analysis in Boix (1999), which appears to hold up better against his re-examination of the historical data. Inspired (or perhaps provoked) by Kreuzer’s challenge, Boix (2010) re-examines his earlier claims (in Boix 1999), this time using a more historically-oriented process tracing approach, and ends up confirming and deepening his original explanation, as well as doubling down on his claim that the origins of PR in Europe can be largely explained by the interests of the established
2.1. THEORETICAL APPROACHES

parties of the right. This finding is also supported by Pilon (2013), whose comparative historical analysis of electoral systems in Western Europe, Canada, and Australia also stresses class struggle as the primary motivation for reform.

It is also worth noting that the approaches detailed here are not mutually exclusive, and they can be combined to complement one another. One such example is the recent popularity of the veto players concept developed by Immergut (1990) and later popularized by Tsebelis (2002). Each veto player is a political actor (or group) whose consent is necessary for change to occur. The greater the number of veto players, the more difficult it becomes to modify the status quo (Immergut, 1990; Tsebelis, 2002; Koenig et al., 2010). This concept has been used extensively by scholars of electoral reform, and appears to be particularly well suited to institutionalist explanations. This may be a reflection of the fact that, since the 1990s, there has been a trend toward increased citizen involvement in the electoral reform process, both in the form of referendums (e.g. New Zealand 1992, 1993, 2011; Britain 2011) and, increasingly, via direct citizen involvement in the consultation and design process (e.g. Netherlands 2006; Ireland 2013), which has added additional layers of complexity to the study of electoral reform initiatives (see also: LeDuc, 2011). This is evident in Renwick’s (2010) useful theoretical distinction between reforms introduced by elites (“elite majority imposition”) versus those developed in a process of “elite-mass interaction.” The veto player concept, which is used by Renwick and many others, has proven especially useful to explain both the observed stability of electoral systems, and the process necessary to produce change (for example, see: Rahat, 2004).

The present scope of this project is primarily interested in explaining how and when governments investigate electoral reform, rather than probing the institutional
obstacles that prevent reform initiatives from advancing. Hence, this dissertation does not currently consider the role of veto players or other such constraints. That said, the data collected for this project could also be used to explore their significance in determining which investigations go on to become attempts, and which attempts are most likely to succeed.

Despite its quantitative methodology, this dissertation does test at least one hypothesis inspired by the historical institutional approach. Specifically, it considers a path-dependent argument on the importance of institutional entrenchment by probing the effects of electoral system age on the likelihood of investigating reform—a key antecedent step to enacting change.

2.2 Selection Bias in the Study of Electoral Reform

Despite the theoretical and methodological pluralism of the relatively small literature on electoral reform, it continues to suffer from a crucial common limitation, whereby scholars remain fixated on explaining successful cases of institutional change. What appears to be missing, however, is a discussion of the categories between stasis and change: reforms that were proposed or attempted but never enacted.

The preoccupation with successful reforms is compounded by the seeming shortage of these cases due to the illusion of the rarity of reform. This problem has led several authors to call for a reconsideration of the definition of electoral reform. In that sense, at least, this dissertation is not the first time a researcher has questioned the way in which scholars define electoral reform as a dependent variable, or how we approach case selection when studying electoral system change. Of course, not all calls to radically rethink the study of electoral reform are in agreement. While Kreuzer
(2010) and Ahmed (2010), for instance, call for more attention to historical analysis, especially using process tracing techniques, others have proposed ways to expand the population of available cases, either by extending the definition of electoral reform (Leyenaar and Hazan, 2011) or examining reforms at other levels of government.

2.2.1 Expanding the Definition of “Electoral Reform”

Minor Reforms

The present academic literature on electoral system reform is almost exclusively concerned with what are deemed “major reforms”—that is, significant changes to the way in which votes are counted and translated into legislative representation. Usually this entails the wholesale replacement of one electoral system with another. Although definitions of electoral system type and family vary, Renwick (2010, 4) provides a particularly good list using categories based on Reynolds et al. (2005), with a few additions and lexical modifications. Generally speaking, movement from one of the categories in the right column of Table 2.1 to another—even if the new system remains in the same family—is considered “major” reform.

These major reforms occur far less frequently than other types of changes to the electoral system. Electoral law comprises a great many varied and complex elements, encompassing everything from voting rights to the administration of elections. Some of these areas, in particular campaign finance reform, have developed their own distinctive literatures (for example, see: Boatright 2011; Mutch 2014; Norris and Abel van Es 2016). And regular modifications of such things as district boundaries and assembly size—for instance, to compensate for population and demographic

\[4\text{For a good overview of many aspects of minor electoral reform, see: Massicotte et al. (2004).}\]
2.2. SELECTION BIAS

Table 2.1: Electoral Systems and Families

<table>
<thead>
<tr>
<th>Electoral System Family</th>
<th>Electoral System and Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plurality/Majority</td>
<td>Single Member Plurality (SMP)</td>
</tr>
<tr>
<td></td>
<td>Block Vote (BV)</td>
</tr>
<tr>
<td></td>
<td>Party Block Vote (PBV)</td>
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<td></td>
<td>Alternative Vote (AV)</td>
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<tr>
<td></td>
<td>Two-Round System (TRS)</td>
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<tr>
<td>Proportional</td>
<td>List Proportional Representation (PR)</td>
</tr>
<tr>
<td></td>
<td>Single Transferable Vote (STV)</td>
</tr>
<tr>
<td>Mixed</td>
<td>Mixed-Member Proportional (MMP)</td>
</tr>
<tr>
<td></td>
<td>Mixed-Member Majoritarian (MMM)</td>
</tr>
<tr>
<td></td>
<td>Bonus-Adjusted (BA)</td>
</tr>
<tr>
<td>Other</td>
<td>Single Non-Transferable Vote (SNTV)</td>
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<tr>
<td></td>
<td>Limited Vote (LV)</td>
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<tr>
<td></td>
<td>Cumulative Vote (CV)</td>
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<tr>
<td></td>
<td>Borda Count (BC)</td>
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</tbody>
</table>

changes—occur with relative frequency. Are these not also electoral reforms?

Minor electoral reforms are often dismissed as tinkering, but, as Lijphart (1994, 78-94) shows, even seemingly minor changes can and do have important political implications. In that sense, what scholars may classify as a “minor” reform may in fact be highly contested and have serious consequences. This is certainly the case in the ongoing debate over the five percent legislative threshold introduced for German Bundestag elections in 1953, for example, where concerns about the fractured party system of the Weimar Republic (see: Hermens, 1941) and a desire to exclude extremist parties of the far right have led Germany to retain the threshold despite growing opposition that claims it is unconstitutional and undemocratic. Several smaller parties have successfully appealed to the German Constitutional Court, which overturned corresponding thresholds of five and then three percent for elections to the European
2.2. SELECTION BIAS

parliament in 2011 and 2014, respectively. Yet the five percent threshold remains in place for national elections despite growing pressure to repeal it.

Leyenaar and Hazan (2011) make a strong case for the importance of examining minor electoral reforms, arguing that there is no substantive difference between so-called major and minor reforms, making the distinction unhelpful and restrictive. Instead, Jacobs and Leyenaar (2011) have proposed an ordinal scale featuring major, minor, and technical reforms along several dimensions: proportionality, election levels, inclusiveness, ballot structure, and election procedures. These calls for greater consideration of minor reforms appear to have been heeded by the organizers of the ambitious Electoral System Change in Europe Since 1945 project (Pilet et al., 2016), which includes details on electoral law changes in 30 European countries since the end of WWII, but such attention to minor reforms, especially in a comparative context, remains rare.

Reform at Other Levels

Rather than expand the definition of electoral reform, another group of scholars has sought to deepen the pool of available cases by looking to reforms at other levels of government. Sub-national comparisons have become increasingly popular in the study of electoral reform, as these governments appear to change their electoral systems far more frequently. In the United States, for example, while there has been no change at the national level, the local level has seen considerable experimentation with a wide range of different systems (Weaver 1984; Barber 1999; Bowler et al. 2003, 2005; Prosterman 2012). Mitchell (2005, 157) similarly describes the United Kingdom as a “very active laboratory for electoral system design and implementation” due to
the adoption of proportional and mixed electoral systems in the devolved territories of Scotland, Wales, and Northern Ireland. At the same time, in Canada, half of the ten provinces (British Columbia, Ontario, New Brunswick, Prince Edward Island, and Quebec) have taken serious steps toward electoral reform in recent years (Cross, 2005; Pilon, 2010; LeDuc, 2011). Increasingly, scholars interested in national-level reforms are discovering sub-national reforms can provide useful comparisons (see: LeDuc, 2009; Flinders, 2010; Pilon, 2013). Where sub-national governments have independent jurisdiction over the modification of their own electoral laws, there is little reason why they cannot be studied alongside national cases. There is also evidence of a similar trend outside the field of electoral systems research, as authors like Snyder (2001) continue to promote the sub-national comparative method.

In some respects, however, these well-intentioned efforts to expand the study of electoral reform are missing the more obvious mark. This dissertation contends that to the extent that the rarity of reform is a problem for scholars of reform, it is a self-made problem that contains its own solution. Rather than seeking new cases and types of reforms to address the purported rarity of reform, scholars would be well advised to look to the multitude of cases in which reform did not occur. Indeed, our collective obsession with successful reforms represents not just a challenge for researchers, but also a serious methodological quandary—one that cannot be resolved by adding more cases of successful reform.

2.2.2 The Problem of Selection on the Dependent Variable

The rarity of reform, coupled with the sudden explosion of cases in the early 1990s, helps to explain why much of the recent literature explores the phenomenon in the
2.2. SELECTION BIAS

form of single-case and small-N studies, which allow researchers to engage with the rich political and historical context of each case. The mainstream comparative literature is overwhelmingly focused on four countries: France, Italy, Japan, and New Zealand. The popularity of these cases is due both to the overall rarity of reform and the rich history of reform in these cases; taken together, these countries represent more than two thirds of all successful reforms in Katz’ calculation, with no fewer than 10 distinct reforms as well as a further seven failed attempts at reform since 1950.

It is easy to understand why researchers have been drawn to these cases. But while studies of successful reform have offered valuable insight into the process at work in a handful of interesting cases, little is known about the majority of cases where reform has not occurred. More problematically, the emphasis on the rarity of reform that exists across the field conceals the fact that this so-called stasis is routinely interrupted by periods of serious debate. In that sense, the wave of reforms that inspired so many researchers to seriously consider electoral systems as dependent variables also appears to have landed many in a related methodological quagmire.

While the existing literature remains heavily focused on a small and unrepresentative sample of cases, the more numerous cases of unsuccessfully attempted reform—including unsuccessful attempts that occurred in the cases that are the subject of most scholarship on reform—remain largely overlooked. One notable exception appears to be the case of the United Kingdom, where a 2011 referendum to replace the Single Member Plurality (SMP) system with the Alternative Vote (AV) was decisively defeated yet still received considerable academic interest, even providing the subject for an entire special edition of Electoral Studies. The UK aside, unsuccessful attempts

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7Electoral Studies Volume 32, Issue 2, pages 211-390 (June 2013).
have been largely overlooked. Remarkably, two failed constitutional referendums on
the electoral system held in Ireland (1959, 1968) are almost entirely absent from the
comparative literature. Also noteworthy is the apparent neglect of further develop-
ments in New Zealand; while the 1993 reform features prominently in the electoral
reform literature, analysis of a more recent plebiscite in 2011 on whether to keep the
Mixed-Member Proportional (MMP) system or return to the old plurality rule has
been, by comparison, almost entirely lacking from the literature.

If unsuccessful reform attempts have been overlooked by the existing literature,
then it is certainly true that reform investigations and proposals that were never
followed through have been almost entirely ignored. This oversight is unfortunate
because investigations and unsuccessful attempts represent important parts of the
reform process, and analysis of these cases may yet reveal much about the reasons
why reform ultimately succeeds or fails. By choosing to focus our attentions so
narrowly on successful reforms, scholars are overlooking valuable evidence that may
affect our conclusions.

This problem is not unique to the study of electoral systems, or even the discipline
of political science. It is indicative of a larger tendency throughout the social sciences
to gravitate toward successful outcomes, whatever the phenomenon of interest. After
all, it is always easier to study phenomena that actually occurred than those that did
not. But this narrow focus is problematic for two reasons. Firstly, it is misleading to
dismiss reform investigations and unsuccessful attempts as non-events given that they
do, in fact, occur with some regularity, and are vastly more common than successful
electoral reforms. Secondly, and more importantly, this myopia is methodologically
problematic because it is a clear example of selection bias.
Selection bias occurs as a result of “systematic error in causal inference that derives from the selection processes through which the data are generated, and/or through which the researcher’s access to the data may be filtered” (Collier et al., 2004, 88). Selection on the dependent variable is the most serious form of selection bias, and occurs where cases are selected because they have achieved the outcome of interest: in this case, where electoral reform has successfully occurred. It, too, is a persistent problem throughout the discipline. Many authors, especially those with quantitative backgrounds, have been critical of comparative scholars who select cases on the dependent variable, arguing that this method obscures causal relationships and leads to logically faulty conclusions (for example, see: Geddes 1990, King, Keohane, and Verba 1994, Geddes 2003).

For quantitatively-minded scholars, the problem is quite clear. King et al. (1994, 129) summarize the problem succinctly: “how can we explain variations on a dependent variable if it does not vary?” According to these authors, the answer is simple: we cannot. They therefore emphasize the fact that comparativists aiming to draw causal inferences ought to select a sample of cases that are as representative as possible of the entire population of cases. Thus, for quantitative studies, the solution to this problem is equally clear: “the cases of extreme selection bias where there is by design no variation on the dependent variable are easy to deal with: avoid them! We will not learn about causal effects from them” (King, Keohane, and Verba 1994, 130; but see: Brady and Collier 2010).

But selection bias is not just a quantitative problem, and to address it we must look beyond a uniquely qualitative solution. In response to the criticisms levelled above, qualitative scholars has emphasized the fact that some of the most important
comparative studies have yielded valuable findings despite apparently violating the case selection procedures proposed by the literature on selection bias, leading to a heated methodological debate within the discipline (see: Rogowski 1995). And, indeed, studies that rely exclusively on the examination of successful cases of electoral reform have contributed much to the analysis of the phenomenon. As Dion (1998) suggests, no-variance designs can be particularly useful when examining apparently deviant cases, or testing claims of necessary or sufficient conditions. Such studies can offer valuable insight into similarities or differences among the selected cases. In addition, single-case studies can also offer valuable insights into causal mechanisms at work within the case in question. In that sense, process-tracing methods can help to overcome the specific problems of the selection bias critique levelled against comparative analyses. As Mahoney (2010) explains, the logic underpinning process tracing analysis is fundamentally different from that which underpins regression analysis and even qualitative comparative studies: “the analysis of [within-case causal process] mechanisms involves a logic that can be modeled as Bayesian, as opposed to the frequentist logic that underpins [DSI’s] regression-oriented approach.” In other words, “[w]hat is important is not the number of pieces of evidence within a case that fit one explanation rather than another, but the likelihood of finding this evidence if the alternative explanations are true” (Bennett 2006 341). Thus, although scholars should be cautious about over-generalizing based on the results of within-case analysis, the method itself remains a useful explanatory tool.

This vigorous defence notwithstanding, however, the fact remains that, generally speaking, qualitative studies of electoral system reform do seem to be collectively guilty of ignoring unsuccessful cases of reform. That is not to suggest, however, that
qualitative methodologies lack the tools to investigate reforms that did not occur. In the cases of aborted reform investigations or unsuccessfully attempted reforms, for instance, qualitative scholars might approach these (non-)events as “failed critical junctures,” that is, moments in time where it appeared as though change was possible but did not occur. There is also a rich literature on the use of counterfactuals that would certainly be helpful for qualitative scholars seeking to investigate unsuccessful cases of reform \textit{(Tetlock and Belkin, 1996; Capoccia and Kelemen, 2007; Levy, 2008)}. At the very least, qualitative scholars who continue to focus primarily on successful outcomes need to provide a more explicit and rigorous justification for their case selection choices.

To that end, \textit{Collier and Mahoney (1996)} offer some excellent advice on case selection that is easily applied to the qualitative and quantitative study of electoral reform: researchers must choose cases and analytical frameworks most appropriate to answering their research question. In the case of electoral reform, if the research question asks \textit{what explains the success of electoral reform initiatives?} it is clearly problematic to examine only those cases where reform has succeeded. Any analysis that is restricted to successful cases is likely to face at least one major explanatory challenge: how can we be sure that the causal mechanisms/processes identified exist only in successful cases and not elsewhere without considering those cases as well? The restrictive focus on successful cases is also especially puzzling given the very small sample of successful cases and the apparent abundance of unsuccessful reform attempts.
In that sense, the lack of scholarly attention dedicated to unsuccessful and unattempted reforms represents a serious methodological limitation of the existing literature. In order to explain when and why electoral reform occurs, it is logically imperative to consider not only successful cases, but also cases where reform was unsuccessfully attempted or not attempted at all. Studies that investigate only successful reforms necessarily take their evidence from a biased and unrepresentative sample of cases. Without considering any cases in which reform is not attempted or investigated, it is methodologically problematic to generalize about the underlying causal processes that are responsible for the success (or failure) electoral reform. This oversight is particularly unfortunate given the fact that the approaches described at the start of this chapter are also capable of offering theoretical insight into the reasons why reform fails, stalls, or is never proposed. What is required, however, is a reconceptualization of the concept of electoral reform that is less focused on successful outcomes.

2.3 Treatment of Non-Reform in the Literature

2.3.1 Unsuccessful Reform in the Literature on Successful Reform

Despite the well-articulated dangers associated with selecting cases on the dependent variable, the majority of the prominent studies on electoral reform continue to do just that. Almost all of the single-case literature and the best-known comparative work on electoral reform described so far in this chapter examine some combination of France, Italy, Japan, and New Zealand (see, for example: Rudd and Ichikawa 1994, Gallagher 1998, Sakamoto 1999, Scheiner 2008, Renwick 2010), or expands the range of cases slightly to include other successful reforms in places such as Russia (Dunleavy
2.3. TREATMENT OF NON-REFORM IN THE LITERATURE

Although the sample of successful reforms often varies, the underlying methodological problem remains the same: it is almost always exclusively cases of successful reform that are under consideration. Conspicuously absent from the comparative literature are studies in which successful reforms are examined alongside unsuccessful attempts.

Where unsuccessful reforms are discussed in the current literature, it is most often in the context of explicating the process that ultimately led to a successful reform. Alan Renwick’s book *The Politics of Electoral Reform* (2010) is typical in this regard, and provides a good illustration of both the usefulness and limitations associated with selecting on the dependent variable. Although the analysis does consider several unsuccessful reform attempts, it only examines those that occurred during the course of ultimately successful reforms. One could make the case that this type of within-case comparison of successful and unsuccessful reform is, in fact, an application of the most similar systems design (on the most similar systems method, see: Mill 1874, Przeworski and Teune 1970). In that sense, this approach is likely to allow precise specification of the factors that vary between the successful and unsuccessful reform initiatives within a single case. The limitation of this logic, however, relates to the generalizability of these findings. For example, the fact that successful reform remains exceptionally rare (as the prevailing literature continues to insist), while reform investigations and attempts occur with relative frequency—including in cases where reform has never successfully occurred—suggests that there may be something “exceptional” about the institutional and/or political context in cases where reform has succeeded. However, the nature of this exceptionality, and whether it exists at all, is difficult to assess using a within-case comparative method.
Ultimately, this raises the question of what exactly the author is trying to explain. If the answer is that the author is interested in understanding a successful reform outcome in a single specific case, then this method seems appropriate. But if the answer is that the author is seeking to generate generalizable propositions about when and how electoral reform initiatives succeed, then the omission of cases where reform efforts did not ultimately succeed presents a real methodological problem. In that sense, although his process-tracing approach offers excellent insight into the cases in question, Renwick (2010) largely fails in his stated aim to “develop comparative generalizations regarding the nature of the reform process.” The most useful contribution of Renwick’s analysis comes from his distinction between elite-imposed reform processes and those involving elite-mass interaction, but this observation is primarily descriptive rather than causal in nature. How well do Renwick’s propositions about the relationship between elites and the mass public help to explain why reform initiatives outside of these cases did not succeed? Because it does not consider cases where reform attempts never succeeded, Renwick’s analysis ultimately offers few insights into the larger role of institutional constraints in determining the outcome of reform efforts. Where Renwick does succeed, however, is in providing rich and compelling accounts of the successful reforms in his cases. Yet there is no shortage of valuable insight into the cases of France, Italy, Japan, and New Zealand in the literature on electoral system reform. What is urgently needed, however, is some understanding of how electoral reform investigations work (or don’t work) almost everywhere else.

In that sense, Renwick tells a far more compelling story with his 2009 article in Government and Opposition, which examines probability of success for future reform initiatives in the UK. After identifying four paths to electoral reform—clearly derived
from the typology in *The Politics of Electoral Reform*—Renwick (2009b) considers their applicability in the UK case. His argument that reform is unlikely to succeed in the UK due to both a lack of public demand for change and an institutional environment characterized by significant barriers is likely to resonate with those familiar with the UK case. The accuracy of his predictions, viewed in light of the failed referendum on reform in 2011, provides far more persuasive evidence of the utility of his typology, and its potential predictive power, than his analysis of the successful reforms in France, Italy, Japan, and New Zealand.

### 2.3.2 Non-Reform in Case Study Collections

Since 2001, at least four highly influential edited volumes have been published that consider electoral system reform in comparative perspective. These include Shugart and Wattenberg’s *Mixed-Member Electoral Systems: The Best Of Both Worlds?* (2003), Colomer’s *Handbook of Electoral System Choice* (2004a), Gallagher and Mitchell’s *The Politics of Electoral Systems* (2005), and André Blais’ *To Keep or to Change First-Past-the-Post?* (2008). Although each compendium adopts a different focus and style, all follow a similar format: a varied collection of (mostly) case study chapters are woven together with a somewhat more theoretical introduction and conclusion that offer tentative generalizations about electoral reform (and other related phenomena, especially in Gallagher and Mitchell).

These volumes merit special mention for two reasons. Apart from Shugart and Wattenberg (2003), who are focused exclusively on mixed systems, these volumes all contain case studies of both successful reforms and cases where reform has yet

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8He does, however, argue that reform in the UK may be possible under different circumstances in the future Renwick (2009b).
2.3. TREATMENT OF NON-REFORM IN THE LITERATURE

To occur, at least at the national level. This includes discussion of electoral reform debates in Canada (Massicotte 2005, 2008), India (Mitra 2004; Heath et al. 2005), the United States (Engstrom 2004; Bowler and Donovan 2008), and the United Kingdom (Dunleavy and Margetts 2004; Mitchell 2005; Blau 2008), for example. This consideration of reform and non-reform side-by-side represents a useful step in the right direction, but, being separate chapters by different authors, each stands on its own, meaning that comparative inferences are largely left to the reader.

That said, these volumes also include some of the most important comparative work on electoral reform in recent years. Colomer’s (2004b) large-N analysis of electoral system changes, for example, identifies several important long-term patterns, including a global trend toward increased inclusivity and proportionality, and away from indirect elections and majority/plurality rules. Of the 19 major, postwar, democratic electoral system changes that he identifies, 14 have resulted in the adoption of more proportional systems while just five have been in the opposite direction (Colomer 2004b, 56-57). At the same time, he finds that while 18 countries abandoned the use of indirect electoral systems (in favour of direct ones), on only two occasions did countries re-introduce indirect elections (Colomer 2004b, 55-56). Colomer’s remarkably wide-ranging analysis also considers the relationship between electoral reform and the number of effective parliamentary parties. Here, his findings reinforce the classic rational choice argument that “multiparty systems are a prior fact and not only subsequent to the adoption of proportional representation” (Colomer 2004b, 63). Finally, Colomer also shows that the age of an electoral system is highly relevant in determining the likelihood of reform, with newer electoral systems being

9In both cases the re-established indirect electoral systems were ultimately replaced with direct systems once again.
especially susceptible to change. Electoral systems become further entrenched with each electoral cycle they endure.

Shugart (2003) similarly emphasizes the importance of the inherent effects of electoral systems, such as instability or disproportionality. Taking this logic another step further, he argues that “extreme” electoral systems are more susceptible to reform. In particular, he identifies two relevant dimensions—the interparty and intraparty dimensions—according to which extremity at either end of the spectrum may be sufficient to predispose an electoral system toward reform. On the intraparty dimension, for instance, Shugart suggests that systems that produce either exceptionally strong candidates (mainly majoritarian systems) or strong parties (predominantly proportional systems) may be inherently vulnerable to reform. At the same time, systems which are extreme on the interparty dimension—that is, systems in which governments tend to be formed by a) a single party that governs with a majority of the seats but only a plurality of the vote (majoritarian), or b) a splintered multiparty coalition (proportional)—are also inherently predisposed toward reform. This, he posits, may help to explain the appeal of mixed electoral systems, which can offer a more “balanced” alternative.

Importantly, Shugart also observes that “triggering” events or “aberrant” factors can help to explain the timing of reforms. This distinction between inherent and contingent factors is picked up by Katz (2005), whose actor-based account acknowledges that while inherent factors such as extreme disproportionality can leave systems vulnerable to reform, the factors that determine the timing of reforms are at least as significant. Thus, he emphasizes the impact of contingent factors such as crisis, scandal, and the motivations of the political actors as relevant factors for initiating
reform.

While the focus in the aforementioned comparative chapters is largely on successful reforms, these volumes also contain some important analysis of unsuccessful reforms and investigations. For instance, in their attempt to synthesize the case studies contained in *To Keep or to Change First-Past-the-Post?* Blais and Shugart (2008) discuss how each of the three theoretical perspectives they identify can be used to explain both reform and non-reform. Firstly, interest-based accounts (see 2.1.1 and 2.1.2) suggest that reform occurs if and when it is in the interest of at least one party in power. But Blais and Shugart remind us that “the party” is not a unitary actor, and different individuals will have different understandings (or even misunderstandings) of their interests. While the rational choice account outlined in 2.1.1 explains why parties may reform the system to their advantage, Blais and Shugart argue that it is also useful to look at situations where we might expect a party that has been historically disadvantaged by the electoral system to pursue change once in government but it does not. Such is the case with the Quebec Liberal Party (PLQ), which they show has fared worse under the SMP system than its rivals yet has never made a serious attempt to implement a more proportional system.\(^\text{10}\) Shugart (2008) argues that this may be because a party that sees itself as the “natural governing party” is less likely to perceive of electoral reform as being in its interests, even where it has been substantially disadvantaged by the existing system. Similarly, it is important

\(^{10}\)In March 2003, the Estates General on the Reform of Democratic Institutions (the Beland Commission) recommended a change in the voting system in favour of increased proportionality, and the PLQ government presented a draft bill proposing a mixed electoral system in December 2004. In June 2005 the National Assembly adopted a motion to appoint a parliamentary committee to study the bill. Its report in April 2006 the committee rejected the top-up system that had been originally proposed in favour of a German-style Mixed-Member Proportional system. In December 2006, the Minister Responsible for the Reform of Democratic Institutions convened a working group to study the MMP proposal, but no further action has since been taken. For further details, see: Barnes and Robertson (2009).
2.3. TREATMENT OF NON-REFORM IN THE LITERATURE

to consider the degree to which the major parties are disadvantaged by the current electoral rules relative to their smaller competitors. They argue that major parties are likely to be less perturbed by extreme or anomalous outcomes than minor parties—even those that disadvantage them—if they see the electoral system as still serving their interests in the long term. In particular, individual MPs are likely to have a strong interest in opposing reform, which could expose those in so-called safe seats to unfamiliar challenges (Blais and Shugart 2008, 192-193). Therefore, we should expect major electoral system change (in a more proportional direction) to occur only when major parties have reason to fear being relegated to minor party status in the near future (Blais and Shugart 2008, 192).

A second, ideational approach, identified by (Blais and Shugart 2008, 185) and described in 2.1.3 claims that “the impetus for electoral reform is driven by the belief that [the existing electoral system] is a ‘bad’ system that needs to be replaced.” There may be many reasons for this belief. In the case of plurality systems, for instance, supporters of small parties often oppose the strong majority governments that SMP tends to produce. Others argue that proportional representation is inherently more “democratic” (see: Blais, Dobrzynska, and Indridi 2005). In any case, while reformers are often passionate about the benefits and pitfalls of particular systems, these anoraks are not representative of the larger voting public. Blais and Shugart (2008, 196) note that while anomalous events such as plurality reversal elections or lopsided majorities can inflame opposition to the existing system, acting as catalysts for reform, the reality is that rallying public opinion against the existing rules is challenging at best, and “it cannot be overstated how unimportant the electoral system is to voters most of the time.” Hence, the probability of a party winning or losing an
election based on its support for (or opposition to) reform is close to zero, even where voters are dissatisfied with the current system (Massicotte 2008). Conversely, they argue that the electoral system can become a political scapegoat when politicians seek to appease public outrage at the general failings of the system, for which it may or may not be responsible (Blais and Shugart 2008). Such cases may help to explain why reform is so frequently proposed but seldom followed-through.

Thirdly, Blais and Shugart emphasize the significance institutional rules. While they argue that institutional approaches (see 2.1.4 and 2.1.5) alone cannot explain the initiation of reform attempts, which necessarily depend on actors, political institutions may facilitate or impede efforts to reform the existing system (Blais and Shugart 2008). In that sense, institutional approaches are particularly well suited to the study of unsuccessful reform, and Blais and Shugart emphasize the importance of institutional veto players and the recent pressure to involve the public in electoral reform decisions in the form of referendums as important explanatory factors in that respect.

But perhaps the most important contribution to the study of reform investigations and attempts in recent years comes from Shugart’s chapter in the same book, in which he updates his aforementioned arguments about inherent and contingent factors in determining electoral reform. Shugart (2008) theorizes that reform is most likely to occur when the previously aggrieved party forms government following an anomalous outcome in the previous election in which it was unfairly disadvantaged. He tests this argument by examining reform investigations in Westminster systems. First, focusing on so-called spurious majorities, in which the party that receives fewer

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11For example, referendums on electoral system reform have been held in New Zealand (1992, 1993, 2011), the United Kingdom (2011), and in the Canadian provinces of British Columbia (2005 and 2009), Ontario (2007), and Prince Edward Island (2005).
2.3. TREATMENT OF NON-REFORM IN THE LITERATURE

votes nevertheless goes on to form a majority government, he finds that in six of the nine cases he examines the next election resulted in an alternation in government (necessary for his hypothesis), and of those three resulted in the initiation of a reform attempt—an exceptionally high proportion given the rarity of reform. Second, examining lopsided majorities—a second type of anomalous outcome that unfairly decimates the opposition—he finds that of the lopsided elections that were followed by an alternation in government, two of the five cases also saw the initiation of a reform process. This leads him to conclude that such aberrant results, to which plurality systems are particularly prone, are especially likely to provoke sufficient dissatisfaction with the existing electoral rules to initiate a possible reform—whether or not it ultimately succeeds depends on other factors.

These observations about the importance of anomalies in vote-to-seat conversion, in turn, lead to a more generalizable theory that poor performance on this dimension, even in the absence of an anomalous election outcome per se, predisposes a country to (at least investigate) reform (Shugart, 2008). Shugart emphasizes the importance of specific inherent conditions for reform in plurality systems, especially the chronic under-representation of the second largest party (relative to the proportion of seats that it would be expected to win under other normal circumstances). Also important are contingent factors, such as the attitudes of disadvantaged parties toward reform and, perhaps more importantly, the achievement of sufficient public support to allow them to pursue a reform agenda. In that sense, Shugart’s contribution represents a rare (if not unique) attempt to articulate a generalizable theory of reform investigation that is not primarily concerned with successful reform outcomes.
2.3.3 Failed Reforms

Several failed reform attempts have also attracted considerable scholarly attention, most notably the failed referendum on the adoption of the Alternative Vote in the UK in 2011. For instance, in his comparison of reform initiatives in the UK and the Canadian province of British Columbia, Flinders (2010) points to the significance of veto points. His argument is undoubtedly a persuasive one, and he clearly shows that the strategic manoeuvring of political elites is a powerful factor for facilitating or hampering change. After all, if it were not for the daunting double supermajority requirement, the 2005 BC referendum on the adoption of the single transferable vote would have passed. Had the 1993 New Zealand referendum been held to the same standard, it too would have failed. In their content analysis comparison of the reform referendums in BC (2005, 2009), Ontario (2007), and, to a lesser extent, New Zealand (1992, 1993), LeDuc et al. (2008) look to the influence of media elites rather than politicians. They attribute the lower level of support for reform in Ontario and BC (2009) to anti-reform media bias and/or a general lack of coverage.

In his analysis of the four failed referendums on electoral reform in Canada, LeDuc (2009) also documents the significant challenges to change posed by an apparent trend toward increased citizen involvement, especially in the form of citizens’ assemblies and referendums. As reform initiatives move from a theoretical debate among elites to a political movement they may struggle to inspire voters, especially where there is no pre-existing climate of dissatisfaction with the electoral system.

Finally, Cross (2005) observes that one of the primary reasons why reform was initiated in several Canadian provinces in the 2000s related to the desire of governments to be seen as pro-reform, even if they were not ideologically committed to reform
2.4. SITUATING THE THEORETICAL CONTRIBUTIONS OF THE DISSERTATION

and even where there was little apparent public demand for electoral system change. In that sense, although the Canadian reforms he describes failed, they may in fact have served their (true?) purpose by allowing the parties that initiated them to paint themselves as democratic reformers.

2.4 Situating the Theoretical Contributions of the Dissertation

The hypotheses tested in this analysis are perhaps best understood as response to Colomer’s (2004b) wide-ranging, large-N exploration of patterns among successful electoral reforms, described in 2.3.2. Like Colomer’s analysis, they are not driven by a single theoretical perspective, but reflect debates and assumptions common to several approaches. This, in turn, reflects the fact that the theoretical approaches described in Section 2.1 are not as incompatible as they are sometimes made out to be.

To be sure, the models discussed in Chapter 5 are not exhaustive. They do not test all of the causal explanations for reform that have been advanced by the literature summarized here. For example, they do not account for the influence of norm entrepreneurs, exogenous shocks, or long-term trends in democratic satisfaction, although, in the case of the latter two, the data could be adapted to consider these hypotheses in the future. But in addition to the methodological contribution described in 2.2, and the related conceptual contribution described in the next section, the subsequent analysis also makes three important theoretical contributions.

First, it offers the most comprehensive test yet of one of the most widely held assumptions of the advocacy literature: the claim that disproportionality is inherently unfair and therefore leaves majoritarian systems more vulnerable to reform.
While Colomer (2004b) finds evidence of a global trend toward increased inclusivity and proportionality, his analysis does not consider reform investigations or even attempts. But if this trend is truly global, we might also expect to see the same pattern reflected in these antecedent steps, since they are a necessary precursor to successful reform. Thus, the functionalist argument, summarized in $H_1$, assumes that majoritarian systems should be at a generally greater risk of investigating reform than better-performing mixed or proportional systems. Furthermore, it also follows that those systems that produce the most disproportional results should be also at the greatest risk of investigating reform at a given time, since these systems are the worst performers. Finally, if dissatisfaction with unfairness is the primary driver of reform, it also follows that reform investigations are most likely to propose a more proportional alternative wherever possible ($H_6$). If not, this suggests that the functionalist explanation is incomplete.

Second, this project weighs in on the chicken-and-egg debate in the rational choice literature regarding the relationship between multipartism and PR. $H_2$ considers the causal argument that multipartism precipitates reform in majoritarian systems. It therefore also builds on Colomer’s (2004b) findings that systems with a higher degree of party system fragmentation tend to be more vulnerable to reform. If this pattern is evident among successful reforms, $H_2$ suggests the same trend should also be evident among investigations and attempts, particularly because reform proposals and investigations are generally easy to initiate.

But $H_2$ is not restricted to majoritarian systems, and the formulation of $H_2$ also tests a second functionalist argument about the role of party fragmentation in PR
systems. In particular, Shugart (2001) suggests that a “hyper-representative” proportional system that results in a fragmented party system may be seen to be robbing voters of the chance to select from competing possible government alternatives, since the actual composition of the government will be decided in post-election bargaining. Hermens (1941) presents a similar though somewhat more alarmist view based on his observations of Weimar Germany.) It therefore follows that electoral systems that “fail” on this count are also likely to be more vulnerable to attempts to reform them to better approximate the ideal, although in this case the ideal is closer to a mixed system than the more proportional vision of PR presented in many ideational accounts.

Third, despite its quantitative approach, the project is well suited to test a key claim from the historical institutionalist literature regarding the entrenchment of electoral rules. This path-dependent argument claims that institutional rules become increasingly resilient to change over time. As a result, not only do these institutions become more difficult to change, but actors who have adapted to thrive this a new institutional context also come to accept it. (Note the clear echo of the rational choice explanation here.) Thus, $H_4$ suggests that if that younger electoral systems are more vulnerable to successful reform than older systems (as Colomer (2004b) finds), it follows that younger systems should also experience a higher number of reform investigations and proposals.

The focus on reform proposals and investigations represents a particular strength of this project because it allows for a much clearer, more direct test of these theoretical claims described above than any analysis that remains restricted to successful reforms can provide. Proposals and investigations are always necessary precursors
to successful (democratic) reform. Thus, while other theoretical arguments (e.g. the role of institutional constraints, veto players, etc.) may help explain why proposals or investigations fail to advance, we should expect not expect these explanations to affect the initial proposal or investigation of reform to the same degree. In that sense, reform investigations are a better, more direct indicator of the causal relationships and processes identified by these theoretical explanations.

2.5 Conclusion

While the bulk of the existing literature focuses on the effects of electoral laws, this chapter reviewed accounts that deal with electoral system as dependent variables. After identifying several distinct theoretical approaches to the study of electoral system change, this chapter has argued that, at present, most studies of electoral reform suffer from a common weakness related to their near-exclusive focus on successful reforms. This unhealthy obsession with a very small and unrepresentative sample of cases represents a serious challenge to the study of electoral reform. The remainder of this dissertation is devoted to addressing these shortcomings by examining the conditions that lead to reform investigations regardless of their ultimate outcome. It is worth noting here that the pathologies of the electoral reform literature are, to some degree, characteristic of the literature on institutional reform more generally. This is unfortunate, however, as all of the theoretical approaches identified in this chapter are capable of offering explanatory insight into the reform process. As such, this project also aims to make a contribution to the larger institutional reform literature by drawing attention to these often overlooked categories of non-reform.
Chapter 3

Recasting Reform: A Conceptual Framework

The introductory chapter posed a deceptively simple question: if we know that successful electoral reform is rare, is it rare because attempts to change the electoral system are rare, or because such attempts rarely succeed? Because the current literature does not adequately consider unsuccessful reforms, it does not offer a satisfactory answer. By considering reform investigations and proposals, this dissertation represents an important step toward answering this question.

The central research question of this dissertation asks: how and when do governments investigate electoral system reform? To answer this question, the dissertation looks to the larger literature on successful electoral system change. Do reform investigations follow the same patterns as successful reforms? If not, what differences exist, and what might account for these differences? If so, what can this tell us about the reform process?

As noted in the previous chapter, relatively little has been written on the subject of reform investigations and proposals. Hence, this project is also interested in providing important descriptive details about reform initiatives and identifying patterns in the data. What do government-sponsored reform initiatives look like? What form(s) do
they take? Who participates? And has the nature of reform investigations changed over time? Are there any patterns or trends in the kinds of alternative systems that reform initiatives tend to suggest? Answering these questions will provide a better picture of a vital yet under-explored part of the reform process.

The remainder of this chapter proceeds as follows. The next section outlines the way in which the dependent variable (the proposal or investigation of electoral system reform) has been defined for the purposes of this study. Building on this, Section 3.2 introduces a new conceptual framework that distinguishes between several different types of non-reform. This framework forms the basis of the proceeding analyses.

3.1 Dependent Variable: Defining Major Electoral System Reform

Electoral law comprises a great many varied and complex elements, encompassing everything from voting rights to the administration of elections. Some elements of electoral law, such as campaign and party finance, have developed their own distinctive literatures (for example, see: Boatright 2011; Mutch 2014; Norris and Abel van Es 2016). Other elements, including corruption, electoral violence, and the repression of political parties/movements, are often emphasized in a largely distinct literature on democratization. Regular modification of electoral rules occurs with relative frequency; for instance, such things as district boundaries and assembly size must be regularly updated to compensate for population and demographic changes. While reforms in all of these areas, and many others\footnote{For a good overview of many aspects of minor electoral reforms, see Lijphart and Grofman (1984).}, fall under the larger umbrella of electoral reform, this project is exclusively concerned with (proposed) changes to a single but critically important element of electoral law: the electoral system.
3.1. DEFINING MAJOR ELECTORAL SYSTEM REFORM

Although this limits the scope of the dependent variable significantly, even changes to the electoral system are not uncommon. In his seminal work on the consequences of electoral systems, Rae (1971) identifies three components of electoral systems: the electoral formula, district magnitude, and ballot structure. Modifications to any of these elements can have serious consequences for the way in which votes are translated into seats. For example, Chile’s controversial binomial system (1989-2015) was, from a strictly technical point of view, a form of proportional representation—but with smallest possible district magnitude of two, its effect was not proportional at all. As this example illustrates, modification along even one of Rae’s elements is sufficient to radically alter an electoral system. Data from the wide-ranging Electoral System Change in Europe Since 1945 project (Pilet et al., 2016) has shown that countries make adjustments to these three components quite regularly, and for a variety of reasons. Most of these amendments appear to fall under the categories of so-called minor reform or technical reform described by Leyenaar and Hazan (2011), and while they make a strong case that these changes are not substantively different from so-called major reforms, most of the academic literature cited in Chapter 2 adopts a much narrower definition of electoral system reform.

The present literature on electoral system reform is almost exclusively concerned with what are deemed major reforms—that is, significant changes to the way in which votes are counted and translated into legislative representation. Following this common trend in the literature, the dependent variable in this project is defined as the (proposed) wholesale replacement of one electoral system with another. A list of electoral systems and families is provided in Table 2.1.\footnote{Note, however, that the sample used in this analysis contains no representatives from the Other category, which systems are more rarely used.}
this analysis, movement from one of the categories in the right column of Table 2.1 to another—even if the new system remains in the same family—is considered to be major reform. Other modifications, even those that may have dramatic consequences, are not.

The scope of the dependent variable as defined here is also restricted to the system used to elect members to the national legislature. It therefore does not consider reform initiatives that occurred at the sub- or supra-national levels, nor does it consider upper house reforms, nor reforms to the method used to (s)elect a separate head of state or government. Of course, as outlined in Chapter 2.2.1, there are compelling reasons to investigate electoral reforms at these levels, which often mirror their national counterparts in many important respects. However, no study can do everything, and the scope of this project is necessarily limited by constraints of feasibility and therefore, lamentably, must effectively truncate the dependent variable.

3.2 Conceptual Framework

3.2.1 Conceptualizing Non-Reform

The disproportionate focus on successful reforms that exists in the current literature on electoral system change is deeply problematic. While some unsuccessful cases, such as the UK, have received considerable attention, most unsuccessful reforms continue to be largely overlooked. Yet merely encouraging researchers to adjust our collective focus in order to bring unsuccessfully attempted reforms into view is insufficient. If the exclusive investigation of successful reforms is methodologically problematic, so, too, is a conceptualization of the variable of electoral reform as a pair of binary categories.
For example, the division of cases into groupings of “successful” and “unsuccessfully attempted” reforms effectively continues to select on the dependent variable, as these do not represent the full range of cases. By considering only cases in which reform was attempted (whether successfully or not), this pairing excludes a great many cases where reform was never attempted or even proposed. This makes such a binary ill suited for studies seeking to explain how and why electoral reform reaches the political agenda. Alternate formulations of this binary are equally problematic. For instance, describing reform outcomes as merely “successful” or “unsuccessful” creates a pair of highly lopsided categories. While it may make sense to combine cases of successful reform under a single umbrella, it is more difficult to justify the jumbled category of “unsuccessful” reforms. It seems misleading, for example, to construct a category in which near-successful referendum outcomes are lumped alongside cases where electoral reform has never been seriously investigated at all.

[Rahat and Hazan (2011)] acknowledge this problem, and urge scholars to consider cases of non-reform or stasis, as well. In a significant departure, they urge scholars to consider how existing theories of electoral reform can be extended to incorporate non-reforms. Specifically, they suggest a research framework that focuses on the barriers to reform in order to better understand both the success and the failure of electoral initiatives, as well as the long-term stability of electoral systems. Despite their commendable appeal for investigation of a broader range of reform outcomes, several of the barriers identified remain vague and underdeveloped. While some of the institutional variables that the authors note clearly lend themselves to comparative analysis (for example, procedural barriers or veto points), other barriers such as “social structure” and “political tradition” remain poorly specified and therefore
difficult to measure, especially in a comparative context. Despite these shortcomings, however, the authors’ most valuable contribution is the reminder that they offer of the importance of considering a full range of outcomes, and their demonstration of the way in which a variety of existing theories can be applied in the explanation of these outcomes (some more easily than others, perhaps). Yet the range of outcomes identified in Rahat and Hazan (2011) is still too narrow. What the study of electoral reform urgently requires is a process-based approach to the study of electoral reform: one that can distinguish between different phases or degrees of reform.

In that sense, this conceptual framework goes another step further. Instead of a binary or even ternary variable, it proposes a reconceptualization of electoral reform as a process with a series of distinct outcomes. After all, electoral reform often occurs in incremental stages as battles are won and lost in a protracted struggle between political parties, elites, and shifting electoral coalitions. By conceptualizing reform as a variable with multiple categories it is possible to design more nuanced types or groupings that better capture the nature of the process itself.

Table 3.1 illustrates the proposed typology. By unpacking the bloated binary group of “Reform does not occur” it is possible to distinguish between at least three different types of cases where electoral reform did not occur, representing a more accurate picture of electoral reform as a process. The first group of interest, “attempted” reforms, includes those reform initiatives that were formally attempted (by government) but failed to receive the support necessary to be implemented. This category would include cases in which electoral reform was put to a binding referendum and failed, including Ireland (both 1959 and 1968) and the United Kingdom (2011), among others. It would also include cases where electoral reform was put to a vote in
the national legislature but was not enacted into law, including the United Kingdom (1918 and 1931), where reform bills in favour of adopting the Alternative Vote passed in the House of Commons but were later abandoned (see: [Hart 1992]).

The second unsuccessful category of “proposed/investigated” reform initiatives includes those cases in which reform was proposed by at least one party in government (e.g. during an election campaign) or formally investigated (e.g. by parliamentary committee). This category would include cases such as Mauritius (2002) following the release of the Sachs Report, which recommended the adoption of a mixed-member proportional electoral system, but which was never acted upon. It would also include cases in which consultative, non-binding referendums were held, such as the 2011 plebiscite in New Zealand on whether or not to keep the mixed system that was adopted in 1993.

Of course, as in the latter example, reform investigations do not always recommend change. While the actual recommendations of reform investigations are discussed in more detail in Chapter 6, it is worth noting here that investigations upholding the status quo are included in subsequent analyses. The reason for this, explained in more detail below, relates to the fact that these recommendations were rarely a foregone conclusion. Hence, each investigation represents a moment where electoral reform was seriously considered by government and appeared to be possible.
### Table 3.1: Defining Reform Proposals and Investigations

<table>
<thead>
<tr>
<th>Binary</th>
<th>Categorical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform Does Not Occur</td>
<td>Stasis</td>
<td>No explicit commitment to change or investigate the possibility of changing the electoral system is made by any governing party</td>
</tr>
<tr>
<td>Proposed/Investigated</td>
<td>Proposal: Reform is explicitly proposed by at least one governing party while in office, OR immediately prior to forming government (e.g. during an election campaign)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Committee: A parliamentary committee investigates reform</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent body: An independent commission of experts AND/OR citizens is selected by government to investigate reform</td>
<td></td>
</tr>
<tr>
<td>Attempted</td>
<td>Legislation: A bill to enact reform is put forward by government, but fails due to insufficient legislative support, OR is passed by one house of the legislature but later vetoed by another actor (e.g. upper house, president, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Referendum: A referendum or plebiscite is held, but votes fail to pass the necessary threshold of support, OR the referendum passes but no further action is taken to implement reform</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reform Occurs</th>
<th>Successful Reform</th>
<th>Reform occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unilateral Reform</td>
<td>Reform is imposed by an external actor (e.g. occupying military power), OR by an undemocratic internal actor</td>
</tr>
</tbody>
</table>

While several high-profile attempted reforms have received significant attention in
the literature, there is remarkably little comparative work on proposals and investigations of electoral system reform. Although several celebrated works have explored the apparent trend toward increased citizen participation in the reform process (see: Thompson 2008; Warren and Pearse 2008; Renwick 2010; LeDuc 2011), few authors have taken a broader look that compares citizens’ assemblies with royal commissions on electoral reform, for example—and even less has been written that deals specifically with reform proposals and promises. As a result, even though reform proposals and investigations occur far more frequently than successful reform—a trend elaborated in Chapter 4—we know surprisingly little about the conditions under which electoral reform is most likely to be proposed. Just as importantly, we do not fully understand the circumstances that influence which such proposals are likely to advance. In this regard, the conceptual framework advanced here represents a useful step forward.

Finally, the “not proposed/investigated” category includes the great majority of cases in which serious investigation of electoral reform has not occurred. This category remains the most ill-defined, as it groups cases where there has been considerable public debate on the issue of reform with those where debate has been limited or non-existent. The common denominator, however, is that irrespective of public debate and private/not-for-profit lobbying efforts, no formal, government-sponsored investigation into the possibility of electoral system reform was initiated during the period in question.

As Table 3.1 illustrates, by reconceptualizing the variable of electoral reform in a more nuanced way, it is possible for researchers to consider the entire population of cases—not just successful reforms, but also a variety of distinct unsuccessful outcomes. Accurately categorizing dozens or hundreds of reform episodes (or periods
of stasis) for each case requires detailed case-specific knowledge, and a great deal more background research than simply limiting one’s attention exclusively to those very few cases of successful contemporary reform. Yet despite the difficulties associated with this approach, the value of the typology outlined in Table 3.1 lies in the fact that it is theoretically possible to place every case—that is, every contemporary, historical, national and sub-national reform or non-reform—in one of the categories above, making this a useful approach to the variable. The fact that the categories are exhaustive and non-overlapping is key to the use of these groups in the survival analysis described in Chapter 4 and presented in Chapter 5.

In addition to its ability to accommodate the entire population of cases, this approach also allows researchers to distinguish between different stages of attempted electoral reform. The development of the “attempted” and “proposed/investigated” categories is especially useful, as it allows for clear differentiation between degrees of attempted reform, specifically by distinguishing cases where electoral reform was formally attempted from those where reform was merely investigated or discussed but where no action was taken. After all, holding a binding referendum on reform suggests a degree of commitment to the reform process that is distinct from the proposal to eventually hold one at an unspecified future date.

3.2.2 (Non-)Reform as Government Action

The categories of the conceptual framework depicted in Table 3.1 are largely defined based on actions taken by government. This reflects a common theme in the literature on democratic reform: those in power are almost always responsible for choosing the (new) electoral system (see, for example: Farrell[2001] 176-181; Pilon[2002] 6-13).
This point is central to the rational choice account of the origins of proportional representation in Europe, described in Chapter 2.1.1. It is also the reason that this project defines “electoral reform initiatives” by focusing on government-led reform projects rather than the plethora of non-governmental reform movements that exist in virtually every case.\(^3\)

Government-led reform initiatives may take several different forms, as Table 3.1 illustrates. “Government” in this context may refer to the legislative, executive, and bureaucratic branches.\(^4\) As Chapter 4.2.2 explains, all of the cases represented in the sample are parliamentary democracies,\(^5\) which are characterized by a fusion of the executive and the legislature. Hence, most government-sponsored reform initiatives observed in this sample originate with the executive, which is also drawn from and accountable to the legislature. In this case, reform proposals may take the form of campaign promises, for example, or occur during coalition negotiations, throne speeches, party conventions, etc. Examples of reform investigations initiated by the executive may include plebiscites or the designation of special cabinet committees, independent investigators, etc. Of course, that is not to say that the reform proposals and investigations cannot originate in the legislature—in the case of reforms proposed by parliamentary committees, for instance, these bodies may or may not have been specifically tasked with investigating reform by the executive, and may or may not be dominated by members from the governing party or parties. Historically speaking,

\(^3\)The justification for this choice is twofold: first, the sheer volume of independently led reform initiatives of varying degrees of organization and influence makes their study, especially in a large-N comparative project such as this, unwieldy; second, the mere existence of non-governmental actors pushing for reform does not guarantee that government will pursue any action in this regard, no matter how powerful or persuasive their message.

\(^4\)The scope of the study originally included reform proposals and attempts originating from the judiciary, as well, but no examples of this type occur in the data.

\(^5\)The sample does include semi-presidential systems, but is limited to those described as primarily parliamentary in Bormann and Golder (2013) and Cheibub et al. (2010).
it has not been unusual for major electoral reform to be investigated by an all-party committee or speaker’s conference, for example.

It is worth noting, however, that another potential legislative source of reform proposals is specifically excluded from the scope of this study: private members’ bills. There are theoretical reasons to be suspicious of the likelihood that a private members’ bill on a major issue such as electoral reform could be passed into law. As the rational choice self-interest explanation suggests, in the case of such an important institutional change we should expect governments to be exceptionally hesitant to lend their support to a major transformational proposal that they have not designed. This means that private members’ bills on the subject are more likely to reflect an outspoken MP’s individual enthusiasm for reform or present a critique of government policy than represent a moment where meaningful institutional reform was possible.

The well-studied case of New Zealand provides a good illustration of the phenomenon. Despite a flurry of private members’ bills on the issue of electoral reform in the years just prior to the appointment of the Royal Commission, as Christmas (2010, 65-69) observes in his detailed account of these bills, many were intended as thinly veiled attacks on government rather than genuine policy proposals, few made it past their first reading, and none can be said to have generated meaningful or sustained debate. Older private members’ bills on electoral system change (dating as far back as the 1920s) saw even less debate, sometimes failing to receive even an introductory statement from their own movers. This is because, in New Zealand, “government bills very rarely fail to become law even when the whips are theoretically absent. Conversely, private members [sic] bills almost always fail without government support” Lindsey (2007, 5). In this respect, New Zealand is not alone. Bowler’s
analysis of the UK finds that only 10 percent of private members’ bills there succeed, perhaps because the institutional context is stacked against them by making private members’ bills “so easy to oppose” (Marsh and Marsh 2002, 110). Those private members’ bills that do succeed tend to be minor, technical, pre-approved or written by government and almost never address controversial issues such as the replacement of the electoral system (Marsh and Marsh 2002). Thus, as Marsh and Marsh (2002, 110) argue in their seminal study of private members’ bills, government remains “the key actor in the process.”

For the purposes of this study, however, “government” may also refer to the bureaucracy, as the body of non-elected administrators and policymakers who act on behalf of the state. Because of their involvement in the area of election administration, bureaucrats are occasionally responsible for proposing or investigating major electoral system reforms. These cases represent about 8.5% of the investigations in the data, and in two thirds of these cases, the investigation were explicitly requested by government. Reform initiatives initiating in the bureaucracy or arm’s length bodies including law commissions, even those undertaken without the explicit foreknowledge of the cabinet, nevertheless represent state-sponsored actions that have the potential to develop into successful reforms and therefore merit serious examination. Unlike private members’ bills, such investigations rarely reflect an individual’s agenda and are seldom politically motivated. Instead, they typically reflect years of study and are often explicitly framed as policy suggestions for lawmakers. Such investigations also tend to receive extensive media coverage, prompting a much more serious government response. Hence, these types of proposals/investigations are included in the scope of

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6Known as “handout bills” these are pre-written bills covering mainly technical issues that have been pre-written by the governing party and distributed to MPs.
Finally, this project also considers the recommendations of expert and citizen groups or individuals that have been appointed by the executive to issue recommendations on electoral reform. There are two situations in which such bodies are relevant to this study: in the first case, the body is specifically tasked with investigating the issue of major electoral system reform; in the second, although the body is not specifically tasked with investigating reform, its mandate is sufficiently broad that major electoral system reform is included in its final recommendations. A third type of case, where electoral reform is neither explicitly mentioned in a body’s mandate nor its recommendations, although the scope of its purview appears sufficiently broad to include the possibility that it may have (but did not) consider reform, is not considered. This is due to the fact that there are far too many such cases to examine here, and, more importantly, it seems highly unlikely that a serious electoral reform initiative might emerge from such a case.

In that sense, this conceptualization of electoral reform proposals/investigations is predominantly interested in identifying moments where successful reform emerged on the political agenda and appeared to be a possible future outcome, however distant. This possible trajectory is clearest where actions are initiated by the executive, but because proposals and investigations originating from the other sources identified above also claim to speak on behalf of the state, they often compel a response from the executive in a way that private proposals do not. In the case of independent private and citizen-led reform movements, these initiatives are thus reflected in this measure only once they become sufficiently powerful to compel a government to respond with a promise or policy. Following Dahl’s logic, if a private reform initiative
is not sufficiently persuasive to elicit even a vague promise from government to consider investigating reform, how likely can it be that major electoral system reform will follow?

Qualitative approaches to electoral system change, which tend to be predominately concerned with successful reforms, frequently conceptualize successful reforms as “critical junctures,” or choices that set a system along a new path. Framing the categories of the dependent variable in terms of government action effectively treats each reform initiative as a potential critical juncture, to borrow some conceptual vocabulary from qualitative methodology (on the study of critical junctures, see: Capoccia and Kelemen 2007). This makes the conceptual framework outlined in this section of interest to qualitative and quantitative approaches, alike. While the vast majority of reform initiatives do not succeed, we may think of reform investigations that were not pursued or unsuccessfully attempted reforms as “failed critical junctures”—that is, moments in time where it appeared as though change was possible even though it did not ultimately occur. Reform proposals, investigations, and attempts—categories defined in Table 3.1—therefore represent moments at which a government signalled its willingness to consider change. Whether change ultimately occurred is not necessarily of interest at this stage.

Similarly, whether such change was ever truly possible, and the degree of sincerity behind each proposal, may be subject to debate. It is not difficult to imagine, for instance, a scenario in which a government with no intention of actually changing the system might agree to investigate reform merely to attract voters or appease a minor coalition partner or potential political rivals. This appears to be true of several successive Liberal governments in Canada in the 1920s and 30s, for example. While
Prime Minister William Lyon Mackenzie King made a variety of promises to woo voters over a span of at least two decades, even going so far as to set-up an all-party parliamentary committee on the subject of electoral reform in 1936, the committee was stacked with known anti-reformers and none of King’s promises ever came close to being realized (Phillips 1976, 171-229; Pilon 2006, 146-152; Pilon 2013, 146-149). Paradoxically, then, it could be argued that governments may sometimes propose or investigate reform precisely to keep it off the agenda in the future.

This raises the question of whether it is fair or reasonable to include such “insincere” proposals in the same category as other “genuine” proposals, which presumably have a better chance of success. But distinguishing the true motivations of governments and differentiating between “sincere” and “insincere” proposals are difficult tasks. It is certainly possible that, once proposed, an apparently disingenuous reform initiative may end up gaining considerable momentum—as in the well-known case of New Zealand Prime Minister David Lange, whose now (in)famous misreading of his notes during the 1987 election campaign led him to inadvertently promise a referendum on reform in the next election (Nagel 1994; Ingle 1995; Malone 2009). As David Cameron’s Conservatives recently learned during the Brexit referendum in the UK, however, reform initiatives may take on a life of their own, especially in an era characterized by increased citizen and expert participation in constitutional reform investigations and attempts. Having ceded (at least partial) control of the reform process, governments cannot always be certain of achieving a particular outcome in such cases. This undoubtedly raises the stakes, making insincere investigations potentially risky propositions, especially given the repercussions associated with even minor modifications to the electoral system.
Chapter 4

Hypotheses, Data, and Methodology

This chapter provides a blueprint of the nuts and bolts of the study. It begins by clearly stating the central hypotheses of the project and the way in which these have been operationalized and tested. Section 4.2 then goes on to outline case selection procedures, while 4.3 discusses dataset construction, including relevant definitions, data collection, and coding procedures used to construct an original dataset to test the hypotheses. The final section discusses the appropriateness of the survival analysis statistical technique used to test the hypotheses in the next chapter, and outlines several important model specifications and considerations.

4.1 Hypotheses

In seeking to explain how and when countries investigate reform, this dissertation aims to extend the larger literature on successful reforms by exploring its implications for reform proposals. It challenges several well known claims that recur frequently in the literature on successful reforms. Below, these claims are articulated as hypotheses and divided into two broad clusters. The first cluster of hypotheses relate to the conditions in which reform initiatives are most likely to occur. In particular, this
group probes the relationship between the (dis)proportionality of an electoral system and the likelihood that it will consider reform. The second, more loosely related cluster of hypotheses considers the effects of institutional consolidation and path dependency on the vulnerability of electoral systems to change. Note that most of the hypotheses below are intended to be tested using survival analysis statistical techniques, and are framed accordingly.

4.1.1 Functionalist Explanations for Reform

In his analysis of successful, major electoral system changes stretching back to the nineteenth century, Colomer (2004b) finds compelling evidence that majority electoral systems, once the most common form of democratic rule, have gradually been supplanted by more proportional alternatives. His evidence, summarized in Chapter 2.3.2, strongly suggests that we should expect this trend to continue well into the foreseeable future, as majoritarian systems continue to reform their electoral rules in favour of increased proportionality, both in the form of traditional proportional systems and hybrid mixed electoral systems, which have proliferated in the postwar period (Colomer 2004b, 53-62). Colomer is not alone in advancing this argument. Different variations of this functionalist view propose that majoritarian systems are indeed inferior and out-dated; hence, we should expect to see evidence of attempts to modify them in a way that would bring them closer to the more proportional ideal.

This functionalist, ideational argument leads to the first collection of hypotheses, which suggest that the trend toward proportionality observed by Colomer and others applies to reform proposals and investigations, as well. To begin with, this includes the commonly held (if largely anecdotal) assumption that majoritarian systems are
inherently more vulnerable to reform than proportional or mixed systems due to their tendency to produce unfair results. If this is the case, we should expect to find that majoritarian systems engage in far more investigation of reform than more proportional (i.e. better-functioning) systems, as well. This is because a) proposals and/or investigations are always necessary precursors to successful (democratic) reform, and b) proposals and investigations are not hindered to the same degree by the many, well-documented constraints that make successful reform so rare, which makes their study a more accurate reflection of dissatisfaction with an ill-functioning system than an analysis that is exclusively concerned with successful change.

\[ H_1 \text{ Disproportional systems are at a greater risk of investigating reform than more proportional systems.} \]

Specifically, \( H_1 \) predicts that some types of electoral systems are inherently more vulnerable to investigating reform.

\[ H_{1a} \text{ Majoritarian systems are at a greater risk of investigating reform than mixed or proportional systems.} \]

If dissatisfaction with the disproportional effects of majoritarian systems an important driver of reform, as some ideational accounts claim, it therefore follows that those systems that produce the most disproportional results should also be at the greatest risk of investigating reform.

\[ H_{1b} \text{ Those systems that produce the most disproportional results are at the greatest risk of investigating reform at a given time.} \]
In particular, $H_{1b}$ suggests that extreme disproportionality is likely to greatly increase a system’s risk of investigating reform, with aberrant events such as extremely disproportional election outcomes potentially acting as catalyzing events. Extreme disproportional election outcomes are often cited as catalysts for the successful reforms described in the case study literature. Lijphart (1985), for example, suggests that extreme disproportional results, including plurality reversal elections, are responsible for fomenting dissatisfaction with the electoral system in several Westminster-style systems in the 1970s and early 1980s. The back-to-back plurality reversal elections of 1978 and 1981 are regularly cited as having sparked the reform movement that led to the adoption of a mixed-member proportional system in New Zealand (but see: Renwick 2009a).

If disproportionality is a main driver of reform, it also follows that that reform proposals are also generally more likely to propose an alternative that is more proportional than the current system, whenever possible.

$H_6$. Reform investigations are most likely to propose a more proportional alternative.

This implies several corollary hypotheses, articulated below.

$H_{6a}$. Majoritarian systems are likely to propose mixed or fully proportional alternatives.

$H_{6b}$. Mixed systems are likely to propose other (equally proportional) mixed systems or fully proportional alternative systems.

$H_{6c}$. Proportional systems are likely to propose highly proportional mixed systems or other types of proportional alternatives, or to recommend against change.
4.1. HYPOTHESES

Like the functionalist argument, the rational choice literature summarized in Chapter 2.1.1 suggests that majoritarian systems might be more likely to investigate reform. This literature, however, suggests that not all majoritarian systems are likely to be equally vulnerable. According to this literature, the most relevant factor is not the disproportionality of a system but rather the fragmentation of its party system. Of course, as Duverger’s (1954) law suggests, party systems are clearly influenced by the electoral system. But Grumm (1958) and others argue that the causal relationship runs in the opposite direction, claiming that “multi-party systems are a fact prior to and not only subsequent to the adoption of assembly rules with proportional representation” (Colomer, 2004b, 63).

Because it considers reform investigations and not just successful outcomes, this project is uniquely situated to speak to this debate. Finding that multiparty majoritarian systems are more likely to investigate reform than either proportional systems or two-party majoritarian systems, for instance, would add further support to the rational choice position that multipartism precedes the adoption of PR, as this would suggest that these systems are at an inherently higher risk of taking the first step toward reform. Thus, \(H_2\) posits that majoritarian systems with fragmented party systems are likely to be especially vulnerable to reform (relative to other majoritarian systems).

\[H_2\text{. Within the same electoral system family, cases with a more fragmented party system are at a greater risk of investigating reform.}\]

The framing of \(H_2\) applies to other electoral system families, as well. Specifically, \(H_2\) also reflects a second functionalist argument about the role of party fragmentation
in PR systems. Shugart (2001) finds that “hyper-representative” (i.e. highly fragmented) proportional systems may be seen to be robbing voters of the chance to select from competing alternative governments, since the actual composition of the government is decided in post-election bargaining. Hermens’ (1941) more cynical account of Weimar Germany goes slightly further, arguing that fragmented PR systems are inherently unstable and therefore vulnerable to reform (if not collapse). It therefore follows that electoral systems that “fail” on this count are also likely to be more vulnerable to attempts to reform them to better approximate the ideal. Thus, $H_2$ expects all systems with a high degree of party system fragmentation (relative to other systems from the same family) to be at an increased risk of investigating reform.

4.1.2 Institutional Consolidation and Path Dependency

The second cluster of hypotheses explores the importance of institutional consolidation and path dependency on a system’s likelihood of reform. This includes the widely held assumption that developing democracies are more likely to propose/investigate reform than developed countries.

$H_3$ Developing states are likely to be at a higher risk of proposing/investigating reform than developed states at a given time.

Although some of the earliest comparative studies on electoral reform urged scholars to explore variations between the West and postcolonial states, appeals by Rokkan (1970) and others appear to have been largely unheeded, and these literatures have evolved into largely separate traditions. In general, studies of electoral systems in
developing countries tend to be interested in processes of democratization (for example: Lijphart 1992; Lijphart and Waisman 1996; Crisp and Levine 1998; Birch, Millard, Popescu, and Williams 2002), while investigators who look at reform in developed countries tend to be wary of developing democracies (compare with: Katz 2005; Blais and Shugart 2008; Renwick 2010). Comparative analyses rarely include both categories. The most common justification for omitting developing cases cites the purported fragility of these democracies, where electoral institutions are presumably more flexible, even unstable, than in established democracies (see works cited above). Yet it is certainly possible for democratic traditions and institutions to be firmly entrenched in developing counties, as in India, for example. Thus, the premise that democratic institutions in developing states are inherently more vulnerable to manipulation is subject to debate. At the very least, it merits further probing.

The inclusion of this hypothesis in the study means that the sample of cases used for the subsequent analyses includes developing countries. The criteria for their inclusion are discussed below in 4.2.3, although it is worth noting here that countries with extremely unstable or ineffectual political institutions have not been included. Because the concept of development is itself contested, several different definitions have been used to operationalize it, each of which is also discussed in further detail below. This discussion is also continued in 4.3.1, which deals with the way in which time is conceptualized based on a set of minimal democratic criteria rather than calendar year.

A more nuanced version of this hypothesis suggests that institutional consolidation rather than “development” explains the observed stability among advanced (established) democracies. This path-dependent argument posits that institutional rules
become increasingly entrenched over time. As a result, not only do these institutions become more difficult to change, but actors who have adapted to thrive in this new institutional context also come to accept it.

\[ H_4 \] Very young electoral systems are at the highest risk of proposing/investigating reform.

\[ H_4 \] suggests that if younger electoral systems are more vulnerable to successful reform than older systems (as Colomer (2004b) finds), it follows that younger systems should also experience a higher number of reform investigations and proposals. Testing this hypothesis alongside also serves as a control for \( H_3 \), since electoral institutions in developing countries are likely to be newer, generally speaking, than those in established democracies by definition. Testing \( H_3 \) alongside \( H_4 \) allows this project to distinguish between these factors in causal terms.

A logical extension of \( H_4 \) suggests that electoral systems that have been reformed in the past, especially recently, are much more likely to be reformed again. Of course, this means that newer systems (i.e. those that have recently experienced successful reform) are the most likely to reform again. This path-dependent argument is reminiscent of similar explanations advanced in the case study literature on successful reforms. \( H_5 \) posits that the same pattern is likely to be true of reform investigations.

\[ H_5 \] Systems that have recently investigated reform are at an increased risk of investigating reform (again).

This hypothesis suggests that once reform gets on the agenda, it tends to linger. This theme is emphasized in the case study literature on electoral reform, which often stresses the fact that successful reform is usually the culmination of years of political
effort (i.e. reform proposals and investigations). A government that is serious about reform may therefore initiate several such proposals or investigations during its time in office, as proposals evolve and new recommendations emerge. In that sense, previous reform (especially recently) is likely to be a good predictor of future reform.

A final, primarily descriptive hypothesis relates to the changing nature of reform investigations over time—a phenomenon that has been described in many recent studies of citizen participation in democratic reform initiatives, resulting in a small but rapidly developing sub-literature on the subject [Thompson (2008); Warren and Pearse (2008); LeDuc (2011); Renwick (2009b, 2010)], in particular, has drawn attention to the importance of citizen participation in the electoral reform process with his useful distinction between elite-imposed reform and elite-mass interaction, with the latter, he argues, being more likely to lead to a successful outcome—an argument that he convincingly demonstrates using the case of the UK. In more recent work, Renwick and Pilet (2016) emphasize this theme, arguing that citizen participation in democratic reform has become increasingly important in recent years. This suggests a fundamental long-term shift in the nature of reform investigations.

\[ H_7 \text{ Over time, the nature of reform investigations has changed, with fewer reforms being controlled by governmental actors and increased involvement from experts and citizens.} \]

4.2 Case Selection

As this dissertation has so far argued, the literature on electoral system reform collectively suffers from several problems related to case selection. In particular, our
preoccupation with successful reforms has led to a narrow focus on a small and interesting but highly unrepresentative sample of successful cases. Unsuccessful reforms, especially investigations and proposals that failed to advance, have received comparatively little attention. These case selection problems are compounded by the fact that relatively few scholars engage in detailed discussions of the logic underpinning their case selection, and those who do usually limit their attentions to justifying the cases they have chosen to consider rather than those they have omitted, which can be equally problematic. To avoid this common bias, the 14 cases used in the subsequent analyses have been randomly selected. That said, the sample itself is not perfectly representative, and some non-random restrictions have been implemented for the sake of feasibility. The selection procedures and justifications for all such restrictions are elaborated below.

4.2.1 Random Selection Procedure

Due to limitations of time and feasibility, it was not possible to examine the entire population of cases (i.e. every country in the world) in this study. Instead, a random sample of 50 cases was initially selected for analysis. A list is provided in Appendix A. Because this project is interested in explaining the democratic reform process, it was necessary to further restrict this sample to examine only those states where democratic traditions are sufficiently entrenched. Therefore, extremely unstable and authoritarian cases have been excluded. This effectively removed 16 authoritarian
4.2. CASE SELECTION

states\(^1\) from the initial sample, as well as 5 democratic states\(^2\) with an insufficient observation period (i.e. fewer than 10 consecutive years of democratic rule). Three further cases\(^3\) later had to be excluded due to difficulties accessing data on electoral reform initiatives there.

The 10-year minimum democratic requirement reflects the fact that several measures (e.g. of disproportionality) discussed below in 4.3.2 indicate whether a particular type of democratic outcome has occurred in the previous decade. Hence, these criteria cannot be measured where democracy has not existed during that time, making the inclusion of only very short-lived democracies unhelpful, as they would contain primarily missing values on these metrics.

For reasons of feasibility, a second round of restrictions was later necessary to further reduce the sample. At this point, the sample was divided based on institutional design, with presidential systems being excluded. This removed a further 12 states\(^4\) from the sample. This effectively limited the sample to parliamentary systems and semi-presidential systems that are predominantly parliamentary in nature.\(^5\) This distinction, elaborated in 4.2.2, is particularly useful due to the way in which the dependent variable (reform initiatives) has been operationalized based on governmental action, which is easier to attribute in parliamentary systems due to the fusion of the

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\(^1\) Authoritarian states: Afghanistan, Albania, Burundi, Cameroon, Georgia, Guinea-Bissau, Iran, Iraq, Jordan, Liberia, Oman, Samoa, Swaziland, Tanzania, Yemen, and Zimbabwe.


\(^3\) The small island nations of Nauru, Saint Kitts and Nevis, and Tuvalu.

\(^4\) Presidential systems: Armenia, Chile, Colombia, Finland, Guyana, Iceland, Mexico, Namibia, Nigeria (1999-2013), Palau, Sierra Leone, Sri Lanka. It also abbreviated the observation period for Bangladesh (omitting the period between women’s suffrage in 1972 until the adoption of a parliamentary system in 1991).

\(^5\) See the note on semi-presidential systems in Appendix A.
4.2. CASE SELECTION

legislative and executive branches.

The small size of the final sample makes it necessary to use caution when generalizing the results presented in Chapter 5 to the larger population. In particular, Africa and Latin America are notably under-represented. However, because the project does not claim to be able to predict where or when reform will be investigated in the future, this limitation is not a fatal flaw. Instead, the project is interested in identifying trends and patterns, and for this purpose the sample is more than adequate.

4.2.2 Parliamentary Systems

This analysis uses original data on government-sponsored reform investigation initiatives in 14 randomly selected parliamentary democracies: Bangladesh, Belgium, Belize, Canada, Dominica, Germany, India, Ireland, Mauritius, Nepal, New Zealand, Slovakia, Sweden, and the United Kingdom. The choice to restrict the sample to parliamentary democracies is partly due to a need to maintain a manageable scope for the project and partly due to the nature of decision-making in parliamentary versus presidential systems. As Chapter 3 explained, the dependent variable (reform initiatives) has been operationalized based on governmental action, which is easier to attribute in parliamentary systems due to the fusion of the legislative and executive branches. In presidential systems, “government” can refer to either the presidential executive or the legislative branch, and, depending constitutional rules and conventions, reform proposals may originate from either branch. Unlike in parliamentary systems (with the possible exception of hung parliaments), there is also no guarantee of agreement between the legislature and the executive in presidential systems—even where the same party dominates both branches. This adds another layer of complexity both to
defining and measuring reform initiatives in presidential systems, and to determining the institutional factors that may prevent reform initiatives from moving forward. Inclusion of presidential systems is also not essential for testing any of the hypotheses specified earlier. That said, in a future phase of this project I would eventually like to include this group to explore hypotheses related to the effects of institutional design on the rate of proposal and success of reform initiatives. At present, however, the sample has been narrowed to the 14 randomly selected parliamentary democracies named above.

4.2.3 Developing Democracies

The sample used in the subsequent analyses includes both advanced industrialized countries as well as developing democracies, which is somewhat unusual among comparative studies of electoral system reform. The problem with omitting developing cases en masse stems from the vague and largely arbitrary nature of this category. The most common justification for omitting developing cases cites the purported fragility of these democracies, where electoral institutions are presumably more flexible, even unstable, than in established democracies. Yet it is certainly possible for democratic traditions and institutions to be firmly entrenched in developing counties—and to be “flexible” or subject to manipulation in advanced industrial nations, for that matter. Hence, the initial population from which cases were drawn only excluded countries with extremely unstable or ineffectual political institutions resulting from authoritarian rule or discriminatory franchise restrictions. However, as the discussion of the observation period below explains, instead of differentiating between developing and developed states, this study applies the same selection criteria across all cases in the
4.3. DATASET CONSTRUCTION

sample based on a set of basic democratic criteria.

Rather than starting from the common assumption that developing cases are inherently more likely to propose/investigate/attempt reform, this project instead aims to evaluate this claim as one of several hypotheses about the conditions under which reform proposals and investigations are most likely to be initiated. Of course, there are many ways to conceptualize “development,” and several different indicators used in this project are discussed below.

4.3 Dataset Construction

Data on reform initiatives in the 14 cases identified above has been collected from a wide variety of primary and secondary sources. Additional measures for independent variables are based on measures found in other academic datasets, including Bormann and Golder (2013), Cheibub et al. (2010), Norris (2009), and Michael Gallagher’s (2014) excellent Election Indices Dataset.

4.3.1 Observation Period

The data are organized for survival analysis in country-year format. However, unlike most comparative investigations of reform, which tend to take a particular calendar year (e.g. 1946) as their start date, data for this analysis are based on a set of democratic criteria. The first observation in each case occurs once a state has achieved universal suffrage (including women and all minority groups representing more than 5% of the total population) and full constitutional and legislative independence from any colonial powers, if applicable. Thus, the earliest observed entry for all cases is coded as chronological year one, irrespective of the calendar year. All subjects enter
in year one and are observed an average of about 60 years (per country). This count resets to year one following a successful electoral reform. Thus, there are observations for 17 subjects but only 14 countries; Germany, Nepal, and New Zealand are each divided into two subjects based on the electoral system in use at the time. The last observed exit—that is, the latest chronological year for which there is an observation for at least one of the country subjects—is 94. Periods of authoritarian or non-democratic rule are excluded. In total, there are observations for 821 country-years.

A total of 68 reform investigations were initiated during the study period, some of which were experienced multiple times by the same subject. Of the 68 events recorded in the data, there were an average of about five investigations per country during the period in question, with the fewest investigations per case being zero (Bangladesh, Belize, Dominica) and the most being 12 (New Zealand). Figure 4.1 provides a visual summary of the investigations, attempts, and successful reforms in the dataset.

During the 821 country-years under investigation, successful electoral reform occurred in just three cases (only two of which were democratic) and was unsuccessfully attempted a further four times. Yet as Figure 4.1 reveals, restricting our collective focus to these outcomes means that we are only observing the tip of the iceberg. What of the other 60+ investigations that went nowhere? Without an understanding of these cases, how much can we claim to know about electoral system reform as a phenomenon? And what do these investigations tell us about institutional reform more generally, and the conditions under which institutions are likely to be changed or not?

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6This makes the average observation period about 60 years per country and about 49 years per subject.
4.3. DATASET CONSTRUCTION

4.3.2 Operationalizing Hypotheses

Independent Variable

Chapter 3 sketched the coding frame used to distinguish between different types of reform initiatives. Electoral reform is often a protracted political process, and cases will naturally migrate from one category in the conceptual framework to another over time. Qualitative studies of successful reforms tend to emphasize the fact that it often takes several proposals, investigations, and even attempts before a reform occurs. Thus, careful periodization of reform episodes is therefore of the utmost importance. Reform investigations may last for months or years due to the complexity and political
sensitivity of the subject, as well as the recent trend toward citizen and expert involvement, as noted above. For the purpose of the proceeding analysis, a proposal or investigation is indicated as having occurred only in the year in which it was initiated. If that proposal or investigation then took several years to complete, the subsequent years are coded as non-investigation (or, more accurately, non-initiation of a new investigation). These continuing investigations are also indicated in Figure 4.1. If a proposal or investigation was repeated in a substantially different way (e.g. a different alternative system was later proposed, or a different investigative body reinvestigated the issue of reform), it is coded as being another, separate proposal/investigation.

Data on reform investigations has been collected from a wide variety of sources, including secondary academic sources, news media, records of parliamentary proceedings, government documents, and reports from NGOs and election monitoring agencies.

$H_1$: Measuring Disproportionality

$H_1$ reflects the idea that the disproportionality of an electoral system is related to its risk of investigating reform at a given time, with more disproportional systems being inherently more vulnerable to investigating reform. $H_{1a}$ uses electoral system family as a blunt measure of disproportionality, dividing electoral systems into three groups: proportional, mixed, and majoritarian systems. These categories are widely used throughout the discipline to distinguish between the basic methods by which representatives are elected. Table 2.1 provides an overview of this classification scheme. Note that the scheme includes a fourth, ill-defined group of “other” systems that do not neatly correspond with the organizing logics of the other three groups, however,
these systems are comparatively rare and none of the cases in the sample employ electoral systems from this category.

Although (dis)proportionality is central to the distinctions between these electoral system families, there are nevertheless significant differences in proportionality within these groups that merit further examination. The category of mixed systems, in particular, includes considerable variation. This is because although mixed systems share a common logic whereby some members are elected from nominal constituencies and others from party lists, the proportion of seats elected by each method and the formulae used at each level can vary widely, and this, in turn, has important implications for the proportionality of the system. For example, while a Mixed-Member Proportional (MMP) compensatory system with a low threshold, large proportion of PR seats, and a highly proportional formula for the allocation of list seats is likely to produce results that are comparable to a list-PR system in terms of proportionality, this family also includes Mixed-Member Majoritarian (MMM) or parallel systems that may produce disproportionalities that are more in line with majoritarian systems. Therefore, as Shugart and Wattenberg (2003, 9) explain, a mixed system may use a majoritarian formula to elect as much as three fourths of its legislature (Italy) or restrict it to the election of a single seat (Israel, 1992-2001).

At the same time, even a majoritarian formula will occasionally produce a more-or-less proportional result. Hence, a more sophisticated measure of disproportionality that focuses on the precise distribution of votes and seats is required to test $H_{ib}$, which posits that certain types of anomalous election outcomes, including extreme disproportionality, are likely to increase a system’s risk of investigating reform at a given time. Although rare, anomalous outcomes do occur with some regularity in

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9 As measured using the Least Squares Index described below.
majoritarian systems, which is among the main criticisms of this family of systems by proponents of PR. These events are often cited as catalysts for the successful reforms described in the case study literature.

Several types of anomalous election results are used to test $H_{1b}$. The first relates to plurality reversals, also known as wrong winner elections, which occur when one party wins (at least) a plurality of seats without also winning a plurality of the vote. Plurality reversals are seen as especially aberrant because they appear to pervert the wishes of voters—a particular problem for the majoritarian vision of democracy that emphasizes the importance of a clear choice between policy alternatives. This problem is intensified where the plurality reversal results in a spurious majority that elects a single-party government that was, in fact, rejected by voters. There are 10 plurality reversal elections in the data, including five spurious majorities and five artificial minorities.

While plurality reversals may be seen as aberrant, they are usually not particularly disproportional, as they tend to most frequently occur in multiparty majoritarian systems where the two largest parties receive an approximately equal share of the vote. Thus, a second type of anomalous election result measures extreme disproportionality. Disproportionality is measured using the Least Squares Index (Gallagher 1991), also known as the Gallagher Index. The Index is calculated based on the absolute difference between a party’s seat share and vote share and can be expressed as follows:

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11Canada (1957, 1979), Nepal (1994), and the United Kingdom (1929, February 1974).
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\[ LSq = \sqrt{\frac{1}{2} \sum_{i=1}^{n} (V_i - S_i)^2} \]

Although there is no accepted definition of extreme disproportionality in the literature, for the purposes of this analysis, extreme disproportionality is defined by a LSq Index value of 20 or higher, which represents the most extreme 5-8 percent of cases globally. Extreme disproportionality of this magnitude tends to result from highly lopsided electoral victories that disadvantage opposition parties while providing a generous bonus to the winner, and are considered aberrant because they can greatly limit the ability of the legislature to hold the executive accountable for its actions.

There are 19 extreme disproportional election results in the data, representing six percent of all elections (227 in total), or 11.9 percent of elections in majoritarian systems (117 total). These include, for example, two elections in Mauritius (1982 and 1995) in which a single party won 100% of the legislative seats.

Data on extreme disproportionality uses figures from Gallagher’s *Election Indices Dataset* (2014), with missing values and plurality reversals calculated using election results from the *Elections in ...* series edited by Dieter Nohlen and others (Nohlen et al., 1999; Nohlen, 2005; Nohlen and Stoever, 2010), as well as Mackie and Rose (1991).

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13Using election data from 1950 onward.
15I would like to thank David Orr for his assistance with data entry and coding of election results.
4.3. DATASET CONSTRUCTION

**H₂: Measuring Party System Fragmentation**

Building on the self-interest hypothesis advanced in the literature on the origins of proportional representation in Europe, $H₂$ posits that more fragmented majoritarian systems should be at a higher risk of investigating reform at a given time than two-party majoritarian systems. In multiparty majoritarian systems, the argument suggests, established parties have an interest in adopting a more proportional system to prevent being permanently sidelined by emerging competitors.

For the purposes of this study, party system fragmentation is measured using the effective number of legislative (parliamentary) parties (denoted on the literature as $N_S$ or $EffN_S$). Following the definition in [Laakso and Taagepera (1979)], which builds on Rae’s [1971] measure of fractionalization, the effective number of legislative parties is defined here as being equal to the reciprocal of the sum of the squared values representing each party’s proportion of the legislative seats. It is expressed as follows:

$$N_S = \frac{1}{\sum (P_S)^2}$$

A more detailed description of the measure and its origins can be found in [Taagepera and Shugart (1989)], and the calculations are helpfully illustrated in Appendix B of [Gallagher and Mitchell (2005)]. For the purposes of this study, multiparty majoritarian systems are defined as those majoritarian systems that have an $N_S$ value of 2.3 or higher (2.3 being the mean value of $N_S$ for majoritarian systems). There is no clearly established definition of “multiparty majoritarian systems” in the existing literature, but in practice few majoritarian systems have fewer than two legislative
parties, which makes the use of a lower threshold restrictive, as it results in highly lop-sided categories. At the same time, no mixed or proportional systems in the sample have values lower than 2.3.

\( H_3: \) Measuring Development

There are as many approaches to measuring development as there are different definitions of the concept. Economic development. Social development. Political development. The list is long, and there has been spirited disagreement about the meaning of the term as well as its utility. To some extent, this confusion appears to be reflected in the literature on electoral system reform, in which developing cases are dismissed \textit{en masse} on the grounds that their democratic institutions are presumed to be insufficiently stable. But precisely what it means to have “consolidated” or “stable” democratic institutions is seldom discussed in the literature on electoral reform, revealing the distinction to be largely artificial. The case of France, for instance, is seldom excluded despite experiencing considerable political volatility during the reinvention of its political institutions several times during the mid-twentieth century (see: [Criddle 1992](#) [Alexander 2004](#)). Yet the notion that democracies with weaker political and civil rights or lower levels of institutional capacity may experience a greater degree of conflict with regard to the nature of social and political institutions, including electoral systems, is not entirely without merit. Thus, \( H_3 \) seeks to test this implied hypothesis in a more systematic way by positing that developing states are likely to be at a higher risk of investigating reform due to the fact that the political

\[\text{The only exception appears to be New Zealand (1993-1995), but this reflects a coding decision that indicates the new mixed system was implemented in 1993, when, in fact, the system was not used until 1996. Thus, the } N_S \text{ value of 2.16 for this period is actually a reflection the results produced by the previous plurality system.}\]
4.3. DATASET CONSTRUCTION

Institutions in these cases are likely to be less firmly entrenched.

Although many widely used indicators of development exist, almost all suffer from a problem of limited length (i.e. limited historical data) or breadth (i.e. a non-universal sample). This creates a particular problem for this project: is it better to forego historical observations in favour of including a wider variety of cases, or to include historical data but only for an incomplete set of cases?

To address this problem, the dissertation uses three distinct measures of development. The first uses time series data from Polity IV to measure the robustness of a subject’s democratic institutions. Using the combined Polity scores and the corresponding definitions suggested by the presentation of the Polity IV Individual Country Regime Trends, 1946-2013 (Marshall and Jaggers 2014), a country with a score of 10 is considered to be a full democracy, while a score of 6 to 9 denotes a democracy. Lower scores (5 to -5, -6 to -10) denote anocracies and autocracies, respectively. These categories have been further collapsed to a binary variable that distinguishes between full democracies and other polities.

The second measure uses infant mortality data from Gapminder (2010), and records the number of infant deaths prior to age one per 1000 live births. The third uses gross domestic product per capita data from the World Bank’s Development Indicators dataset (2016), as well as the Varieties of Democracy dataset Coppedge et al. (2015). Both infant mortality and GDP per capita are widely used proxies of

\[\text{\footnotesize{\textsuperscript{17}}The former limitation applies to indices such as the United Nations Human Development Index, which only goes back as far as 1970, the World Bank’s World Development Indicators dataset (1960 onward), and the CIRI Human Rights Data Project (1981 onward). Similarly, the Quality of Government dataset from the University of Gothenburg does include time series observations for some measures from as early as 1946, although many of the most relevant democratic measures only date from the early 2000s (Teorell et al. 2016). The latter limitation applies to the ambitious Varieties of Democracy project (Coppedge et al. 2015) and Polity IV Project (Marshall and Jaggers 2014), which both contain good historical data but tend to omit smaller states such as Belize and Dominica.}}\]
development, but due to their imprecise reflection of the concept, both variables have been recoded as simple dummies, representing “above average” and “below average” groups based on global averages in a given calendar year.\footnote{In the case of infant mortality, “above average” actually indicates a lower infant mortality rate.}

\(H_4\): Electoral System Age

Despite appearances, the precise measurement of electoral system age is not always straightforward. Where a major reform has occurred and a completely new system has been introduced, electoral system age is usually clear. But in other cases, especially for older systems, electoral rules often evolve slowly over time. Decades of smaller changes may, cumulatively, result in a system that is fundamentally different, but identifying the precise moment of change is harder to pinpoint in such cases. In the UK, for example, the origins of the first-past-the-post system could conceivably be traced back as far as Montfort’s Parliament of 1265, but it was only after a series of major modifications in 1832, 1867, and, most importantly, 1883-1885, which eliminated so-called “rotten boroughs” and ended the use of multi-member districts, that the modern SMP system in use today began to take shape (Carstairs, 1980).

It is also true that an electoral system, as defined here, may be older than a state, and may predate other important political and even electoral institutions including responsible government and universal suffrage. This is particularly true in post-colonial states, where electoral systems were often introduced long before these polities became self-governing. In India, for example, where fewer than five percent of the electorate could vote in 1919, the electoral system was not so much a means of translating the preferences of the people into legislative seats, but a tool whereby
a small, propertied, and largely foreign elite could elect a small number of representa-
tives to a council that remained under the control of the Viceroy (Enskat et al., 2001).

Thusly understood, electoral system age should not be mistaken for a measure of
the robustness of a state’s democratic institutions. Rather, it is simply a measurement
of the length of time that a system has endured in its present form without being
profoundly altered or replaced. This is important for testing $H_4$, which makes the
path-dependent claim that the older a system is, the more entrenched it becomes,
and the more difficult it is to change.

Electoral system age is measured based on the descriptions in the *Elections in
...* series edited by Dieter Nohlen and others (Nohlen et al., 1999, 2001a,b; Nohlen,
2005; Nohlen and Stoever, 2010), as well as Gallagher and Mitchell (2005), Colomer
(2004b), and the Inter-Parliamentary Union (2016). Appendix B provides a brief
overview of the origins of the relevant electoral system(s) for each case.

$H_5$: Measuring Prior Investigation of Reform

$H_5$ posits that recent prior investigation of reform is likely to increase a subject’s risk
of further investigation. Previous investigation of reform, in this sense, is coded as
a binary variable defined based on the occurrence of at least one reform proposal,
investigation, attempt, or successful change (according to the definitions in Chapter
3) in the ten-year period before a given time, $T_i$. Given that the case study literature
tends to emphasize the fact that reform initiatives often take several years to complete,
and that a reform project may go through several phases or transformations before it
becomes an attempt, this indicator is meant to signal simply that reform has been on
the agenda recently and in a serious way. Although the 10-year span is a somewhat arbitrary cut-off, it is a sufficiently long period to allow for at least two full electoral cycles and, therefore, a possible change in government.

4.4 Survival Analysis

4.4.1 The Logic and Appropriateness of Survival Analysis

The next chapter presents the results of a multiple failure event history analysis to model the expected duration of time until an event—in this case, the initiation of a reform investigation—occurs. Event history analysis, also known as survival analysis, was first developed for use in demography, biology, and medicine, where it continues to be used to model a wide variety of things such as human survival rates (e.g. after a heart attack), genetic risks (e.g. for a particular condition), and the efficacy of medical treatments (e.g. versus placebos). Today, the technique is known by a variety of names and is used to model a diverse range of phenomenon in engineering\(^{19}\), economics\(^{20}\) and criminology. As Allison (2014, 4) explains, although social scientists have been “somewhat late to the game,” because of our interest in studying events and transitions, survival analysis has become increasingly popular as a way for political scientists to study events (see also: Box-Steffensmeier and Jones 1997).

Of course, an electoral system is not a biological entity, but the basic logic of event history analysis is such that we may apply the same techniques to the study of both phenomena. At its core, survival analysis is concerned with patterns of causation and

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\(^{19}\) Where it is better known as reliability analysis or failure-time data.  
\(^{20}\) Where it is better known as duration analysis or duration modeling.
4.4. SURVIVAL ANALYSIS

change (Yamaguchi 1991). As the name suggests, event history analysis is concerned
with the analysis of event data—that is, data on the timing, number, and ordering of
change(s) on a variable of interest. An event, in this sense, represents a transition from
one state to another. Over time, a subject (individual, state, etc.) may experience
one or more such transitions. The most obvious example of an event is death (hence
the term survival analysis), but an event could also include a change from married
to divorced, for example—or, as in this case, a change from not investigating reform
(stasis) to investigating reform. Thus, survival analysis is used to model the amount
of time spent within each state, the timing of each transition made (if any), and the
effects of different variables on the expected time to an event or outcome.

Event history analysis has several distinct advantages over other statistical tech-
niques when it comes to the study of event data. This is largely due to the fact
that event data tend to be censored and usually contain time-varying explanatory
variables. Information on time-varying covariates is a particular strength of event
data, but conventional linear regression is poorly suited for use with time-dependent
variables. While such data can be dichotomized or otherwise manipulated for use
with OLS regressions, Allison (2014, 2-4) argues that this is arbitrary and wastes

21 Censoring occurs when the observation period does not include complete information about the
time to an event, making it a problem of missing data. There are many types of censoring, the most
common of which are: truncation, which occurs when a subject is excluded from a sample because
their “lifetime” is not long enough to be observed (based on some threshold); interval censoring,
which occurs when information is only available between two fixed points in time; left-censoring,
which occurs when an event occurs before the observation period and is therefore not considered;
and right-censoring, which occurs when the observation period ends at a fixed time, whether or not
subjects have experienced the event in question. As described in 4.2, the data used in the subsequent
analysis are truncated in the sense that cases with fewer than 10 consecutive years of democratic rule
have been excluded. The data also include both left- and right-censored observations, since electoral
systems did exist in almost all cases prior to “year one” in the study, and, happily, all continued to
exist after 31 December 2013.
imported information. Censoring presents an equally serious problem. For example, Allison (2014, 2-3) shows that while it may be tempting to use a time-to-event measurement as the dependent variable in a liner regression, this effectively excludes (or censors) all cases in which the event did not occur. Not surprisingly, this type of censoring can result in considerable bias, making this type of regression largely inappropriate for event data (see: Tuma and Hannan 1978). In sum, while linear regressions can struggle to incorporate the time-sensitive nature of causal relationships, this represents a singular strength of event history analysis.

4.4.2 Model-Building Process

The hypotheses are tested using several different techniques in the proceeding chapter, although all fall under the general umbrella of survival analysis. The results of several different univariate and multivariate analyses are provided to illustrate the relationship between the proportionality of a country’s electoral system and its “risk” of investigating reform at a given time. The chapter begins with an overview of the survival curve, which provides a visual representation of the aggregate survival rate of the countries in the sample. It continues with a series of univariate tests (e.g. the log-rank test) that compare the survival distributions of groups within the sample. These tests of equality across strata are used to explore whether or not the categorical predictors identified by the hypotheses should be included in the final model. For continuous predictors (e.g. electoral system age), a Cox model with a single variable is used to obtain a Chi-squared test. Only predictors that are significant at the 20% level (i.e. with a p-value of 0.20 or less) are considered for inclusion in the subsequent
4.4. SURVIVAL ANALYSIS

modeling phase.\footnote{This type of elimination approach, which follows \citet{HosmerLemeshow1999}, is useful because all the predictors in the data could potentially be relevant to the model.}

Finally, the analysis concludes by fitting a series of Cox proportional hazards regression models. The Cox proportional hazards model, which is flexible and semi-parametric in nature, is the most widely used approach to modeling event history data. As the name suggests, the Cox models rely on the proportional hazards assumption, which requires that the survival curves for different strata (determined by the values of a categorical explanatory variable) must have hazard functions that are proportional over time (i.e. constitute a constant relative hazard). The proportionality assumption is tested in two ways: first, by using the incorporation of time-varying covariates into the model itself; and second by using Martingale and Schoenfeld residuals. The results of these tests are reported in Appendix D.

It is important to note that most subjects (countries) in the sample experienced multiple failures (reform investigations) during the observation period. The easiest way to model multiple failure data is to treat it as single failure data—that is, by looking exclusively at the time until the first event—but since, on average, reform occurred in the countries in the sample about once every 12 years, this would needlessly omit most of the observations in the dataset. Instead, the models in the following chapter consider repeat events, but while the Cox model is appropriate for modeling multiple-failure-per-subject data, some special considerations are in order. In particular, there is likely to be statistical dependence among repeat events (investigations of reform) for each subject. The easiest way to correct for this is to use robust standard errors, which yield more accurate standard errors and p-values, but leave coefficient estimates largely unchanged \citep{Allison2014, 67-75}. This is achieved by clustering
by subject (country), and is the approach taken here. Alternatively, a similar result could be achieved by using a Cox proportional hazards model with shared frailty, however this approach requires significantly more computing power than other models and is not allowed if the data include delayed entries or gaps (which is the case).

A series of Cox models using significant and theoretically relevant variables are then compared, and their (limited) predictive value is assessed. The next chapter turns to presentation of the first set of substantive results, while Chapter 6 is focused on the nature and recommendations of reform investigations themselves.

\[23\] Assumed to be latent random effects that affect the hazard across groups.
Chapter 5

When Do Governments Investigate Reform?

When do governments investigate electoral reform? At present, the literature on electoral reform remains largely focused on successful reforms. As a result, comparatively little is known about what factors prompt governments investigate reform. The previous chapter outlined five main hypotheses that speak to this question from different (but not necessarily incompatible) theoretical traditions. This chapter tests these hypotheses using survival analysis techniques in order to determine whether and to what extent the predictors identified in Chapter 4 affect a subject’s risk of initiating a reform investigation. Do these explanations, which are based on successful reforms, help to explain why governments investigate reform, as well?

This chapter begins with a general statistical overview of the data. Section 5.2 then presents the results of a series of univariate tests that explore whether or not the predictors identified by the hypotheses are likely to affect a subject’s risk of investigating reform. Following a model-building process similar to that described in

\[H_1\text{ to }H_5\] If for easy reference, an abbreviated list of hypotheses can be found on page 10. This chapter tests \(H_1\) to \(H_5\). The remaining hypotheses, \(H_6\) and \(H_7\), are not suited to survival analysis, and will therefore be assessed in the next chapter.
Hosmer and Lemeshow (1999), those predictors that meet a predetermined significance threshold in the univariate tests will then be included in the first iteration of the multivariate survival models in 5.3. Section 5.4 offers a brief, non-technical summary of the findings.

5.1 The Survival Curve

An overview of the survival curve provides a general statistical picture of the survival rate of the countries in the sample. Figure 5.1 shows the non-parametric product limit estimation of the survivor function, also called the Kaplan-Meier survival estimate (Kaplan and Meier, 1958). The Kaplan-Meier method allows for the estimation of the proportion of the population that would “survive” under the same circumstances as those in the sample, and illustrates the percentage of subjects (countries) “surviving”—that is, going without experiencing a reform investigation or proposal—over time. The y-axis indicates the aggregate probability of surviving at time $t$, with a 95% confidence interval.

As a non-parametric model, the Kaplan-Meier estimate makes no assumption about the shape of the hazard function, and is therefore only suitable for univariate

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2 An important note on interpreting the Kaplan-Meier and Nelson-Aalen graphs for the remainder of the chapter: the graphs depicted here have been generated using Stata 13, which does not allow users to control the range of the x-axis in this type of graph. Thus, the scale on all Kaplan-Meier and Nelson-Aalen graphs that follow depicts a range from chronological year 0 to 100, with the scale being automatically determined by the longest observation period of any of the subjects of the sample (94 continuous years). It is worth noting, however, that subjects in the sample are observed for an average of about 49 years, which means that observations at the tail end of the survival curve are based on very few subjects. For example, only two subjects remain at $t = 90$. For this reason, caution should be exercised when interpreting the curve past $t = 60$, as the number of remaining subjects on which it is based drops substantially after this point.

3 The curve represents the survival function at time $t$, which is equivalent to the probability of not experiencing the event at time $t$, or the probability that the survival time is $> t$. It is calculated based on the proportion of cases at risk at every point in time where an event occurred in the data.
The shape of the survival curve is revealing nonetheless. While successful reforms remain relatively rare, it is clear that investigation of reform is not. On average, the countries in the sample investigated reform about once every 12 years. After 20 years of observation, less than 20% of cases in the sample had gone without experiencing an event, suggesting a failure rate of just over 80% at $t=20$. This means that the probability that a subject will have launched at least one reform investigation by this time is greater than 80%. By year 40 that probability is closer to 95%. This reinforces the finding that reform investigations and proposals are far more common than successful reforms, as illustrated in the timeline in Figure 4.1.

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4 Although, in the case of Figure 5.1, no predictor variable has been specified in order to provide a general picture of the survival curve.
5.2 Univariate Analysis

Figure 5.1 suggests that reform investigations occur with some regularity in the sample. But do they occur at the same rate in all cases, or are there certain institutional characteristics or other factors that may predispose certain cases toward investigating reform more or less frequently? If the determinants of successful reform cited in the existing literature are indeed relevant causal factors, it follows that we might also expect to see evidence of their effects on rates of investigation of reform, as well, given the fact that it is far easier to initiate an investigation of reform than it is to successfully change the electoral system. For example, if disproportionality leaves subjects vulnerable to reform by fomenting dissatisfaction with the existing electoral system, as is commonly assumed in ideational accounts, we would expect to find evidence of this dissatisfaction in the form of higher rates of reform investigation in disproportional systems, as well—especially in response to extreme disproportionality.

This section presents the results of a series of univariate tests that explore whether or not the predictors identified by the hypotheses are likely to affect a subject’s risk of investigating reform. Those predictors that meet a predetermined significance threshold in the univariate testing phase will then be included in the multivariate survival models that follow in the next section. For binary and categorical predictors (e.g. electoral system family), differences in the survival curve across groups are visualized using Kaplan-Meier survival estimates (similar to Figure 5.1) and/or Nelson-Aalen cumulative hazard rates, both of which are commonly used to characterize the distribution of such variables in survival analyses. These are accompanied by univariate tests (e.g. the log-rank test) that compare the survival distributions of groups within the sample. For continuous predictors (e.g. electoral system age), a Cox regression
5.2. UNIVARIATE ANALYSIS

with a single variable is used to obtain a Chi-squared test.

As in Hosmer and Lemeshow (1999), in this round of univariate testing, predictors that are significant at the 20% level (i.e. with a p-value of 0.20 or less) will be considered for inclusion in the subsequent modeling phase. In the final models, however, the more conventional 5% threshold for determining statistical significance will be applied. This type of elimination approach is useful in this case because there is good theoretical reason to believe that any and all the predictors identified by the hypotheses could potentially be relevant to the model.

5.2.1 \( H_1 \): Are Disproportional Systems More Vulnerable to Investigating Reform?

Disproportionality by Electoral System Family

\( H_{1a} \) posits that majoritarian systems are more likely to investigate reform than proportional or mixed systems. The most straightforward way to test this hypothesis is to compare the survival curves of different groups based on electoral system family within the sample. Figure 5.2 provides a visual representation of the survival curves of each of the major electoral system families: majoritarian, proportional, and mixed systems. The curves in Figure 5.2 represent the survival functions of different groups at time \( t \), which is equivalent to the probability that the survival time is \( > t \), with 95% confidence bands.

If Colomer’s (2004b) finding that majoritarian systems are inherently more vulnerable to reform than proportional systems applies to investigation of reform, as well, we would expect to see a significantly higher rate of investigations in majoritarian systems than in proportional ones, with mixed systems likely falling somewhere
in-between. In other words, we would expect the survival curve to be steepest among majoritarian systems and least steep among proportional systems, with the curve representing mixed systems resting somewhere between the other two.

As $H_1$ predicts, majoritarian systems do appear to have a steeper rate of failure than proportional systems, suggesting that majoritarian systems are indeed at a greater risk of investigating reform than proportional ones, just as the ideational explanation for reform suggests. That said, the large overlap in the confidence bands suggests that this difference should be interpreted with some caution. More surprising, however, is the fact that mixed systems appear to have the steepest rate of failure of any electoral system family. Contrary to $H_1$, this suggests that mixed systems may
be at a greater risk of investigating reform than either of the other electoral system families.

To further examine this unexpected result, Figure 5.3 visualizes the relationship in a different way. The Nelson-Aalen estimates in Figure 5.3 illustrate the baseline hazard\(^5\) of initiating a reform investigation for each electoral system family, assuming other values are held at their means. An examination of Figure 5.3 reveals the same pattern: as \(H_1\) predicts, proportional systems appear to be at the lowest risk of investigating reform at a given time, while majoritarian systems appear to have a generally higher risk. Once again, however, the risk appears highest among mixed systems—by a wide margin.

\(^5\)The hazard rate is the rate at which subjects fail by time \(t\) given that subjects have survived until time \(t\).
Several statistical tests are also available to confirm the existence of the pattern suggested by a visual inspection Figures 5.2 and 5.3. The univariate tests in Table 5.1 use a Chi-square distribution to test the null hypothesis that electoral system family has no effect on the risk of initiating a reform investigation at a given time.

Table 5.1: Number of Reform Investigations Observed vs. Expected: Tests Comparing Survival Functions by Electoral System Family

<table>
<thead>
<tr>
<th>Electoral System Family</th>
<th>Events observed</th>
<th>Log-Rank Test</th>
<th>Wilcoxon Test</th>
<th>Tarone-Ware Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events observed</td>
<td>Events expected</td>
<td>Sum of ranks</td>
<td>Sum of ranks</td>
</tr>
<tr>
<td>Plurality/Majoritarian</td>
<td>41</td>
<td>38.92</td>
<td>-13</td>
<td>1.016463</td>
</tr>
<tr>
<td>Proportional</td>
<td>15</td>
<td>22.44</td>
<td>-88</td>
<td>-24.636566</td>
</tr>
<tr>
<td>Mixed</td>
<td>12</td>
<td>6.65</td>
<td>101</td>
<td>23.620103</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$\text{Chi}^2(2)$</td>
<td>7.48</td>
<td>11.61</td>
<td>9.57</td>
<td></td>
</tr>
<tr>
<td>$P &gt; \text{Chi}^2$</td>
<td>0.0238**</td>
<td>0.0030***</td>
<td>0.0083***</td>
<td></td>
</tr>
</tbody>
</table>

As the results in the bottom row of Table 5.1 indicate, all of the statistical tests are highly significant, suggesting that electoral system family is a significant predictor of a subject’s vulnerability to investigating reform—although perhaps not necessarily in the way that Colomer (2004b) or $H_1$ originally suggested. While plurality systems experience slightly more investigations than expected (41 observed vs. 38.92 expected), and proportional systems fewer (15 observed vs. 22.44 expected), mixed systems appear to investigate reform far more often than $H_1$ predicts (12 observed vs. 6.65 expected).

Although each of these test statistics is based on the null hypothesis that the survivor functions of the different categories (i.e. electoral system families) do not differ, the tests operate differently. For example, the Log-Rank test emphasizes increasing differences at the end of the observation period, while the Wilcoxon test stresses differences at the beginning (Blossfeld et al., 2007). Hence, it is useful to use multiple tests in order to account for these differences.
5.2. UNIVARIATE ANALYSIS

This finding is in stark contrast to the way in which mixed systems tend to be portrayed in the electoral systems literature, which typically casts them as a compromise between the perilous extremes of pure plurality and proportionality, deliberately engineered to provide “the best of both worlds” (see: Shugart and Wattenberg 2003). Because there is good theoretical reason to believe that electoral system family is relevant, and because the Chi-squared values for each test meet the cut-off for inclusion in the model (all tests in Table 5.1 are significant at the 20% level), electoral system family will be included in Model 1. However, the surprising nature of these results raises an important question that merits further exploration: is it actually the case that mixed electoral systems are especially contested—far more so than other types of systems, apparently—or could another explanation also be at work here?

With only three mixed systems in the sample it is possible that the electoral system has been uniquely contested in these cases compared to other mixed systems in use around the world. That said, however, the mixed systems examined here do represent a diverse range of cases on several dimensions, including level of development and institutional stability. In any case, in order to help account for the potentially distorting effects of “serial reform-investigator” cases (i.e. countries where reform is consistently on the agenda), the Cox regression models will be clustered by country.

Alternatively, it seems plausible that the unexpected vulnerability of mixed systems to investigating reform could be the result of a collinearity problem specific to mixed systems. While mixed systems have proliferated in recent years, the very category of mixed electoral systems is itself relatively new, having originated in West Germany, Nepal, and New Zealand.
Germany in 1949. In practical terms, this means that each of the mixed systems in the sample is the result of an electoral system change. It is also the case that these three electoral system changes are the only changes observed in the sample during the observation period, which means that: a) 100% of mixed systems in the sample are the result of an electoral system change, while 0% of other systems in the sample are the result of an electoral system change during the observation period and b) all mixed systems in the sample are relatively new compared with other types of electoral systems.

Importantly, both of these factors represent potential intervening variables, and will be examined further. To resolve this question, 5.2.4 will consider electoral system age ($H_4$) as a predictor, since institutional consolidation is likely affect a subject’s risk of investigating reform. Section 5.2.5 will then consider the effects of recent prior experience with reform, attempted reform, or investigation of reform, as per $H_5$. Including one or more of these predictors as controls in the regression models will help to assess whether mixed systems are, in fact, more vulnerable to investigating reform, or whether this vulnerability is actually a result of these other factors.

Disproportionality by Least Squares Index Values

$H_{1b}$ posits that reform is more likely to be proposed in cases that have recently experienced an extreme disproportional election result. Although this hypothesis is specifically framed in terms of extreme disproportionality, much of the focus in the literature is actually on the effects of plurality reversals and spurious majorities.

8By comparison, proportional systems have been in use at the national level since the late nineteenth century, while many plurality systems can trace their roots back even further (see Appendix B).

9Of course, other electoral system changes have occurred in the subjects in the sample, but these occurred outside the observation period (e.g. Belgium 1899, Germany 1918).
This is because plurality reversals are seen as especially aberrant and therefore likely to provoke a strong negative reaction to the existing electoral system, even if these outcomes are rarely highly disproportional. Thus, $H_{1b}$ actually contains two related hypotheses: one about the effect of plurality reversals, and another about the effect of extreme disproportionality.

Plurality reversal election outcomes are unusual but not infrequent. Siaroff’s (2003) study of spurious majorities in Westminster-style systems documents at least 41 cases at the national and sub-national levels in nine different countries. The suggestion that plurality reversals trigger reform has been made in several different ways in the existing literature, with most studies focusing on successful reforms that follow an anomalous election outcome. The problem with this approach, however, is that by focusing only on successful reform we risk underestimating the effects of these anomalous outcomes. It may well be the case that steps toward reform are often taken in the aftermath of an aberrant election outcome. In these situations, the fact that reform initiatives failed to pass may be evidence of the institutional hurdles that reform initiatives face rather than the absence of a relationship between disproportionality and reform.

$H_{1b}$ can be evaluated in two ways. The first is to use a single variable Cox regression of a continuous measure of disproportionality (the Least Squares Index) to obtain a Chi-squared test. The results (reported in Appendix C) are not statistically significant even at the 0.20 level, which suggests that the continuous measure is not a useful predictor.

A second approach uses binary variables to distinguish aberrant election outcomes. The first binary indicates that an extreme disproportional election outcome occurred

\footnote{Kaplan-Meier and Nelson-Aalen graphs cannot be used for non-categorical predictors.}
Table 5.2: Number of Reform Investigations Observed vs. Expected: Tests Comparing Survival Functions by Extreme Disproportionality and Plurality Reversal Binaries

<table>
<thead>
<tr>
<th>Extreme disproportional outcome in previous decade</th>
<th>Events observed</th>
<th>Log-Rank Test</th>
<th>Wilcoxon Test</th>
<th>Tarone-Ware Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>60</td>
<td>55.70</td>
<td>54</td>
<td>14.687304</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>12.30</td>
<td>-54</td>
<td>-14.687304</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \text{Chi}^2(2) = 2.05 \]

\[ P > \text{Chi}^2 = 0.1519 \]

<table>
<thead>
<tr>
<th>Plurality reversal in previous decade</th>
<th>Events observed</th>
<th>Log-Rank Test</th>
<th>Wilcoxon Test</th>
<th>Tarone-Ware Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>59</td>
<td>62.10</td>
<td>-18</td>
<td>-7.3003785</td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>5.9</td>
<td>18</td>
<td>7.3003785</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \text{Chi}^2(2) = 2.17 \]

\[ P > \text{Chi}^2 = 0.1412 \]

* * P < 0.10, ** P < 0.05, *** P < 0.01

in the previous decade (yes or no)\(^{11}\) the second indicates that a plurality reversal election outcome occurred in the previous decade (yes or no)\(^{12}\) The results of these tests are reported in Table 5.2.

Contrary to \(H_{1b}\), subjects that recently experienced an extreme disproportional election outcome actually seem to have initiated fewer reform investigations than would be expected if the null hypothesis were true (8 events observed vs. 12.3 expected). The opposite appears to be true of subjects that recently experienced a

\(^{11}\)Unlike the continuous measure, this binary indicator of disproportionality only considers “extreme” outcomes—that is, election outcomes with a Least Squares Index value of 20 or higher, representing the most extreme 5 to 10 percent of cases globally.

\(^{12}\)I use decades as a measure of time because it provides an even period across cases, but it would also be possible to use an alternative (e.g. previous two election cycles).
plurality reversal, which initiated almost twice as many reform investigations as expected. The relationships are also illustrated in the Kaplan-Meier graphs in Figure 5.4, where experiencing a recent plurality reversal appears to be associated with a much steeper survival curve (i.e. higher rate of investigation), while the opposite is true for cases that have recently experienced an extreme disproportional outcome, which appear to be less likely to investigate reform. Although the extreme disproportionality binary is significant at the 0.20 level in all tests, the plurality reversal binary is not, which suggests that these results should be interpreted with caution at this stage.

Figure 5.4: Comparing Survival Curves for the Extreme Disproportionality and Plurality Reversal Binaries: Probability of Surviving at Time $t$
Kaplan-Meier Survival Estimates with 95% Confidence Bands

This surprising result may reflect another pattern in the data that relates to the nature of the party system: while so-called wrong-winner elections happen slightly
more often in majoritarian systems with more than two legislative parties. Extreme disproportional outcomes almost always happen in two-party majoritarian systems. In fact, while only 6% of the elections in the sample resulted in an extreme disproportional outcome, 95% of extreme disproportional outcomes occurred in two-party majoritarian systems. Of course, the nature of the party system is directly related to the disproportionality of the election results, since the very measure of disproportionality used here (the Least Squares Index) is calculated based on the absolute difference between a party’s seat share and vote share. Thus, the extreme disproportionality variable effectively identifies highly lopsided electoral victories that disadvantage opposition parties while providing a generous bonus to the winner. The result is a distribution of legislative seats that is almost certain to be coded here as being a two-party system (rather than a multiparty one).

Seen this way, the results in Figure 5.4 help to resolve an important question of causality. The functionalist hypothesis predicts that both extreme disproportionality and plurality reversals, as indications of an electoral system performing poorly, should act as a catalysts for reform. Yet the evidence does not support this. Instead, subjects that experienced more extreme disproportional election outcomes actually investigated reform less frequently than those that did not. Importantly, however, almost all extreme disproportional outcomes occurred in two-party majoritarian systems, which the rational choice hypothesis predicts should be the least likely to investigate reform (i.e. because the system (disproportionately) benefits the two parties that alternately form government). This suggests that in majoritarian systems, the party system, rather than the (dis)proportional effects of the electoral system, may

\[13\text{11\% of elections in multiparty majoritarian systems resulted in a plurality reversal, versus 7\% in two-party majoritarian systems.}\]
be the more important driver of reform investigation. This result is explored in the next section.

5.2.2  $H_2$: Are Fragmented Party Systems More Vulnerable to Investigating Reform?

While Duverger’s (1954) seminal law states that the party system is largely determined by the electoral system, others have suggested that the relationship may in fact be the other way around (see: Grumm 1958, Riker 1982, Sartori 1986). The resulting debate on the direction of causality has yet to be fully resolved. Of particular relevance is the claim, made by proponents of the rational choice self-interest hypothesis, that the introduction of proportional representation in Europe is largely explained by existing parties’ attempts to maintain their electoral dominance when faced with changes to the party system brought by the extension of the franchise. In his examination of this relationship, Colomer (2004b, 62) finds that systems (of all types) with a higher degree of party system fragmentation tend to be more vulnerable to reform. $H_2$ extends this hypothesis, suggesting the same pattern is likely true of reform investigations, as well.

The most straightforward way to test $H_2$ is with a single variable Cox regression using a continuous measure of party system fragmentation: the effective number of parliamentary parties ($EffN_S$). However, as the debate between Duverger (1954) and others suggests, the relationship between party systems and electoral systems is a dynamic one. Different electoral system types are likely to result in different party systems with different baselines of $EffN_S$, making it necessary to stratify the result by electoral system family. While a majoritarian system with five legislative
parties may indeed appear fragmented, for example, the same cannot be said of a proportional system with the same value of $EffN_S$.

The results of the stratified single variable regression (reported in Appendix C) indicate that party system fragmentation appears to be a much more relevant predictor of reform investigations in majoritarian systems (where the Chi-squared statistic is highly significant, $p=0.0002$) than in the other two families (where the Chi-squared statistic is not significant, even at the 0.20 level). While this finding is somewhat contrary to Colomer (2004b) and Shugart (2001), who suggest that party system fragmentation is relevant across all electoral system families (i.e. highly fragmented proportional and mixed systems are also more vulnerable to reform than less fragmented systems of the same type), it does clearly conform to the rational choice explanation for the adoption of PR in Europe as articulated by Boix (1999, 2010) and others.

According to the self-interested explanation for reform, among majoritarian systems it seems probable that where the electoral system produces a near-perfect two-party system there is little incentive for those parties that currently dominate to investigate reform. However, where majoritarian systems produce a more fragmented party system, newer, smaller parties may soon challenge the established order, prompting the existing parties to consider reform. At the very least, it seems plausible that pressure from smaller parties, especially those with regionally diffuse support, could push the dominant parties to at least investigate reform, if not enact it—even if only as a precondition for their tacit coalition support, especially in a hung parliament that is more likely to result from a fragmented party system in majoritarian democracies. Thus, while the continuous measure of $EffN_S$ will not be included in the multivariate
analysis, there are sound theoretical and evidentiary reasons to distinguish between
two-party versus multiparty majoritarian systems.

Table 5.3: Number of Reform Investigations Observed vs. Expected:
Tests Comparing Survival Functions by Electoral System Family and
Party System

<table>
<thead>
<tr>
<th>Electoral System Family</th>
<th>Events observed</th>
<th>Events expected</th>
<th>Sum of ranks</th>
<th>Sum of ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Party Majoritarian</td>
<td>21</td>
<td>24.68</td>
<td>-90</td>
<td>-20.129313</td>
</tr>
<tr>
<td>Multiparty Majoritarian</td>
<td>20</td>
<td>14.23</td>
<td>77</td>
<td>21.145776</td>
</tr>
<tr>
<td>Proportional</td>
<td>15</td>
<td>22.44</td>
<td>-88</td>
<td>-24.636566</td>
</tr>
<tr>
<td>Mixed</td>
<td>12</td>
<td>6.65</td>
<td>101</td>
<td>23.620103</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[\text{Chi}^2(3) = 10.57, P > \text{Chi}^2 = 0.0143^{***}, 0.0005^{***}, 0.0021^{***}\]

1. For majoritarian systems only; compare with Table 5.1.

This leads to a revised, alternative conceptualization of the electoral system fam-
ily variable used to test \(H_1\). In addition to the proportional and mixed categories,
which remain unchanged, the updated variable distinguishes between two types of
majoritarian systems: two-party versus multiparty majoritarian systems. Notably,
the pattern predicted by the rational choice self-interest hypothesis appears to be
evident in Table 5.3, which repeats the tests from Table 5.1 using the updated cate-
gories. The univariate tests show that while two-party majoritarian systems initiated
slightly fewer reform investigations than we would expect if the null hypothesis were
true (21 observed vs. 24.68 expected), multiparty majoritarian regimes initiated con-
siderably more (20 observed vs. 14.23 expected). The significant results indicate that
party system fragmentation is quite likely to affect a subject’s risk of investigating
reform among majoritarian systems.

Importantly, then, Table 5.3 reveals a distinction among majoritarian systems that the combined category in Table 5.1 obscures. While Table 5.1 showed that majoritarian systems as a whole experienced more reforms than expected, this pattern does not apply equally to all majoritarian systems, as the purely ideational hypothesis ($H_1$) had predicted. Instead, the tests in Table 5.3 indicate that the revised electoral system categories are likely to be relevant predictors of a subject’s risk of initiating a reform investigation, suggesting that in the case of majoritarian systems this risk may be mediated by the nature of the party system.

This relationship, illustrated in Figure 5.5, is also evident when examining the
Nelson-Aalen estimates specified by the alternative electoral system family variable that differentiates between two-party versus multiparty majoritarian systems. Compared with Figure 5.3, the different hazard rates for these categories is striking, as multiparty majoritarian systems are at a far greater risk of initiating a reform investigation than their two-party cousins.

Since it is not possible to include this revised electoral system family variable in a Cox model that also includes the more typical three-category version, this measure will be included in a subsequent model for comparison.

5.2.3 $H_3$: Are Developing Democracies More Vulnerable to Investigating Reform?

Following a common assumption in the comparative literature on electoral reform, $H_3$ posits that developing states are inherently more vulnerable to investigating reform than developed states. Most of the best known comparative studies of electoral system change justify their choice to examine only advanced industrial democracies on the grounds that electoral rules in developing democracies are “unconsolidated,” making them manipulable even to the point of instability (see: Katz 2005, Blais and Shugart 2008, Renwick 2010). Yet as Chapter 4 critically observed, precisely what constitutes the difference between “consolidated” and “unconsolidated” democratic institutions is seldom explicitly discussed in this literature, revealing the distinction to be largely arbitrary—at least in the way that it had been used to discuss electoral reform.

The unsystematic nature of this definition becomes apparent when considering commonly used measures of the quality of democracy as applied to the randomly chosen cases examined here. For example, Table 5.4 lists the average Polity IV score
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for each case over the observation period of this study, as well as the standard deviation. Polity IV scores reflect the degree to which democratic (or autocratic) authority is reflected in governing institutions, creating a spectrum ranging from fully institutionalized autocracy (-10) to fully institutionalized democracy (+10) (Marshall and Jaggers 2014). Although the specific metrics used to construct the Polity IV index have been criticized as being too narrowly focused on formal institutions (and thereby omitting other important aspects of a robust democracy such as participation) [14] the data nevertheless reveal an important trend: while there is good reason to be sceptical of the degree of democratic consolidation in Bangladesh and Nepal, for example, it seems highly plausible that democratic traditions and institutions are much more firmly established in other developing democracies such as India and Mauritius. This suggests that dismissing developing cases en masse obscures important distinctions between these cases.

Because of the contested and complex nature of the concept of development, and problems regarding the availability of data (see Chapter 4.3.2), $H_3$ is tested using three very different measures of development. The first uses the Polity IV combined scores depicted above. This indicator collapses the Polity IV index into two categories, distinguishing between “full democracies” (which received a Polity IV score of 10) and “other” states, which received lower scores (9 and lower), with the aim of differentiating between those with the strongest democratic institutions versus the heterogeneous “rest.”

A second measure uses infant mortality as an imperfect proxy for development. Although not directly related to the quality of democratic institutions, infant mortality tends to reflect other factors, such as the availability and quality of medical

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Table 5.4: Average Polity IV Combined Scores for Cases in the Sample

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>5.714</td>
<td>0.561</td>
</tr>
<tr>
<td>Belgium</td>
<td>9.788</td>
<td>0.620</td>
</tr>
<tr>
<td>Belize*</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Canada</td>
<td>9.989</td>
<td>0.103</td>
</tr>
<tr>
<td>Dominica*</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Germany (Weimar Republic)</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Germany (Post-WWII)</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>8.7</td>
<td>0.462</td>
</tr>
<tr>
<td>Ireland</td>
<td>9.537</td>
<td>0.849</td>
</tr>
<tr>
<td>Mauritius</td>
<td>9.842</td>
<td>0.370</td>
</tr>
<tr>
<td>Nepal</td>
<td>4</td>
<td>4.094</td>
</tr>
<tr>
<td>New Zealand</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Slovakia</td>
<td>8.905</td>
<td>1.179</td>
</tr>
<tr>
<td>Sweden</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Full democracy (10); Democracy (6 to 9); Anocracy (5 to -5); Autocracy (-6 to -10)

*Polity IV scores not are not currently available for Belize and Dominica.

Source: Marshall and Jaggers (2014)

care, which are relevant to human development. The infant mortality measure used here is a binary variable that reflects the number of infant deaths prior to age one per 1000 live births, and divides the sample into two groups based on whether a subject was above or below the global mean in a given calendar year. In this case, “above average” indicates a lower infant mortality rate.

Finally, a third measure of GDP per capita is similarly grouped into binary categories representing “above average” and “below average” groups based on global means in a given calendar year.

Of the three development proxies, the results (see Appendix C) show that none are consistently significant at the 20% level across the univariate tests. Therefore, no
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measure of development will be included in Model 1, especially since Chapter 4 has already presented a strong challenge to the theoretical reasons for doing so. This means that $H_3$ can be rejected, as none of three distinct measures of development appear to be significant predictors of a subject’s risk of initiating a reform investigation.

5.2.4 $H_4$: Are Younger Electoral Systems More Vulnerable to Investigating Reform?

The univariate analysis of $H_{1a}$ and $H_2$ revealed that contrary to expectations, mixed systems appear to be much more prone to investigating reform than any other electoral system family. But does this reflect the fact that mixed systems—described by their proponents as “the best of both worlds”\textsuperscript{15}—are inherently more disputed than other systems, or are there other possible explanations for this trend? Of the electoral systems in the sample, the three mixed systems are the only ones to result from reforms that occurred during the observation period. As a result, all are among the newest systems in the sample\textsuperscript{16}, which means there is good reason to believe that the relative youth of mixed systems may contribute to their apparently heightened risk of investigating reform, especially since, as Colomer (2004b) finds, electoral systems are most vulnerable to change in their early years. Thus, $H_4$ posits that over time, as electoral rules become entrenched, not only do they become more difficult to change, but they also become less contested. Therefore, newer systems (of all types) are more likely to be at a higher risk of investigating reform than older ones.

The most straightforward way to test $H_4$ is with a single variable Cox regression

\textsuperscript{15}See: Shugart and Wattenberg (2003).

\textsuperscript{16}The mean age of plurality systems in the sample is 90 years, with a standard deviation of 53 years. The mean age of proportional systems is 58 years, with a standard deviation of 31 years. The mean age of mixed systems is 25 years, with a standard deviation of 19 years.
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using a continuous measure of electoral system age, since Kaplan-Meier and Nelson-Aalen graphs cannot be used for non-categorical predictors. The results of the Chi-squared test (reported in Appendix C, p=0.24) suggest that electoral system age is not a significant predictor of a subject’s risk of launching a reform investigation. However, due to the collinearity problem regarding mixed systems described earlier, there are still strong theoretical and practical reasons for including a measure of electoral system age in Model 1. In particular, controlling for electoral system age in the model will help to more accurately distinguish between the effects of institutional consolidation versus electoral system type, especially in the case of mixed systems.

5.2.5 $H_5$: Are Systems That Recently Investigated Reform More Vulnerable to (Re-)Investigating Reform?

Case studies of electoral reform tend to emphasize the fact that successful reform initiatives often come as the result of repeated investigations that occur over a period of several months or even years. And if more than one reform investigation is often required in order to bring about change, it follows that investigations are likely to occur in clusters, especially where governments are serious about pursuing reform but face institutional and other obstacles in doing so. Thus, $H_5$ posits that once reform gets on the agenda, it tends to linger there. This means that recent prior investigation of reform is likely to greatly increase a subject’s risk of investigating reform (again).

Table 5.5 tests three different formulations of $H_5$ based on whether or not a subject experienced an investigation, attempt, or successful reform in the recent past. Of particular interest is the first series of tests, which indicate whether an electoral system reform occurred in the previous decade, as this measure can be used as a control
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Table 5.5: Number of Reform Investigations Observed vs. Expected:
Tests Comparing Survival Functions Based on Recent Prior Reform,
Attempted Reform, and Investigation of Reform

<table>
<thead>
<tr>
<th>Successful reform in previous decade</th>
<th>Events observed</th>
<th>Log-Rank Test Events expected</th>
<th>Wilcoxon Test Sum of ranks</th>
<th>Tarone-Ware Test Sum of ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>60</td>
<td>63.64</td>
<td>-61</td>
<td>-14.89171</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>4.36</td>
<td>61</td>
<td>14.89171</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$Chi^2(1)$</td>
<td>4.73</td>
<td>4.76</td>
<td>4.75</td>
<td></td>
</tr>
<tr>
<td>$P &gt; Chi^2$</td>
<td>0.0297**</td>
<td>0.0290**</td>
<td>0.0293**</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attempted reform in previous decade</th>
<th>Events observed</th>
<th>Log-Rank Test Events expected</th>
<th>Wilcoxon Test Sum of ranks</th>
<th>Tarone-Ware Test Sum of ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>58</td>
<td>63.46</td>
<td>-70</td>
<td>-19.438898</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>4.54</td>
<td>70</td>
<td>19.438898</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$Chi^2(1)$</td>
<td>8.21</td>
<td>6.92</td>
<td>7.57</td>
<td></td>
</tr>
<tr>
<td>$P &gt; Chi^2$</td>
<td>0.0042***</td>
<td>0.0085***</td>
<td>0.0059***</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reform investigated in previous decade</th>
<th>Events observed</th>
<th>Log-Rank Test Events expected</th>
<th>Wilcoxon Test Sum of ranks</th>
<th>Tarone-Ware Test Sum of ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>20</td>
<td>42.50</td>
<td>-257</td>
<td>-74.738699</td>
</tr>
<tr>
<td>Yes</td>
<td>48</td>
<td>25.50</td>
<td>257</td>
<td>74.738699</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$Chi^2(1)$</td>
<td>36.63</td>
<td>36.74</td>
<td>38.15</td>
<td></td>
</tr>
<tr>
<td>$P &gt; Chi^2$</td>
<td>0.0000***</td>
<td>0.0000***</td>
<td>0.0000***</td>
<td></td>
</tr>
</tbody>
</table>

1. Recent reform, i.e. electoral system in use for less than 10 years.

* $P < 0.10$, ** $P < 0.05$, *** $P < 0.01$

in the modeling phase to help distinguish the effects of mixed electoral systems. A variation of the electoral system age measure, the variable indicating the occurrence of a successful reform in the previous decade can be used to test Colomer’s (2004b)
hypothesis that very new systems are at a disproportionally greater risk of investigating reform. It can also help to address the collinearity problem regarding mixed electoral systems. It seems plausible, for instance, that mixed systems only appeared to be more vulnerable to investigating reform in 5.2.1 and 5.2.2 because these systems recently experienced a major successful change, which effectively kept the possibility of major reform on the agenda.

Table 5.5 shows that recent prior experience with reform initiatives of all types appears to result in a higher rate of failure relative to cases where reform has not recently been on the agenda. The results suggest that all three types of outcomes are potentially relevant predictors of (re-)investigating reform, as all meet the 20% significance threshold for consideration in the modeling phase.

5.3 Multivariate Analysis

Using the results of the tests from the previous section as a starting point, this section estimates several multivariate survival models. Following a similar process to that recommended by Hosmer and Lemeshow (1999), the first model is based on the predictors that have been identified as significant at the 20% level according to the elimination process above. Using Model 1 as basis, non-significant variables are then eliminated from subsequent models in an attempt to refine the estimates.

All of the multivariate regressions presented in this section use the Cox proportional hazards model (Cox, 1972), which is the most popular statistical model for survival analysis. As a result of its semi-parametric nature, the Cox model is also

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17 The appropriateness of the Cox proportional hazards model is discussed in Appendix D.
18 As Allison (2014) explains, the importance of the Cox model to survival analysis cannot be overstated. Box-Steffensmeier and Jones (2004, 48) go so far as to suggest that it will undoubtedly be regarded as “one of the top statistical achievements of the 20th century.”
5.3. MULTIVARIATE ANALYSIS

particularly flexible and easy to use, especially with multiple failure data and time-varying covariates, since it does not assume a particular hazard rate or distribution, which helps to account for its widespread popularity. Because the data include multiple failures per subject, there is likely to be statistical dependence among repeat failures (investigations of reform) for each subject (country)—especially since, as the univariate tests revealed indicated, recent prior investigation of reform is likely to be a strong predictor of future risk. Thus, all models use robust standard errors, clustering by subject (country).\(^{19}\)

Here it is necessary to depart from Hosmer and Lemeshow (1999), as their model fit test\(^ {20}\) is not appropriate for use with clustered models. Instead, after estimating the first Cox model (Model 1), non-significant variables are considered for elimination using Wald tests to obtain a Chi-squared reading\(^ {21}\). These test that the variables of interest (i.e. those to be considered for elimination) are simultaneously equal to zero. If they are, it is safe to assume that they are not contributing much to predicting variation on the dependent variable and can therefore be dropped without harming the overall fit of the model\(^ {22}\). In other words, they are not useful in accounting for a system’s risk of initiating a reform investigation. Models 2 and 3 repeat the process of...

\(^{19}\)Note, however, that different country codes are assigned to the Weimar Republic and West Germany (post-WWII), reflecting major cultural, institutional, and even geographic differences.

\(^{20}\)The classic Hosmer-Lemeshow test involves grouping cases according to their predicted values based on the regression model. For each group (usually deciles), the observed number of events and non-events are compared with the expected number of events and non-events using Pearson’s Chi-squared. A low p-values suggests that the model can be rejected.

\(^{21}\)Ordinarily, because the models are nested, a likelihood ratio test could be used to compare fit. However, because the models contain robust standard errors this is not possible due to the clustering effect. As a result, the “likelihood” reported for these models is not a true likelihood, since observations are no longer considered independent. The Wald test is intended to approximate a likelihood ratio test, but functions differently in that it does not require estimating more than one model for comparison.

\(^{22}\)The Chi-squared value tests the null hypothesis (i.e. that the predictors are simultaneously equal to zero). A significant Wald test indicates that the model fit will be worsened if the variables are dropped, while an insignificant result suggests that the predictors have little explanatory power.
assessing and eliminating predictors. Models 4, and 5 then repeat a similar elimination process but use the alternative electoral system family variable that accounts for party system fragmentation among majoritarian systems for comparison.

5.3.1 Model 1

Model 1\textsuperscript{23} includes all of the variables that were identified as potentially relevant in the univariate testing phase, with the only exception being the modified electoral system family variable that takes into account the degree of party system fragmentation in majoritarian systems, which is included in later models (4 and 5). The development proxies, which were not significant in the univariate testing phase, are not included. The anomalous election outcome variables are included in Models 1 and 2, since the extreme disproportionality variable was significant at the 20 percent level in the earlier tests. The plurality reversal variable is considered for comparison with the extreme disproportionality variable, but is not significant.

The estimates in Model 1 provide clear support for the hypothesis that electoral system family affects a subject’s risk of investigating reform. In particular, proportional systems are at a significantly lower risk—approximately 39% lower—of investigating reform than majoritarian systems (the reference category) at any given time. The result is less clear for mixed systems, however, but by controlling for electoral system family...
5.3. MULTIVARIATE ANALYSIS

Table 5.6: Model 1: Estimated Hazard Ratios, Standard Errors, z-Scores, Two-Tailed p-values, and 95% Confidence Interval Estimates for the Proportional Hazards Model\(^1\) Containing Variables Significant at the 20% Level in the Univariate Testing Phase

<table>
<thead>
<tr>
<th>Electoral System Family(^3)</th>
<th>Hazard Ratio</th>
<th>Standard Error(^2)</th>
<th>z</th>
<th>p &gt;</th>
<th>z</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportional</td>
<td>0.614***</td>
<td>0.110</td>
<td>-2.72</td>
<td>0.006</td>
<td>0.433</td>
<td>0.872</td>
</tr>
<tr>
<td>Mixed</td>
<td>0.910</td>
<td>0.267</td>
<td>-0.32</td>
<td>0.749</td>
<td>0.512</td>
<td>1.618</td>
</tr>
<tr>
<td>Extreme disproportionality (d)</td>
<td>0.565</td>
<td>0.253</td>
<td>-1.28</td>
<td>0.202</td>
<td>0.235</td>
<td>1.358</td>
</tr>
<tr>
<td>Plurality reversal (d)</td>
<td>1.321</td>
<td>0.334</td>
<td>1.10</td>
<td>0.271</td>
<td>0.805</td>
<td>2.1667</td>
</tr>
<tr>
<td>Electoral system &lt;10 years (d)</td>
<td>1.544</td>
<td>0.941</td>
<td>0.71</td>
<td>0.477</td>
<td>0.467</td>
<td>5.101</td>
</tr>
<tr>
<td>Reform attempted in previous decade (d)</td>
<td>1.091</td>
<td>0.783</td>
<td>0.12</td>
<td>0.904</td>
<td>0.267</td>
<td>4.453</td>
</tr>
<tr>
<td>Reform investigated in previous decade (d)</td>
<td>3.791***</td>
<td>1.288</td>
<td>3.92</td>
<td>0.000</td>
<td>1.948</td>
<td>7.377</td>
</tr>
</tbody>
</table>

1. Breslow method for ties  
2. Robust standard errors, adjusted for 15 clusters  
3. Reference category = majoritarian systems  
(d) indicates a dummy variable

System age and the recent occurrence of a previous successful reform, it is now possible to more accurately assess the their effects. As expected, the pattern suggested by Model 1 is quite different from that depicted in the univariate tests. Model 1 suggests that mixed systems are not at a significantly different risk of investigating reform relative to majoritarian systems.

In a blow to the functionalist explanation for reform, the two measures of “poorly-functioning” electoral systems—that is, those indicating recent extreme disproportionality or the occurrence of a plurality reversal—do not appear to have a significant effect on a subject’s risk of initiating a reform investigation. This suggests that reform is not more likely to be proposed in the aftermath of an anomalous result produced by the electoral system, and that the effects of such anomalies may have been somewhat exaggerated in the single-case literature on the subject.
Model 1 also suggests that recent prior investigation of reform is a very strong and significant predictor of a subject’s vulnerability to (re-)investigating reform. Subjects that investigated reform in the past decade are nearly four times as likely to initiate another reform investigation as subjects with no recent history of investigating reform. This provides convincing support for $H_5$. Note, however, that the other dummy variables indicating recent prior reform (i.e. electoral system age less than 10 years) and attempted reform are not significant. The binary predictor indicating the occurrence of an attempted reform in the previous decade is the first to be considered for elimination using a Wald test. The results of the Wald test (reported in Appendix C) suggest that the dummy variable indicating a recent attempted reform can be eliminated without affecting model fit.

5.3.2 Model 2

After eliminating the recent attempted reform dummy variable that was not significant in Model 1, Model 2 estimates the effects of the remaining predictors. Notably, the effects of electoral system family continue to be highly significant, at least in terms of distinguishing between proportional and majoritarian systems. As Table 5.7 shows, Model 2 predicts that on average proportional systems are still about 40% less likely to initiate a reform investigation than majoritarian systems.

As in Model 1, recent prior investigation of reform continues to be the single strongest predictor of a subject’s risk of (re-)investigating reform. Subjects who investigated reform in the past decade are between two and 7.6 times more likely to launch a new reform initiative than subjects who did not.

The dummy variable indicating recent reform/electoral system age continues to be insignificant ($p=0.376$). Contrary to Colomer (2004b), this suggests that if very
new electoral systems are at an increased risk of investigating reform relative to older systems, the effect is not disproportionately high.

Finally, neither of the two anomalous election catalyst predictors are significant, even at the 10% level. Thus, both are considered for elimination using another Wald test (reported in Appendix C, p=0.234), which suggests that removing both variables will not affect model fit.

5.3.3 Model 3

With the anomalous election outcome variables eliminated, Model 3 shows that electoral system family continues to be a relevant predictor of a subject’s risk of investigating reform. As the ideational hypothesis predicts, Table 5.8 shows that majoritarian systems are, on average, about twice as likely to investigate reform as proportional ones. However, somewhat contrary to $H_{1a}$, there is no significant difference in risk
between majoritarian systems and mixed systems.

Table 5.8: Model 3: Estimated Hazard Ratios, Standard Errors, z-Scores, Two-Tailed p-values, and 95% Confidence Interval Estimates for the Further Reduced and Final Proportional Hazards Model

| Electoral system family | Hazard Ratio | Standard Error \(^2\) | z   | p > |z| | 95% C.I. |
|-------------------------|--------------|-------------------------|-----|-----|---|--------|
| Proportional            | 0.501***     | 0.1392848               | -2.49|0.013|0.291|0.864   |
| Mixed                   | 0.800        | 0.182                   | -0.98|0.325|0.512|1.248   |
| Electoral system age    | 0.993***     | 0.002                   | -2.96|0.003|0.989|0.998   |
| Reform investigated in previous decade (d) | 4.427***     | 1.446996                | 4.55 |0.000|2.333|8.401   |

1. Breslow method for ties
2. Robust standard errors, adjusted for 15 clusters
3. Reference category = majoritarian systems
4. (d) indicates a dummy variable

Notably, Model 3 also tests a different, continuous measure of electoral system age, which, as \(H_4\) predicts, appears to be a highly significant predictor of a subject’s risk of investigating reform. While its effect may be small, the magnitude of the hazard ratio should not be taken as evidence of a non-relationship, as this modest result is very much in line with the path-dependent relationship predicted by \(H_4\): while the passing of a single year may not have a large effect on a subject’s risk of investigating reform, the passage of 20 or 30 years appears to have a strong and significant effect. Although the continuous electoral system age was not a significant predictor in the univariate, a Wald test using Model 3 shows that it is, in fact, a highly significant predictor of reform investigation (p=0.0031), and that removing it from the model would reduce the overall model fit substantially. This supports the path-dependent argument in \(H_4\). The measure is also necessary since it serves as a control to help differentiate the effects of mixed electoral systems.
5.3. MULTIVARIATE ANALYSIS

5.3.4 Model 4

Models 4 and 5 repeat a similar elimination process using the alternative electoral system family variable that includes party system fragmentation, for comparison. This time, the anomalous election outcome variables serve an important control function in helping to distinguish the causal mechanism at work—do aberrant outcomes act as catalysts for reform, or are these outcomes also by-products of another causal factor: the party system?

Table 5.9: Model 4: Model 1 Proportional Hazards Model\(^1\) Repeated with Modified Electoral System Family Variable

| Model 4: Risk of Initiating a Reform Investigation, 4-Part Electoral System Family Variable | Hazard Ratio | Standard Error\(^2\) | \(z\) | \(p > |z|\) | 95% C.I. |
|---|---|---|---|---|---|
| Electoral system family\(^3\) | | | | | |
| Multiparty Majoritarian | 1.833** | 0.508 | 2.19 | 0.029 | 1.065 3.155 |
| Proportional | 0.790 | 0.130 | -1.44 | 0.151 | 0.573 1.090 |
| Mixed | 1.131 | 0.326 | 0.43 | 0.669 | 0.643 1.988 |
| Extreme disproportionality (d) | 0.534 | 0.226 | -1.48 | 0.138 | 0.234 1.223 |
| Plurality reversal (d) | 1.477 | 0.409 | 1.41 | 0.159 | 0.858 2.540 |
| Electoral system <10 years (d) | 1.813 | 1.110184 | 0.97 | 0.331 | 0.546 6.020 |
| Reform attempted in previous decade (d) | 1.129 | 0.719 | 0.19 | 0.849 | 0.324 3.935 |
| Reform investigated in previous decade (d) | 3.733*** | 1.241239 | 3.96 | 0.000 | 1.946 7.163 |

1. Breslow method for ties
2. Robust standard errors, adjusted for 15 clusters
3. Reference category = two-party majoritarian systems
(d) indicates a dummy variable

Unlike the previous iterations, electoral system family is no longer a relevant predictor of risk the same way in Model 4, which uses the new reference category of two-party majoritarian systems. Compared to this group, proportional and mixed systems do not appear to be at a significantly greater risk of investigating reform.
5.3. MULTIVARIATE ANALYSIS

Multiparty majoritarian systems, however, appear to be nearly twice as likely as two-party systems to investigate reform, suggesting that the party system is indeed a highly relevant factor.

As in the first round of models, Table 5.9 shows that recent prior investigation of reform is still a significant predictor in Model 4, and its effect is similar to that in Model 1. The remaining variables are not significant, and a Wald test (reported in Appendix C), suggests that the dummy variables indicating very new electoral systems and those that recently attempted reform can be safely eliminated \( p=0.4430 \).

5.3.5 Model 5

Model 5 omits the recently attempted reform dummy variable and replaces the electoral system age binary with the continuous measure. As in Model 3, this continuous measure of electoral system age is also highly significant, decreasing a subject’s risk of investigating reform by about 0.7% per year\(^{24}\). Though modest, this effect certainly accumulates over time: after 49 years (the average observation period of the subjects in the sample) a subject’s risk of investigating reform decreases by nearly 34% compared to a brand new system from the same family. This finding is consistent with \( H_4 \), which posited that newer electoral systems are likely to be at the highest risk of reform since rules become less contested as they become entrenched over time. But while this result confirms the path-dependent element of \( H_4 \), it should be observed that the effect of electoral system age appears to be gradual and cumulative over time, suggesting that very new electoral systems are not at a disproportionate high risk of investigating reform.

\(^{24}\)A Wald test (reported in Appendix C, \( p=0.0058 \)) confirms that removing this variable would harm model fit.
5.3. MULTIVARIATE ANALYSIS

Table 5.10: Model 5: Further Reduced and Final Proportional Hazards Model
Using the Modified Electoral System Family Variable

| Electoral system family | Hazard Ratio | Standard Error | z    | p > |z|  | 95% C.I. |
|-------------------------|--------------|----------------|------|-----|----|---------|
| Multiparty Majoritarian | 1.768**      | 0.464          | 2.17 | 0.030 | 1.057 | 2.959 |
| Proportional            | 0.596**      | 0.127          | -2.43| 0.015 | 0.392 | 0.904 |
| Mixed                   | 0.956        | 0.169          | -0.26| 0.797 | 0.676 | 1.351 |
| Extreme disproportionality (d) | 0.549  | 0.201          | -1.64| 0.101 | 0.268 | 1.124 |
| Plurality reversal (d)  | 1.480        | 0.433          | 1.34 | 0.180 | 0.834 | 2.624 |
| Electoral system age (years) | 0.993***   | 0.003          | -2.76| 0.006 | 0.988 | 0.998 |
| Reform investigated in previous decade (d) | 4.220*** | 1.304          | 4.66 | 0.000 | 2.30249 | 7.733 |

1. Breslow method for ties
2. Robust standard errors, adjusted for 15 clusters
3. Reference category = two-party majoritarian systems
(d) indicates a dummy variable

Wald tests of both anomalous election outcomes variables (reported in Appendix C) show that neither is significant, but keeping these variables as controls in Models 4 and 5 reveals that multiparty majoritarian systems are far more likely to investigate reform than their two-party counterparts, even when the (non-significant) effects of anomalous results are taken into account. Table 5.10 indicates that multiparty majoritarian systems are, on average, about 77% more likely to investigate reform than majoritarian systems with only two parties.

As the univariate tests anticipated, and as Model 3 showed, Model 5 also confirms that that electoral system family remains a relevant predictor of a subject’s risk of launching a reform investigation. Both Models 3 and 5 indicate that proportional systems are significantly less likely to investigate reform than majoritarian ones, reducing a subject’s risk of initiating a reform proposal by as much as 50% (compared to majoritarian systems)\(^{25}\) As in Model 3, there is no significant difference in risk

\(^{25}\)Or 40% compared to two-party majoritarian systems.
5.3. MULTIVARIATE ANALYSIS

Figure 5.6: Estimated Probability of Survival at Time $t$, by Electoral System Family

Estimated Survival Functions Based on Cox Proportional Hazards Regression Models 3 and 5

between majoritarian systems and mixed systems. This not surprising given the correlation problem identified in the univariate testing phase. As Figures 5.6 and 5.7 now make clear, mixed systems are not at an especially great risk of investigating reform. Rather, it seems likely that their apparent vulnerability was mostly due to the comparatively new electoral ages of these systems, which both models show is a highly significant predictor of a subject’s vulnerability to proposing reform.

Finally, both Models 3 and 5 indicate that recent prior investigation of reform is the strongest single predictor a subject’s risk of (re-)investigating reform, as subjects who have experienced at least one investigation in the previous decade are, on average, more than four times as likely to launch a new investigation than subjects with no recent history of investigating reform.

The appropriateness and fit of Models 3 and 5 is discussed in Appendix D. Several
different tests lead to the conclusion that all variables in Models 3 and 5 do indeed appear to satisfy the proportionality assumption, making the Cox model a suitable choice. Similarly, as an analysis of the DFBETAs reveals, although overall model fit is poor (as is common in political science literature), this is most likely due to unexplained variance rather than results being driven by a few anomalous cases.

5.4 Summary of Findings

This chapter began by considering the functionalist, ideational explanation for reform, which argues that majoritarian systems are inherently more vulnerable to reform than proportional or mixed systems due to their tendency to produce unfair results. In particular, this explanation suggests that we should expect to find evidence of reform initiatives following “failures” of the electoral system that result in aberrant outcomes such as plurality reversals or extreme disproportionality.

The analysis in this chapter has found mixed evidence in support of this view. On the one hand, both the univariate analysis (Tables 5.1 and 5.3) and multivariate Cox regressions (Tables 5.8 and 5.10) clearly show that proportional systems are, in general, at a considerably lower risk of investigating reform relative to majoritarian systems. This finding conforms to the functionalist explanation nicely, as majoritarian systems (in general) are about twice as likely to investigate reform as proportional ones (Model 3).

On the other hand, however, Model 5 clearly shows that not all majoritarian systems are equally vulnerable to investigating reform. In particular, multiparty majoritarian systems—that is, majoritarian systems with 2.3 or more effective parliamentary parties—are at a much higher risk of investigating reform than majoritarian
systems dominated by just two parties. While this finding supports the claims by Colomer (2004b) and others that multipartism is a necessary precondition for reform in majoritarian systems (and not just a result of that reform, as Duverger’s (1954) law would have it), it is not easily explained by the functionalist account. This result does make intuitive sense, however, as it seems highly plausible that the emergence of a third party might push the dominant parties in a majoritarian system to consider reform, whether to preserve their own advantage or because they are pressured to do so by the smaller party (or parties) on whose support they may be reliant in the case of a hung parliament.

At the same time, in a further blow to the functionalist explanation, both the univariate and multivariate tests in this chapter have raised doubts about whether poorly-performing electoral systems—that is, those that recently experienced an anomalous election outcome—are actually more likely to initiate a reform investigation than apparently better-performing systems. Models 2 and 5 (and their corresponding Wald tests, reported in Appendix C) show that neither recent extreme disproportionality nor experiencing a plurality reversal significantly affect a subject’s risk of launching a reform investigation.

This finding suggests that much of the literature on the subject, which is largely anecdotal or based on single-case observation, may be overstating the degree to which disproportionality is a relevant driver of reform. Once again, however, the rational choice explanation may offer a clue: extreme disproportionality, in particular, occurs almost exclusively in two-party majoritarian systems, which the rational choice hypothesis maintains are inherently less likely to investigate reform, since doing so would not be in the interest of the parties that benefit from the existing rules. Thus,
it appears that the party system, rather than the proportional performance of an electoral system, is the better predictor of a subject’s risk of investigating reform, at least in majoritarian systems.

Contrary to \( H_2 \), however, the univariate testing in 5.2.2 revealed that fragmented proportional and mixed systems do not appear to be at a significantly increased risk of investigating reform. While this finding does speak to the causality debate regarding multipartism and reform in majoritarian systems described above (see: \cite{Grumm1958, Riker1982, Sartori1986}, it runs counter to the expectations of \cite{Shugart2001}, who predicts that fragmented, inefficient, “hyper-representative” proportional systems should also be at an increased risk of reform. Of course, due to the small size of this sample, it is possible that the proportional systems analyzed here are not sufficiently fragmented to produce the degree of public dissatisfaction that this explanation maintains is necessary for reform. A larger sample may find otherwise. Nevertheless, this analysis has found no evidence that party system fragmentation is a relevant predictor of reform in proportional or mixed systems.

Does this mean that the functionalist explanation can be rejected entirely? Not necessarily. Less proportional (majoritarian) systems are still, on the whole, more likely to propose reform than PR systems. Importantly, this is also true of two-party majoritarian systems, which the rational choice hypothesis predicts should be exceptionally unlikely to investigate reform. It might also be the case that the vast majority of reform proposals in all electoral system families aim to introduce a system that would be more proportional than the status quo, which would clearly support the functionalist explanation. This hypothesis is explored in the next chapter, which looks at the nature and recommendations of reform proposals and investigations themselves.
5.4. SUMMARY OF FINDINGS

Turning to the second cluster of hypotheses, which emphasized the importance of institutional consolidation, it appears that \( H_3 \) can be rejected. None of the three proxies representing different conceptualizations of development were sufficiently significant to be included in the modeling phase. Analysis of the measures themselves also raised further reason to be cautious when distinguishing between “consolidated” and “unconsolidated” democracies.

\( H_4 \), however, has been largely confirmed, as electoral system age proved to be a far better measure of institutional consolidation and a far more significant predictor of a subject’s risk of investigating reform. The small magnitude of the effect reported in Tables 5.8 and 5.10 should not be taken as evidence of a non-relationship, as this finding strongly supports the path-dependent explanation for reform, which suggests that institutions become gradually entrenched (and therefore more resistant to change) over time.

Importantly, Models 1, 2, and 4 revealed that there is no evidence that very new systems are at a disproportionately high risk of investigating reform, as Colomer (2004a) suggests. Rather, as Models 3 and 5 show, the effect of electoral system age appears to be gradual and cumulative, much as the path dependent explanation for reform would suggest. This finding helps to resolve a puzzle that emerged during the univariate testing in 5.2.1 and 5.2.2, which showed that mixed electoral systems were at an unexpectedly high risk of investigating reform. In fact, this early finding was almost certainly the result of collinearity problem involving electoral system age, since the mixed systems in the sample are all the result of a prior reform, making them much newer, on average, than the other systems in the sample. By controlling for electoral system age, the multivariate models in Tables 5.8 and 5.10 show that in
5.4. SUMMARY OF FINDINGS

fact mixed systems are not at a significantly elevated risk of investigating reform.

At the same time, however, this result opens another interesting line of inquiry: if electoral reform is more likely to succeed among new systems, as Colomer (2004b) finds, but not disproportionally more likely to be proposed, as this study has shown, then these findings, taken together, suggest that reform investigations have a higher rate of success in newer systems. In fact, this finding strongly reflects the path-dependent explanation for institutional reform. New systems, it appears, are not inherently contested. However, their lack of institutional consolidation does appear to make it easier to change the rules where some stakeholder(s) may not be satisfied with the new constitutional order.

Finally, there is strong evidence in support of $H_5$, as Models 3 and 5 reveal that recent prior investigation of reform is the single strongest predictor of (re-)investigation among those tested here. This finding reaffirms the assertion in the case study literature that reform is often a long process, as multiple investigations and proposals may be needed in order to bring about change. In New Zealand, for example, even agreeing to investigate reform required two separate proposals, and once the Royal Commission on the Electoral System recommended the use of MMP, it took another proposal, two further investigations (both by parliamentary committee), and a pair of referendums before reform finally occurred. Thus, persistence may well be a key ingredient of successful reforms. That said, this persistence doesn’t always pay off—in Germany, six proposals and an investigation over a span of nearly 20 years ultimately came to nothing. Although this dissertation has not examined veto points or other obstacles that prevent reform from advancing once it gets on the agenda, this finding does suggest that parties that are serious about pursuing change should be prepared
to endure multiple investigations over a sustained period.

Interestingly, recent prior investigation of reform is also a far better predictor of (re-)investigation than either recent prior successful reform or attempted reform. This suggests that in most cases, a reform or an attempted reform may bring an element of finality or closure to debate, as politicians and voters accept the result. The same is not true of recent prior investigations, however, as Models 3 and 5 show that recent investigation of reform is often followed by further investigation. This may indicate that achieving political compromise is a difficult task, but it may also indicate that governments that are not satisfied with the recommendations of an investigative body have an incentive in challenging its findings.

This chapter has explored the conditions under which reform is proposed. The next chapter explores the nature of reform proposals themselves. How is reform investigated? And what types of alternative systems are most commonly recommended?
Chapter 6

How Do Governments Investigate Reform?

Much of the focus of this dissertation has so far been dedicated to exploring when governments investigate reform. This chapter considers how. Because reform proposals and investigations have received scant attention in a literature that remains obsessed with successful reforms, this chapter is dedicated to exploring this often overlooked category. This chapter asks basic questions about what shape reform investigations tend to take and what types of alternatives reform initiatives tend to explore. In doing so, it tests two hypotheses based on claims made in the larger literature. The first hypothesis (H$_6$) posits that the trend toward increasing proportionality should be evident among proposals and investigations, as well. Specifically, proposals and investigations should be likely to advance alternatives that are more proportional than the existing rules wherever possible. The second hypothesis (H$_7$) suggests that the way reform is investigated has changed over time, with fewer investigations being controlled by governmental actors and increased involvement from experts and citizens.
6.1. WHAT DO REFORM PROPOSALS AND INVESTIGATIONS RECOMMEND?

6.1 What Do Reform Proposals and Investigations Recommend?

6.1.1 $H_6$: Proposed Alternative Systems

The idea that we should expect reform proposals and investigations to recommend a more proportional alternative whenever it would be possible to do so ($H_6$) is the logical extension of $H_1$, which posited a relationship between the disproportionality of an electoral system and its likelihood of investigating reform. This functionalist, ideational explanation for reform suggests that plurality and majority electoral systems are inherently more vulnerable to reform because they produce results that are less fair and/or less representative than more proportional systems. The analysis of proposals and investigations in the previous chapter found some evidence in support of this argument. Similarly, Colomer (2004b) shows that there has been a long-term shift away from plurality rule in favour of increased proportionality. But his analysis is based exclusively on successful reforms. If this trend exists among successful reforms, does this mean that reform proposals and investigations are more likely to recommend more proportional alternatives? Or does it mean that those proposals which do recommend more proportional alternatives are more likely to lead to advance?

$H_6$ is in line with the former explanation; if there has been a general trend toward proportionality, it follows that we might also expect to see this reflected in the types of alternatives proposed. This is what the ideational literature predicts when it suggests that voters, dissatisfied by the unfairness of majoritarian systems, are likely to turn to fairer and more representative alternatives. In order to evaluate this hypothesis, the proceeding analysis examines the recommendations of reform initiatives in the sample. If $H_6$ is confirmed, we should expect to find that a) reform initiatives in all
6.1. WHAT DO REFORM PROPOSALS AND INVESTIGATIONS RECOMMEND?

electoral system families (but especially majoritarian systems) are more likely to recommend a more proportional alternative whenever possible, and b) reform initiatives in proportional and mixed systems should only rarely recommend a less proportional alternative.

Figure 6.1 illustrates the relative proportionality of the alternative systems proposed by reform initiatives in each electoral system family—that is, relative to the existing system. In the case of plurality systems, a less proportional alternative is not possible, but proposed alternative systems may be similar (SMP, AV, BV, TRS, etc.), somewhat more proportional (MMM or MMP) or much more proportional (PR or STV). In the case of proportional systems, although the proportionality of “proportional” formulae can vary widely, a much or even somewhat more proportional alternative is not usually possible, therefore a proposed alternative may be similar (e.g. STV moving to PR, or vice versa), somewhat less proportional (e.g. PR moving to MMP), or much less proportional (e.g. STV moving to SMP). Finally, the case of mixed systems is more complex due to the substantial variation in proportionality within this family. Therefore, proposed alternatives may be similar (e.g. no change is recommended), somewhat more proportional (e.g. an MMP system moving to PR or STV) or much more proportional (e.g. an MMM system moving to full PR); conversely, they may also be somewhat less proportional (e.g. MMP moving to MMM) or much less proportional (e.g. MMP moving to SMP).

The size of the bubbles in Figure 6.1 corresponds with the total number of proposed alternatives in each category (labelled in white): the larger the bubble, the

1In practical terms, some highly proportional mixed systems (e.g. Germany) produce results that are as proportional as list PR or STV systems, while some ostensibly proportional rules (e.g. Ireland) produce results that are significantly less proportional than some types of mixed systems. In that sense, the classification in Figure 6.1 is a gross oversimplification, but the aim is to illustrate the general intention of the proposed alternatives in relation to each existing system (albeit imperfectly).
6.1. WHAT DO REFORM PROPOSALS AND INVESTIGATIONS RECOMMEND?

What Alternatives Do Reform Initiatives Suggest?

Figure 6.1: The Proportionality of Proposed Alternatives, Relative to the Existing Electoral System
greater the number of proposed alternatives in that group. Where a proposal or investigation recommended multiple alternatives, each alternative has been coded separately. As a result, there are slightly more proposed alternatives pictured in Figure 6.1 (73) than there were individual proposals and investigations (68).

Figure 6.1 also shows the proportion of proposals and investigations that did not issue a recommendation, or which recommended further investigation. One striking feature of the data is that it appears to be routine for reform investigations to prove inconclusive—as recently happened in the Canadian case in the winter of 2017, much to the dismay of Minister of Democratic Reform Maryam Monsef. On average, 30% of proposals and 17.5% of reform investigations either recommended further investigation of the issue or did not specify a clear alternative proposal. Although these figures seem high, they are generally consistent with the earlier finding ($H_5$) that recent investigation of reform is a strong and significant predictor of further investigation. After all, when one in four reform initiatives (including both proposals and investigations) fails to articulate a clear alternative vision, it is hardly surprising that governments might choose to reopen debate or re-investigate the issue.

Interestingly, these types of outcomes seem to be more common among majoritarian and proportional systems. In majoritarian cases, 19% of reform initiatives called for further investigation, while a further 12% recommended change but without articulating a clear alternative. For proportional systems, these figures are 17% and 11%, respectively. The data do not contain any examples of these outcomes from mixed systems.

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2 Despite having promised to reform the electoral system almost 2000 times during the 2015 election, Justin Trudeau’s Liberals abandoned their commitment to reform shortly after the all-party Special Committee on Electoral Reform issued an equivocal recommendation that was clearly in favour of a more proportional system but did not endorse a specific alternative.

3 These figures combine proposals and investigations, but do not include attempts.
The distribution pattern for majoritarian systems in Figure 6.1 is not entirely consistent with $H_6$, as only about half (16/30) of the recommendations that suggested a specific alternative system proposed a more proportional one. Recommendations that called for a more proportional alternative also tended to prefer mixed systems (10/30) rather than full PR or STV (4/30 and 2/30, respectively). At the same time, a substantial proportion of proposals and investigations recommended against change or suggested alternative systems from the same majoritarian family (14/30).

In particular, the Alternative Vote (AV) appears to be among the most popular alternatives considered by the majoritarian systems in the sample, as it was endorsed by 30% of proposals and investigations that issued a specific recommendation and the subject of two (failed) attempted reforms (UK 1931, 2011).

For mixed systems, the pattern is even less consistent with $H_6$. Of the recommendations that suggested a specific alternative system, only 7.7% recommended a more proportional system, while a further 31% recommended a similarly proportional alternative. Contrary to expectations, nearly half (46%) of specific proposed alternatives actually called for a less proportional system, with most of those alternatives being much less proportional. This surprising result is considered in further detail below.

For proportional systems, the distribution is more consistent with $H_6$ than for mixed systems, but it is still the case that a larger than anticipated proportion of the proposed alternatives were much less proportional than expected. While 53% of specific alternative recommendations called for a similar alternative, 47% called for a less proportional system, with almost half of those (3/7) proposing a much less proportional alternative. $H_6$, by contrast, predicts this number should be close to

\[4\text{Again, these figures do not include attempts.}\]
6.1. WHAT DO REFORM PROPOSALS AND INVESTIGATIONS RECOMMEND?

zero.

All this suggests that while it may be the case that there has been a long-term shift away from plurality rule in favour of increased proportionality, as Colomer (2004b) shows, this trend is not as clear when examining reform proposals and investigations. This indicates that $H_0$ (and, by extension, the ideational explanation for reform) may be understating the degree to which mixed and proportional systems are contested. What might explain this finding?

Majoritarian Systems

Exploring a pattern that was revealed in the previous chapter, it appears that among the majoritarian systems in the sample there are several subtle but revealing distinctions in the types of recommended alternatives proposed in two-party versus multiparty systems. Table 6.1 compares the two groups. Of particular interest is the fact that investigations in two-party majoritarian systems were most likely to recommend against change or propose a similarly (dis)proportional alternative (62%), while investigations in multiparty systems were most likely to recommend a more proportional alternative (43% slightly more proportional, 14% much more proportional).

This may reflect, to some degree, the apparent impartiality of investigatory bodies, which appear to be inclined to recommend an alternative system that would be “fair” based on the nature of the party system at the time. In two-party systems, where the existing majoritarian rules appear to be working well, there is no need for change. But in multiparty majoritarian systems, where Duverger’s law is violated and minor parties (especially those with regionally diffuse support) are likely to be disproportionately disadvantaged by the existing rules, a somewhat more proportional
alternative would level the playing field. Thus, it is possible that among independent or arm’s length investigations in majoritarian systems, the “fairness” considerations emphasized by the ideational literature are more compelling in a multiparty context (i.e. because there is at least one party that is systematically disadvantaged by the current electoral rules). This is certainly reflected in the language of many of the reports produced by independent reform investigations in multiparty majoritarian systems. The repeated emphasis on fairness throughout the reports of the Reddy Commission (1998) and the Law Commission of Canada (2004), for example, is typical.

Table 6.1: Recommendations of Reform Proposals and Investigations, Two-Party vs. Multiparty Majoritarian Systems

<table>
<thead>
<tr>
<th>Existing Electoral System Family</th>
<th>Two-Party Majoritarian</th>
<th>Multiparty Majoritarian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposals</td>
<td>Investigations</td>
</tr>
<tr>
<td>Much More Proportional</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Somewhat More Proportional</td>
<td>0%</td>
<td>15%</td>
</tr>
<tr>
<td>Similar</td>
<td>14%</td>
<td>62%</td>
</tr>
<tr>
<td>Further Investigation</td>
<td>71%</td>
<td>0%</td>
</tr>
<tr>
<td>No Specific Recommendation</td>
<td>0%</td>
<td>8%</td>
</tr>
<tr>
<td>Total %</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Proposals in two-party majoritarian systems were also almost twice as likely as proposals in multiparty systems to recommend further investigation (71% vs. 38%). This suggests a more vague or tentative commitment to reform among these systems that is consistent with the rational choice hypothesis. This explanation maintains that we should not expect two-party majoritarian systems to seriously consider reform (except under exceptional circumstances), as it is not in the interest of the dominant parties to do so. Thus, as expected, most reform proposals that originate
from governing parties in these systems are non-specific promises to consider the issue further. In multiparty systems, however, this type of promise is less common, as most government proposals (62%) suggested a specific alternative, and most of those alternatives (60%) were for a more proportional system. This may reflect pressure from smaller parties (i.e. whose political support may be necessary) to reform the system in a way that would improve their chances of forming government. In two-party systems, this type of pressure is likely to be less intense, since the support of smaller parties is not usually required by the majority governments that tend to occur in these systems.

**Mixed Systems**

Reform proposals and investigations in the mixed systems from the sample, it appears, rarely recommend more proportional alternatives. Instead, reform proposals and investigations tend to propose mainly majoritarian alternatives (46%) or else, more infrequently, less proportional parallel mixed systems (15%). The most intuitive explanation for this trend relates to the fact that all the mixed systems in the sample are themselves the result of a successful reform. In particular, two of the three mixed systems in the sample (Nepal and New Zealand) used majoritarian systems just prior to switching to MMP. Perhaps this tendency toward investigating less proportional alternatives reflects an ongoing debate in these cases in which some groups are not satisfied with the reform and propose a return to the old system?

While this explanation would be compelling, the evidence does not support it. Of the reform proposals and investigations that occurred in the formerly majoritarian
mixed systems in the data, only one (Nepal 2010) proposed a return to plurality—and that was a secondary proposal put forward by an opposition party. The primary proposal in that case called for full PR.\footnote{In this instance, the collapse of Prime Minister Pushpa Kamal Dahal’s government created considerable political uncertainty. The assembly missed a self-imposed deadline to pass a new, permanent constitution by May 2010. There was disagreement among the coalition partners as to which electoral system to adopt in the new constitution. The Maoist CPN, a member of the governing coalition, proposed a list PR system, while the Madhesi parties instead advocated for SMP. Ultimately, however, the ruling Communist Party of Nepal (Unified MarxistLeninist Party) appears to have blocked reform by garnering the support of the opposition Nepal Congress Party to keep the MMP system that was introduced in 2007. For a detailed account, see: Loeb 2012 116-122).} The other proposals and investigations conducted in formerly majoritarian systems mainly considered parallel mixed systems (20%) or recommended against change (40%). In fact, the apparent preference for plurality rule as an alternative among mixed systems is almost exclusively due to the German case, where SMP was repeatedly pursued by the Christian Democrats (CDU) throughout the 1950s and 60s. But it seems unlikely that the German proposals to introduce SMP are indicative of a desire to return to the previous system, as the Weimar Republic had used a highly proportional list PR formula and a majoritarian system had not been used in Germany since 1919.\footnote{Even then, the previous majoritarian system had been a two-round system—quite distinct from the SMP alternative proposed by the CDU.} Instead, most accounts suggest that the CDU’s insistence on plurality was partly meant as a threat to ensure the cooperation of the smaller Free Democratic Party, and partly reflects the fact that the CDU/CSU alliance stood to gain from a majoritarian arrangement due to the more fractured nature of the left (see: Conradt 1970, Jesse 1987, Scarrow 2001).

The CDU’s commitment to SMP was more than just posturing, and there is good reason to believe that the Christian Democrats were quite serious about reform. In addition to keeping it on the agenda for over two decades, the issue proved to be a major stumbling block in the formation of a grand coalition with the Social...
6.1. WHAT DO REFORM PROPOSALS AND INVESTIGATIONS RECOMMEND?

Democrats (SPD) between 1963 and 1966, and later reports indicated that a grand coalition could have been formed earlier if the SPD had been willing to accept a majority voting system (Conradt 1970, 344-345; Jesse 1987, 435). On finally entering into a coalition, the SPD initially agreed to consider reform but later ignored the recommendations of a seven-person expert advisory commission, delayed attempts to introduce reform legislation, and ultimately refused to support it (Conradt 1970, 345-348; Roberts 1975, 20; James 2003, 36).

The particularly contested nature of the German system in the 1950s and 60s may reflect the fact that it was introduced under less-than-democratic circumstances by the Parliamentary Council struck by the occupying Allied forces. By the 1970s, however, the major parties appear to have accepted (if not embraced) MMP, and no further discussion of reform occurs in the data after 1968. Today, Helms (2006, 59) observes that the MMP system is so universally accepted that the issue of major electoral reform has come to be seen as “little short of an assault on democracy itself.”

Proportional Systems

Among the proportional systems in the sample, the preference for much less proportional (majoritarian) alternatives, although not quite as pronounced, may be largely explained by self-interested motivations. When proportional systems investigated reform through parliamentary or independent committees, these mainly recommended against change or proposed a similarly proportional alternative (64%). A further 9% of investigations recommended a slightly less proportional alternative, while the
remaining 27% were inconclusive. The data do not contain an example of an investigatory body proposing a much less proportional alternative. Conversely, however, 43% of reform proposals articulated by governing parties in proportional systems advocated a switch to a much less proportional system, while relatively few (14%) recommended a similarly proportional alternative. This suggests a discrepancy between the types of alternative systems proposed by individual political parties versus those recommended by investigative bodies, including expert reports and multi-party parliamentary committees. Table 6.2 presents a breakdown of the recommended alternatives pictured in Figure 6.2.

The data contain several examples of clearly self-interested, majoritarian reform proposals occurring in proportional systems, as in Slovakia (1995-1996) and Belgium (1999-2000). But nowhere is the difference between government proposals and all-party or independent investigations more stark than in the Irish case, where virtually every proposal (and attempt)—mostly directed by Fianna Fáil, although the cause was later picked up by Fine Gael—has pushed for a majoritarian vision (1958, 1959, 1968), while every investigation has cautioned against the need for change, or

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7There are several examples of reform investigations in proportional systems apparently considering majoritarian rules, as in Sweden (1954), where the Commission on the Constitution appears to have examined some hypothetical situations involving majoritarian systems using past election data. See: Verney (1957, 216-217); Rustow (1969, 101-115); Srlvik (1983, 127-129); Elder et al. (1989, 144-145). However, none of these considerations appear to have resulted in the clear endorsement of a majoritarian alternative.

8The 1995 HZDS Cabinet Program included a proposal to investigate electoral system reform, and the following year leader Vladimír Mečiar proposed a system of 150 single-member districts (SMP). But the obviously self-interested proposal was abandoned just three months later in order to win support from minor coalition partners. See: Malová (2001, 353-354); Birch et al. (2002, 75-77); Millard (2004, 84-89).

9In opposition, the Flemish Liberals (VLD) and the Francophone Liberals (PRL) had proposed a shift from PR to majority two-round run-off elections. Upon forming government, a parliamentary committee was established to investigate the issue, but it did not recommend reform. See: Pilet (2007, 11-12, 83-112); Hooghe and Deschouwer (2012, 201-203).

10Former FG leader Garret FitzGerald even penned a pro-reform article for the journal Representation in 1991 (30:111, pp. 49-53).
suggested a similarly proportional alternative (1967, 1995, 2002, 2011)(FitzGerald 1959; O’Leary 1975, 166-170; O’Leary 1979, 46-74; Sinnott 1995, 222-224; Adshead and Tonge 2009, 118-120; Coakley 2013).\footnote{Investigations in 1960 and 2010 recommended that change be considered, but could not agree on a specific alternative. In the latter case, the issue was then referred to a Constitutional Convention comprised of citizens and parliamentarians. On the Irish case, see also: All-Party Oireachtas Committee on the Constitution (2002); Joint Committee on the Constitution (2010); Convention on the Constitution (2013).}

**Differing Recommendations: Proposals vs. Investigations**

Although the terms “proposal” and “investigation” have been used synonymously in previous chapters, a closer examination reveals that there are some important differences between them.\footnote{Recalling the conceptual framework from Chapter 3, a proposal refers to an explicit commitment to change the electoral system (or investigate change) by a governing party while in office or immediately prior to forming government. Investigation refers to the appointment of an investigatory body (several types are possible, including parliamentary committees or independent expert commissions, for example) to consider the issue and present a recommendation.} In all three electoral system families, reform investigations conform to $H_0$ far better than proposals, as investigations tend to recommend similarly proportional alternatives at a much higher rate. Only rarely do reform investigations recommend less proportional rules. This may indicate that the added impartiality of investigations could lead them to weigh more heavily the importance of the types of “fairness” arguments typically associated with the ideational explanation for reform.

But does this confirm the functionalist, ideational argument? Or is it evidence of something else? In all types of systems, reform investigations were consistently more conservative than proposals, recommending against change or advancing an alternative from the same electoral system family far more frequently: on average,
6.1. WHAT DO REFORM PROPOSALS AND INVESTIGATIONS RECOMMEND?

Table 6.2: Recommendations of Reform Proposals and Investigations, by Existing Electoral System Family

<table>
<thead>
<tr>
<th>Existing Electoral System Family</th>
<th>Majoritarian Proposals</th>
<th>Mixed Proposals</th>
<th>Proportional Proposals</th>
<th>Mixed Investigations</th>
<th>Proportional Investigations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much More Proportional</td>
<td>2</td>
<td>4</td>
<td></td>
<td>(13%)</td>
<td>(15%)</td>
</tr>
<tr>
<td>Somewhat More Proportional</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>(15%) (30%) (9%) (0%)</td>
</tr>
<tr>
<td>Similar</td>
<td>3</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat Less Proportional</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Much Less Proportional</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>(55%) (0%) (43%) (0%)</td>
</tr>
<tr>
<td>Further Investigation</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>No Specific Recommendation</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>27</td>
<td>11</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>%</td>
<td>(100%)</td>
<td>(100%)</td>
<td>(100%)</td>
<td>(100%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

Note: Where a proposal or investigation recommended multiple alternatives, each alternative has been coded separately; as a result, there are slightly more proposed alternatives (73) than proposals/investigations (63). These numbers do not include attempts.

50% of investigations (not including attempts) recommended against change.

At the same time, the tendency of reform proposals originating from government to recommend less proportional alternatives more often than expected—much more often in the case of mixed and proportional systems—may also reflect the self-interested explanation for reform advanced by rational choice theorists. In many cases, it is likely that the governing party would stand to benefit from a majoritarian rule change that would simultaneously increasing their own seat bonus while disproportionately disadvantaging smaller (competing) parties.

To probe the causal claims of the ideational explanation further, the next section

13This figure is even higher when considering investigations that recommended a specific alternative system: 20/33.
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considers the “most likely” cases where we should expect to find proposals and investigations that recommend more proportional alternatives: those reform initiatives that follow an unfair, anomalous election outcome.

**Extreme disproportionality**

Given that $H_6$ is an extension of $H_1$, which predicted that disproportionality, especially extreme disproportionality, would increase a system’s likelihood of investigating reform, it is also worth considering the types of alternative systems that tend to be proposed in response to these conditions. Even if it appears that majoritarian systems are only somewhat more likely to consider more proportional alternatives on the whole, one might expect this tendency to be more prevalent following extreme disproportional or other anomalous election outcomes. If the causal argument in the ideational literature is borne out, those proposals and investigations that follow extreme election outcomes—which are inherently unfair—should be the most likely to propose more proportional alternatives, reflecting the anticipated high levels of dissatisfaction with the disproportional system that produced the anomalous result in the first place, and a corresponding desire for a more “fair” alternative.

Nineteen of the 227 elections in the data resulted in extreme disproportional outcomes (with a Least Squares Index value of 20 or higher). Of those extreme election outcomes, 5 were followed by at least one reform initiative within 10 years, and, in some cases, more than one proposal or investigation occurred during that time. Of the 9 reform initiatives that occurred following extreme disproportional elections, two

\footnote{Looking at reform proposals and investigations that endorsed a specific alternative, 53% recommended a more proportional alternative, while 47% supported the status quo or a system from the same family.}
proposals called for further investigation but did not specify an alternative (Mauritius 2008, 2010), while a further two investigations considered reform but did not issue clear recommendations (India 1970). Another two investigations recommended against changing the existing system (Canada 1936; India 1989). Of the three initiatives that proposed a more proportional alternative, two suggested mixed systems (Mauritius 2000, 2002) while the third entailed a conflicting promise to simultaneously implement both AV and PR (Canada 1935).

An examination of the alternative systems proposed in the wake of extreme disproportional election outcomes casts doubt on this extension of $H_6$. While reform initiatives in majoritarian systems, on average, recommended a more proportional alternative 38% of the time, the average among initiatives that follow extreme disproportional elections is just 33%. The data do not reflect the sort of dissatisfaction with “malfunctioning” electoral systems that the ideational predicts.

**Plurality reversals**

A further 10 elections in the data resulted in plurality reversals, four of which were followed by reform initiatives within 10 years. In some cases, more than one reform proposal or investigation occurred. Once again, the causal explanation implicit in the ideational explanation for reform suggests that proposals and investigations that follow plurality reversals should be especially likely to propose more proportional alternatives. Once again, however, the pattern of alternative proposals does not conform to $H_6$. Just 33% of reform initiatives that followed plurality reversals suggested the adoption of a more proportional alternative—slightly below the overall average of 38%.
6.2. GENERAL TRENDS IN INVESTIGATING REFORM

Of the nine such reform initiatives in the data, one third called for further investigation of the issue, while another third recommended against change or suggested an alternative system from the same (majoritarian) family, and the remaining third proposed the use of a more proportional alternative. Two investigations recommended against change (New Zealand 1978, 1988), while two investigations and a proposal called for further investigation of reform but without specifying a particular alternative (New Zealand 1984, 1987, 1990). Two independent, high profile investigations recommended adopting MMP (Canada 1979; New Zealand 1985), and one investigation recommended the adoption of a proportional system, but failed to specify whether that should be list PR or STV (UK 1929). Finally, an attempted reform in the UK in 1931 sought to replace the SMP system with AV, but failed.

Together with the similar finding regarding proposals that follow extreme disproportional election outcomes, this challenges the causal explanation advanced by the ideational literature. If these outcomes do indeed crystallize discontent with the existing electoral system, as is often (anecdotally) suggested, this does not seem to translate into a preference for proportionality. Reform initiatives that follow anomalous election outcomes in the data are not more likely to recommend proportional alternatives—if anything, they appear to be slightly less likely to do so.

6.2 General Trends in Investigating Reform

6.2.1 $H_7$: Reform Investigations Over Time

$H_7$ posits that the nature of reform investigations has changed over time, with fewer reforms being controlled by governmental actors and increased involvement from experts and citizens. This hypothesis is inspired by the rapidly expanding sub-literature
examining citizen participation in the process of democratic institutional reform, especially via deliberative mini-publics (Thompson 2008; Warren and Pearse 2008; Le Duc 2011). At present, this literature offers the only serious examination of electoral reform investigations in their own right. Several recent studies have also emphasized the importance of citizen participation and public engagement as key factors in explaining the success or failure of democratic reform initiatives (Renwick 2009a, 2010; Renwick and Pilet 2016). While $H_7$ does not go so far as to claim a causal connection, it does suggest that the way in which electoral reform is investigated has changed over time.

To assess this hypothesis, Figure 6.2 shows the proportion of government-initiated reform investigations in the sample that involved government, citizens, and experts, respectively. The size of the bubbles corresponds to the proportion of investigations that were conducted by citizens, experts, and governments in each year, respectively. Reform proposals (i.e. promises made by government that did not involve an investigation) are listed separately, as are undemocratic reforms. A cursory examination appears to confirm the trend posited by $H_7$.

The pattern in Figure 6.2 is clear: whether by special committee, cabinet committee, or speaker’s conference, reform investigations appear to have taken a variety of forms, but, until 1959, they remained the exclusive domain of government. In part, this reflects the conceptual framework used to define “reform initiatives” for this study, which is deliberately restricted to reform proposals and investigations that have been initiated by government. Even so, there appears to have been a clear shift in the way that governments approach reform, with expert and even citizen

$^{15}$Note that for most years, only one investigation occurred, but in some years multiple investigations have resulted in smaller bubbles.
involvement increasing dramatically since the early 1980s.

The earliest examples of the involvement of non-governmental actors in the reform process in Figure 6.2 are the two Irish referendums on the future of the STV system in 1959 and 1968. Yet it would be misleading to identify these referendums as the beginning of the well-documented shift toward greater public consultation. In the Irish case, the STV electoral system was enshrined in the constitution of 1937, which can only be modified by referendum. Thus, any attempt to change it (democratically speaking) would require a public vote. This raises an important counterfactual question: would the public have been involved in the reform process if it had not been...
6.2. GENERAL TRENDS IN INVESTIGATING REFORM 167

required in order to implement reform? The answer is probably not. Had it been possible to change the electoral system without the bother (and risk) of a referendum, it seems likely that Éamon de Valera’s Fianna Fáil government would have dispensed with this mechanism, given its persistent commitment to reform throughout the 1950s and 60s and the obvious lack of public dissatisfaction with the existing STV system.

The Irish case aside, however, the shift away from exclusive government control appears to have begun in earnest in the 1970s with the increased involvement of experts, especially judges and academics. The earliest example of a government-appointed expert investigation of reform in any of the cases in the sample comes from 1973, with the appointment of the Royal Commission on the Constitution in the UK. Its final report recommended the use of STV for any national assemblies created in England, Scotland, or Wales, but made no recommendation for Westminster elections. The Royal Commission format has since proved to be a popular method of investigating electoral reform. By the early 1980s the involvement of experts, in particular, appears to have increased dramatically, becoming a regular feature of government-sponsored investigations. Examples of similar trends include the Pepin-Robarts Task Force on Canadian Unity in 1979, the Royal Commission on the Electoral System in New Zealand (1986), the Constitution Review Group in Ireland (1996), the Independent Commission on the Voting System in the UK (1998), and a host of others.

16 However, because the Royal Commission made no recommendations for Westminster elections, it is not counted as a reform investigation for the purposes of the preceding analysis.

17 The committee had not been explicitly tasked with modifying the electoral system, and although it recommend a variety of institutional reforms, including electoral system reform, this recommendation was promptly rejected by the governing Liberals (Seidle 1995, 292; Farrell 2001, 38-39; Pilon 2013, 193.)
Importantly, this trend is not limited to advanced industrial democracies. Similarly independent or arm’s length expert reviews have occurred in most of the developing states in the sample. Some of the most notable such examples coincide with the emergence of independent post-colonial states, including a series of reports on the design of post-independence Mauritian political institutions, beginning with the recommendations of constitutional expert Professor Stanley Alexander de Smith in the 1960s.\footnote{For a summary, see: \textit{Government of Mauritius} (2014).} In Belize, too, a small group of members from the opposition United Democratic Party visited the independent British Electoral Reform Society seeking advice just prior to independence in 1981.

Of course, expert involvement in the issue of electoral reform dates from long before 1980. Independently motivated academics and activists in the tradition of Mill (1861) and Hare (1865) have long held symposiums and published volumes dedicated to persuading political elites of the need for reform. And these efforts can and have influenced government policy, as with the influential Tarkunde Committee (1975) for electoral reform organized by Indian activist Jaya Prakash Narayan, which proved so popular with the public that it inspired the reform plans of the Janata government when it took office in 1977 (\textit{Advani} 1987, 7-8; \textit{Trivedi} 1987, 25-26; \textit{Chopra} 1989, 164-167). But the focus of this study is on government-initiated reforms, and Figure 6.2 reveals an important shift in the way that governments have approached this issue. Although it continues to be true that democratic electoral reform cannot occur without an act of government (in addition to other likely hurdles), the trend toward increased expert and citizen involvement in the investigation of reform suggests that governments are increasingly willing to concede at least partial control over the deliberative mechanisms through which reform is considered.
Although the $H_7$ was inspired by literature that emphasizes the growing importance of citizen participation in the reform process, the data contain relatively few such examples. Apart from the aforementioned Irish referendums, the other examples of citizen participation in the data come from New Zealand (referendums in 1992, 1993, and 2011), and the UK (2011 referendum). One further investigation involving a combination of government and citizen involvement occurred in Ireland, with the appointment of the Constitutional Convention in 2011, which was comprised of 66 citizens, 33 parliamentarians, and an independent Chairman. Although deliberative mini-publics have become an increasingly popular tool around the world (and not just in the area of electoral reform), the Irish Constitutional Convention is the only such example in the data. With so few cases, it is difficult to speculate about the degree to which these examples are indicative of a larger trend, but some possible patterns may be evident. Of the six democratically attempted reforms in the data, only two did not involve public consultation via referendum (UK 1931 and Nepal 2007). Although there are no examples of citizen consultation among the developing countries in the sample (even in India and Mauritius, where the issue has received considerable attention), since 1959, no reform has been attempted in any of the advanced industrial democracies analyzed here that did not involve public approval via referendum. Whether this is evidence of an emergent standard for democratic reform is impossible to say due to the small size of the sample analyzed here.

At least on the surface, however, relinquishing control over the introduction and design of a proposed alternative system appears to violate the basic assumption of the rational choice explanation for reform, which emphasizes that parties will only change
the voting system when it is in their interest to do so. Why would a rational, self-interested governing party willingly give up control over the reform process, especially since the increased involvement of independent experts and citizens seems likely to limit degree to which parties can change the system to their advantage? Yet as [Katz (2005) and Cusack et al. (2007)] rightly observe, it has never been quite as easy for political parties to manipulate electoral rules as the underlying assumptions of the rational choice hypothesis might imply.

There is also no guarantee that governments will pursue the recommendations issued by independent investigations—more often than not the data suggest that they do not, or at least not right away. Nearly every case in the dataset includes at least one example of a government ignoring or delaying its response to the recommendations of an independent investigation of reform. In Belize, the United Democratic Party lost interest in the recommendations of the Electoral Reform Society as soon as it formed government in 1984. In the UK, 13 years passed between the appointment of the Jenkins Commission (1998) and the referendum on its recommendations. In Canada, the Pepin-Robarts Commission’s (1979) recommendation of MMP has been gathering dust for nearly 40 years. Subsequent similar recommendations from the Law Commission of Canada (2004) also appear to have been largely ignored. In India, there is still no sign of any serious intention to implement the recommendations of either the Goswami Committee (1990) or the Reddy Commission (1998) as far as modifying voting system is concerned. In New Zealand, it took seven years, at least one further investigation (by parliamentary committee), and two referendums to implement the recommendations of the Royal Commission on the Electoral System (1986). In Ireland, repeated advice from experts doubting the need for reform appears to have
been ignored by a series of governments pushing for reform. The recommendations of
the expert Constitutional Review Group (1996) that questioned the need for reform
were largely ignored, and the issue was immediately re-investigated by a parliamen-
tary committee before being picked up again in 2002. Its recommendation (against
change), was, in turn, also largely overlooked by another all-party investigation in
2010. An independent investigation involving citizens and parliamentarians again
recommended against changing the STV electoral system in 2013. And finally, in
Mauritius, the recommendations of the 2002 Sachs Report were re-investigated (and
rejected) by a parliamentary committee before being superseded by another indepen-
dent investigation (the 2011 Carcassonne Report), which was also rejected. Even an
ultimatum from the United Nations Human Rights Commission does not appear to
have been sufficient to compel the government to act on the issue of reform.

It may be the case that independent investigation of reform is emerging as a new
type of institutional hurdle that is necessary to implement reform. This argument is
certainly implied in much of the emerging deliberative democracy literature, and it
merits further investigation in the future. If so, this conforms to the pattern evident in
the analysis of $H_5$, which showed that reform proposals and investigations often occur
in clusters. After all, if there is no guarantee that an investigation will recommend
the “right” result, governments may simply choose to re-investigate reform until they
are presented with a more desirable alternative, as appears to have happened in the
Mauritian and Irish cases.
6.3 Conclusion

$H_6$ posited that the trend toward increasing proportionality predicted by the functionalist, ideational hypothesis and observed by studies of successful reform should also be evident among reform proposals and investigations, as well. However, this analysis has found only limited evidence in support of this hypothesis. Examining the recommendations of reform proposals and investigations in the sample, one of the most immediately striking findings is the proportion that did not issue a conclusive recommendation. On average, about one in four reform initiatives (including both proposals and investigations) either recommended further investigation of the issue or did not specify a clear alternative proposal. While these figures may seem high, they are generally consistent with $H_5$, which posited that recent investigation of reform is likely to be a strong predictor of further investigation, and which the analysis in Chapter 5 confirmed.

Among majoritarian systems, of the recommendations that did suggest a specific alternative system only about half (53%) proposed a more proportional one, while the remainder recommended against change or suggested alternative systems from the same majoritarian family. There are also some small but interesting differences between two-party and multiparty systems. A breakdown of recommended alternatives suggests that investigations in two-party majoritarian systems were most likely to recommend against change or propose a similarly (dis)proportional alternative, while investigations in multiparty systems were more inclined to recommend proportional alternatives. This suggests that apparently impartial investigatory bodies may be more inclined to take the nature of the party system into account when issuing their recommendations. In terms of proposals, two-party majoritarian systems are also
almost twice likely as multiparty systems to recommend further investigation, which suggests a tentative commitment to reform among these systems that is consistent with the rational choice hypothesis.

In a more critical blow to the ideational explanation, however, it also appears that reform initiatives that follow anomalous election outcomes are not more likely to recommend proportional alternatives—if anything, they appear to be slightly less likely to do so. This finding is clearly inconsistent with the expectations of the ideational literature, which not only predicts that “unfairness” (i.e. disproportionality) should be a major catalysing factor for reform, but also suggests that we should expect to see “fairer” (i.e. more proportional) alternatives proposed in response “failures” of the existing electoral system. Taken together with the results from Chapter 5, which found no evidence that these anomalous outcomes increase a subject’s risk of investigating reform, this finding suggests that the largely single-case based literature is almost certainly overestimating the effects of extreme disproportionality.

At the same time, mixed and proportional systems favoured disproportional, majoritarian alternatives far more frequently than expected. In mixed systems, nearly half (46%) of specific proposed alternatives called for a less proportional system. In proportional systems, this figure was 47%. In both cases, many of these proposals called for a much less proportional (i.e. majoritarian) alternative—something the ideational literature predicts should almost never occur. Importantly, in the case of the mixed systems in the sample, which are themselves the result of a previous successful reform, this trend does not appear to reflect a desire by some to revert to the previous system.
In all electoral system families it must be noted that the data also show a notable difference between the alternative electoral systems recommended by reform investigations versus proposals. Reform investigations in all families tend to be more conservative, favouring the status quo at a much higher rate than proposals. This means that investigations in mixed and proportional systems rarely recommend less proportional rules—as $H_6$ predicts—but it also means that, contrary to $H_6$, investigations in majoritarian system tend to favour similar, majoritarian rules. This may indicate that the added impartiality of investigations could lead them to weigh more heavily the importance of the types of “fairness” arguments typically associated with the ideational explanation for reform, but it may also indicate an institutional bias in favour of the status quo.

The tendency of reform proposals originating from government to recommend less proportional alternatives more often than expected—much more often in the case of mixed and proportional systems—also appears to support the self-interested rational choice explanation for reform. In these cases, it is likely that the governing party proposing reform would stand to benefit from a majoritarian rule change that would simultaneously increase their own seat bonus while disproportionately disadvantaging their smaller competitors.

Of course, it must be noted that the sample on which this analysis is based is relatively small—just 68 reform initiatives in 14 countries. And while it is certainly possible that an examination of different cases could yield different results, this is a critique to which the larger literature, with its emphasis on single-case studies of successful outcomes, is far more vulnerable.
All this leads to the conclusion that to the extent that there has been a trend toward increasing proportionality, the evidence for this trend appears to be far stronger among successful reforms than among reform proposals and investigations. In that sense, this finding may open an important avenue for future research. While the data show that reform initiatives on the whole are only slightly more likely to recommend a more proportional alternative than the existing system, it appears that reform attempts are not—of the six democratically attempted reforms in the data, only two proposed a more proportional alternative. Yet these two more proportional proposals are the only ones to have succeeded. Does this mean that attempts to implement more proportional alternative systems are more likely to succeed? Further research is needed in this area.

These findings also underscore a major limitation of the functionalist, ideational approach: the distinction between “good” versus “bad” electoral systems based on their output is, in large part, a red herring. Although there is certainly room for disagreement on normative grounds, as the well-established literature on the effects of electoral systems has long argued, the different electoral system families represent different logics of government (see: Lijphart 1984; Powell 2000; Hall and Soskice 2001). In that sense, a majoritarian system is not merely a poorly-functioning copy of a proportional system, but entails a fundamentally different vision of democracy—something that is also recognized, for instance, in the distinction between the seven organizing principles of democracies in the Varieties of Democracy Project (2015), one of which is a majoritarian dimension. Thus, it is not surprising that majoritarian systems may be hesitant to transform themselves so profoundly by introducing more proportional rules—especially in two-party majoritarian systems where the current
rules are less disputed due to the absence of a third-party challenger. More surprising, however, is the degree to which proportional systems appear to entertain majoritarian proposals, although this is likely explained by self-interested motivations.

Indeed, overall, this chapter has provided much stronger support for the self-interested, rational choice explanation for reform than for the ideational argument—with one possible exception. Turning to $H_7$ there is strong evidence of a trend toward the increased involvement of experts and citizens in the process of investigating reform. This trend has been well documented by recent work examining the sudden surge in popularity of tools such as deliberative mini-publics. However, less attention has been paid to the more gradual but no less seismic shift toward the involvement of experts and independent investigative bodies. Yet, on the surface, this trend appears to contradict the most basic assumptions of the rational choice hypothesis, which maintains that actors (in this case, governing parties) will only pursue reform when doing so is clearly to their own advantage. Relinquishing control over the design of a proposed alternative system clearly violates this assumption.

Nevertheless, it remains true that governments retain a near exclusive degree control over the reform process. In that sense, almost every country in the sample contains at least one example of a government commissioning an independent reform investigation and then delaying, rejecting, or re-examining its recommendations. This helps to explain why reform is re-investigated so frequently, as the analysis in the preceding chapter found. It also points to another area for future research regarding the obstacles to reform initiatives—an area that this analysis has largely overlooked.
Chapter 7

Conclusion

7.1 Summary

This dissertation began by challenging the myth that electoral reform is rare. As Chapter 2 explained, in one way or another this assumption features prominently in most of the major theoretical approaches to the study of electoral reform. For historical institutionalists, for example, the rarity of reform is a reflection of the self-reinforcing nature of political institutions. For rational choice theorists, the rarity of reform is seen as confirmation that elites will only change the rules that have benefited them when extraordinary circumstances disrupt the political equilibrium and reform becomes necessary to preserve their historical advantage.

Yet while it is certainly true that successful reform is rare, this analysis has shown that successful reforms are only the tip of the iceberg. The continued emphasis on the rarity of reform that exists across the field conceals the fact that what is often called “stasis” is routinely interrupted by periods of serious and sustained debate. This analysis has shown that reform is attempted twice as often as it succeeds, and that it is investigated ten times more often than it is attempted. In fact, reform is
proposed and investigated about once every 12 years in the sample analysed here, and yet remarkably little is known about this vast majority of cases. The fact that the larger literature has mostly ignored these outcomes represents a methodological weakness and a missed opportunity to learn more about the reform process.

To remedy this ill, the project proposed a corrective framework that encourages scholars to consider a broader range of outcomes beyond the typical “successful” versus “stasis” binary that has dominated current scholarship. Most importantly, the framework outlined in Chapter 3 distinguishes between at least three different types of outcomes where electoral reform did not occur: stasis, in which reform is not seriously considered by any branch of government; proposed/investigated reform, in which government actors indicate a commitment to move forward with reform; and unsuccessfully attempted, in which a government’s attempt to change the voting system fails due to lack of legislative or electoral support or the veto of another actor. In differentiating between these outcomes, the conceptual framework draws attention to the multitude of under-explored cases in which reform has been unsuccessfully attempted, investigated, or never proposed at all.

Following this framework, Chapter 4 advanced seven hypotheses about when and how countries investigate electoral reform. These hypotheses probe the conditions that increase a country’s risk of investigating reform and the nature of reform investigations themselves. The hypotheses formed two complementary clusters inspired by empirical studies of successful electoral reforms and informed by different theoretical approaches to the study of institutional change.

The first group reflected a predominantly functionalist understanding of reform, which predicted that electoral system change would be proposed in order to bring
“poorly performing” electoral systems closer to a better-functioning ideal. This included the widely-held ideational belief that majoritarian systems—particularly highly disproportional majoritarian systems—are more vulnerable to change due to their inherent unfairness. It also included the hypothesis that party system fragmentation should increase a system’s likelihood of investigating change across all electoral system families. In majoritarian systems, for example, we might expect the presence of a strong third party challenger to disrupt the equilibrium, leading governing parties to either push for change defensively, or to (at least appear to) meet the reform demands of smaller challengers whose coalition support may be politically necessary. By contrast, hyper-representative (i.e. highly fragmented) proportional and mixed systems should also be vulnerable to attempts to reform them to better approximate a more efficient, less fragmented ideal.

The second group offered a different—although not necessarily incompatible—path-dependent explanation. This approach emphasized the importance of institutional consolidation and explored two related hypotheses. The first reflected the recurring assumption that the political institutions in developing democracies are less firmly entrenched than those in developed democracies, making them more contested and therefore more vulnerable to investigating reform. The second posited that the degree of institutional consolidation, measured as electoral system age, should be inversely correlated with reform investigation. That is, the older a system is, the more entrenched it becomes, the more likely it is to be accepted by those players that have flourished under its rules (i.e. formed government), and the less vulnerable it should be to reform proposals and investigations.

Chapter 5 tested those hypotheses that predict when reform is investigated using
an original dataset containing details of reform proposals and investigations in 14 randomly selected parliamentary democracies. It applied survival analysis techniques to determine whether and to what degree the predictors identified by the hypotheses affect a country’s risk of initiating a reform investigation. Originally developed for use in demography and biology, this statistical technique is rapidly gaining popularity in the social sciences. This project is the first to apply it to the study of electoral reform. Following a model-building process similar to that in [Hosmer and Lemeshow (1999)], predictors that met a predetermined significance threshold in a series of univariate tests were then included in the first iteration of a multivariate Cox proportional hazards model. After estimating the first Cox model (Model 1), the non-significant variables were considered for elimination. The two best-fitting Models (3 and 5) served as the basis for further analysis.

Chapter 6 evaluated two further hypotheses about how reform is investigated. This chapter examined the nature of reform investigations themselves, the recommendations they issued, and the way in which reform investigations have been transformed over time. The key findings of Chapters 5 and 6 are summarized below.

7.2 The Empirical Contributions of the Study

7.2.1 Assessing the Functionalist Explanation for Reform

Taking up a common refrain in the ideational literature, $H_1$ probed the relationship between the disproportionality of an electoral system and its vulnerability to investigating reform. $H_{1a}$ predicted that majoritarian systems would be more likely to investigate reform than proportional or mixed systems. The analysis in Chapter 5 found mixed evidence in support of this view. On the one hand, both the univariate
tests and the multivariate Cox regressions clearly showed that the proportional systems in the sample are, in general, at a considerably lower risk of investigating reform relative to majoritarian systems. This finding certainly conforms to the functionalist explanation, as Model 3 suggests that all else being equal, majoritarian systems (in general) are about twice as likely to investigate reform as proportional systems. Moreover, Model 5 showed that the proportional systems in the sample were even less likely to investigate reform than the two-party majoritarian systems, which the rational choice hypothesis predicts should be among the least likely to investigate reform.

On the other hand, the analysis in Chapter 5 showed that contrary to $H_{1b}$, poorly-performing electoral systems—that is, those that recently experienced an anomalous election outcome—were no more likely to initiate a reform investigation than better-performing systems. Neither extreme disproportionality nor a recent plurality reversal significantly affected a subject’s risk of launching a reform investigation.

Building on these findings, the analysis of the recommended alternatives proposed by reform initiatives in Chapter 6 also found only limited evidence of a trend toward increasing proportionality. Contrary to $H_6$, mixed and proportional systems favoured disproportional, majoritarian alternatives far more frequently than expected. In both mixed and proportional systems, nearly half of specific proposed alternatives called for a less proportional system, and in both cases many of these proposals called for a much less proportional alternative—something the ideational literature predicts should almost never occur.

Among majoritarian systems, of the recommendations that suggested a specific
alternative system only about half proposed a more proportional one, while the remainder recommended against change or suggested alternative systems from the same majoritarian family. More specifically, reform initiatives that followed anomalous election outcomes were not more likely to recommend proportional alternatives—if anything, they appear to be slightly less likely to do so. This finding is clearly inconsistent with the expectations of the ideational literature, which not only predicts that “unfairness” should be a major catalyst for reform, but also suggest that we should expect to see “fairer” (i.e. more proportional) alternatives proposed in response to “failures” of the existing electoral system.

Taken together, these findings indicate that much of the ideational literature on the subject, which is largely based on single-case observation, may be overstating the degree to which disproportionality is a relevant driver of reform. While it may be the case that back-to-back “wrong-winner” elections in New Zealand helped to inspire the reform movement there, for instance, this high-profile case does appear to be an anomaly. As this analysis has shown, neither extreme disproportionality nor a recent plurality reversal appear to significantly affect a subject’s risk of investigating reform. This is likely because extreme disproportionality, in particular, occurs almost exclusively in two-party majoritarian systems, which the rational choice hypothesis predicts should be inherently unlikely to investigate reform, since doing so would not be in the interest of the parties that clearly benefit from the existing rules. Thus, it appears that the party system, rather than the proportional performance of an electoral system, is the better predictor of a country’s risk of investigating reform.

That said, however, the party system is not a universal predictor, as it explains patterns of reform investigation in some cases far better than in others. Following
a theme that has been explored by diverse scholars ranging from Hermens (1941) to Shugart (2001), a second functionalist hypothesis, $H_2$, predicted that inefficient, “hyper-representative” (i.e. highly fragmented) proportional systems should also be inherently more vulnerable to change. However, the univariate analysis in Chapter 5 showed that party system fragmentation is only a relevant predictor of risk among majoritarian systems. Contrary to $H_2$, fragmented proportional and mixed systems do not appear to be at a significantly elevated risk of investigating reform.

Among majoritarian systems, the nature of the party system is an important factor. Model 5 clearly shows that not all majoritarian systems are equally vulnerable to investigating reform. In particular, multiparty majoritarian systems were shown to be at a much higher risk of investigating reform than their two-party cousins. This finding supports the causal claim in the literature that multipartism is a necessary precondition for reform in majoritarian systems rather than the result of that reform, as Duverger’s (1954) law would have it. Indeed, this analysis has shown that multi-party majoritarian systems are at a far greater risk of taking the first steps toward reform (i.e. launching an investigation), which helps to establish the direction of causation in this situation. This result also makes intuitive sense, as it seems highly plausible that the emergence of a third party might push the dominant parties in a majoritarian system to consider reform.

This finding strongly supports the self-interest argument when it predicts governing parties in a two-party system should have no desire to change electoral rules that are working well for them—even when they produce results that are clearly unfair, as in the case of extreme disproportionality. But because this analysis has not considered successful or attempted reform, a complete test of the causal mechanisms specified
by the rational choice hypothesis is not possible here. This leaves several important questions unanswered for the present. Do governments in multiparty majoritarian systems investigate reform more frequently for self-interested reasons (i.e. because they are keen to find ways to protect their historical advantage), as the rational actor explanation holds? Or is this pattern indicative of the pressure from third parties to modify the system in a way that would give these smaller parties a better chance at forming government? Although the difference is subtle, it suggests that the timing of reform investigations and the source of the impetus for change are important.

It certainly seems plausible that smaller parties—whose support is often necessary to prop-up minority governments in the hung parliaments that are likely to occur in a multiparty majoritarian system—might use this leverage to push for reform, which would make them (and not the established parties) the primary drivers of change. There are several clear examples of this type of scenario in the data, most notably the UK referendum of 2011, where the Conservatives promised to hold a referendum on introducing a modified version of the alternative vote in exchange for the support of the Liberal Democratic Party, which had been pushing for reform since at least the late 1990s. While the Conservatives committed to a referendum (and then campaigned heavily in favour of the status quo), in other cases merely investigating or even promising to investigate reform may be sufficient to appease coalition partners, especially since investigations often take months or years to complete—that is, if they are completed at all before the next election cycle rolls around and parties’ strategic calculations have changed.

\[1\] In 1997, Labour and the Liberal Democrats agreed to the Cook-Maclennan pact, which, among other things, agreed to form an investigative commission to consider replacing the plurality electoral system. However, the recommendations of the resulting Jenkins Commission were never implemented by the Labour government. See: Reynolds (1999, 173-174); Dunleavy and Margetts (2004, 297).
Furthering this point, the analysis in Chapter 6 revealed that a surprising number of reform investigations are actually inconclusive. On average, about one in four reform initiatives (including both proposals and investigations) did not specify a clear alternative proposal. In some cases, this was because they called for further investigation of the issue, while other investigations were cut short by the dismissal of parliament or paralysed by partisan disagreement. The probability of an inconclusive result may make investigating and re-investigating reform particularly attractive to governments looking to stall or delay reforms in which they are not interested but which they must be seen to pursue in order to secure the support of other parties whose interest in reform is more genuine.

Chapter 6 also showed that even when an investigation did issue a clear and unequivocal recommendation, this was no guarantee that it would be acted upon. Again, the UK case is illustrative in this regard. In an earlier pact with Labour during the 1997 election, the Liberal Democrats were initially satisfied by Tony Blair’s promise to investigate reform and his intimation that some form of proportional representation would be the likely outcome (see: Reynolds 1999 173-174; Dunleavy and Margetts 2004 297). However, after Labour won a decisive victory (securing the highest proportion of seats the party had ever held) and support from the Liberals was no longer necessary, Blair followed through on his promise to investigate reform but promptly ignored the recommendations of the Jenkins Commission, as did his successor Gordon Brown. It was not until Labour looked to be in serious electoral danger in 2010 that it included a promise to hold a referendum on AV in its manifesto, although this was not enough to secure the support of the Liberal Democrats, who allied with the
7.2. EMPIRICAL CONTRIBUTIONS

Tories after having been disappointed before. Importantly, the discussion in Chapter 6 showed that the UK case is not alone in this regard. Almost every country in the sample has witnessed at least one example of a government commissioning an independent reform investigation and then delaying, rejecting, or re-examining its recommendations.

7.2.2 The Importance of Institutional Consolidation

Turning to the second cluster of hypotheses inspired by path-dependent explanations that emphasize the importance of institutional consolidation, $H_3$ posited that developing states should be at a higher risk of proposing/investigating reform. While this assumption is commonplace in the literature (see: [Katz 2005], [Blais and Shugart 2008], [Renwick 2010]), this analysis failed to find any evidence that development has any measurable effect on a subject’s baseline hazard. Despite considering several different measures of the concept in Chapter 5, none appeared to render developing countries more vulnerable to investigating reform than advanced industrial democracies. A critical analysis of the measures themselves also raised further reason for caution when distinguishing between “consolidated” and “unconsolidated” democracies.

It should be noted that this finding does not offer conclusive proof that scepticism of very new or unstable democracies is unwarranted. As the scope of this project has been limited to reform proposals and investigations, it cannot speak to the rate of successful or even attempted reform in these cases. It may well be the case that reforms in developing cases face fewer obstacles and are therefore more likely to succeed. However, this analysis does indicate that democratic institutions in these
cases are not inherently more contested, which suggests that comparative scholars who exclude developing democracies *en masse* must provide more compelling reasons for doing so.

That “development” proved to be a poor predictor of a subject’s vulnerability to investigating reform should not be taken as evidence that institutional consolidation is irrelevant, however. Far from it. Using a different, less conceptually contested measure, electoral system age proved to be a far more significant predictor of a subject’s risk of launching a reform investigation. The small magnitude of the effect reported in Chapter 5 should not be taken as evidence of a trivial or non-substantive relationship, as this finding strongly supports the path-dependent explanation for reform, which suggests that institutions become gradually entrenched (and therefore more resistant to change) over time. However, contrary to initial expectations, there is no evidence that very new systems are at a disproportionately high risk of investigating reform, as \[\text{Colomer} \ (2004b)\] predicts. Rather, the analysis of \(H_4\) shows that the effect of electoral system age is gradual and cumulative, much as the path dependent explanation for reform holds.

Of course, it is worth noting that this finding is also compatible with the self-interest explanation for reform; as actors adapt to the new institutional context, those who thrive (i.e. form government) understandably become more resistant to changing the conditions that have benefited them. But this does raise an interesting question that merits further exploration: \[\text{Colomer} \ (2004b)\] finds that very new systems are the most vulnerable to successful reform, yet the analysis in Chapter 5 found that very new systems were *not* at a significantly increased risk of investigating reform. If reform is not more likely to be proposed in these cases, what then explains their
particular vulnerability to successful change? Further research is needed to help explain this pattern.

7.2.3 Investigating Reform Investigations

Chapter 6 looked at the nature of reform investigations themselves and considered the way in which reform has been investigated over time. The data contain examples of a wide variety of reform investigations. Speaker’s conferences. Cabinet committees. All-party parliamentary special committees. But until the 1980s, reform investigation remained the exclusive domain of government. In some ways this is a natural reflection of the conceptual framework outlined in Chapter 3, which defined “reform initiatives” in such a way as to deliberately restrict the sample to reform proposals and investigations that were initiated by government. Nevertheless, there appears to have been a clear shift in the way that governments approach reform, with expert involvement increasing dramatically since the early 1980s and citizen involvement becoming an increasingly popular component of reform investigations, especially in recent years.

This finding is very much in line with a trend that has been identified in the burgeoning literature on deliberative mini-publics, which so far has been the only place where reform investigations have been seriously examined in their own right. Yet voluntarily ceding control over the reform process—even in a limited way—appears to violate the fundamental assumption of the rational choice hypothesis, which stresses the fact that governing parties should only be expected to move to reform the system when doing so is clearly in their own interests. Why would a party that clearly benefits from the existing rules (i.e. because it is in office) give up control to an independent
investigatory body, not only allowing it to decide whether reform is necessary, but also in many cases giving it the power design an alternative system that may seriously—and potentially irreversibly—disadvantage that party’s electoral prospects in the long term?

This trend may reflect, as some democratic theorists and proponents of deliberative mini-publics have argued, that independent input, whether from experts or citizens, is emerging as a new “best practice” for governments interested in democratic reform. But it is equally possible that governments have used independent investigations as a tool to advance their own interests. It is important to remember that even when citizens and experts become involved, governments retain almost exclusive control over the reform process. In particular, this means that they can usually choose to ignore the recommendations of an independent investigation (see: McLaverty 2009; Smith 2009)—or simply task another body with reinvestigating the issue (over and over, if need be) until a more favourable recommendation is issued.

For some critics, the non-binding nature of their recommendations and the general degree of manipulability of these deliberative bodies are among their major weaknesses (Furedi, 2005, 118-119), and indeed in virtually every country in the sample that investigated reform there is also at least one example of a government commissioning an independent reform investigation and then rejecting or re-examining its recommendations.

This may help to explain why reform is re-investigated so frequently, as the analysis in Chapter 5 showed. As $H_5$ predicted, Models 3 and 5 revealed that recent prior investigation of reform is the single strongest predictor of (re-)investigation among those tested here. Other things being equal, countries that recently experienced at
least one reform investigation were shown to be, on average, more than four times as likely to launch a new investigation as subjects with no recent history of investigating reform. On one level, this finding reaffirms the assertion in the case study literature that reform is often a long process, as multiple investigations and proposals may be needed in order to bring about change. Interestingly, however, during the model-building process recent prior investigation of reform was also shown to be a far better predictor of (re-)investigation than either successful reform or attempted reform. This may indicate that a recent reform or attempted reform can bring an element of finality or closure to debate, as politicians and voters accept the result. But it may also be evidence of a trend whereby governments that are not satisfied with the recommendations of an investigation simply repeat the process. In the latter case, rather than ceding control of the reform process to experts and ordinary citizens in a way that reflects an emerging standard for democratic reform initiatives, it would appear that savvy parties may be using these apparently impartial investigations to legitimize their own agenda. In particular, by setting the terms of independent investigations and designing the criteria by which they evaluate the need for change (and any alternative system that might be proposed), governments may be able to subtly bias ostensibly independent investigations in favour of a particular outcome even before they begin. Using the data collected for this dissertation, a future project might explore this relationship by examining the likelihood that governments will follow through on the recommendations of independent investigations (both citizen and expert) versus other types of proposals and investigations.
7.2.4 Practical Implications for Reform Advocates and Political Parties

From the perspective of pro-reform advocates, especially those in majoritarian systems, who tend to find the ideational arguments about the superior fairness of proportionality to be particularly compelling, this analysis may seem to offer little hope. But while it is true that this study has found only limited evidence in support of the ideational view, these findings do nevertheless entail some important practical implications for reform advocates.

Firstly, in terms of strategy, this analysis strongly suggests that directing resources toward contesting anomalous election results and lobbying governments by emphasizing the unfairness of the existing rules may be for naught, as these tactics are unlikely to yield a favourable response. This advice is clearly counter-intuitive in some respects, as the media attention that surrounds these aberrant outcomes provides a rare natural opportunity to increase public awareness of the failings of the current electoral system. These anomalous results may even provoke some pro-reform sentiment among the general public, at least temporarily. But as the analysis in Chapter 5 showed, governments that clearly benefit from the existing rules are unlikely to consider reform even when those rules produce results that are clearly unfair. In that sense, it is hardly surprising that political parties are motivated by different logics than reform advocates. Although political parties serve an important representative function in a democracy, they are nonetheless in the business of getting elected, rather than providing “fair” representation.

Instead, it may be more advantageous to direct precious resources toward persuading electorally viable third parties of the need for reform. In majoritarian systems, the emergence of a third party challenger was shown to increase the likelihood that a
country would consider reform by over 75%. Moreover, it should not be terribly difficult to persuade a rational, office-seeking third party of the merits of an alternative electoral system—especially if that party’s support is diffuse, as a more proportional electoral system would almost certainly improve their chances of winning seats. In most cases, however, the real difficulty is more likely to come from persuading smaller parties of the urgency of reform, and convincing them to use what leverage they may have to pursue reform over other policy goals. Naturally, this does mean that advocates in stable two-party majoritarian systems may be out of luck for the time being. However, while the emergence of a challenger may be slow process, it is quite possibly the best chance that reform advocates may have to push governments that favour the status quo to consider reform.

Secondly, the examination of the recommendations of reform investigations in Chapter 6 suggests that it is important for reform advocates not to despair when an investigation fails to issue a clear recommendation or is apparently ignored by government. Both situations, it seems, are actually relatively common. But far from being decisive “failures,” there is at least some reason to optimistic about these seemingly disappointing outcomes. After all, the analysis in Chapter 5 showed that the very fact that a government has recently considered reform is the single strongest predictor of further investigation of reform. In such a moment, strategic political pressure is vital to keeping reform on the agenda. Thus, it may be advantageous to conserve lobbying efforts for intensive bursts at critical moments rather than spreading resources evenly over time and space in a sustained but low-level campaign. Once a government indicates its willingness to consider reform, advocates would be wise to direct their attentions toward keeping reform on the agenda, even if that means they are likely
to have to endure several rounds of investigation and re-investigation. However, this process can take years. In Britain, the Liberal Democrats had to wait more than a decade to hold a referendum on the recommendations of the Jenkins Commission. In New Zealand, it took two referendums to change the voting system, the first of which only occurred in 1992—fourteen years after reform was first proposed. This kind of sustained pressure may put a real strain on the resources of smaller advocacy groups, but the hard-fought battle to investigate reform may come to nothing if the recommendations of an investigation are allowed to gather dust. Most importantly, activists must keep in mind that investigation of reform is only the beginning—and not the end—of any quest for reform, and it is important not to assume that governments will act on the recommendations that they have solicited.

This analysis has not considered the role of institutional obstacles to reform, which may yet prove to be just as much a source of frustration for reform advocates as government inaction. Nevertheless, a strategic shift from away from emphasizing ideational arguments in favour of a rational self-interest perspective seems likely to be beneficial. However, Renwick (2010) also shows that elite-imposed reform is unlikely to succeed without the support of citizenry, which suggests that reform advocates who turn their attentions to persuading political parties of the need for reform must not neglect the importance convincing the general public, as well. As LeDuc et al. (2008) show, even the involvement of citizens in deliberative mini-publics may not be sufficient to persuade voters of the urgency of reform, so public education and media outreach are critical.

There may be a lesson here for governments, too. Dismissing the recommendations of an independent reform investigation may buy governments enough time to
reframe the debate, but it can also be a dangerous prospect, especially where one or more opposition parties are pushing hard for change. Thus, agreeing to investigate reform and then delaying a response indefinitely may seem like a good short-term solution, but this can only continue for so long before opposition parties catch on, as the Liberal Democrats did in the UK case. From the perspective of established parties, it is usually true that the worst reform is one that you can’t control, which makes investigating reform a potentially risky proposition if a party lacks the corresponding intention to follow through. Although Cross (2005) suggests governments may investigate reform as an end in itself (i.e. in order to appear pro-reform without actually being interested in change), some bells cannot be un-rung.

7.3 The Conceptual and Methodological Contributions of the Study

In addition to the empirical contributions summarized above, this project has also sought to make a valuable conceptual and methodological contribution to the study of electoral system reform and institutional change, more broadly. To begin with, this project has challenged two major assumptions about the way that the prevailing literature has approached the study of electoral reform. First, by illuminating the spectrum of outcomes between stasis and success, this dissertation has dispelled the myth that electoral reform is rare. While studies of successful reform have offered valuable insight into a handful of fascinating cases, relatively little is known about the majority of cases where change has not occurred. Although it is easy to understand why researchers have been drawn to these cases, doing so has obscured the vast majority of the phenomenon. In order to shed light on reform proposals and investigations in a way that would not be coloured or conditioned by the ultimate
success or failure of those initiatives, this project began by selecting cases at random. Second, by showing that electoral institutions in developing democracies are neither inherently unstable nor especially contested, this analysis has questioned the common practice of dismissing developing democracies as inappropriate for comparative analysis alongside wealthier and more advanced countries.

Of course, although the cases analysed here were randomly chosen, it bears acknowledging that the sample on which this analysis is based is relatively small. While many political science datasets—including some of those on which this analysis has drawn—including dozens of countries and thousands of observations, by comparative standards this sample is rather limited. The observations span just 821 country-years and include 68 reform initiatives in 14 democratic states. Thus, while every attempt has been made to avoid biasing the sample, it is certainly possible that an examination of different cases could yield different results. Nevertheless, by moving away from the popular methods of within-case observation or small-N comparison of cases where reform successfully occurred, this project represents an important attempt to overcome some of the limitations of the larger literature on electoral reform.

The troubling tendency to focus so narrowly on successful reforms is not unique to the study of electoral systems, and in that sense the pathologies of the electoral reform literature are characteristic of the much larger body of work on institutional innovation. Thus, the conceptual framework outlined in Chapter 3 makes a clear contribution to the larger institutional reform literature by emphasizing the importance of proposals, investigations, and attempted reforms, and, more importantly, by providing a conceptual approach to these outcomes. The exhaustive nature of the framework allows researchers to identify the full spectrum of outcomes, dispelling the
7.4. FUTURE RESEARCH

persistent fiction that electoral reform is rare. Importantly, this conceptual framework also has the distinct advantage of being equally compatible with qualitative and quantitative research designs. At the same time, although the framework has been specified in terms of electoral reform for the purposes of this project, there is no theoretical reason why it could not be applied to study other types of institutional change, as well.

This project is also the first to use survival analysis to study the phenomenon of electoral system change. In doing so it has demonstrated appropriateness of the method for the study of institutional change, providing an approach that could be adapted to the study of other phenomena in the future. The project has also collected valuable data on reform initiatives in 14 randomly selected parliamentary democracies, and this dataset can now be expanded, adapted, and used with other quantitative or even mixed-methods approaches to address some of the many questions about electoral reform that this analysis has raised.

7.4 Future Research

Because relatively little has been written on the subject of reform investigations and proposals, this area remains under-theorized at present. In an attempt to address this lacuna, this study has adapted several explanations for successful electoral system change to the study of reform proposals and investigations. In this regard, the findings of this dissertation offer a valuable sketch of an area that has until now remained largely out of view. Yet due to limitations of scope and feasibility, it has not been possible to test all of the potentially relevant theoretical explanations for reform that were explored in Chapter 2. Using some of the data on reform investigations and
attempts gathered for this project, future research may consider the role of other potentially relevant explanatory variables such as the effects of exogenous shocks (using data on social movements or franchise legislation) or democratic satisfaction on a country’s risk of investigating reform.

Similarly, although this dissertation has found only limited evidence in support of the ideational approach, it would also be possible to test alternative hypotheses that might support this view. For example, [Bol (2013)] finds that parties may be committed to particular electoral systems for ideological reasons. Specifically, there is reason to believe that in some places, parties of the left may be more ideologically committed to proportionality. The data used for this project contain several examples of social democratic parties blocking reforms that would reduce the proportionality of the existing system (Germany, 1960s). At the same time, many of the proposals that would have dramatically reduced proportionality originated from parties of the right (Germany, 1950s and 1960s; Slovakia, 1990s; Belgium, 1999/2000; New Zealand, 2000 and 2011). Using data on party ideology in combination with the information on recommended alternative systems gathered for this study, it would certainly be possible to explore this relationship further. Are parties to the left of the political spectrum more likely than parties to the right to recommend electoral reforms that would increase proportionality relative to the existing system? Is this true even where the introduction of more proportional rules might harm that party’s electoral prospects (as in two-party majoritarian systems, for example, or anywhere the existing rules have disproportionately advantaged said party)? Conversely, are parties of the left more likely to be instrumental in blocking reform attempts that might decrease proportionality?
7.4. FUTURE RESEARCH

While this dissertation has shed light on some long-standing puzzles by examining reform from a different angle, further research is needed to fully resolve some of the causal questions that remain unanswered here. An examination of reform investigations has helped to address the question of causality in the multipartism versus proportional representation debate. However, other causal questions remain. Specifically, the causal mechanism that explains why multiparty majoritarian systems are more vulnerable to reform remains imprecisely specified: are (minority) governments pushed to act by smaller, pro-reform parties, or do they choose to act pre-emptively in order to preserve their advantage? Using the data gathered for this study, it would certainly be possible for a future project to test the causal argument implicit in the rational actor hypothesis by adding additional measures (based on electoral data that has already been entered) indicating a) whether or not a governing party has historically benefited from or been disadvantaged by the existing electoral system, and b) whether minority governments are more likely to propose reform than majority ones. A finding that parties that have been disadvantaged by the electoral system are more likely to propose reform would support a rational self-interest explanation. At the same time, a finding that minority governments are more likely to propose reform may indicate that these proposals are primarily intended to appease potential coalition partners in the short term, which would make them self-interested in the sense that they are necessary to secure immediate support but may not reflect a party’s long-term interests in the way that the rational choice literature, with its emphasis on successful reform, currently suggests.

Further testing of this relationship might also involve an examination of the proposed alternatives themselves. Chapter 6 found that reform proposals in two-party
majoritarian systems recommended further investigation (i.e. rather than a specific alternative system) twice as often as proposals in multiparty systems. If this is true of minority governments, as well, it could indicate that their commitment to reform is primarily instrumental (for immediate political gain) rather than indicative of a desire for long-term self-preservation, as the classical rational choice hypothesis would have it.

This underscores the point that the existing theoretical explanations for successful reform are limited in their ability to explain reform investigations and proposals, and that more theoretical development is needed in this area. This is especially true where the short-term, instrumental pay-offs of investigating reform are concerned, given the apparent tendency of governments to ignore recommendations that they themselves solicited. Does this inaction reflect the fact that governments often investigate reform for instrumental reasons without any intention of actually changing the electoral system? If so, what should we make of these “insincere” investigations, and what, if anything, separates them from “sincere” ones? If not, what obstacles prevent governments from moving forward?

This dissertation has been focused on when and how reform is proposed. As a result, it has been less concerned with the obstacles that prevent reform from succeeding once it gets on the agenda. As Chapter 2 revealed, however, these obstacles have been an important focus of the literature on electoral reform, especially from an historical institutional point of view. Yet, once again, much of this existing work continues to focus on the obstacles that prevent attempted reforms from succeeding. Using the data gathered for this project, however, it would be possible to push this analysis further by examining some of the obstacles that prevent investigations or
proposals from advancing to attempts.

Thus, this area represents an obvious next step for the project, especially because both the conceptual framework outlined in Chapter 3 and the original dataset used for the analyses in Chapters 5 and 6 can be easily applied to the consideration of these obstacles. The analysis in Chapter 5, for example, identified several interesting puzzles. Why is it that reform is proposed ten times more often than it is attempted? And why do half of all attempted reforms fail? If very new electoral systems are more vulnerable to successful reform but not to investigating reform, what explains this pattern? Using data on institutional design and veto players, for example, the testing of historical institutional hypotheses regarding the importance of these features should be relatively straightforward. In particular, a future project could explore these questions using a series of sequential logit models to consider the obstacles to reform at each of the stages outlined in the conceptual framework.

7.5 Conclusion

This dissertation began by asking how and when governments consider electoral reform. To answer this question, it examined the frequency, timing, context, design, and content of reform investigations and proposals in a sample of 14 randomly chosen parliamentary democracies. It found that the trend toward increasing proportionality evident among successful reforms is less clear among proposals and investigations. In particular, reform is rarely proposed in response to apparent “failures” of the electoral system, and those investigations that do follow such failures are not more likely to recommend an alternative system that would prevent their recurrence in the future. Instead, the nature of the party system appears to be a far better predictor of reform
investigation, at least in majoritarian systems. Among all electoral system families, electoral system age also appears to be inversely correlated with a country’s risk of investigating reform—the older and more established the system, the less likely it is to consider reform. At the same time, once reform is proposed it tends to linger on the agenda, as more than one investigation is often required in order to advance a reform proposal. While these results challenge the functionalist and ideational explanations for electoral system change, they are clearly in line with the expectations of the rational choice literature and the path-dependent explanation favoured by historical institutionalists.

Of course, the small size of the sample used here means that caution is necessary when attempting to generalize these findings. And further research is needed to assess the obstacles that prevent reform proposals and investigations from advancing to become attempts, and to explore some of the puzzles that this analysis has revealed. Nevertheless, this study represents an important attempt to look beyond cases of successful reform. In that sense, these results have illuminated an area that had been previously obscured. Over the course of this analysis, this project has also challenged several widely-accepted beliefs about electoral reform, including the assumption that electoral institutions in developing countries are inherently more contested even to the point of instability. Most importantly, however, this dissertation has dispelled the myth that electoral reform is rare.


BIBLIOGRAPHY


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Appendix A

Case Selection

The cases chosen for analysis were randomly selected from a list of 186 countries recognized by the United Nations. Countries were then assigned numbers in alphabetical order and a random number generator was used to select the sample by generating 50 random numbers between 1 and 186. The 14 countries in bold font are included in the final sample.

Table A.1: Cases and Observation Periods

<table>
<thead>
<tr>
<th>Country</th>
<th>Observation period</th>
<th>Start date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>1963-2003</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td></td>
<td>2004-2013</td>
<td>Omitted (Insufficient data)</td>
</tr>
<tr>
<td>Algeria</td>
<td>1962-2013</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td>Armenia</td>
<td>1991-2013</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1991-2013</td>
<td>Parliamentary system</td>
</tr>
<tr>
<td>Belgium</td>
<td>1948-2013</td>
<td>Universal suffrage</td>
</tr>
</tbody>
</table>

1 The complete list included 194 countries, but as the purpose of this study is to investigate the factors that explain electoral system change, it was necessary to narrow this initial list to only those states that have electoral systems. Therefore, cases where members of the lower chamber are not and have never been (as of 31 December 2013) elected through universal, direct suffrage have been excluded. This list includes China, Eritrea, Madagascar, Qatar, Saudi Arabia, Somalia, South Sudan, United Arab Emirates.

2 The True Random Number Service: http://www.random.org/ operated by Dr Mads Haahr of the School of Computer Science and Statistics at Trinity College, Dublin in Ireland.
<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belize</td>
<td>1984-2013</td>
<td>Independence</td>
</tr>
<tr>
<td>Burundi</td>
<td>1962-2013</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1960-2013</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>1920-2013</td>
<td>Universal suffrage</td>
</tr>
<tr>
<td>Chile</td>
<td>1949-1973</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td></td>
<td>1974-1989</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td></td>
<td>1990-2013</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td>Colombia</td>
<td>1954-1957</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td></td>
<td>1958-2013</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td>Congo</td>
<td>1963-1991</td>
<td>Omitted (Authoritarian)</td>
</tr>
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<td></td>
<td>1992-1996</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td></td>
<td>1997-2013</td>
<td>Omitted (Authoritarian)</td>
</tr>
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<td>1934-1951</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td></td>
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</tr>
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</tr>
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<td>Finland</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>1933-1948</td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td></td>
<td><strong>1949-2013</strong></td>
<td>Restoration of democracy</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>1974-2013</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
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<tr>
<td></td>
<td>1960-1961</td>
<td>Omitted (Insufficient data)</td>
</tr>
</tbody>
</table>

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3Canada did not recognize the franchise of indigenous and Inuit peoples until 1960. However, as these groups represent less than 5% of the total population, this case is considered to have achieved universal suffrage by the definition used for this study with the extension of the vote to women over age 21 in 1918.
<table>
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<th>Country</th>
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<td>Nepal</td>
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<td>1991-2013</td>
<td><strong>Restoration of democracy</strong></td>
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<td>New Zealand</td>
<td>1919-2013</td>
<td><strong>Universal suffrage</strong></td>
</tr>
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<td>Nigeria</td>
<td>1978</td>
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<tr>
<td>Slovakia</td>
<td>1992-2000</td>
<td><strong>Dissolution of Czechoslovakia in 1993</strong></td>
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<td></td>
<td>1988-1989</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>Omitted (Authoritarian)</td>
</tr>
</tbody>
</table>

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4 Nepal is included as a case in this project following the end of authoritarian rule in 1990. However, it remains the most unstable democracy included in the sample.

5 Although Slovakia did not separate until 1993, the observation period begins with the 1992 elections, which effectively elected the first government of the independent state.

6 This period is omitted due to franchise restrictions implemented in 1948-1949 that stripped Indian Tamils of their political rights, which were not fully recognized until the 1990s.
<table>
<thead>
<tr>
<th>Country</th>
<th>Suffrage Dates</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swaziland</td>
<td>1991-2013</td>
<td>Omitted (Presidentialism)</td>
</tr>
<tr>
<td>1968-2013</td>
<td></td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td><strong>1921-2013</strong></td>
<td><strong>Universal suffrage</strong></td>
</tr>
<tr>
<td>Tanzania</td>
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<tr>
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<td></td>
<td>Omitted (Authoritarian)</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>1978-2013</td>
<td>Omitted (Insufficient data)</td>
</tr>
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<td><strong>United Kingdom</strong></td>
<td><strong>1929-2013</strong></td>
<td><strong>Universal suffrage</strong></td>
</tr>
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<td>1990-2013</td>
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</tr>
<tr>
<td>Zimbabwe</td>
<td>1978-2013</td>
<td>Omitted (Authoritarian)</td>
</tr>
</tbody>
</table>

Suffrage dates are from the Inter-Parliamentary Union (2016).

Clarifications

**Authoritarian:** Based on the “regime” variable in Bormann and Golder (2013), which uses updates from Cheibub et al. (2010). Corrected for “false negative” errors to include minimally democratic states. Additional data from the “Cheibub4Type” variable in Norris (2009).

**Semi-presidential systems:** Armenia, Iceland, and Sri Lanka are classified as Presidential following the “Cheibub4Type” variable in Norris (2009). Finland is classified as Presidential and India as Parliamentary following the “oldexec” variable in Norris (2009).

**Insufficient data:** This includes highly unstable cases (e.g. those with fewer than 10 consecutive years of democratic rule) as well as three small island states for which insufficient data on electoral reform initiatives could be found: Nauru, Saint Kitts and Nevis, and Tuvalu.
## Appendix B

### Electoral System Age

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
<th>Description</th>
<th>Electoral System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>1972</td>
<td>In 1972, the Constitution for the newly independent state did not specifically establish particular electoral system, but indicated Parliament should be elected using direct elections in single territorial districts. This was interpreted to mean SMP.</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
<tr>
<td>Belgium</td>
<td>1899</td>
<td>Proportional representation replaced the previous single member plurality system in 1899.</td>
<td>List Proportional Representation (PR)</td>
</tr>
<tr>
<td>Belize</td>
<td>1936</td>
<td>Belize (formerly British Honduras) attained full internal self-governance in 1964, although the plurality electoral system has been in use for much longer. Before that, SMP had been used to elect (at least some) representatives to the governing council as far back as 1936.</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
</tbody>
</table>

---

1. Although the Settlement of Belize had previously enjoyed self-governing privileges, it relinquished them to the Crown in 1871 in exchange for greater protections [Hillebrands and Ortiz Ortiz 2004].
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Description</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1791</td>
<td>Legislative assemblies with limited self-governing powers were first established with the Constitution Act of 1791, but their influence was limited until 1848, when responsible government was realized[^2].</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
<tr>
<td>Dominica</td>
<td>1924</td>
<td>Dominica was granted internal self-governing powers in 1967, but the plurality system (modeled on the UK) has been in use since before independence, and remains largely unchanged. This system had previously been used to elect Dominica’s representatives to the Leeward Island Federation, and, later, the Windward Islands since at least 1924.</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
<tr>
<td>Germany</td>
<td>1918</td>
<td>The Weimar Constitution of 1918 replaced the previous TRS electoral system with Proportional Representation.</td>
<td>List Proportional Representation (PR)</td>
</tr>
<tr>
<td>(Weimar Republic)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>1949</td>
<td>After WWII, PR was replaced with a mixed electoral system implemented by the Parliamentary Council struck by the Allies in 1948-1949.</td>
<td>Mixed-Member Proportional (MMP)</td>
</tr>
<tr>
<td>(Federal Republic)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>1919</td>
<td>The Government of India Act of 1919 established direct elections using SMP for all levels, although the highly restrictive franchise requirements permitted less than five percent of the population to vote at the time.</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
<tr>
<td>Ireland</td>
<td>1920</td>
<td>Although STV had previously been used in several constituencies and in local elections, it was finally applied to Home Rule elections in 1920. It was then adopted into the 1922 Constitution of the Irish Free State, and entrenched in the 1937 constitutional revisions.</td>
<td>Single Transferable Vote (STV)</td>
</tr>
</tbody>
</table>

[^2]: While the dates cited here make it seem as though the electoral systems of Canada and New Zealand predate that of the UK, of course these former colonies modeled their political institutions on Westminster. The apparent misalignment is due to the fact that the British system continued to use many two- and three-member districts until the Reform Act of 1885.
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Events</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mauritius</td>
<td>1966</td>
<td>The unusual “Best loser” system was introduced shortly before independence, and incorporates the suggestions of both the Banwell Commission and the Stonehouse Report (both from 1966).</td>
<td>Block Vote (BV)</td>
</tr>
<tr>
<td>Nepal</td>
<td>1959</td>
<td>In 1950, the Rana dynasty, which had controlled Nepalese politics for more than a century, was overthrown, and the first democratic elections occurred in 1959. But Nepal’s experiment with democracy was short-lived, and King Mahendra instituted the Panchayat system shortly thereafter.</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>The 2007 constitution, designed with the assistance of the UNDP, included the introduction of a mixed electoral system.</td>
<td>Mixed-Member Proportional (MMP)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1853</td>
<td>The first New Zealand Parliament was elected by SMP in 1853, although its self-governing powers were severely restricted.</td>
<td>Single-Member Plurality (SMP)</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>Following a binding referendum in 1993, SMP was replaced with a mixed electoral system.</td>
<td>Mixed-Member Proportional (MMP)</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1990</td>
<td>After the collapse of the Soviet Union, the first free and fair elections were held in Czechoslovakia in 1990. Following the dissolution of country in 1993, Slovakia continued to use the List-PR electoral system.</td>
<td>List Proportional Representation (PR)</td>
</tr>
</tbody>
</table>

---

3 Mauritian uses the unique “Best loser system,” a variation of a block vote system designed to improve ethnic representation. According to the BLS, the country is divided into 20 three-member geographic constituencies (and one two-member district) in which voters as many votes as there are constituency seats and candidates are elected based on the plurality principle. A further 8 seats are reserved for ethnic minorities (each candidate must declare their ethnicity). After the election, the first 4 BLS seats are distributed to distributed to the most successful losing constituency candidates from each major ethnic group regardless of party. The remaining 4 seats are then allocated based on a complex set of criteria that include ethnic group and party considerations.

4 See Footnote 2.
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>1907</td>
<td>In 1907, PR replaced the previous SMP system.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1885</td>
<td>Although the British electoral system has evolved gradually over the years, the modern SMP system was largely cemented with the Reform Act of 1885. Before that, most constituencies had double-member seats, and many had three members.</td>
</tr>
</tbody>
</table>

Sources: Nohlen et al. (1999, 2001a,b); Nohlen (2005); Nohlen and Stoever (2010); Gallagher and Mitchell (2005); Colomer (2004b); Inter-Parliamentary Union (2016).

5See Footnote 2.
Appendix C

Non-Significant Survival Analysis Tests

5.2.1 Are disproportional systems more vulnerable to investigating reform?

Table C.1: Single-Variable Cox Regression of Reform Investigation
Using A Continuous Measure of Disproportionality

<table>
<thead>
<tr>
<th>Number of subjects</th>
<th>=</th>
<th>17</th>
<th>Log pseudo-likelihood</th>
<th>=</th>
<th>-155.16923</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of failures</td>
<td>=</td>
<td>68</td>
<td>Wald $\chi^2(1)$</td>
<td>=</td>
<td>0.35</td>
</tr>
<tr>
<td>Time at risk</td>
<td>=</td>
<td>839</td>
<td>Prob $&gt; \chi^2(1)$</td>
<td>=</td>
<td>0.5557</td>
</tr>
</tbody>
</table>

| Least Squares Index | 0.0123576 | 0.0209739 | 0.556 | -0.0287505 | 0.0534658 |

Standard error adjusted for 15 clusters
* $P < 0.10$, ** $P < 0.05$, *** $P < 0.01$
5.2.2 Are fragmented party systems more vulnerable to investigating reform?

Table C.2: Single-Variable Cox Regressions of Reform Investigation, Stratified by Electoral System Family

<table>
<thead>
<tr>
<th>Majoritarian systems</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of subjects</td>
<td>9</td>
</tr>
<tr>
<td>Number of failures</td>
<td>41</td>
</tr>
<tr>
<td>Time at risk</td>
<td>474</td>
</tr>
<tr>
<td>Log pseudo-likelihood</td>
<td>= -64.908108</td>
</tr>
<tr>
<td>Wald $Chi^2(1)$</td>
<td>= 14.27</td>
</tr>
<tr>
<td>Prob $&gt; Chi^2(1)$</td>
<td>= 0.0002***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Robust Standard Error</th>
<th>p</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$EffN_S$</td>
<td>0.5828258</td>
<td>0.1542961</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

Standard error adjusted for 9 clusters

<table>
<thead>
<tr>
<th>Proportional systems</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of subjects</td>
<td>5</td>
</tr>
<tr>
<td>Number of failures</td>
<td>15</td>
</tr>
<tr>
<td>Time at risk</td>
<td>277</td>
</tr>
<tr>
<td>Log pseudo-likelihood</td>
<td>= -16.203893</td>
</tr>
<tr>
<td>Wald $Chi^2(1)$</td>
<td>= 0.46</td>
</tr>
<tr>
<td>Prob $&gt; Chi^2(1)$</td>
<td>= 0.4960</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Robust Standard Error</th>
<th>p</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$EffN_S$</td>
<td>-0.0590598</td>
<td>0.0867539</td>
<td>0.496</td>
</tr>
</tbody>
</table>

Standard error adjusted for 9 clusters

<table>
<thead>
<tr>
<th>Mixed systems</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of subjects</td>
<td>3</td>
</tr>
<tr>
<td>Number of failures</td>
<td>12</td>
</tr>
<tr>
<td>Time at risk</td>
<td>91</td>
</tr>
<tr>
<td>Log pseudo-likelihood</td>
<td>= -8.9666624</td>
</tr>
<tr>
<td>Wald $Chi^2(1)$</td>
<td>= 1.41</td>
</tr>
<tr>
<td>Prob $&gt; Chi^2(1)$</td>
<td>= 0.2343</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Robust Standard Error</th>
<th>p</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$EffN_S$</td>
<td>1.668271</td>
<td>1.402641</td>
<td>0.234</td>
</tr>
</tbody>
</table>

Standard error adjusted for 3 clusters

* $P < 0.10$, ** $P < 0.05$, *** $P < 0.01$
5.2.3 Are developing democracies more vulnerable to investigating reform?

Table C.3: Number of Reform Investigations Observed vs. Expected: Tests Comparing Survival Functions, Using Three Proxy Measures of Development

<table>
<thead>
<tr>
<th>Polity IV Score</th>
<th>Events observed</th>
<th>Log-Rank Test</th>
<th>Wilcoxon Test</th>
<th>Tarone-Ware Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events observed</td>
<td>Events expected</td>
<td>Sum of ranks</td>
<td>Sum of ranks</td>
</tr>
<tr>
<td>10</td>
<td>54</td>
<td>53.57</td>
<td>18</td>
<td>3.3904243</td>
</tr>
<tr>
<td>9 or lower</td>
<td>14</td>
<td>14.43</td>
<td>-18</td>
<td>-3.3904243</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>68</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chi²(1)</td>
<td></td>
<td>0.02</td>
<td>0.26</td>
<td>0.11</td>
</tr>
<tr>
<td>P &gt; Chi²</td>
<td></td>
<td>0.8839</td>
<td>0.6095</td>
<td>0.7376</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infant Mortality</th>
<th>Events observed</th>
<th>Log-Rank Test</th>
<th>Wilcoxon Test</th>
<th>Tarone-Ware Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Mortality Rates (50%)</td>
<td>54</td>
<td>57.39</td>
<td>-33</td>
<td>-10.587014</td>
</tr>
<tr>
<td>Highest Mortality Rates (50%)</td>
<td>12</td>
<td>8.61</td>
<td>33</td>
<td>10.587014</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>66</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chi²(1)</td>
<td></td>
<td>1.71</td>
<td>0.98</td>
<td>1.33</td>
</tr>
<tr>
<td>P &gt; Chi²</td>
<td></td>
<td>0.1904</td>
<td>0.3216</td>
<td>0.2486</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Domestic Product</th>
<th>Events observed</th>
<th>Log-Rank Test</th>
<th>Wilcoxon Test</th>
<th>Tarone-Ware Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest GDP (50%)</td>
<td>12</td>
<td>10.60</td>
<td>7</td>
<td>3.4280041</td>
</tr>
<tr>
<td>Highest GDP (50%)</td>
<td>54</td>
<td>55.40</td>
<td>-7</td>
<td>-3.4280041</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>66</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chi²(1)</td>
<td></td>
<td>0.26</td>
<td>0.04</td>
<td>0.12</td>
</tr>
<tr>
<td>P &gt; Chi²</td>
<td></td>
<td>0.6122</td>
<td>0.8401</td>
<td>0.7243</td>
</tr>
</tbody>
</table>

* P < 0.10, ** P < 0.05, *** P < 0.01
5.2.4 Are newer electoral systems more vulnerable to investigating reform?

Table C.4: Single-Variable Cox Regression of Reform Investigation Using a Continuous Measure of Electoral System Age

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Robust Standard Error</th>
<th>p</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electoral system age</td>
<td>-0.0036814</td>
<td>0.0031351</td>
<td>0.240</td>
</tr>
</tbody>
</table>

Standard error adjusted for 15 clusters
* P < 0.10, ** P < 0.05, *** P < 0.01

5.3.1 Models 1 to 3

Table C.5: Model 1, Wald Test of Recent Prior Attempted Reform

Reform attempted
in previous decade (d) = 0

Wald $\chi^2(1)$ = 0.01
Prob $\chi^2(1)$ = 0.9035

Table C.6: Model 2, Wald Test of Variables Indicating Recent Extreme Disproportionality and Recent Plurality Reversal

Extreme disproportional election outcome (d) = 0
Plurality reversal = 0

Wald $\chi^2(2)$ = 2.91
Prob $\chi^2(2)$ = 0.2335

Table C.7: Model 3, Wald Test of Continuous Measure of Electoral System Age

Electoral system age (years) = 0

Wald $\chi^2(1)$ = 8.76
Prob $\chi^2(1)$ = 0.0031***
5.3.2 Models 4 and 5

Table C.8: Model 4, Wald Test of Recent Prior Attempted Reform

<table>
<thead>
<tr>
<th>Reform attempted</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>in previous decade (d) = 0</td>
<td>0</td>
</tr>
<tr>
<td>Electoral system age</td>
<td></td>
</tr>
<tr>
<td>&lt; 10 years (d) = 0</td>
<td>0</td>
</tr>
<tr>
<td>Wald $\chi^2(2)$ = 1.63</td>
<td></td>
</tr>
<tr>
<td>Prob $&gt; \chi^2(2)$ = 0.4430</td>
<td></td>
</tr>
</tbody>
</table>

Table C.9: Model 5, Wald Test of Variables Indicating Recent Extreme Disproportionality and Recent Plurality Reversal

<table>
<thead>
<tr>
<th>Electoral system age (years) = 0</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wald $\chi^2(1)$ = 7.62</td>
<td></td>
</tr>
<tr>
<td>Prob $&gt; \chi^2(1)$ = 0.0058***</td>
<td></td>
</tr>
</tbody>
</table>

Table C.10: Model 5, Wald Test of Variables Indicating Recent Extreme Disproportionality and Recent Plurality Reversal

<table>
<thead>
<tr>
<th>Extreme disproportional</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>election outcome (d) = 0</td>
<td>0</td>
</tr>
<tr>
<td>Plurality reversal</td>
<td>0</td>
</tr>
<tr>
<td>Wald $\chi^2(2)$ = 4.25</td>
<td></td>
</tr>
<tr>
<td>Prob $&gt; \chi^2(2)$ = 0.1195</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Assessing Model Fit

D.1 The Proportionality Assumption

As the name of the model suggests, of the main assumption underlying the Cox proportional hazard model is that of proportional hazards. Specifically, the proportionality assumption requires that the effect of each predictor variable on the log of the hazard is the same at all points in time (Allison 2014, 43). Thus, if some explanatory variable has an effect on the hazard that is different at different points in time, then the hazards cannot be said to be proportional and the assumption is not satisfied.

Although the variable distinguishing very new (versus older) electoral systems was not significant in any of the models, further testing is in order to ensure that the (significant) continuous measure of electoral system age satisfies the proportionality assumption. There are numerous ways to test the proportionality assumption. The first and most straightforward method is to expand the models to include time-dependent covariates, which are interactions of the existing predictors and time. The estimates in Table D.1 do this using log(time), which is the most commonly used...
function of time for this purpose, although, in theory, any function of time could be used. A significant result for any of the time-dependent covariates indicates a potential violation of the proportionality assumption for that predictor. Only Models 3 and 5 are tested, as these contained the most relevant (and fewest irrelevant) predictors.

Table D.1: Cox Proportional Hazard Regressions\(^1\) with Time-Dependent Covariates

<table>
<thead>
<tr>
<th></th>
<th>Model 3</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electoral system family(^2)</td>
<td>1.71201</td>
<td>1.814894*</td>
</tr>
<tr>
<td>Extreme disproportional election outcome (d)</td>
<td>-1.671132</td>
<td></td>
</tr>
<tr>
<td>Plurality reversal (d)</td>
<td>2.207709</td>
<td></td>
</tr>
<tr>
<td>Electoral system age (continuous)</td>
<td>0.0243549</td>
<td>0.0322465**</td>
</tr>
<tr>
<td>Reform investigated in previous decade (d)</td>
<td>0.3830782</td>
<td>0.2390899</td>
</tr>
<tr>
<td><strong>Interactions with time (tvc)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electoral system family(^2)</td>
<td>-0.6213843</td>
<td>-0.5765271**</td>
</tr>
<tr>
<td>Extreme disproportional election outcome (d)</td>
<td>0.4719375</td>
<td></td>
</tr>
<tr>
<td>Plurality reversal (d)</td>
<td>-0.4660752</td>
<td></td>
</tr>
<tr>
<td>Electoral system age (continuous)</td>
<td>-0.009187**</td>
<td>-0.0112247***</td>
</tr>
<tr>
<td>Reform investigated in previous decade (d)</td>
<td>0.3148501</td>
<td>0.3664161</td>
</tr>
</tbody>
</table>

Robust standard errors, adjusted for 15 clusters
1. Breslow method for ties
2. It is not possible to use factor variables as time-dependent covariates, as in the original models (d) indicates a dummy variable

The time-dependent covariate for electoral system age is significant in both tests, which suggests a possible violation in line with the concerns described above. That this variable may violate the proportionality assumption is not surprising, especially considering Colomer’s (2004b) findings that new electoral systems are more vulnerable to successful reform. For this reason, a critical reading emphasizing the importance of this assumption might take issue with the way in which \(H_4\) is framed, as the very core of the hypothesis (i.e. subjects’ risk of investigating reform decreases as the
electoral systems age) seems somewhat at odds with the proportionality assumption, especially given Colomer’s evidence based on successful reforms.

In fact, further testing reveals that neither variable violates the proportionality assumption after all. This result can be confirmed by examining the Schoenfeld residuals from the models estimated in Chapter 5. Tests of the Schoenfeld residuals for each predictor are reported in Table D.2. Notably, none of the results are significant, which suggests that there is no evidence that any of the predictor variables violate the proportionality assumption, making the Cox model appropriate to use in this case.

Table D.2: Tests of Proportional Hazards Assumption: Schoenfeld Residuals for Models 3 and 5

<table>
<thead>
<tr>
<th>Model</th>
<th>Electoral system family</th>
<th>Degrees of freedom</th>
<th>P &gt; Chi²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 3</td>
<td>Majoritarian systems</td>
<td>1</td>
<td>0.5001</td>
</tr>
<tr>
<td></td>
<td>Omitted: reference category</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportional systems</td>
<td>0.54</td>
<td>0.3626</td>
</tr>
<tr>
<td></td>
<td>Mixed systems</td>
<td>0.83</td>
<td>0.5468</td>
</tr>
<tr>
<td></td>
<td>Electoral system age</td>
<td>0.36</td>
<td>0.5236</td>
</tr>
<tr>
<td></td>
<td>Reform investigated in previous decade</td>
<td>0.41</td>
<td>0.9063</td>
</tr>
<tr>
<td>Model 5</td>
<td>Two-party majoritarian systems</td>
<td>0.01</td>
<td>0.9246</td>
</tr>
<tr>
<td></td>
<td>Omitted: reference category</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multiparty majoritarian systems</td>
<td>0.00</td>
<td>0.9833</td>
</tr>
<tr>
<td></td>
<td>Proportional systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixed systems</td>
<td>0.51</td>
<td>0.4770</td>
</tr>
<tr>
<td></td>
<td>Extreme disproportional election in previous decade</td>
<td>0.07</td>
<td>0.7973</td>
</tr>
<tr>
<td></td>
<td>Plurality reversal in previous decade</td>
<td>0.12</td>
<td>0.7272</td>
</tr>
<tr>
<td></td>
<td>Electoral system age</td>
<td>0.00</td>
<td>0.9752</td>
</tr>
<tr>
<td></td>
<td>Reform investigated in previous decade</td>
<td>0.26</td>
<td>0.6076</td>
</tr>
<tr>
<td>Model 5</td>
<td>Global test</td>
<td>1.02</td>
<td>0.9945</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Note: robust variance-covariance matrix used
* P < 0.10, ** P < 0.05, *** P < 0.01

Box-Steffensmeier and Jones (2004) show that Martingale residuals can also be used to assess the appropriateness of the Cox model. By plotting the residuals for each variable in the models, it is possible to visualize the functional form of the covariates,
as in Figures D.3 and D.4.

While curved or inclined fitted lines would confirm that the covariates need to be adjusted for use with the Cox model (i.e. because the proportionality assumption is violated), the straight horizontal lines (with a slope of zero, centred around zero) depicted in Figures D.3 and D.4 show that no adjustments are necessary, as the plots in both Figures indicate that there is no substantial deviation from linearity for any of the covariates.
Figure D.2: Smoothed Martingale Residuals (Model 5)
D.1. THE PROPORTIONALITY ASSUMPTION

The fact that the continuous measure of electoral system age does not appear to violate the proportionality assumption may be a reflection of the way that time has been defined chronologically beginning with the satisfaction of a set of minimally democratic criteria (see Chapter 4). The same would likely also be true if time had been defined using calendar year instead. Alternatively, it would also be possible to set electoral system age as the time variable in a future study, which would preclude its inclusion as an explanatory variable in a statistical model but may yield a different picture of the survival curve.

All this raises the question: how much does it matter if the electoral system age predictor violates the proportionality assumption? Would the Cox model still be appropriate? There is disagreement in the statistical literature on this point. While Hosmer and Lemeshow (1999) insist that violations of the proportionality assumption are serious obstacles to the interpretation of results and therefore must be addressed, Allison (2014, 42) counters that these concerns are almost certainly exaggerated. Instead, he advises caution when interpreting estimates for covariates that do not satisfy the assumption, suggesting that they be understood as an average effect over the observation period. In any case, further testing has revealed that the electoral system age variable does satisfy the proportionality assumption at least in Models 3 and 5. Moreover, since the goal of this project is not to predict the occurrence of future reform investigations but rather to provide a general portrait of the ‘average effects’ of the variables in question, Allison’s interpretation suggests that even if some variables of interest (including electoral system age) had violated the proportionality assumption, this may not have been a critical flaw in the models.
Identifying outlying observations that may be influencing the parameters estimated in the models is especially important given the small size of the sample used in this analysis. Although a random selection procedure was used in order to avoid biasing the results, there is nevertheless a chance that a very small number of outlying cases may be disproportionately swaying the results seen in the models. If so, it is important to identify these subjects and take their effects into account.

While many tests are available for this purpose, this analysis uses DFBETAs derived from a rescaling of the Martingale residuals (reported above). DFBETAs are obtained by comparing the estimated parameters based on the full regressions in Models 3 and 5 with those pertaining to the individual subjects (obtained by removing the subject in question and fitting the model to the remaining subjects). Plots of the DFBETAs for Models 3 and 5 are reported in Figures D.5 and D.6. A visual inspection of the plots allows for the identification of subjects that may have a disproportionate influence on the estimated parameters. Note that DFBETAs are not available for the electoral system family reference category (majoritarian systems in Model 3, and two-party majoritarian systems in Model 5).

Overall, the plots suggest that there are relatively few points of concern, as the outliers are largely clustered around the zero line and tend to more or less cancel one another out. Thus, it is likely safe to conclude that the results reported in above are not likely due to the disproportional influence of a small number of outlying cases.
D.2. OUTLYING CASES

D.2.1 Model 3

The values of DFBETA are relatively easy to interpret. The first two graphs, which illustrate the outliers for the electoral system family variable, suggest that New Zealand (pre-1993), Ireland, and Sweden may be influencing the coefficient for the proportional systems estimator, while Mauritius and New Zealand (post-1993) are influencing the mixed systems estimator. In both graphs, however, the distribution is clustered around the zero line, suggesting there is little cause for concern.

Turning to the electoral system age parameter, Canada and the United Kingdom appear to be the most obvious outliers. Removing the Canadian case would decrease coefficient of that estimator by 0.00075, while removing the British case would increase it by about the same amount. Notably, the outliers for this variable appear to more or
less cancel each other out: Bangladesh (0.0006) and New Zealand pre-1993 (-0.0006), Sweden (0.0005) and Nepal pre-2007 (-0.0005), Ireland (0.0005) and India (0.0003). This suggests that despite the presence of several potential outliers, the estimator is not being unduly influenced by any single subject.

Finally, looking at previous investigation of reform, the British case appears to be the most obvious outlier: if removed, it would increase the coefficient of that parameter (already the largest in the model) by approximately 0.24. The result would be a sizeable increase in the hazard ratio of exp(0.24) or 1.27. This suggests that despite the magnitude of the effect, the large positive value of the coefficient is not driven by any single outlier, but, if anything, may even be underestimated.

D.2.2 Model 5

Repeating the process for Model 5, the first three graphs illustrate the outliers for the electoral system family variable categories. There are several outliers worthy of note. New Zealand pre-1993 (0.14) appears to be positively influencing the coefficient for the two-party majoritarian systems estimator, just as Ireland (-0.15) is negatively influencing it. Similarly, Ireland (0.1) appears to have a positive if somewhat less substantial effect on the proportional systems estimator, although this is largely counterbalanced by Sweden (-0.11). For mixed systems, removing New Zealand post-1993 would increase the value of the coefficient by 0.11. However, because this measure is not significant, its effects are not particularly worrisome. The same is true of the extreme disproportionality and plurality reversal variables.

In the case of the electoral system age parameter, once again the outliers seem to more or less balance each other, clustering around the zero line in a way that
Model 5 DFBETAs

Multiparty Majoritarian Systems

Proportional Systems

Mixed Systems

Recent Extreme Disproportionality

Recent Plurality Reversal

Electoral System Age

Recent Prior Investigation

Figure D.4: Plotted DFBETAs (Model 5)
suggests no single case is clearly manipulating the result. Finally, as in Model 3, the UK is a notable outlier for the previous reform investigation variable, producing a similar negative effect on the estimate. Again, this suggests that large magnitude of the coefficient for that predictor is not due to the influence of an outlying case, but, if anything, may even be underestimated.

D.3 Overall Goodness of Fit

D.3.1 Cox-Snell Residuals

Models 3 and 5 are intended to probe a series of hypotheses based on the literature on successful reforms. In that sense, they are inherently limited in their scope. They are not exhaustive, and it is highly likely that other relevant factors have not been captured. As a result, the overall fit of the models is likely to be relatively poor, resulting from a high degree of unexplained variance on the dependent variable. As expected, the Cox-Snell residuals used to assess overall model fit (reported in Appendix 3) reveal that both Models 3 and 5 fit the data rather poorly, as is typical in much political science literature.

While this would perhaps prove a challenge for a predictive models, it is less problematic in this case. This is because the models are not intended to be used for prediction, and the causal claims made here are relatively modest. In addition, the Martingale and Schoenfeld residuals examined in the previous section give no cause for alarm, and the tests of the proportionality assumption suggest that the Cox model is appropriate (or, at least, not inappropriate). Similarly, as the preceding analysis of

1Such as exogenous shocks or democratic satisfaction, for example, which Chapter 2 noted are both identified in the literature as possible variables of interest.
2A perfect model fit would follow the H line in Figure D.5 exactly, with a slope of 1.
D.3. OVERALL GOODNESS OF FIT

Figure D.5: Cox-Snell Residual Plots (Models 3 and 5)

...the DFBETAs revealed, although overall model fit is poor, this is due to unexplained variance rather than results being driven by a few anomalous cases.