Country Size and State Performance: How Size Affects Politics, Administration and Governance

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Summary

This dissertation addresses the question how the size of a country affects the performance of its political and administrative system. It advances the literature on small states by explicitly theorizing large states and empirically comparing countries of different sizes. Country size, operationalized as population size, is expected to be related to three clusters of country characteristics: First, a perception of vulnerability in small states vs. a lack of awareness for external threats in large states; second, social homogeneity and proximity in small states vs. heterogeneity and distance in large states; third, institutional centralization and concentration of power in small states vs. specialization and de-centralization in large states. The effect of country size and these three characteristic features on different aspects of procedural state performance is analyzed in three empirical chapters. Chapter 2 develops the argument that small country size favors the stability of political regimes, namely authoritarian monarchies. It iterates between theoretical reflections and the empirical analysis of different data: statistical data on population size and monarchic regime durability between 1946 and 2008; two most similar comparative cases of monarchic regimes, Egypt and Jordan; and supposedly deviant cases. Chapter 3 investigates the effect of population size on the effectiveness of national bureaucracies and expects a trade-off between economies and diseconomies of scale. It estimates multivariate OLS regression models and within-between random effects models for more than 150 countries. The analysis supports the hypothesized inverse U-shaped relation and finds that administrative effectiveness is highest, ceteris paribus, at medium levels of population size. Chapter 4 consists of a comparative case study of Germany and Luxembourg and investigates whether country size affected how the two states prepared for and reacted to the 2015 migration crisis. The analysis builds on newspaper articles and 20 expert interviews. It shows that Luxembourg’s small size favored identities and structures that allowed early crisis recognition and preparation as well as swift communication and coordination, whereas Germany’s large size led to attention biases that inhibited a quick reaction. In sum, the findings show that country size affects several aspects of state performance, which has important normative and practical implications.
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CHAPTER ONE

Preamble

1.1 Country size in political science and governance research: Setting the agenda
A look at the news still confirms what was already true in the 1980s: that “the state in the eyes of most people remains paradigmatically large” (Lowenthal 1987, 28). Small states are rarely covered by international media and usually only in the context of exceptional events (Gingrich and Hannerz 2017, 1): an almost complete internet blackout due to a damaged cable shortly drew interest to Tonga in 2019 but mainly highlighted the country’s remoteness. Reporting on the EU member states Malta and Slovakia peaked overnight in relation to the killing of journalists in 2017 and 2018 and related corruption allegations; the two countries were accused of violating European norms. And the small Asian monarchy of Brunei made headlines in 2019 when it introduced Sharia law. The undertone of the news stories was that these small countries deviated from a regional or global norm. In contrast to this limited reporting, the last decades have, in fact, seen an increase in the number of small countries around the globe (Neumann and Gstöhl 2006, 5–7; Lake and O’Mahoney 2004) as result of several developments including the break-up of colonial empires and the rising of independent island states particularly in the Pacific, the disintegration of the Soviet Union and Yugoslavia, and secessions like in Timor-Leste or South Sudan. Nevertheless, the majority of political science and governance research still focuses on a handful of medium-sized and large states and excludes small ones: for example, in their prominent regime classification Geddes and colleagues (2014, 317) exclude all states with a population of less than one million, and Lijphart (2012, 46) compares only the patterns of those democracies that have a population above 250,000. Both give no substantial reasons for this exclusion. Our empirical and theoretical understanding of political and societal phenomena is largely based on the study of largely the same large states (critically for public administration research: Van de Walle et al. 2016, 13). To overcome this gap, specific small-state research has been increasingly conducted over the past decades with the aim to identify the characteristics of their states and societies and the specific conditions under which small countries operate. Veenendaal and Corbett (2015) have made this point convincingly and set the agenda for small-state research in comparative politics.
The danger is, however, that this research field remains an isolated niche of little relevance to researchers from larger states as long as it focuses exclusively on small states and as small-state experts remain among each other and publish in their own specialized outlets such as the recently founded Small States & Territories Journal.

This dissertation takes the small-state literature as a starting point but aims to extend it by integrating and comparing small and larger states in one study. The overarching research question is as follows: How does the size of a country affect the performance of its political and administrative system? The underlying assumption is that the size of a country makes a difference for the functioning of the state; or in short: size matters. To find out whether and, if so, how country size matters, it is fundamental to compare small and large countries. In Sartori’s (1991, 245–46) metaphorical words, mainstream comparative research in politics and public administration only compares apples (large states) and small-state studies focus exclusively on pears (small states). In order to find out how far these two differ, I precisely want to compare apples and pears. The aim is not only to analyze how small states “tick” but how they differ from larger states and what the respective advantages and disadvantages for state performance are. By way of comparison, this thesis also opens up new perspectives on medium-sized and large states and challenges our understanding of them as being the norm; instead, they are only one of the shapes and sizes in which countries come, and not even the most frequent one (see Figure 7.1 in appendix). A normative goal of this dissertation is to raise awareness and mutual understanding for the different conditions and constraints under which smaller and larger countries operate. For example, small states may have difficulties to provide public services efficiently that require a certain number of customers, whereas larger states with more complex sets of actors may have difficulties to agree on substantive reform policies. Understanding such structural constrains helps to understand why states and societies, their behavior and performance differ.

The focus on performance as outcome is also normatively driven; my aim is to contribute to a better understanding of the prerequisites of democratic, effective and successful governance (the focus is on domestic issues within countries, not on international governance). In this dissertation, I employ a broad understanding of state performance comprising decision-making processes, political stability, democratic quality as well as the effectiveness of governments and public administrations. Therefore, I draw on literatures from the fields of comparative
politics, democracy studies, public administration, and public policy, which I integrate in one conceptual framework. Joining these approaches contributes to overcoming sub-disciplinary silos that tend to prevail in the social sciences; and integrating frameworks and previous knowledge of several debates promises new, but also broader insights. This dissertation shows how the same mechanisms affect different parts and phenomena of politico-administrative systems, which have previously been studied isolated from each other. Even readers who are not interested in size effects *per se* can gain from this study as an intellectual mind game: The analytical lenses of country size and state performance are sufficiently broad to conceive and address a variety of causal mechanisms linking them; these broad concepts also require thinking of and comparing functional equivalents between countries of different shapes and sizes. The dissertation, therefore, offers a fresh and ambitious take on comparative politics, administration and governance research. Empirically, I try to explain variation in performance between countries and derive policy recommendations. For example, this research yields practical implications for secessionist movements around the world like those in Scotland, Catalonia or Québec: What are their prospects compared to the larger states from which they want to secede? Would an independent Catalonia provide more political stability? Would the state institutions of an independent Scotland work more effectively than under British rule? The research findings are also of interest to practitioners in government institutions or international organizations who work on improving governance in various countries. Finally, the findings on size effects can contribute, on a more abstract level, to discussing the emergence and effects of large-scale transnational political systems, most prominently the European Union.

Big questions and structural, macro-level explanations may have gone somewhat out of fashion in political science and public administration research in favor of neater research questions, individual-level explanations, and causal identification. However, they are indispensable for advancing our understanding of complex social phenomena as Thelen and Mahoney (2015) argue and as the ECPR’s jury for the 2019 Stein Rokkan Prize emphasized in their laudation (ECPR 2019). The question of size is such a big question. It remains a fundamental issue of political and social organization that has intrigued some of the greatest thinkers across time ranging from Plato to Montesquieu and Dahl (see section 1.2). Size is a primal characteristic of every country in the world and it varies considerably between countries. Indeed, the fact that small states are frequently excluded from
comparative studies and sometimes with the justifications that they are no “real” states (Veenendaal and Corbett 2015, 530), implies that size significantly shapes societies and political-administrative systems. Only by analyzing small and large countries in the same study can I find out how exactly size matters. One dissertation is not enough, however, to examine all effects of country size on political systems and administrations. Therefore, I discuss the development of small-state research and the starting points it offers for my study (section 1.2) before I present this dissertation’s conceptual framework (sections 1.3.1 and 1.3.2) and the three detailed research questions and research design (1.3.3). Besides (a) the comparison of small and large states in one study of country-size effects and (b) the integration of multiple literatures from the fields of political science and public administration, a third key contribution of this dissertation is (c) its use of a variety of research methods. I combine historical comparisons and comparative case studies based on expert interviews with quantitative methods including multilevel modeling and instrumental variable analysis. The choice of research design and methods is based on the respective research question (section 1.3.3).

1.2 Small-state research: State of the art

1.2.1 Definitions of country size and smallness

While most people and researchers have an intuitive understanding of what constitutes a small or a large state, there is no agreement in the literature on a clear definition or operationalization. This section gives an overview of different approaches to country size and one of its manifestations: small country size or smallness. As there is no distinct literature on larger states, large and medium country size is usually defined implicitly as the norm and by what it is not: small. Here and throughout the dissertation, I use the terms ‘state’ and ‘country’ interchangeably to refer to independent polities as defined by membership in the United Nations. To refer to the size of these polities, however, the term ‘country size’ is preferred over ‘state size’, as the latter is prone to be misunderstood as small (i.e. restricted) expenditures or a large (i.e. generous) welfare state which depend primarily on political choices.

To systematize the definitions used in the social-science literature, two conceptual approaches to country size or smallness are distinguished: absolute or relative (Gingrich and Hannerz 2017, 4–5; Randma-Liiv and Sarapuu 2019, 163–64). Absolute definitions of size focus exclusively on the characteristics of a specific country, while relative concepts consider these characteristics in
comparison with other countries, primarily neighboring ones (e.g. Sri Lanka is small compared to India, Canada is small compared to the US). Another important distinction is between qualitative definitions of a small or large country and quantitative measures of country size. Qualitative definitions build on certain criteria that states must fulfil to fit into a category (small or large), while quantitative measures use numerical indicators, most prominently a country’s population size or area. In applied studies, the definitions and operationalizations of size vary between (I) a qualitative-relative understanding and (II) a quantitative-absolute approach, and there is some alignment between the research interests and the employed definition of country size. Notably, studies of a single or a few cases (small N) tend to employ relative, multi-dimensional concepts of size or smallness and qualitative classifications (i.e. small or not) because they can discuss at length how a case in its specific context fulfills these criteria; quantitative studies or studies with medium or high N of countries, in contrast, require measures of country size that are quantifiable and easily comparable.

An example for the first type (I) is Wolf (2016, 84) who gives a qualitative and somewhat abstract definition of small states as being characterized by “a structural scarcity of certain (significant) resources within a (sovereign) country”, which he applies to the case of Liechtenstein. In another qualitative, single-case study, Browing (2006) employs a concept of the narrated or socially constructed smallness of a country in a specific regional context, which he applies to Finland in relation to neighboring Russia. This is only one example from the field of international relations, which naturally focuses on the confrontation and comparison of different states and where, therefore, qualitative and relative understandings of small and large states, or small and large powers, are prominent (see Amstrup 1976, 166; Neumann and Gstöhl 2006, 8). Anthropologists Gingrich and Hannerz (2017, 4–10) discuss qualitative self-attributions of smallness by a country’s population or by others as main indicator of small states; and sociologists Campbell and Hall (2017, 1–13) focus on perceptions of vulnerability as main characteristic of small states, which they assess in qualitative case studies of countries’ specific history and relations with neighboring countries. Studies in economics, in contrast, follow the quantitative approach (II): They ask about the effect of size in its various degrees (not only smallness) and employ quantitative and continuous measures of country size, most commonly population size (e.g. Alesina and Wacziarg 1998; Congdon Fors 2014), followed by area (Olsson and
Hansson 2011). Taylor (1969) as well as Crowards (2002) use a particular approach to empirically define small states. They combine indicators such as population, area and national income and search for break points and empirical clusters of country sizes in the data.

Political science and governance research often lie between these two extremes; studies in these fields tend to employ quantitative indicators of country size, primarily population size, but with a focus on cut-off points instead of a continuous scale. Many authors admit that cut-off points or thresholds that separate small from other states (i.e. medium and large states) are inherently arbitrary and debatable (Panke 2010, 15; Taylor 1969, 116–17; Wolf 2016, 84) but a closer look reveals that they vary systematically by sub-fields and area of study: In comparative studies of European countries and EU members in particular, the threshold for smallness has traditionally been set at the size of the Netherlands (Neumann and Gstöhl 2006, 6; Thorhallsson 2000, 3), which currently has around 17 million inhabitants. Panke (2010, 15), instead, uses a measure of political power and defines small EU member states as countries with less than average votes in the Council of Ministers. In democracy studies, Ott (2000, 18) defines small states as those below 1.5 million and Corbett and Veenendaal (2018, 1) employ the cut-off of 1 million; in public administration research, Randma-Liiv (2002, 375) uses a threshold of 2 million. The literature offers many more, somewhat varying definitions for small states, very small states, micro states and small (developing) island states etc. (see e.g. D. Anckar 2004; Ott 2000, 18; Diamond and Tsalik 1999, 128; Srebrnik 2004; Streeten 1993, 197). The use of thresholds does not preclude a comparative perspective, although it often goes together with an exclusive focus on small states and disregard of larger ones. However, it predefines a categorical understanding of size, which means that a country can either be small or not according to a definition or cut-off, but there are no degrees or gray areas. It is not always clear whether this choice of operationalization is made deliberately based on a certain conceptual understanding or whether thresholds are so widely used simply out of habit or for a feeling of greater precision that arises when a label with an exact number is put on the phenomenon of small countries.

1.2.2 Smallness and democracy
The following sub-sections give an overview of the most important debates on the effect of country size on domestic governance (i.e. transnational and international aspects are left aside). The question whether small or large size is conducive to democracy goes back to ancient Greece and the context of democratic city states.
Plato and Aristotle (as cited in Veenendaal 2014, chapter 2) argued that smallness is a prerequisite for democracy and effective government because it allows for direct communication between citizens and increases social cohesion. Later, Rousseau and Montesquieu (ibid.) among others held similar views, while US founding father Madison (2014, 46) praised the advantage of a large and heterogeneous country to enable pluralistic competition and respect for minorities and to prevent tyranny. This millennia-old debate is taken up in the modern classic *Size and Democracy* where Dahl and Tufte (1973, 20, 29, 113–17) formulate a trade-off: while small states tend to be more homogenous and less complex than large states, which is favorable for citizens’ political participation and institutional responsiveness (citizen effectiveness), small states also have fewer capacities to address all political questions relevant for their citizens and to implement policies (system capacity). Later, Dahl (1994) applies this trade-off to democratic polities at different scales ranging from direct democracy in the city state and representative democracy in the larger nation-state to emerging transnational political systems (for example, the European Union). Dahl and Tufte’s (1973) theoretical scope but limited empirics motivated a number of empirical studies. Since the 1990s, several large-N studies have linked small country size and the prevalence of democracy (D. Anckar 2002; Congdon Fors 2014; Diamond and Tsalik 1999, 117–19; Hadenius 1992, 122–27; Ott 2000). In contrast and as a direct response to quantitative studies that rely on a few indicators of democracy, some qualitative scholars question the optimistic and simplistic “small is democratic” hypothesis: Veenendaal (2014, 212; see also 2015; Erk and Veenendaal 2014) argues that large-N studies are unable to capture the “disparity between formally democratic structures and a more antidemocratic political reality”. Instead, he builds on field research and expert interviews in four micro states to show that the typical centralization of resources and informal social relations in small countries are not necessarily conducive to democratic practice: “there is nothing intrinsically about size that produces a democratic political system [...] democracy] can potentially be explained by factors with which size often (though not necessarily) co-varies, such as colonial history and international vulnerability and dependence” (Veenendaal 2014, 216). In an in-depth study of small Pacific island states, Corbett (2015) shows that “smallness provides mixed blessings” for democratic practice in that the strong role of personal and kin relations can enhance communication and political activism but also lead to nepotism and corruption. In their recent joint book, Corbett and
Veenendaal (2018) provide an extensive summary of theories of democratization and show that their explanatory power is limited for small states, where informal relations and personalism explain why democracy exists and how it works. This book has two central caveats: First, it does not clearly differentiate between the emergence and survival of democracy and which of the two is (or is not) influenced by size. Second, as in their previous articles, they focus exclusively on small states and employ either single case studies or comparisons of most different small states to make inferences about small states generally without considering the reality of larger states.

1.2.3 Smallness and political institutions

Veenendaal and Corbett convincingly make the point that it is not only important to research whether democracy exists in relation with country size but also how it works in small states. This relates to another strand of literature on smallness, types of democracy and institutional design that is based on another modern classic: In Small States in World Markets Katzenstein (1985a) starts from an interest in the political economy of small Western European states, but links their economic flexibility and success to a democratic governance system characterized by political stability and ‘democratic corporatism’ (Katzenstein 1985a, 9, 32). Through case studies and historical comparisons, he identifies several characteristics of these small states that have resonated in the broader literature on small-state governance: first, small states’ internal cultural-linguistic homogeneity together with their vulnerability to external military and economic threats promote a shared understanding of national goals and facilitate compromise and sacrifice for the national good (ibid., 24, 34-35, 49, 97). Second, power is centralized within societal groups and organizations as well as within governments (ibid., 89-90). Third, he emphasizes the role of informal bargaining which hints at the general pervasiveness of informal contacts between societal actors as well as individuals (ibid., 32). In a recent update of this approach, Campbell and Hall (2017) argue that the paradox of vulnerability and close contact between relevant actors allowed small European countries to flexibly and successfully navigate the global financial crisis. However, the flexibility praised by Katzenstein and Campbell and Hall can also turn bad: Ornston (2018) shows that the lack of checks and balances in small Northern European democracies, based on institutional centralization and a lack of ideological and intellectual diversity, can lead to unbalanced or even excessive policy decisions. The question of institutional power concentration also guided the work of Lijphart who notes in
his early work (1977, 65–66) that consociational democracy, where power is essentially shared between many actors, clusters in small states because of their closely linked elites and external vulnerability. On the other hand, Lijphart (ibid., 1) suggests that consociational democracy, later consensus democracy (Lijphart 2012, 59), is especially appropriate for plural societies, which he relates to large country size (ibid., 59). This apparent paradox can be explained by his research practice that starts from analyses of the small states in Western Europe which are unusually pluralistic for their size. Lijphart’s remarks on the relation of country size and institutional patterns are thus rather a by-product of his research than a deliberate research finding. Other scholars have addressed this question more systematically. Anckar (2008) finds that the majoritarian model of democracy dominates among 29 micro states around the world with populations below one million; he explains this prevalence with a combination of internal factors, geographic and social homogeneity, and external factors, including international diffusion and colonial legacies. Furthermore and using a continuous measure of country size, several authors empirically confirm the theoretically intuitive relation between country size and the distribution of power between national and sub-national levels: Bernauer and Vatter (2016, 265–67, 270–71) find effects of population size, area and ethnic heterogeneity (although they note that the three are not always related as expected) on patterns of decentral power diffusion in continental Europe, while Hooghe and Marks (2013, 191–94) find that population size outperforms area at explaining levels of regional or sub-national authority. Gerring and colleagues (2018) bring institutions of horizontal and vertical power distribution together in a “general theory of power concentration” and examine the relation with the size of a polity (Gerring, Maguire, and Jaeger 2018, 491, 494). They (ibid., 496-498) argue that power is diffused in larger polities in order, first, to increase efficiency in light of a heterogenous population that is divided into a larger number of groups and, second, to solve problems of trust that occur when governments rule over many people. In a series of regression models, they estimate the effect of population size on fifteen measures of horizontal and vertical power concentration across more than 100 years and 100 countries and conclude that population size is the only generalizable cause of power diffusion or concentration.

1.2.4 Smallness and public administration
The size of a polity or jurisdiction has also gained attention from the literatures on public administration and government performance. While size effects are widely
discussed in the context of local or regional jurisdictions (for many: Blom-Hansen, Houlberg, and Serritzlew 2014; Boyne 1995; Ostrom 1972), national-level country size is less prominent and the few works that address it are mostly theoretical or case studies, that do not refer to the few large-N studies largely conducted by economists. An example of the qualitative tradition is Thorhallsson (2000) who analyzes how smallness shapes the foreign services of small EU member states and their performance in EU negotiations. He finds that small state administrations are characterized by limited resources which allow less specialization than in larger states (Thorhallsson 2000, chapter 3), but on the other hand “informality and flexibility work against the disadvantages of the smallness of their administration” (ibid., 98), which is why small states can perform surprisingly well. Farrugia (1993) describes the problems of public administration in small developing countries from a theoretical point: the lack of human and financial resources forces individual bureaucrats to fulfil multiple tasks and roles, which presumably leads to a lack of specialization and motivation. Randma-Liiv (2002) and Sarapuu (2010) also aim at theoretical generalizations about small state administrations; their starting point is their experience as public administration scholars in a small state. Randma-Liiv (2002) argues that characteristics of small state administrations, including various resource constraints and the importance of personal relationships, make it difficult to copy Weberian ideas of universality and rationality from large to small states. Sarapuu (2010) focuses on five important aspects of small-state administrations: a limited scope of activity focusing on basic functions of the state, multi-functionalism of individuals and ministries fulfilling several tasks, reliance on informal coordination structures, a lack of steering and control mechanisms, and high personalism based on close and overlapping social relations. Recently, they jointly highlighted these characteristics again and asked for more comparative research as “the knowledge on the impact of size is [still] ambiguous” (Randma-Liiv and Sarapuu 2019, 162). And indeed, systematic comparisons on the influence of country size on bureaucratic performance are virtually absent. Related studies in the field of economics on corruption (Knack and Azfar 2000; Xin and Rudel 2004), rule of law (Congdon Fors 2014; Olsson and Hansson 2011) or governance outcomes at large (Bräutigam and Woolcock 2001; Rose 2006) offer some insights, but the empirical results on the effect of country size are mixed and the studies often lack convincing theoretical explanations for size effects.
1.3 The approach of this dissertation

1.3.1 Conceptualizing country size

To substantiate the key concepts used in this dissertation I follow Goertz’ (2006) framework of three-level concepts. He understands concepts as “theories about ontology: they are theories about the fundamental constitutive elements of a phenomenon” (Goertz, 5), and he differentiates between the first, basic level of a concept, the secondary level of its constitutive dimensions, and the third level of indicators. At the basic level, country size refers to the size of a country or state and “size” is defined in the Oxford Dictionary as “The relative extent of something; a thing’s overall dimensions or magnitude; how big something is” (Stevenson 2015). While a magnitude can be objectively measured on a scale, the definition also refers to a relative extent. Size is thus an inherently relative and comparative concept. If only one country existed in the entire world, it would not be possible to indicate its absolute size as small or large. One could measure its absolute magnitude in terms of population or area but deducing from these indicators “how big” the country is would not be possible without a comparison. Since there are many countries in the world, labeling one as small implicitly means smaller than others. At the secondary level, country size comprises several dimensions, most prominently population, area and resources (e.g. military, economic, natural etc.). This second level is closely related to the third level of indicators or data but the two are not identical. Many authors, including Dahl and Tufte (1973, 17–20), would agree that country size is a multidimensional concept but still use only one indicator that refers to a single dimension (as discussed in section 1.2.1).

In this dissertation, I understand the size of a country primarily in terms of its society and population and measure it via the absolute size of its population. While I acknowledge that country size is multidimensional, the social-demographic dimension (compared to the economic and geographic dimensions) is at the heart of the explanations developed in this dissertation and therefore, population size is the simplest and most appropriate operationalization. I apply a continuous understanding of country size (from now synonymously: population size) and avoid a priori cut-offs for small or large states in order to consider the full empirical variation of country sizes. From this perspective, the two fictive states A with a population size of 0.5 million and B with 3.5 million are both small, but state A is closer to the ideal-type of a small state as it is a clearer empirical manifestation of the concept of smallness. The continuous understanding of size comes with a probabilistic understanding of what a smaller or larger state entails. I presume
that a country that is smaller than another tends more strongly to display the characteristics of smallness described in the literature on small states and summarized in the previous section 1.2 as well as in sociological and anthropological works on small states (Benedict 1966; 1967; Gingrich and Hannerz 2017; Lowenthal 1987). These characteristics are central to the arguments made in this dissertation and I summarize them in three clusters:

1. **Vulnerability**: This term describes how people in small countries feel particularly vulnerable to external forces (seminally Katzenstein 1985a, 24, 35, 80; Lijphart 1977, 65–70). As other countries, small states face diverse threats (e.g. military, economic), but these may more easily threaten the life or independent existence of small countries as they have relatively scarce material and power resources to cope with these threats. Several studies (J. L. Campbell and Hall 2017, 4–5; Gingrich and Hannerz 2017, 32–33; Streten 1993, 200) argue or show that the perception of threats creates feelings of vulnerability and “being on the same boat” as well as the felt need for internal solidarity and co-operation. The empirical literature has widely argued that small states are in fact more exposed to economic shocks (e.g. Alesina and Wacziarg 1998; Easterly and Kraay 2000) and military threats (for a detailed overview of military and security threats see Archer, Bailes, and Wivel 2014) than larger states, but it is, of course, difficult to quantify the perception of a country’s vulnerability to such threats, and its empirical correlation between population size, which matters here. This perception is not only driven by the existence of a threat but also by the awareness for phenomena outside one’s own country. Since commuting or migrating across borders is common in small states, things beyond the border (including threats) are substantially and mentally closer in a small state (Gingrich and Hannerz 2017, 20–21). The vulnerability characteristic is the one among the three that refers less clearly to the population dimension of country size, although the size of the population is relevant for the perception of military threats and one’s own military strength vis-à-vis neighboring countries. The geographic size of a country can also be highly relevant with regards to potential military interventions and the economic size is paramount for the vulnerability to economic threats.

2. **Social proximity and homogeneity**: I use these terms to summarize a number of characteristics ascribed to small country size including homogeneity in terms of ethnic, socio-economic, religious or professional groups, attitudes
and shared norms as well as the importance of personalism, informal and
direct personal relations (Dahl and Tufte 1973, 30–31; Gerring, Maguire, and
Jaeger 2018, 496). Numerical smallness typically leads to individuals occupying
several, overlapping roles in the private and professional realm (often referred
to as polyvalence or multiple role relationships) and having dense social
networks with a prevalence of kin and personal ties (Benedict 1967, 6–9;
Gingrich and Hannerz 2017, 18–19; Lowenthal 1987, 30–33). The sheer
numerical smallness, moreover, allows politicians and bureaucrats to be in
close contact with each other and the people (Gingrich and Hannerz 2017, 28;
Lowenthal 1987, 30). Empirically, Lijphart (2012, 59) finds a significant but
moderate correlation between population size and ethnic pluralism in 36
democracies, whereas Anckar (1999) finds the expected correlation between
population size and the diversity of political groups but no clear relation
between size and ethnic heterogeneity. The concept of societal homogeneity
should, therefore, be understood more broadly (beyond ethnic homogeneity).
Moreover, several case studies have testified the empirical importance of this
cluster of features, including kin ties (e.g. Corbett 2015), personalism
(Veenendaal 2018; Corbett and Veenendaal 2018), informality (Thorhallsson
2000) and shared norms (J. L. Campbell and Hall 2017), for small state
governance. Based on these findings, I assume that small states are
characterized by social proximity and homogeneity. Because homogeneity and
dense relations refer directly to the population and its absolute size,
population size is the dimension of country size that is most clearly related to
these features of smallness.

3. Centralization and concentration of power: This third cluster refers to
institutional features in a small state that can be summarized by the simple
organizational idea that a smaller unit, be it a state, a government or a national
economy, needs fewer sub-units than a larger one. Small countries’ political
systems are expected to be smaller in absolute terms because they are less
heterogeneous (see societal homogeneity) and resources are scarcer (Dahl and
Tufte 1973, 40). This smallness leads to less horizontal specialization and more
vertical centralization of the politico-administrative system and, in a similar
vein, to less diversification and more centralization of the economy than in
larger countries (Lowenthal 1987, 43; Streeten 1993, 197–98). While the
geographic dimension of country size plays an important role for the vertical
centralization of the state, the basic sociological argument for horizontal and
vertical concentration starts from group size, i.e. from the number of people and not from geographical spread. Empirical studies (Gerring, Maguire, and Jaeger 2018; Hooghe and Marks 2013; see section 1.2.3) show that population, compared to area, is more closely linked with centralization. This feature of smallness thus connects with an understanding of country size as population size.

I expect small population size to broadly correlate with these features but not to determine them entirely. These three characteristics are thus part of the concept of country size but not as necessary conditions but in a ““family resemblance’ concept structure” (Goertz 2006, 7). Both fictive states A and B can possibly sufficiently resemble and therefore be defined as a small state. In my probabilistic understanding, the smaller state A is more likely to display these characteristics than state B, but it cannot be ruled out that state B in reality displays one or several of these features more clearly than state A (compare, for example, the small but relatively plural Western European states discussed in section 1.2.3).

While previous small-state studies left larger states as the implicit other (for a rare analysis of characteristics of large size see Lewis 1991), my aim is to explicitly conceptualize the ideal-typical larger country and its characteristics. Based on the empirical analysis in this dissertation, I want to develop these characteristics beyond a mere mirror image or absence of small-state characteristics; large states should be characterized by what they are and not by what they are not (Goertz 2006, 31–32). At this point, I suggest a working hypothesis to be refined after the empirical analyses: that large states are characterized by the following three features derived as opposite of the three small-state characteristics.

1. **Lack of awareness for external threats**: I expect larger states, their societies, individuals and elites, to focus on domestic phenomena and be less aware of developments beyond their national borders than their counterparts in smaller countries. This includes a lack of awareness for potential or actual threats to the country or external forces that might affect the country politically, economically or in some other form.

2. **Diversity and distance**: I expect larger countries to be more diverse regarding ethnic, linguistic or religious groups, professions and lifestyles. The overlap of private and professional roles is rare and, therefore, formal, professional roles dominate public life. An individual, be it a citizen, a public official or a political
leader, has never been in contact with and knows very little about considerable parts of the large country and the population.

3. **Specialization**: I expect larger states to have a more diversified state apparatus and government system. Specialization can be territorially through federalism and decentralization (Lewis 1991, 372–76) or thematically through division of labor and tasks between and within government organizations. I also expect larger states to have a specialized and therefore diverse economy across sectors and various industries.

I hypothesize these three clusters of characteristics related to country size to turn into causal forces affecting state performance. Since they are all related to the social-demographic dimension of size, they theoretically justify the choice of population size as operationalization of country size in this dissertation (Goertz 2006, 5). How exactly population size is used as a variable and whether and how the three characteristics apply is explained in-depth in each of the empirical chapters. In sum, I employ a quantitative, absolute measure of country size coupled with a probabilistic understanding of what qualitative characteristics this entails.

### 1.3.2 Conceptualizing state performance

This dissertation seeks to analyze the effects of country size on a range of political and governance phenomena which can be summarized as state performance. The term state performance is used at the basic concept level to broadly refer to how well the state is run and how far it is capable to fulfil its tasks, but there is no established definition in political science or governance research. According to the Oxford Dictionary (Stevenson 2015), performance designates both, the “action or process of performing a task or function” as well as “how successfully [such a task] is performed”. With regards to states, performance thus refers to how and how well they fulfil their tasks. Based on a conceptual synopsis of some classic works in political science, Roller (2005, 21) distinguishes two types of tasks or goals that political systems (should) seek to fulfil and against which their performance can be evaluated: general procedural goals and substantive policy goals. She argues that general procedural goals, such as the stability and efficiency of the political system, are prerequisites for fulfilling specific policy goals in different fields such as providing security and welfare to citizens. Notably, there are a number of general, procedural goals in every state and even more, including accountability and participation, in democratic states (ibid., 24). On the other hand, policy goals differ between states based on the specific context and, at least in democracies, on
citizen preferences. Roller's fundamental distinction resembles the five performance domains, which Walker and colleagues (2010, 11) note and distinguish in the public administration literature: three of them, efficiency, responsiveness and governance, refer to procedural goals and two, outputs and outcomes, apply to substantive policy goals. The basic understanding of state performance as a multi-dimensional term is thus similar in political science and public administration literature, but individual studies obviously focus on one specific goal or understanding of performance. While economists (Bräutigam and Woolcock 2001; Easterly and Kraay 2000) or political economists (Bohle and Jacoby 2017; Katzenstein 1985a; Schmidt 2011) study the performance of small states on specific (economic) policy goals, the small-state literature summarized in section 1.2 focusses clearly on procedural goals: the political science strand ranging from Plato to Veenendaal discusses how (through which mechanisms) and how well small states attain democratic procedural goals and norms, while the literature on public administration and governance in small states focuses primarily on how these administrations work, i.e. which patterns, relations and processes are characteristic (e.g. Randma-Liiv 2002; Randma-Liiv and Sarapuu 2019; Sarapuu 2010), and less on how well they achieve the twin goals of effectiveness and efficiency. Building on these strands of literature, this dissertation adopts the understanding of state performance as how and how well states achieve general procedural goals. The next sub-section explains which performance goals or dimensions (secondary level of the concept) are analyzed and how they are operationalized in each of the empirical chapters (third or indicator level).

1.3.3 Research design and outline of the chapters

In order to examine the relation between country size and various dimensions of state performance, this cumulative dissertation combines three empirical chapters (chapters 2, 3 and 4), which are three stand-alone research articles. The cumulative format allows combining three articles that each focus on a different aspect of state performance and employ different research methods. Starting from a clearly defined X, country size, I choose these three different Ys, or aspects of performance, to research the X-Y relation between size and performance (see Gerring 2008, 677–78). The overarching research design of this dissertation is comparative and applies mixed methods. It is comparative insofar as all three chapters compare small and large states empirically in order to estimate size effects and to do so they employ a range of research methods. Each of the three
empirical chapters aims to answer a specific research question and fill a gap left by
the literature summarized in section 1.2.

Chapter 2 addresses a gap left by the political science literature on small
states that focuses primarily on democracies and on their achievement of
democratic goals and norms. This focus disregards other types of political regimes
as empirical cases and dimensions of performance that are not related to
democratic goals, such as the stability of a political system. Chapter 2 addresses
this gap with the following research question: Can country size explain patterns of
survival and breakdown of authoritarian monarchies after the Second World
War? Performance is assessed here with regards to the stability of the political
regime, specifically authoritarian monarchy, which is operationalized as the
continuity or change in regime type in a certain time period. To answer the
research question, I apply several empirical steps mixing data types and forms of
analysis. First, I use data on political regime classifications that have so far not
been employed to study size effects. These data allow inspecting the entire
population of authoritarian monarchic regimes between 1946 and 2018 and
identifying a statistical pattern: monarchies that survived during this period had
significantly smaller populations than monarchies that broke down. In
probabilistic terms, the stability of these regimes is thus inversely related to
population size. In a second step, the chapter develops an explanation for this size-
stability nexus and employs the three characteristics of smallness (vulnerability,
social proximity and homogeneity, centralization) as causal channels. To check
the plausibility of these potential explanations, the chapter zooms in on
qualitative studies of individual cases: it compares a large and failed monarchy
(Egypt) with a small and surviving one (Jordan), which are most similar, except for
their country size, and most likely historical cases. The contrast between the
Egyptian and the Jordanian case, despite their many similarities, proves the added
value of comparing small and large countries for showing whether and how
country size matters. To refine the scope of the argument, I also analyze the
supposedly deviating cases of small but broken-down monarchies. Taken
together, this iteration between theory development and a mix of different
empirical analyses finds that small size enhances the stability of monarchic
regimes via its three characteristics and small size alone is sufficient for a
monarchic regime not to be violently overthrown.

Chapter 3 builds on and contributes to the literature on public
administration in small states. Previous studies in this strand focus on how these
administrations work, i.e. which patterns, relations and processes are characteristic, and less on *how well* they perform. Just as the concept of size, the understanding of *how well* a task is fulfilled entails a comparative notion as every judgment is relative to a benchmark. Since there is little systematic comparative research on small-state administrations and comparable measurement of states’ performance on general and abstract goals such as administrative efficiency remains a challenge, relatively little is known about *how well* small states’ administrations perform compared to those in larger states. Chapter 3 aims to fill this gap by assessing states’ performance on administrative effectiveness: *How does country size affect public service effectiveness? What is the optimal country size for achieving this goal?* Building on the size-related aspects of centralization (vs. de-centralization and specialization) and social proximity (vs. diversity and distance), and to a lesser degree on vulnerability, I describe a theoretical trade-off between the positive effects of large size of a country and bureaucracy (economies of scale) and the negative effects (diseconomies). I expect a curvilinear effect of population size on administrative effectiveness with highest performance reached in medium-sized countries that combine the advantages of both extremes. To test this hypothesis, I employ an indicator of government effectiveness from the World Bank’s Worldwide Governance Indicators, which has hardly been used in comparative public administration, and relevant control variables, most importantly wealth and level of democracy. I estimate cross-sectional OLS regression models as well as multilevel within-between random effects models (REWb), which allow to analyze panel data for more than 150 countries from 1996 to 2014 while accounting for the sluggishness of population size over time. Various robustness checks in the chapter and in Appendix 7.1 support the finding of an inverse U-shaped relation between population size and administrative effectiveness. This chapter’s large-N approach and the choice of data sources, which ensure maximum coverage including often neglected very small states, allows analyzing the statistical associations between size and performance across a large sample of countries. Specifically, I show *how much* size affects performance. Additionally, I employ an instrumental variable approach which minimizes the threat of endogeneity and supports the direction of the effect. However, this approach cannot verify whether the relation is in fact caused through the suggested causal channels.

Chapter 4 compares how the government systems of a large and a small country perform in a specific governance situation: *Can country size explain the
varying performance of Germany and Luxembourg in managing the 2015 migration crisis? The countries are selected based on the insights from Chapter 3 that economic, social and political factors are important control variables for state performance; the selection of Luxembourg and Germany is aimed at minimizing variance in these potentially confounding factors and maximizing variation in population size. The specific policy case is selected because there is a puzzling variation in how and how well the two countries coped with this challenge: Luxembourg appeared to achieve an effective crisis response more quickly and with less conflict than Germany. This approximates a most similar systems design with similarity on important confounding variables, maximum variation in country size, and a meaningful variation in the outcome, procedural performance. The research interest is indeed on how the countries performed procedurally, how quick and effective they were in detecting, communicating and reacting to the crisis; the specific policy performance (e.g. duration of registration and asylum procedures, provision of beds and basic goods to the migrants) is of minor interest. To examine both cases in-depth, I analyze newspaper articles and official documents, and I conducted 20 interviews with politicians, leading bureaucrats and experts in the field in both countries (Appendix 7.2 lists all interviews). The interview partners were selected with the aim of considering the full range of involved actors and perspectives, and a lot of room was accorded to these individual perspectives through a flexible, semi-structured interview format. With this qualitative approach, I can investigate the role of perceptions of vulnerability, identities and other factors that are hardly quantifiable. I can thus show not only that but also how size explains the observed differences: Luxembourg displays the small state characteristics of vulnerability, centralization and social proximity, which enabled quick crisis detection, sense-making, communication and the coordination of a response. In Germany, in contrast, I expect and find that the large state characteristics, specifically the lacking awareness of the country’s vulnerability and the state’s organizational specialization, led to attention biases which inhibited the detection of, preparation for and reaction to the crisis. The qualitative approach of this chapter allows. Comparing these two cases and applying size-related arguments to a large state offers new perspectives on the behavior and mixed performance of Germany in this critical and widely discussed case. The qualitative findings also support the theoretical arguments presented in chapter 3 about mechanisms linking size and administrative performance; they illustrate them in an applied case of
administrative action, of states that are actually *performing*. The chapters 3 and 4 therefore approximate a nested mixed-methods analysis, although they constitute independent research articles.

Chapter 5 synthesizes the findings in order to answer the overarching research question raised in section 1.1. The main finding is that country size affects various dimensions of state performance through the same channels. Size, thus, matters systematically in various contexts. The chapter further discusses the normative and practical implications of this cumulative study, its limitations and avenues for future research.
CHAPTER TWO

Country size and the survival of authoritarian monarchies:
Developing a new argument

2.1 Introduction
The survival\(^1\) of authoritarian monarchies in today’s modern world, in places as diverse as Brunei, Qatar and Swaziland, seems anachronistic (Huntington 1968). Prominent explanations for monarchical survival include support by foreign powers (Frisch 2011; Yom and Gause III 2012), oil rents (Gause III 1994), the role of the royal family in dynastic monarchies (Herb 1999), legitimation sources such as religion (Schlumberger 2010), repression (Bellin 2004), co-optation and coalition-building (Gandhi and Przeworski 2007; Lust-Oskar 2005) and liberalization (Lucas 2004). However, none of these explanations can fully explain all cases of monarchical survival and breakdown; and the recent literature\(^2\) discusses combinations of factors, their relative precedence and explanatory power. In this article, I propose another, structural explanation, which reconciles several of the mentioned explanations: the size of a country and its population. Seven out of ten authoritarian monarchies which exist in 2018 have a population size below five million inhabitants; only two, Saudi Arabia (around 33 million) and Morocco (around 36 million) are above 10 million; and authoritarian monarchies are non-existent in truly large states (let us say above 50 million). The relation between small country size and the persistence of monarchies has been noted by Lucas (2004, 111) who concludes that the “ability of regimes to control smaller populations better deserves to be further explored in relation to the survival of authoritarian monarchies.” This article aims to develop this conjecture into a theoretically and empirically sound explanation for the relative prevalence of authoritarian monarchy in small countries after the Second World War. My main conclusion is that three characteristics of small states, a feeling of vulnerability,

\(^1\)The article focuses on the effect of size on the stability and survival of authoritarian monarchies but treats their emergence as exogenous.

\(^2\)For overviews see Bank, Richter, and Sunik (2015), and Lucas (2004).
social proximity and institutional centralization, prevented violent regime breakdown in all small monarchies since 1946.

In this article, I use the terms “monarchy” and “authoritarian monarchy” interchangeably for regimes in which a person of royal descent takes power or is replaced by rules of hereditary succession and exerts extensive public authority (see Cheibub, Gandhi, and Vreeland 2010, 88; Geddes, Wright, and Frantz 2014, 318), while democratic countries with a monarch as purely ceremonial head of state are treated as democracies. The article also uses the terms “country size” and “population size” interchangeably, since population is the most widely used indicator of country size. The literature uses different thresholds to define small states, which are all somewhat arbitrary and range from 1 to 10 million (e.g. Corbett and Veenendaal 2018, 14–15; Streeten 1993, 197). In this article, I do not define a cut-off point for small monarchies before the analysis but rather as one of its results.

This article contributes to two strands of literature. It, first, offers a new explanation to the puzzle of survival and breakdown of monarchies, which is widely discussed in the regime literature. Secondly, it applies the country-size perspective to monarchies, a regime type largely ignored by the small state literature. The latter argues almost unequivocally and shows empirically that small countries tend to be democratic (D. Anckar 2002; Congdon Fors 2014; Hadenius 1992, 122–27; Ott 2000). However, these studies often use dichotomous measures of democracy that lump all non-democratic regimes together and do not allow for a differentiation between monarchic and other subtypes of authoritarian regimes, which may explain why the relation between smallness and authoritarian monarchy has been largely overlooked. A notable exception is the work by Veenendaal (2016) and colleagues (Corbett, Veenendaal, and Ugyel 2017) who address the smallness-monarchy nexus. However, they conceptualize monarchy not as a subtype of authoritarian regimes but on a continuum from absolute to constitutional monarchy, which limits their compatibility with the broader regime literature. Moreover, they focus exclusively on small states, and the resulting lack of empirical variance limits analytical leverage. This article avoids these caveats by building on established conceptual approaches to authoritarianism and a variance-based empirical analysis. I follow a strategy of inductive iteration based on a “repeating cycle of theory-data dialogues” (Yom 2015, 626).
In the next section, I give an overview of all authoritarian monarchies between 1946 and 2018 and show that countries in which monarchy survived had significantly smaller populations than those experiencing monarchic breakdown. In the following section, I develop an explanation for this relation and argue that the social and institutional characteristics typically ascribed to small country size can explain monarchic stability. The plausibility of this explanation is then checked in two most-similar historical cases: the monarchic survival in 1950s’ small Jordan and the 1952 monarchic breakdown in larger Egypt. The penultimate section addresses deviant cases to further refine the argument. The last section concludes.

2.2 The population of cases: Monarchic regimes after World War Two

Table 2.1 gives an overview of all monarchic regimes after the Second World War grouped by monarchic breakdown or survival. It is based on the data set by Cheibub, Gandhi and Vreeland (2010), which has the advantage over many others of including virtually all microstates, and then updated by my own research. Besides the widely discussed Middle Eastern monarchies, cases from diverse backgrounds complete this global list; there is no clear-cut regional or cultural pattern differentiating successful from collapsed monarchies. One apparent difference, instead, is in population size. While those countries that have abolished monarchy had an average population around 7.4 million in 1946 (or later year of regime start), those that preserved monarchy until 2018 had only 1.6 million. Despite a small number of cases, this difference in historical population size is statistically significant. Due to global population growth, the size of all countries in Table 2.1 has increased until 2017 (latest available data); the difference between the groups is less pronounced in 2017 but the gap in size somewhat persists. There is, thus, some evidence supporting the claim that size is negatively

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With reference to Bjørnskov and Rode, "Regime Types"; Anckar and Fredriksson, "Classifying Political Regimes" and Freedom House. Despite these data sets classifying monarchic regimes is not always straightforward. Some countries have largely democratic institutions, but the monarchic head of state retains substantive powers as in Monaco, Liechtenstein or Morocco (monarchy-democracy hybrid). For the first two I follow Freedom House’s assessment (“free”) and consider them democracies. Morocco, on the other hand, is considered an authoritarian monarchy by Freedom House (“partly free”) as well as in this article because political rights are significantly constrained in practice. Today’s Thailand is a military-monarchy hybrid, where the king continues to play a substantial political role, but power is mainly exercised by a military junta, so I do not code this as a monarchy.
related with monarchic regime stability. For the further analysis and based on Table 2.1, I define small states as those with a population below 1 million in 1946 or the respective year of regime start (i.e. independence after 1946). This working definition sorts most cases as expected: All surviving monarchies except Morocco and Saudi Arabia are small, while all collapsed monarchies were large except Bhutan, Maldives and Tonga.
Table 2.1 Authoritarian monarchies between 1946 and 2018

<table>
<thead>
<tr>
<th>Country</th>
<th>Start-end of monarchy</th>
<th>Monarchy ended by coup</th>
<th>Population in million</th>
<th>1946 (or later year of regime start)</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>1946-1973</td>
<td>yes</td>
<td>7.91m</td>
<td>35.53m</td>
<td></td>
</tr>
<tr>
<td>Bhutan</td>
<td>1946-2007</td>
<td>no</td>
<td>0.16m</td>
<td>0.81m</td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td>1962-1966</td>
<td>yes</td>
<td>3.06m</td>
<td>10.86m</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>1953-1955</td>
<td>no</td>
<td>4.67m</td>
<td>16.01m</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>1946-1952</td>
<td>yes</td>
<td>20.05m</td>
<td>97.55m</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1946-1974</td>
<td>yes</td>
<td>12.00m</td>
<td>104.96m</td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>1946-1979</td>
<td>no</td>
<td>16.52m</td>
<td>81.16m</td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td>1946-1958</td>
<td>yes</td>
<td>5.21m</td>
<td>38.27m</td>
<td></td>
</tr>
<tr>
<td>Libya</td>
<td>1951-1969</td>
<td>yes</td>
<td>1.04m</td>
<td>6.37m</td>
<td></td>
</tr>
<tr>
<td>Maldives</td>
<td>1965-1968</td>
<td>no</td>
<td>0.10m</td>
<td>0.44m</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>1951-1989</td>
<td>no</td>
<td>8.14m</td>
<td>29.31m</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>2002-2008</td>
<td>no</td>
<td>24.52m</td>
<td>29.31m</td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>1970-2010</td>
<td>no</td>
<td>0.08m</td>
<td>0.11m</td>
<td></td>
</tr>
<tr>
<td>Tunisia</td>
<td>1956-1956</td>
<td>yes</td>
<td>3.94m</td>
<td>11.53m</td>
<td></td>
</tr>
<tr>
<td>Yemen North</td>
<td>1946-1962</td>
<td>yes</td>
<td>3.54m</td>
<td>22.68m</td>
<td></td>
</tr>
</tbody>
</table>

Mean: 7.39 million 32.33 million

Countries with monarchical survival until 2018 (N=10)

<table>
<thead>
<tr>
<th>Country</th>
<th>Start-end of monarchy</th>
<th>Monarchy ended by coup</th>
<th>Population in million</th>
<th>1946 (or later year of regime start)</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahrain</td>
<td>1971-2018</td>
<td>-</td>
<td>0.23m</td>
<td>1.49m</td>
<td></td>
</tr>
<tr>
<td>Brunei</td>
<td>1984-2018</td>
<td>-</td>
<td>0.22m</td>
<td>0.43m</td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td>1946-2018</td>
<td>-</td>
<td>0.44m</td>
<td>9.70m</td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>1961-2018</td>
<td>-</td>
<td>0.29m</td>
<td>4.14m</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>1956-2018</td>
<td>-</td>
<td>10.56m</td>
<td>35.74m</td>
<td></td>
</tr>
<tr>
<td>Oman</td>
<td>1970-2018</td>
<td>-</td>
<td>0.72m</td>
<td>4.64m</td>
<td></td>
</tr>
<tr>
<td>Qatar</td>
<td>1971-2018</td>
<td>-</td>
<td>0.12m</td>
<td>2.64m</td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1946-2018</td>
<td>-</td>
<td>3.14m</td>
<td>32.94m</td>
<td></td>
</tr>
<tr>
<td>Swaziland</td>
<td>1968-2018</td>
<td>-</td>
<td>0.43m</td>
<td>1.37m</td>
<td></td>
</tr>
<tr>
<td>UAE</td>
<td>1971-2018</td>
<td>-</td>
<td>0.27m</td>
<td>9.40m</td>
<td></td>
</tr>
</tbody>
</table>

Mean: 1.64 million 10.25 million

Difference of means test (t-test)

\( H_o: \) Difference of means (in population) between the two country groups is 0.

<table>
<thead>
<tr>
<th>t-value</th>
<th>two-tailed probability (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.24</td>
<td>0.035 (0.018)</td>
</tr>
<tr>
<td>-1.91</td>
<td>0.061 (0.035)</td>
</tr>
</tbody>
</table>

Data sources: \( ^a \) own compilation based on Cheibub et al. (2010), Bjørnskov and Rode (2018), Anckar and Fredriksson (2018), Freedom House; \( ^b \) Bjørnskov and Rode (2018), for Tunisia own coding; \( ^c \) population size for 1946 or later year of regime start or independence based on World Bank (via QoG data set), missings filled with Maddison project (via VDem), UN Population Section estimates and Haber and Menaldo (2011); \( ^d \) World Bank, for Ethiopia and Yemen North own calculations based on 2017 World Bank data and former borders.
Figure 2.1. Model of causal channels

2.3 Explaining the smallness-stability nexus

2.3.1 Key characteristics of small and large states

Theoretical and case-based literature has identified general characteristics that small and states share across world regions; they evolve around three main features: a feeling of vulnerability, social proximity, and institutional centralization. While political scientists have used these three features primarily to explain the stability of democracy in small countries (seminally Dahl and Tufte 1973), I will use them to explain the stability of authoritarian monarchies. I consider these features as constitutive dimensions of country size that turn into causal forces (see Figure 2.1).

The first feature results from people in small countries feeling particularly vulnerable to external forces (seminally Katzenstein 1985b, 24, 35, 80). As others, small states face diverse threats (e.g. military, economic), but these may easily threaten the life or independent existence of small countries as they have relatively scarce resources to cope with these threats. Several studies (J. L. Campbell and Hall 2017, 4–5; Gingrich and Hannerz 2017, 32–33; Salamé 1994; Streeten 1993, 200) show that the perception of threats creates feelings of vulnerability and “being on the same boat” together with a felt need for internal solidarity and co-operation. To cope with their vulnerability, small countries overemphasize their independent identity and hold on “to anything national,
everything that distinguishes them from other states, their people from other people” (Lowenthal 1987, 44). Small states are expected to strongly value shared historical memory and to be more conservative, in the sense of adhering to tried and trusted political institutions and traditions (Corbett, Veenendaal, and Ugyel 2017, 690, 692; Khalaf 2017, 279; Ott 2000, 188).

The second aspect, social proximity, is based on a less complex, more homogenous society in terms of societal groups (e.g. ethnicities, professions, lifestyles), attitudes and shared norms, and on the importance of personalism and direct personal relations between people (D. Anckar 1999; Corbett and Veenendaal 2018, 9–10; Dahl and Tufte 1973, 30–31). Numerical smallness typically leads to individuals occupying several, overlapping roles in the private and professional realm and having dense social networks with a prevalence of kin and personal ties (Baldacchino 2012, 112; Corbett 2015; Gingrich and Hannerz 2017, 18–19; Lowenthal 1987, 30–33). Numerical smallness, moreover, allows rulers to be closer to the people and engage directly with large parts of the population, which often leads to strong personalization of small state politics (Corbett, Veenendaal, and Ugyel 2017, 690; Gingrich and Hannerz 2017, 28; Lowenthal 1987, 30).

The third aspect, institutional centralization, results from the fact that, compared to large countries, small countries’ political systems are naturally smaller in absolute terms because they are less heterogeneous and resources are scarcer (Dahl and Tufte 1973, 40). This smallness leads to less specialization and more centralization of the politico-administrative system (Katzenstein 1985b, 89; see also section 3.2 below) and, in a similar vein, to less diversification and more centralization of the economy than in larger countries (Lowenthal 1987, 43; Streeten 1993, 197–98). The typical result is an effective concentration of political and economic resources in the hands of the executive vis-à-vis other political and societal institutions.

The characteristics of the ideal-typical large country can be deductively derived: First, it is characterized by a lack of awareness for potential external threats, which can result in exaggerated pride at the international level and on the other hand in centrifugal internal power struggles (Salamé 1994, 98). Second, larger societies are more complex and heterogeneous and there are bigger geographical and social distances between people or groups. Third, large states’

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4 A striking example is Tonga, where monarchy was introduced primarily as a means to resist external influence. (I owe this point to an attentive reviewer.)
political systems and state organizations tend to be more complex, specialized and decentralized of some form, and economies more diversified.

### 2.3.2 Size effects on legitimation

To conceptualize monarchic regime stability, I build on Gerschewski’s (2013) three pillars of autocratic stability: The first, legitimation, refers to gaining support from the broader population; secondly, repression refers to controlling opposition, and, third, cooptation refers to tying elite groups to the regime (see Figure 2.1). In this and the following subsections, I explain how small country size, and the three key features that come with it, structurally favor these three pillars which form the foundation for stability and survival of authoritarian monarchies.

Smallness can structurally enhance diffuse regime support and a regime’s legitimacy through the mechanism of vulnerability and institutional conservatism (Figure 2.1, channel 1): In small countries, regimes, elites and dynasties are often directly related to the country’s history and independence. Relying on the regime that has so far guaranteed national independence, and in some cases prosperity, in the face of vulnerability may be the safest bet (Corbett and Veenendaal 2018, 38–39 on monarchies); smallness thus enhances “domestic rally-around-the-flag effects” (Gerschewski 2013, 20). Smallness can also strengthen diffuse support and legitimation via social proximity and personalization (channel 2), when monarchs’ closeness to the people enhance their and the regime’s popularity (Corbett, Veenendaal, and Ugyel 2017, 690, 692; Gingrich and Hannerz 2017, 28; Khalaf 2017, 279).

### 2.3.3 Size effects on repression

It is, intuitively, easier for monarchic regimes to overview and control opposition and elite groups in small than in large countries. Specifically, two aspects of smallness, social proximity and centralization, favour repression, the second pillar of stability. Hard or violent repression “necessitates strong cohesion or compliance within the state apparatus” (Way and Levitsky 2006, 388) that is theoretically based, among others, on patrimonial organization through strong personal or kin ties between leaders and state agents (Bellin 2004, 145). Here, social proximity kicks in (Figure 2.1, channel 3); personal networks, the prevalence of kin ties and the proximity between the ruler and the state agents in small countries, I argue, contribute to “confidence among the subordinates [e.g. police,
military, bureaucrats] that they will be taken care of by the leadership” (Way and Levitsky 2006, 396). Together with the centralized discretionary power over resources, which allows the regime to materially reward its state agents well enough to ensure their loyalty (channel 4), this enhances robustness and cohesion among security forces and facilitates hard repression. Soft or low-intensity repression through more subtle instruments such as surveillance, intimidation, systematic economic or political discrimination requires that “resources are concentrated in state hands and governments enjoy substantial discretionary power in allocating those resources” (ibid., 393), which matches the centralization described in small states. While centralization gives the regime the uncontested power, resources and coercive capacity to reach into society and apply measures of soft repression, social proximity makes it easy to identify potential opponents in the first place to target those measures (channel 5), which turns the apparent idyll of smallness into a “hell for dissidents” (Baldacchino 2012, 112; see also Dahl and Tufte 1973, 108). In sum, costs and risks of dissent are higher in small, and therefore more centralized and homogenous, societies where opposition is less likely to gain access to resources and institutionalize.

2.3.4 Size effects on co-optation

The third pillar of monarchic stability, co-optation, refers to the regime’s strategies to ensure the loyalty of relevant actors, often military, business, or traditional elites; the overall ‘demand’ for co-optation is a function of a society’s diversity (Gerschewski 2013, 22; Huntington 1968, 9). Thus, two aspects of smallness reduce the probability of and degree to which elites exist outside the regime that need to be co-opted: social proximity, apparent in a homogenous society in terms of ethnic, religious, tribal or socioeconomic groups (see Figure 2.1, channel 6), and centralization, which leaves little room for the emergence of distinct military, bureaucratic or economic elites (channel 7). This structurally smaller demand is less likely to require formal channels of co-optation, such as parties and parliaments,\(^5\) but can arguably be satisfied through the allocation of spoils via informal channels such as “[p]atronage, clientelism, and corruption” (Gerschewski 2013, 22; see also Gandhi and Przeworski 2007). These informal means of co-optation are theoretically and empirically ascribed to small country size (Corbett, Veenendaal, and Ugyel 2017, 695; Khalaf 2017); they are fueled by

\(^5\) For an overview of the literature on institutionalization, see Wilson and Woldense (2019).
social proximity and personal acquaintance and facilitated by a regime’s central endowment over public and private resources (channel 8).

2.4 Historical illustration: Monarchy in Egypt and Jordan in the 1950s

I examine the plausibility of the suggested mechanisms in a controlled comparison of two cases, which combines internal validity based on careful within-case analysis with external validity through theoretically informed case selection. First, by selecting a large failed monarchy and a small surviving monarchy from Table 2.1, I mirror the full variation in outcomes and the expected relation between size and monarchical survival, which means that these are most likely cases for detecting the hypothesized mechanisms. Second, I seek to select most similar cases. The cases of Jordan (small, monarchical survival) and Egypt (large, monarchical breakdown) between 1946 and the respective military coups in 1957 and 1952 are not perfectly but sufficiently similar to rule out rival explanations: Both are Arab and predominantly Muslim countries, their socioeconomic development in the 1950s without reliance on oil rents is comparable (Hudson 1977, 53) and they share a British colonial heritage, independence after the Second World War with continuing British influence, and monarchical systems with a parliament and without a dynastic setup (Herb 1999, 250). The analyzed period starts in 1946 for both countries and is limited by the failure of the monarchical regime in Egypt and by the unsuccessful military coup in Jordan in 1957 to ensure comparability of historical circumstances.

2.4.1 Egypt: A large kingdom with a plethora of opposition

The fall of the historically rooted Egyptian monarchy through the Free Officers coup in July 1952 is widely considered a result of a fatal mix of a lack of political leadership, corruption, anti-British feelings and the humiliating defeat in the Arab-Israeli War in 1948-49 (Gordon 1989; Vatikiotis 1961, 21–43). While the monarch, King Farouk, retained the most powerful political position deciding over elections and cabinets, the turbulent years between 1946 and 1952 were marked by power struggles between various societal and political groups, protests and political violence (Abdalla 1985, 4–7; Gordon 1989, 224–26). In the following, I describe how the seemingly idiosyncratic fall of the monarchy was structurally facilitated by Egypt’s large size.
Above all, the legitimation pillar was increasingly weakened: King Farouk lacked personal legitimacy because of his escapades and luxurious lifestyle often linked to corruption (Gordon 1989, 226); the sheer size of Egypt reinforced this image by making the King appear to be a distant figure from most parts and cities of the country (see Figure 2.1, channel 2). Another powerful accusation undermining the King’s and the regime’s legitimacy was that Farouk was allegedly a British puppet and at least partly responsible for the defeat in the Arab-Israeli war in 1949; these accusations sparked a feeling of humiliation among many Egyptians including army officers. For the Free Officers, who later staged the successful coup, the ruling monarchy was “like a foreign occupying power” (Vatikiotis 1961, 56 see also 50, 59; 1991, 376). The perceived humiliation was grounded in the proud self-perception as a large, resourceful country aching for “dignity and self-esteem” (Botman 1998, 307) and the officers’ outward-looking ambition to be a role model for the Arab world (Nasser 1955, 210); it led to the opposite of a “rally around the flag”, namely to a centrifugal effect delegitimizing the monarchic regime (channel 1). In a counter-factual scenario, a small population size and awareness of the country’s vulnerability and of the potential fragility of its recent independence might have put the humiliation in perspective and appeased hostile feelings against the regime’s timidity towards Britain. There are thus some limited indications for an effect of large size undermining legitimation via humiliation and spatial distance, but the large country size weakened the other two pillars more clearly.

Around 1950, Egypt had a comparatively large population size of approximately 20 million and a complex society comprising a number of groups with distinct identities such as workers, urban middle classes, a rich and cosmopolitan upper class, students, peasants, landowners, religious minorities as well as hardliners (Abbas and El-Dessouky 2011, 185–200; Abdalla 1985, 18–38; Vatikiotis 1961, 21–43). This social diversity was reflected in the fragmented party system including, among others, radical leftists, the nationalist Wafd party and the Muslim Brotherhood. The latter provided jobs, health care, and education, which elevated popular support and the organization’s economic strength (Botman 1998, 297); many parties issued their own newspapers, and even leaders of smaller parties disposed of own economic resources to distribute among followers (channel 8; ibid., 289, 297, 308). The high number of political groups, many of them critical of the regime, implies a high demand for co-optation, as expected for a large country (channel 6), but there was not enough political will...
and leadership to respond to this demand (Gordon 1989). The military constituted a social group of their own, distinct from the regime and other public organizations through specialization of the state and “institutionalization of the coercive apparatus” (Bellin 2004, 145), but with a common identity rooted in the shared education and training in the Military Academy (channel 7; ibid., 149; Vatikiotis 1961, 45, 58, 67). The regime’s lack of legitimation led to the development of the Free Officers group as early as 1949 particularly among younger military officers from modest backgrounds (Vatikiotis 1961, 60) who were not effectively co-opted and therefore not loyal to the regime as they did not particularly benefit from it and had no personal ties with it (channels 3 and 4; Herb 1999, 210–11). Instead, the regime focused on repressing protests and opposition groups: the Muslim Brotherhood was outlawed in 1948 and martial law was declared repeatedly, yet strikes, student protests and anti-monarchic demonstrations continued to be held “in Cairo, Alexandria, and all the provincial capitals” (Vatikiotis 1961, 40; see also Abdalla 1985, 81, 85, 93–98; Vatikiotis 1991, 371–72). While the regime could simply not repress all the opposition it faced in terms of group heterogeneity and geographic spread (channel 5), the repression that was implemented further weakened its legitimation.

The erosion of all pillars of monarchic stability culminated in the Free Officers coup on July 23, 1952. King Farouk had left Cairo for Alexandria despite the extremely precarious political situation in the capital; he was overly sure of the loyalty of the army, even when informed about the threat of a coup he discounted it (Gordon 1989, 234–35). This blatant misjudgment was caused partly by the institutional decentralization within the state apparatus and palace distancing Farouk from the army: “The King had no direct contact with the bulk of the officer corps” (channel 3; Vatikiotis 1991, 373). Although the Free Officers group had circulated anti-monarchic publications for several years, developed a network inside and outside the army and its existence did not go unrecognized with various governments, no effective measures of repression had been taken as the regime focused on several other anti-regime groups (channel 5; Vatikiotis 1961, 61–62). When the prime minister finally saw the need to appease or co-opt the Free Officers and offered one of their leaders, General Naguib, the post of war minister, it was too late for effective co-optation and Naguib refused (Gordon 1989, 234–35). The quick overthrow of the monarchy by the Free Officers amid the applause of the crowds a few days later testified to the collapse of the three pillars of monarchic stability. The Egyptian case illustrates how large size entailed societal
heterogeneity, geographic spread, institutional decentralization and specialization, through which it undermined the effective co-optation and repression of opponents. The fall of the Egyptian monarchy was indeed related to a number of idiosyncratic factors and actors (not all could be mentioned here), but this very number was driven by the size of the country and added up to the breakdown. The complex Egyptian case takes its full illustrative effect when compared to Jordan.

2.4.2 Jordan: A small and manageable kingdom

Jordan was created under British mandate in 1922 as a fiefdom for the Hashemite family and became an independent kingdom in 1946. The 1950s appear as a succession of critical junctures for monarchic survival. The regional situation with Arab nationalism, socialism and the breakdown of monarchies in Egypt and Iraq was challenging as much as the domestic circumstances including the difficult integration of the West and the East Bank following the first Arab-Israeli war, the 1951/52 succession crisis, protests against continuing British influence, government instability and an attempted military coup in 1957. Despite several parallels to the situation in Egypt, the Jordanian monarchy survived this period under the Kings Abdullah (1946-51), Talal (1951-52) and Hussein (1952-99). The common explanations for this survival include Abdullah and Hussein's extraordinary leadership skills and the loyalty of Bedouin army officers to King Hussein (Herb 1999, 226). Instead, I show how Jordan's smallness structurally enhanced the three pillars of monarchic stability.

In stark contrast to the Egyptian case, Jordan's smallness strengthened the legitimation pillar in two ways. First, the Kings' personal legitimacy was facilitated by small size and social proximity, the country had only "few sparsely populated towns" (Vatikiotis 1967, 97), which allowed them visiting all parts of the country and being in close contact with tribal and local leaders who constituted a direct link between the monarch and ordinary people (see Figure 2.1, channel 2; Milton-Edwards and Hinchcliffe 2009, 36). King Hussein was particularly known for being in touch with his people (Hudson 1977, 35); for example, his dismissal of the British command over the army in 1956 was based on an awareness of popular dissatisfaction and the need to increase his popularity for the sake of regime

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stability (Ryan 2002, 260; Tell 2013, 119; Vatikiotis 1967, 124). Due to Jordan’s small size he “was almost literally able to embrace the Hashemite nation by personally receiving all visitors to the Royal Court and by frequent visits to all parts of his realm” (Milton-Edwards and Hinchcliffe 2009, 36) as just before his coronation. The stabilizing effect of this mechanism was certainly not uniform among the population in the 1950s, but it allowed Hussein to gain personal legitimacy among the groups that backed the regime, especially the tribes (Susser 2000, 98). The second mechanism linking size and legitimation was vulnerability and a rally-around-the-flag effect (channel 1): While the original Jordanian population in the East Bank of around 440,000 in 1946 resembled that of an ideal-typical small state, the first Arab-Israeli war with Jordan’s annexation of the West Bank and East Jerusalem in 1950 led to a sizeable influx of Palestinian refugees, which tripled Jordan’s population size and complicated matters. This internalization of an international conflict made Jordanians feel vulnerable vis-à-vis the larger Palestinian population in their country who threatened its identity and very existence as epitomized in King Abdullah’s assassination by a Palestinian (ibid., 91-92; Tal 1993, 51, 54; Tell 2013, 114). This explains the limited opposition among the Jordanian population and the broad support for the Kings as representatives and defenders of Jordanian interests in a newly multi-national state.7

Jordan’s original population was “tiny” (Susser 2000, 88) and ethnically and socially rather homogenous, consisting of two main groups: the (semi-)nomadic Bedouin, organized in simple and hierarchical clan structures and tribes, and the urban population in the country’s few towns and cities, likewise of Bedouin descent (Hudson 1977, 213; Susser 2000, 89; Vatikiotis 1967, 97). This made it easy to identify the elites that required co-optation (channel 6): Clan and tribal leaders as well as notable families from the cities were admitted to the influential Royal Court, where they could express their advice and enjoy financial benefit (channel 8) and social status in exchange for their loyalty (Hudson 1977, 216; Milton-Edwards and Hinchcliffe 2009, 36; see also Tell 2013, 96, 114). This intertwining of social proximity and co-optation, together with the above-explained vulnerability, minimized room for opposition groups to form among the East Bank population and, at the same time, allowed the King to focus on integrating Palestinians and co-opting their leaders during the 1950s (Vatikiotis 1967, 111–12,

7 Jordan as a whole deviated from the ideal-typical small state through the Palestinian influx, and the conflictual relation between Jordanians and Palestinians remained a source of instability. The focus here is on the stability and support among the native (East-)Jordanian population.
Another key factor in controlling the society was the strong cohesion among the security forces and the army’s loyalty to the monarchy, to which smallness contributed via two paths. First, following from the small and little differentiated society, the Jordanian army of the time with its officers recruited largely from Bedouin tribes was built on clan structures and a traditional ethic of the warrior rather than on a distinct and professional military identity (as in Egypt, channel 7); there was neither an educational nor cultural lag between the army, the officers and the society (ibid., 17-27). This patrimonial organization facilitated the army’s loyalty to the monarchy and personally to King Hussein who “had managed within three to four years to capture the role of father and chief of the army”; for the Bedouin, “he was not only Commander-in-Chief but also their Chief Shaykh, that is, their Chief Tribal Ruler” (channel 3; ibid., 134 for both citations; see also Susser 2000, 93–95). The absence of a military academy was critical and contrasts with the case of Egypt, where the size of the army created enough demand for a professional Military Academy where the future Free Officers and others developed a distinct military identity. Second, smallness favored the army’s cohesion and loyalty via economic centralization. Not only the society but also the economy of Jordan was relatively uncomplex; there were hardly any revenues from independent industries as in Egypt. Instead, the economic resources, sponsored in considerable part by Western aid, were concentrated in the hands of the King who invested them largely into the army via salaries, medical and social benefits (Hudson 1977, 216–17; Susser 2000, 93; Tell 2013, 110–21). The army, in turn, became the primary development force of the country and this patronage system co-opted the Bedouin population (channel 8) and ensured the military’s loyalty, which enabled the repression of repeated, yet spatially limited, protests throughout the 1950s (channel 4; Lust-Oskar 2005, 51; Milton-Edwards and Hinchcliffe 2009, 32–37; Tell 2013, 112, 120–21; Vatikiotis 1967, 98, 124). Opposition was also voiced by several political parties; however, in contrast to Egypt these were “without a wide popular base” (Ryan 2002, 263) as distinct client groups were largely nonexistent, and the regime was able to keep track of all of them (channel 5) and co-opt or repress them through cooperation, licensing, ban, martial law or violence (Lust-Oskar 2005, 50–51).

The explained size effects proved decisive in two critical episodes during the period under study. The succession crisis, starting with King Abdullah’s assassination in 1951, continuing with the short reign of his mentally ill son Talal and ending with the accession of Abdullah’s grandson Hussein to the throne in
1953, would have provided a window for opposition forces to overthrow the regime. Yet, the country’s co-opted elite played a “stabilizing and supportive role” (Susser 2000, 97), while the country’s limited social and political diversification, its vulnerability and the centralization of resources in the regimes’ hand prevented the emergence of a viable political alternative, contrary to the Egyptian case. Another critical episode, the attempted military coup in April 1957, provides insightful similarities to and differences with the successful coup in Egypt in 1952. As in Egypt, a group of military officers, inspired by Arab nationalism, plotted against the monarchy; notably, these were largely non-Bedouins who were arguably less comprehensively co-opted than their Bedouin counterparts. The coup attempt illustrates that smallness does not entirely eliminate risks and challenges for a regime, but it does, and did in this particular case, minimize the prospects for these risks to result in regime change. In the Jordanian case, however, the monarchy survived due to social proximity, institutional centralization and the King’s personal legitimacy: After weeks of political and military turmoil, King Hussein was aware of potential threats to his reign and had the overview and capacity to take them seriously. As a result of small-state centralization, the typical lack of specialization and flat hierarchies (the Jordanian military had a relatively low ratio of officers to total strength), Hussein was directly involved with military matters, as opposed to King Farouk of Egypt. Hussein personally knew the leader of the conspirators and when informed about fights among conspirators and pro-regime forces within the military, he acted resolutely and kept direct contact with loyal (because co-opted) Bedouins officers. In the end, the coup failed because the Bedouin forces but also most officers from cities and towns remained loyal to the King; the most decisive effect of smallness in this critical moment was to strengthen the co-optation pillar. The turbulences did not end after the coup, but an admiration for Hussein’s early successes and his persistence under adverse circumstances strengthened his and the monarchy’s legitimation in later decades (Ashton 2008, 79; Hudson 1977, 218–19); the taken path of monarchy was locked in. While previous case-specific explanations for Jordan with a focus on luck or individual leadership skills are unsatisfying from a comparative perspective and systematic explanations, such as the oil rent

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8 The following account is based on Ashton (2008, 63–64), Hussein King of Jordan (1962, chapter 11), Vatikiotis (1967, 92, 128–34). An alternative account asserts that it was a staged counter-coup by Hussein against the pan-Arabist movement in Jordan, potentially supported by the CIA, see Ashton (2008, 63).
hypothesis and the institutional dynastic hypothesis, failed for the Jordanian case, this analysis illustrates the explanatory power of smallness.

2.5 Deviant cases and refined argument

The cases of Egypt and Jordan illustrate the hypothesized mechanisms at work, but these are most likely cases. Based on the 1-million threshold, five cases deviate from the expected smallness-survival relation: the small but failed monarchies in Bhutan, Maldives and Tonga as well as the larger but surviving monarchies of Morocco and Saudi Arabia. The first small monarchy to fall, which at first look contradicts the initial conjecture, was in the Maldives. The century-old Maldivian monarchy was first abolished when the country was still a British protectorate (therefore this regime change is not reported in Table 2.1): In 1952 Muhammad Amin Didi, a reformer and descendant of the Huraa dynasty, was selected to become the new sultan, but he refused saying that "for the sake of the people of Maldives I would not accept the crown and the throne" (The President’s Office, Maldives 2017). Backed by a public referendum, the Maldives became a republic in 1953 with Muhammad Amin Didi as elected president. Subsequently, the country experienced public unrest in favour of the monarchy in 1953 and two further referenda that first restored the monarchy in 1954 and then, after independence, established a second republic in 1968 (ibid.; Robinson 1989, 228). The last sultan Muhammad Farid Didi peacefully resigned in 1968 (Robinson 1989, 228) upon a vote by the traditional assembly and a referendum, and little is known about his exact motivation to comply with the pressure. It is clear, however, that the period of historical changes that favoured this second abolishment of the monarchy (which is reported in Table 2.1) had been initiated from within the dynasty and monarchic regime by Muhammad Amin Didi.

The other two cases of small abolished monarchies, Bhutan and Tonga, broke down (or transitioned to largely democratic constitutional monarchy) exceptionally late, but the internal reasons are somewhat similar to the Maldivian case with the initiative for regime change coming from within the monarchy. Bhutan is the clearest illustration: After a century of stable monarchic government based primarily on the regime’s legitimacy, social proximity and homogeneity which, as I would expect, “made it easier for the monarchy to manage and control Bhutan’s elite” (M. Turner, Chuki, and Tshering 2011, 189 see also 196), Bhutan held first democratic elections in 2007 and 2008. The newly ascended King himself
initiated the transition to democracy without elite or popular pressures and even against the will of significant parts of the population who preferred the monarchical regime (ibid., 193, 199-201; Corbett, Veenendaal, and Ugyel 2017, 696–98).

In Tonga, where a pro-democracy movement developed in the 1970s, there was much more pressure for democratic reforms (Corbett, Veenendaal, and Ugyel 2017, 694). During his reign from 1965 to 2006, King Tupou IV responded with authoritarian measures: leaders of the pro-democracy movement lost their public-sector jobs or were sent to prison (repression), other opposition figures were allowed to parliament (co-optation), and the king and his government appealed to the nation’s traditions and common history (to increase legitimation; ibid., 695). Although the regime’s legitimation pillar had been comparatively weak (I. C. Campbell 2008, 107), this strategy allowed the monarchy to survive until King Tupou IV’s death in 2006. His son and successor, King Tupou V, first started advocating democratic change as crown prince (ibid., 97-98). Later as king, he was reported to “voluntarily surrendering his powers to meet the democratic aspirations of many of his people” (McMahon 2008), which in 2010 resulted in the first genuinely democratic parliamentary elections. The change of the regime’s attitude towards democracy can clearly be attributed to the new king; comparable to the case of Bhutan, the authoritarian monarchy ended because the king intended to share power with democratically elected politicians. Whether the motivation for his intent was based on intrinsic moral convictions, as in the King’s self-portrayal, or rather on long-term pressure from Tonga’s pro-democracy movement that culminated in violent riots in 2006, is extremely difficult to assess, just as in the Maldives.

The cases of the Maldives, Bhutan, and Tonga draw attention to the type of monarchical breakdown (see Table 2.1, column 3). Whereas there is no clear-cut size threshold below which all monarchies survived and above which all monarchies died, there is a threshold for violent monarchical breakdown: After the Second World War, no small monarchy (below a population of 1 million in 1946 or a later year of regime start) was overthrown by insurgencies or coups. Large monarchies, in contrast, frequently ended with coups staged by parts of the regime coalition. This variation between small and large monarchies indicates that the most important effect of small country size is that it successfully stabilized the co-optation pillar in all cases. There is no unambiguous conclusion for larger states but, indeed, the largest monarchies in Egypt, Iran and Ethiopia broke down. Lucas (2004, 111) notes that “the two largest surviving monarchies, Morocco and Saudi
Arabia, each have populations of fewer than 30 million [in 2004]”, implying that this seems rather medium than truly large-sized. Still, the Moroccan and Saudi monarchies are clearly above the 1 million threshold, and they differ widely in their history and so far successful survival strategies (Bank, Richter, and Sunik 2015, 180): Morocco is an example of the linchpin monarchy relying on the central role and legitimacy of the monarch within society, while Saudi Arabia combines several stabilizing factors including most prominently oil rents but also religious legitimation (as in Morocco), dynastic rule and foreign support (ibid., 190-191). For larger monarchies I, thus, note a mere probabilistic tendency towards monarchic breakdown and the frequent occurrence of violent breakdown which is absent in small countries (see Table 2.1). The main conclusion of the iteration between theory and empirical analysis remains asymmetric: Being in a small country (below threshold of 1 million in 1946 or a later year of monarchic regime start) is sufficient for a monarchy not to be overthrown by coups or revolutions. On the other hand, being large (above the same threshold) is necessary for a country to experience a violent overthrow of a monarchic regime. The first condition applies to eleven cases and the second to eight cases; both conditions are fully consistent, i.e. no deviant cases, and relevant, i.e. they cover a non-trivial share of cases.

2.6 Conclusion

In this article, I have suggested a new explanation for the survival of authoritarian monarchies after the Second World War: country size, specifically smallness. The conjecture that monarchy is more likely to survive in small countries was developed into a fully-fledged argument through iterative induction. The result is a plausible explanation of the relation via multiple causal channels and two conditions that are robust for all monarchies after 1946: Being in a small country is sufficient for a monarchy not to be overthrown by coups or revolutions. Being large is necessary to experience an overthrow of a monarchic regime by such violent means. In contrast to extant studies of country size (for many: D. Anckar 2002, 377; Corbett, Veenendaal, and Ugyel 2017, 690), the size threshold was not formulated ex ante but as a result of the analysis. As reported in Table 2.1, the size difference between surviving and failed monarchies was more pronounced in the early postwar years than it is today and most cases of monarchic breakdown occurred in the 1950s, 60s and 70s (Geddes, Wright, and Frantz 2014, 319). This shows that these decades were most critical for monarchic survival and justifies the use of population size from the postwar time. The fact that populations in
many surviving monarchies have grown considerably since then and crossed the 1 million threshold, while monarchy still survives, indicates path dependency. For example, the stability of today’s Jordanian monarchy with a population around 10 million builds on the power structures which were consolidated when the country was undoubtedly small and on the record of stability during a time and in a region marked by instability.

This article contributes to two strands of literature. First, it enhances the debate about monarchical survival and presents population size as a structural explanation, which synthesizes previous mono-causal explanations. I build on a broader population of cases than most previous studies by including cases beyond the Middle East, cases of abolished monarchies as well as countries of all sizes.9 Future studies could test the explanatory power of the proposed causal mechanisms in-depth in other monarchies including likely and deviant cases. Another important question is how exactly regime choices and size effects at critical times become locked in. While the causal mechanisms suggested in this article run from small size to the three pillars of stability in monarchies, they could equally apply to autocratic stability more generally, for example in personalist and military regimes. This opens interesting and relevant avenues for future research: the effect of country size on regime stability could be tested through survival analysis performed on a larger data set including more years and regime types. Secondly, this article adds to the small state literature by developing specific mechanisms through which the often-described social and institutional characteristics of small countries enhance the survival of authoritarian monarchies. This strand of literature has previously focused, in my opinion too narrowly, on a dichotomous conception of regimes (democracy or not) and on small countries. Including large states in this article’s empirical analysis and theoretically deriving the hitherto implicit characteristics of large states are first steps from small state research towards veritable country size research.

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9 Many studies arbitrarily exclude small states, e.g. Geddes, Wright, and Frantz (2014, 317).
CHAPTER THREE

Finding the golden mean:
Country size and the performance of national bureaucracies

3.1 Introduction
One of the core questions of public administration and management research, which is vitally important for economic development and quality of life, is what determines the quality and performance of national bureaucracies. A Weberian bureaucratic structure (Nistotskaya and Cingolani 2016; Rauch and Evans 2000) and specific management practices (Boyne 2003; Rainey and Steinbauer 1999) as well as certain political (Adam, Delis, and Kammas 2011) and societal factors (Bjørnskov 2010; La Porta et al. 1999) have been shown to be favorable to national-level public service performance. However, one factor has been largely overlooked: country size. While size is a regularly studied feature of local or regional administrative units (Blom-Hansen, Houlberg, and Serritzlew 2014; Boyne 1995; Ostrom 1972) and of individual bureaucratic organizations (Andrews, Beynon, and McDermott 2016; Jung 2013), it receives insufficient attention in cross-country research on national bureaucratic systems. Publications addressing the relation between country size and national-level public service performance in theoretical or empirical terms are limited. Specific theoretical frameworks (Randma-Liiv 2002; Sarapuu 2010) and in-depth case studies (Dumont and Varone 2006; Thorhallsson 2000) are rare and suffer from one major deficit, which is no-variance designs. They focus on small countries’ administrations only (or very rarely on large states only, see Lewis 1991) and do not systematically compare different country sizes. On the other side, some large-N studies analyze the relation between country size and measures of public service performance quantitatively: Some studies find that small countries perform better (Congdon Fors 2014; Olsson and Hansson 2011; Xin and Rudel 2004), while others find no significant size effects (Bräutigam and Woolcock 2001; Knack and Azfar 2000; Kurtz and Schrank 2007; Rose 2006). The downside of these studies is not only that they produce mixed empirical results but also that they often lack convincing theoretical explanations.
This paper addresses two questions: How does country size affect public service performance? What is the optimal country size for high public service performance? To answer these questions, two key concepts should be clarified at the beginning: country size and public service performance. The most common operationalization of country size is via population size or area, and I focus on the first one because it is a simple, continuous and easily comparable measure of country size, which makes it also the most widely used one (see e.g. Crowards 2002). Population size is particularly appropriate in the theoretical context of this study because it is a proxy for the number of social relations in a society, the human resource pool, the heterogeneity of citizens’ and bureaucrats’ identities and preferences and the demand for public goods and services. Therefore, the terms country size, state size and population size are used interchangeably in this paper and ‘small state’ refers to states with a small population, not with a small state sector. This paper focuses on one performance dimension: Public service performance is understood as the effectiveness of the national bureaucracy. I follow Rainey and Steinbauer’s (1999, 13) definition of administrative and operational effectiveness: An effective bureaucracy “performs well in discharging the administrative and operational functions pursuant to the mission.” While the effectiveness of a policy cannot be compared between countries as policy goals and designs differ, the effectiveness of administrative and operational functions can be directly compared between countries. The study exclusively examines the central, national level of administration as this allows comparing states of different sizes regardless of their internal organization (e.g. decentralized vs. centralized); what all states have in common is a national administration.

The theoretical importance of this study is twofold: (1) Country size systematically affects public service performance but can hardly be changed, (2) and therefore we must adapt our theories and practices in public management to it. First, the study raises awareness for the trade-off between two extremes, extremely small and large country size. The main argument is that small states’ bureaucracies benefit from informal coordination mechanisms but tend to be under-specialized and under-professionalized, while large states benefit from economies of scale but are burdened with additional administrative and monitoring costs. The study synthesizes the mechanisms linking size to performance and shows that population size is an important country-level characteristic, which directly and systematically affects national-level public service performance and which should be added to the above-mentioned list of
country-level determinants of performance. Second, the study contributes to the discussion about the role of environmental factors, which are too often regarded as side notes or deviations from a norm, on public service performance by putting one such factor, country size, at the focus of the study. In this sense, “finding the golden mean” is important because it reveals that not all countries have the same potential for public service performance and future research should investigate management tools to counter these contextual disadvantages.

The next section presents the theoretical framework borrowing ideas from several sub-disciplines and debates. Then, the choice of data and models for the empirical analysis is explained; the empirical part applies cross-sectional and multilevel regression models. The subsequent section presents the results, which are corroborated by the robustness checks in the penultimate section. The paper concludes with a discussion of the findings, the theoretical implications and the practical implications for states of various sizes as well as for international organizations.

3.2 The theoretical trade-off between economies and diseconomies of scale
This section develops a theoretical framework of a size-related trade-off in public service performance. It applies the idea of organizational environments (Andrews and Boyne 2008; Lynn Jr., Heinrich, and Hill 2000, 244–46) to the national level and argues that country size is an environmental factor external to the bureaucracy, which affects the overall effectiveness of the national administration under the ceteris paribus assumption. The following two sub-sections detail the mechanisms of economies and diseconomies of scale, which relate country size to public service performance, based on arguments borrowed from classic public administration, small state studies as well as economic and public choice discussions on the optimum size of firms and sub-national jurisdictions. The final sub-section derives hypotheses.

3.2.1 Economies of scale
The concept of economies of scale is based on two underlying ideas: First, per capita fixed costs for bureaucratic institutions and public goods and services decrease with the number of citizens or taxpayers (Alesina and Wacziarg 1998, 308; Tullock 1969, 19–21). Second, a larger scale of a firm, a government agency or a sub-national jurisdiction allows specialization within and between organizations and individual employees can fully develop their skills (Andrews
For large states this means that, *everything else being equal*, they tend to have lower per capita costs of national administration (Alesina and Spolaore 2005, 172), which, together with more (diverse) demand for public goods, services and regulation, lead to larger bureaucracies in absolute terms. In short, large countries have large bureaucracies in absolute numbers. This larger overall size of the central administration in large countries allows for more bureaucrats in each organization (agency, department) and organizational unit than in small states, and ultimately for more specialization at the organizational, individual and societal level: Larger bureaucratic organizations tend to be more specialized internally, so they can adequately address most topics and tasks that arise. The individual bureaucrats can also specialize more on certain tasks, receive advanced training, which requires a “critical mass” of participants with similar specialization, and develop and use their skills to the fullest (Rainey and Steinbauer 1999, 22). A critical mass of bureaucrats is also essential for the formation of professional groups and a distinct identity, which enhances the virtuous separation of interests between politicians and bureaucrats (Dahlström, Lapuente, and Teorell 2011, 4–5). Through these diverse channels, specialization fosters bureaucratic professionalism and public service effectiveness (see also Rauch and Evans 2000, 51–53).

From the perspective of small states, this translates into a double disadvantage: First, *relative* to their population size, they tend to have a “disproportionately large” (Randma-Liiv 2002, 378) public sector with high per capita costs (Alesina and Wacziarg 1998); but, second, mirroring their small population, they have a small absolute number of bureaucrats compared to larger states (Thorhallsson 2006, 20). This smaller number of bureaucrats tend to prioritize certain topics or tasks as “islands of excellence” and set others more or

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10 Scale economies and an optimal size arguably differ between policy fields and public goods (Alesina and Spolaore 2005, 205–11; Ostrom 1972)

11 This relation was confirmed empirically by Gerring and Maguire (2014, 8, 78) who show that the natural logarithm of government employees was positively and significantly associated with (the logarithm of) population size in about 120 countries between 1985 and 2005. In their sample, population size alone explains about 80%, a very large part, of variation in government employees, while adding GDP per capita and year dummies increases the explained variation by less than 4 percentage points. See also Thorhallsson (2006, 20) on the strong correlation between population size and the number of bureaucrats in EU countries’ foreign services in 2001.
less aside, which can impair overall effectiveness (Panke 2010, 204; Thorhallsson 2000, 55–59). Another negative implication is that the few bureaucrats cannot effectively specialize but have to accumulate numerous roles and potentially conflicting tasks (Katzenstein 1985a, 89; Sutton 1987, 15). This leads to limited knowledge and skills in each area, frustration and stress for the individual bureaucrat and a lack of professionalism in the administration (Farrugia 1993, 222–24). The lack of professional skills is aggravated when bureaucracies can recruit only from a very small pool of professional personnel, which is often the case in small developing countries (Randma-Liiv 2002, 377–82). In sum, small size weakens specialization at the organizational and individual level as well as overall public service performance.

The absence of economies of scale in small state administrations can also result in a lack of bureaucratic autonomy, which is, as Dahlström, Lapuente and Teorell (2011) have shown, detrimental to performance: Restricted by their small size, these bureaucracies and their bureaucrats have more difficulties in developing a distinct bureaucratic identity or “esprit de corps” (Rauch and Evans 2000, 52) than their larger counterparts, and in gaining the usually theorized information advantages vis-à-vis politicians (Dumont and Varone 2006, 65–66)\(^\text{12}\). Members of government, in contrast, typically control most of the scarce resources in small states and directly dispose of public jobs; these seemingly omnipotent small state governments can easily capture the under-specialized national bureaucracies of small states (Dumont and Varone 2006, 63, 66; Veenendaal 2014, 157, 212). The above-explained lack of professionalism in the administration, together with the typical nearness between politicians and bureaucrats due to common educational backgrounds or personal relations, may encourage forms of nepotism or clientelism and hinder the effective fulfilling of administrative functions (Downs 1967, 157; Dumont and Varone 2006, 67, 71; Sutton 1987, 15; Veenendaal and Corbett 2015, 539).

### 3.2.2 Diseconomies of scale

Just like economies of scale, diseconomies of scale originate primarily in the absolute size of a bureaucratic organization and the number of employees; essentially, an increase in specialization comes with additional costs. With a fixed maximum span of control in a hierarchical system, an increase in employees implies an increase in superiors overseeing these employees; and since these

\(^{12}\) For opposite arguments see Dumont and Varone (2006, 67) and Sarapuu (2010, 36).
superiors have to be monitored or instructed in turn, an additional layer of superiors or managers is required (Blau 1970, 213–14; Urwick 2003, 54–60). Thus, the larger the bureaucratic organization, the higher the number of organizational levels and management staff; consequently, the proportion of internal administration as well as the overall administrative costs increase exponentially with organizational size (Andrews and Boyne 2009, 742; Downs 1967, 130–31, 141; Jung 2013, 668; Williamson 1967, 127). Parts of these exponentially growing barriers to administrative effectiveness are communication costs, when information are condensed and partly lost on every organizational level, and agency costs, when commands are specified and distorted repeatedly down the hierarchy (Downs 1967, 50, 76, 118, 134; Treisman 2007, 63–73; Tullock 1969, 25).

Administrative costs, loss of information and distortion of commands are likely to occur in large bureaucratic organizations but also at the overall level of large, fragmented national administrative systems (Bouckaert, Peters, and Verhoest 2010, 13–33; e.g. on India see Lewis 1991, 368–71). These diseconomies of scale are the downside of large countries’ professional and specialized bureaucracies and limit public service effectiveness. On the contrary, small states’ bureaucracies benefit from less “noise” (Tullock 1969, 25): flatter hierarchies, greater flexibility in dealing with scarce resources, and lower administrative costs for monitoring and communication. Additionally, small states’ public service performance benefits from two informal coordination mechanisms, or “atmospheric advantages” (Williamson 1967, 128): trust and motivation.

Evolutionary research shows that there is a limited number of individuals to which humans can have a meaningful and trustful relation (Dunbar 1993, 682, 686–87). So the sheer small number of bureaucrats, together with the accumulation of roles in small administrations and societies, allows for proximity, communication and personal relations, which enhances trust across different layers of the organization and “organizational commitment” (Harari et al. 2017, 72; see also Corbett 2015; Farrugia 1993, 222–24; sceptically Treisman 2007, 209–14). A high average level of personal trust within the administration can partly substitute formal monitoring institutions, reduce communication and administrative costs and boost effectiveness (Bjørnskov 2010, 325–28, 344;
Another source of informal coordination and diseconomies of scale are shared goals and motivation. First, regardless of the size of individual departments or agencies, a strong shared national identity increases motivation in small state administrative systems: Small states experts argue that, because small states are culturally more homogenous and have a sense of vulnerability, the national interest is more pronounced in general and among bureaucrats, there is an ideology of social partnership (J. L. Campbell and Hall 2017; Katzenstein 1985a, 32). I argue that this feeling of “being on the same boat” in a small country increases average levels of public service motivation, i.e. the motivation to serve the national interest (Rainey and Steinbauer 1999, 23–25), *everything else being equal*. Second, structural features related to the small size of the bureaucracy also foster bureaucrats’ motivation: The role accumulation of individual bureaucrats and multi-purpose organizations in small states facilitates a generalist orientation among small states’ bureaucrats and limits the ambiguity and divergence between a bureaucracy’s formal goals and specific operative goals (Jann and Wegrich 2008, 59–60; Rainey and Jung 2015, 74–76; Thorhallsson 2000, 81); it also allows a larger share of bureaucrats to interact with beneficiaries and directly serve public interest, which reinforces task significance and motivation (Anderson and Stritch 2016, 212–13; Harari et al. 2017, 80). In large states’ bureaucracies, on the other hand, specialization undermines the coherence between an individual’s task and the more general goals or mission; and if highly specialized tasks are too monotonous or insignificant, individual bureaucrats may lack motivation and perform less well (Grindle 2012, 13, 51–52). In sum, trust and motivation are important sources of effectiveness and while they have other, namely individual-level determinants, they theoretically decrease with increasing country size *on average* and *ceteris paribus*.

### 3.2.3 The trade-off

The previous sub-sections theoretically described the trade-off between ideal-typical advantages of large states, with professional and specialized bureaucracies exploiting economies of scale, and advantages of small states’ flexible bureaucracies with lower administrative costs and informal coordination mechanisms. Empirically, I expect national-level public service performance to increase with the size of a country but to decrease after the optimal country size, 

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13 This informal control could, however, be perverted and lead to a lack of effective monitoring or even to the above-mentioned capture, clientelism and patronage (Bräutigam and Woolcock 2001, 4).
all else being equal. This is because, after a certain tipping point, diseconomies of scale outweigh economies of scale (Alesina and Spolaore 2005, 3–7; Tullock 1969, 25). I follow Alesina and Spolaore (2005, 7) and Boyne (1995, 220) who expect an inverse U-shaped relation and I test this relation for the first time at the national level:

$$H_1: \text{There is an inverse U-shaped relation between a country's population size and national-level public service performance.}$$

I expect this relation to peak at the golden mean or optimal size in the middle of the distribution of population size. This point combines a sufficient degree of the desired characteristics of the ideal-typical large and small bureaucracies (i.e. economies of scale and informal coordination), which are both expected to be necessary for reaching high levels of public service performance.

$$H_2: \text{In a global comparison, the highest level of public service performance is reached at medium population size.}$$

At this point two conceptual clarifications are in order. First, the argument in this paper refers to a global comparison between countries of all sizes; it is, therefore, imperative to move on from previous studies that either exclude small countries or focus on small countries only (see Veenendaal and Corbett 2015). In practical terms, measurements of the key concepts must be chosen in a way that covers as many countries as possible with a maximum variation in country size. Second, the hypothesized size-related trade-off in public service performance applies to the difference between states of different sizes but not to changes within a country over time. For the period covered in this study, differences in population size are much stronger between countries than within a country: A small country remains a small country. Likewise, public service performance has been assumed to be relatively stable over years, decades or even longer (Rauch and Evans 2000, 62). As both key concepts are sticky, this study expects no short-term within-country effects but focuses on between-country effects.

### 3.3 Data and methods

#### 3.3.1 Measurement and data

The aim of the empirical part is to test the hypothesized inverse U-shaped relation between country size and public service performance with a global cross-country statistical analysis. Regarding the dependent variable, several governance measures try to quantify the overall effectiveness of national bureaucracies; yet, they are all disputed and have methodological or conceptual problems (Perry...
This study uses the “Government Effectiveness” index from the World Bank’s Worldwide Governance Indicators (WGI; Kaufmann, Kraay, and Mastruzzi 2009), which is available biannually from 1996 to 2000 and annually from 2002 to 2014 (using the version updated in 2015). The indicator is based on a variety of data on the perception of the quality and effectiveness of public services, of civil service, policy formulation and implementation. The sources encompass: (1) commercial business information providers such as the Economist Intelligence Unit or the Political Risk Services’ International Country Risk Guide (ICRG); (2) country assessments by international organizations such as regional development banks or the World Bank; (3) surveys of firms or households (e.g. Afro- and Latinobarometer, Gallup World Poll); (4) data from non-governmental organizations, namely Bertelsmann’s Transformation Index and the Global Integrity Index; for more details see Appendix 7.1.1. Several items from these sources are integrated, in slightly varying combinations, into one standardized score for each country-year; the resulting measure lends itself to over-time and between-country comparisons (Kaufmann, Kraay, and Mastruzzi 2009).

One of the major advantages of the WGI including Government Effectiveness is that it is “the most comprehensive dataset” (van de Walle 2006, 440) of its kind covering basically all countries in the world including microstates, which is essential for studying the effect of state size in its breadth. Various alternative measures ignore microstates; which leads to severe sample selection bias (Knack and Azfar 2000). The widely used Political Risk Services’ ICRG measure of bureaucratic quality, for example, leaves out around 50 small and medium countries (see Figure 7.1 in appendix). Another upside of the Government Effectiveness indicator is its transparency: The underlying sources and items, the exact weights attributed to them, and the overall method of aggregation are documented in detail in various publications and the WGI website; most disaggregated source variables can be downloaded. Regarding sources, the indicator is based on the judgment of external stakeholders (citizens, entrepreneurs, and mostly experts), who are usually less suspected of systematically over-reporting performance than stakeholders inside the bureaucracy. The reliance on perception may still induce certain reliability issues (Walker, Boyne, and Brewer 2010, 11–14), which have been widely discussed for the WGI (Kurtz and Schrank 2007; Langbein and Knack 2010; van de Walle 2006). Nevertheless, I argue with the initiators of the measure that perceptions capture the “de facto reality that exists ‘on the ground’” (Kaufmann, Kraay, and Mastruzzi
instead of only de jure rules. The problems concerning perceptions are addressed through the unobserved components model, which is used to aggregate and triangulate the items and described in Appendix 7.1.1. The combination of and triangulation between diverse data sources ensures the representativeness of the respondents’ judgments, minimizes the effect of individual respondents’ biases, allows for a broad country coverage (by allowing data sources to differ between countries and years) and, finally, minimizes potential construct validity problems by aggregating only the measure of the targeted concept and discarding conceptual noise. In sum, there are good reasons why WGI remain the global state-of-the-art cross-country measure for public service performance (see introduction). Other measures are employed for robustness checks.

As explained in the introduction, this study uses population size as the main independent variable measuring country size; data are available from the World Bank on an annual basis for most countries in the world. Since its global distribution is extremely right-skewed, I log-transform population size (see Figure 7.2 in appendix). Previous studies on the determinants of public service performance inform the choice of control variables. The baseline model includes economic development (GDP per capita, logged), since high-income countries tend to achieve higher levels of public service performance (Rauch and Evans 2000, 57), and regime type (Freedom House’s political rights, inversed scale), because democracy is related with high levels of performance (Bäck and Hadenius 2008). Further controls include dummy variables for legal origin following La Porta and colleagues (1999) because it has been widely argued that the institutions originating from a British legacy are conducive to high public service performance. Moreover, the share of urban population and the level of education are controls for the level of societal development and a proxy for knowledgeable citizens who are expected to be more critical of bureaucratic inefficiencies. I measure education by the expected average years of schooling because this is the only available measure with extensive country coverage; unfortunately, it is not available over time, so it is used as a static measure. I will test further controls: population growth calculated from the yearly population data to distinguish analytically between the effects of stocks (population size) and flows (population growth) of population, ethnic fractionalization expected to negatively influence public service performance because it increases the internal complexity of the bureaucracy as well as societal complexity (Alesina, Baqir, and Easterly 1999; Habyarimana et al. 2007), and a dummy for federal states that is expected to
attenuate diseconomies of scale in large states. Appendix 7.1.1 reports descriptive statistics and sources for all variables.

### 3.3.2 Modeling strategy and sample selection

I model the inverse U-shaped relation with population size (log-transformed) and its quadratic term as key explanatory variables. The first part of the analysis utilizes a cross-sectional model with data for 2014 because these are most up-to-date in the dataset. Since the explanatory variable of interest (population size) and the dependent variable (government effectiveness) are continuous, OLS estimation is appropriate. The basic regression model is:

\[
GE_j = \beta_0 + \beta_1 \ln{POP_j} + \beta_2 \ln{POP_j}^2 + \beta_3 C_j + e_j
\]

where \( GE_j \) is government effectiveness in country \( j \), \( LPOP_j \) is the natural logarithm of the country's population size and \( LPOP_j^2 \) is its square, \( C_j \) is a vector of controls and \( e_j \) is the error term. The coefficients of top priority are \( \beta_1 \) and \( \beta_2 \) and they are expected to be larger than zero (\( \beta_1 \)) and smaller than zero (\( \beta_2 \)), respectively, to model an inverse U-shaped relation.

The second part of the empirical test seeks to analyze the data in longitudinal format for the period 1996 through 2014, while keeping the analytical focus on the theoretically relevant between-country effect. Consequently, standard fixed-effects models, which control completely for between-country variation, are not suitable.\(^{14}\) Furthermore, a standard random-effects model calculates only one coefficient for each independent variable as a weighted mean of its between- and within-country effect and would “assume that the within- and between-country effects are equal” (Bartels 2008, 9; see also Snijders and Bosker 1999, 30), which is not what the theoretical framework of this study suggests either. Because of the limitations of these standard approaches, the study utilizes a multilevel “within-between RE model (REWB)” (Bell and Jones 2015, 145; see also Bartels 2008; Snijders and Bosker 1999, 27–29), which allows modeling and interpreting the within-country and between-country effects explicitly and separately. Showing “the full picture” and allowing a comparison of effects makes this technique superior to pure between-effect models that do not report the

\(^{14}\) Following a similar intuition, no lagged dependent variable is used since this would change the interpretation of the model from explaining levels of the dependent variable to explaining changes in the dependent variable.
within-country effect. The REWB model builds on a temporal hierarchy, in which country-year observations (level 1) are nested within countries (level 2); it combines a level-1 equation, estimating the time-variant within-country effects, and a level-2 equation, explicitly modeling the time-invariant country effect. This reduces unobserved heterogeneity and corrects standard errors for country-level heterogeneity (Bell and Jones 2015, 142). What is crucial with regards to population size (and other time-variant variables) is that it enters the model twice: at the country level (level 2) the country mean for population size is used; at the country-year level (level 1) the yearly deviation from this country-specific mean is used (Bartels 2008, 11–12). The two-level model is thus:

\[ GE_{ij} = \beta_0 + \beta_1 LPOP_j + \beta_2 LPOP_j^2 + \beta_3 (LPOP_{ij} - \bar{LPOP}_j) + \beta_4 (LPOP_{ij}^2 - \bar{LPOP}_j^2) + \beta_5 \log GDP_{pcj} + \beta_6 (\log GDP_{pcij} - \log GDP_{pcj}) + \beta_7 (POL_RIGHTS_{ij} - POL_RIGHTS_j) + u_j + e_{ij} \]

Here \( GE_{ij} \) is government effectiveness in year \( i \) and country \( j \), \( LPOP_j \) is the natural logarithm of the country’s population size in year \( i \)(\( LPOP_j^2 \) is its square), \( \bar{LPOP}_j \) is the mean of population size over the time of the study in country \( j \)(\( \bar{LPOP}_j^2 \) is its square), \( u_j \) is the random effect for country \( j \) and \( e_{ij} \) is the country-year-specific error. The coefficients for the between-country effect of population size and squared population are \( \beta_1 \) and \( \beta_2 \); in light of the hypothesis, I expect them to be positive and negative, respectively. There are no clear expectations about the within-effect coefficients \( \beta_3 \) and \( \beta_4 \). For reasons of space and simplicity, the above formula includes only two control variables; more will be added with time-invariant variables (legal origin, education for lack of longitudinal data) entering the model only at the country level (level 2) and time-variant variables (GDP per capita, regime type, share of urban population) included at both levels as population size above. The model is estimated by maximum likelihood (Bartels 2008, 15; Snijders and Bosker 1999, 56).

I first calculate the described models for a global sample comprising all independent countries (defined by UN membership and data availability). However, diverse backgrounds and intervening variables in different countries

\[ GE_{ij} = \beta_0 + \beta_1 LPOP_j + \beta_2 LPOP_j^2 + \beta_3 (LPOP_{ij} - \bar{LPOP}_j) + \beta_4 (LPOP_{ij}^2 - \bar{LPOP}_j^2) + \beta_5 \log GDP_{pcj} + \beta_6 (\log GDP_{pcij} - \log GDP_{pcj}) + \beta_7 (POL_RIGHTS_{ij} - POL_RIGHTS_j) + u_j + e_{ij} \]

\[ 15 \text{ For those who prefer the more parsimonious between-effects model, such alternative specifications are shown in Table 7.5 in the appendix; the results are largely the same as the between-effects from the REWB models.} \]
might produce unclear results. I, therefore, define a smaller sub-sample of democratic countries, which have been in the focus of the empirical and theoretical research on public service performance and small states, and in which causal homogeneity is more probable. The sub-sample is defined according to a simple procedural measure of democracy based on Freedom House’s political rights scale.  

3.3 Results

The analysis starts with a test of the hypothesized inverse U-shaped effect of size on government effectiveness in the global sample (Table 3.1). Models 1 through 3 are cross-sectional models for 2014. Model 1 is the baseline model with two control variables: economic development and regime type, which both exert the expected positive effect here and in all following models. The coefficients for (log) population size and its squared term are significant and show the signs expected under H1. Model 2 adds two control variables that increase the explanatory power of the model but are themselves insignificant: share of urban population and education; it also adds dummy variables for legal origin. Model 2 is the best fitting cross-sectional model with regards to the control variables; it explains about 81% of global variation in government effectiveness. The introduction of further controls for ethnic fractionalization, population growth and federalism in Model 3 does not increase the explanatory power of the model but further reduces the country coverage due to data limitations. Therefore, I use the control variables from Model 2 in all following models. The last two columns of Table 3.1 report the results of the multilevel REWB model based on data for 1996 through 2014. The

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16 The original scale from 1 (free) to 7 (not free) is inversed so higher values mean higher levels of political rights. A country is defined as a democracy if it has a score of 5.5 or higher on the inversed scale, which is in accordance with Freedom House’s coding rules.

17 For a reanalysis of the cross-sectional models from Tables 3.1 and 3.2 for various other years see Table 7.3 in appendix.

18 While the federalism dummy is not significant in itself, it could modify the effect of population size. Since the combination of interaction terms with polynomials would be difficult to interpret, the REWB model is run again for federal states only, see Table 7.4 in appendix. The results are significant and as expected.

19 The results of the following models do not change substantially when one controls for ethnic fractionalization, population growth and federalism; these controls neither improve any model fit nor do they turn out significant. The only effects are that the significance level of the population size term and its square slightly drop, but rarely below 95%, and that the inclusion of federalism shifts the turning point upwards.
coefficients for the between-effect of (log) population size and [(log) population size]$^2$ are significant, show the expected signs and are very close to those obtained through a pure between-effects model (see Table 7.5 in appendix); but there is no significant within-country effect of population size. The difference between within- and between-effects affirms the use of the REWB model compared to standard FE and RE approaches and illustrates its usefulness for dealing with sluggish variables. In contrast, the control variables GDP per capita, political rights and urban population show significant within- and between-country effects with the same signs. A Wald test (not shown) indicates that (log) population size and its squared term are jointly highly significant at the .001 level in all specifications in Table 3.1 (except for the REWB model’s within-effect). This is also the case if one excludes the two extreme observations in terms of population size: China and India (see Table 7.4 in appendix).

Table 3.2 reports regression results for the sub-sample of democratic countries with controls as before. The coefficients for (log) population size and its squared term in the cross-sectional model and the between-effect of the REWB model for democracies are highly significant and show the expected signs, while the REWB within-effect is again less clear. The fit of the cross-sectional model is even higher for democracies than for the global sample; it explains about 86% of variation in government effectiveness. According to the cross-sectional model for democracies, an increase of the logarithm of population at low levels from 14 (in levels: 1.2m) to 16 (levels: 8.9m) has a predicted effect of (.837*16 – .024*16$^2$) – (.837*14 – .024*14$^2$) = .21 on government effectiveness, i.e. an increase of about one fifth of a standard deviation (since government effectiveness is standardized). At higher levels of size, in contrast, an increase of the logarithm of population size from 18 (in levels: 66m) to 20 (levels: 485m) is associated with a decrease in effectiveness by just under a fifth of a standard deviation (–.18). Note that the logarithm hides that the positive effect at lower levels of size is steeper (an increase by only 7.7m leading to an increase in performance by .21) than the negative effect at high levels (a 419m increase leading to a .18 decrease). The last columns of Table 3.2 show the results for the multilevel REWB model without the outlier India; the results are robust to this change. While the results for democracies are convincing, there is no significant size-effect among non-democratic countries (see Table 7.4 in appendix).

The predictive margins (Figure 3.1) illustrate the curves resulting from the REWB model’s between-country effect for the global sample and the democratic
sub-sample with 95% confidence intervals. Initially, the predicted level of government effectiveness increases with size up to a turning point after which it decreases. The confidence intervals are inflated at higher levels of population size due to the limited number of observations in this area (for population size distribution see Figure 7.2 in appendix).\textsuperscript{20} In all models and figures the estimated effect size is moderate with substantial differences in population size having a moderate impact on public service performance. Furthermore, in the models in Tables 3.1 (except Model 3) and 3.2, the control variables exert significant influence in the expected direction, except for the share of urban population that has a constantly negative effect and education that remains insignificant throughout the models. The tables also report the turning points of the size effect as the empirical estimation of the theoretically expected optimal country size (H\textsubscript{2}). I calculate them from the coefficients on (log) population size and [(log) population size\textsuperscript{2}] in the cross-sectional model or, in case of the multilevel model, from their between-effect coefficients, and discuss them below (see Appendix 7.1.2).

\textsuperscript{20} I discuss and employ a different graphical approach based on 83.5% confidence intervals in Appendix 7.1.2 (see Figure 7.3).
Table 3.1 Regression results for global sample

<table>
<thead>
<tr>
<th></th>
<th>Cross-Sections for 2014</th>
<th>REWB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>(log) population</td>
<td>.500** (.162)</td>
<td>.573* (.236)</td>
</tr>
<tr>
<td>([log] population)^a</td>
<td>-.014* (.005)</td>
<td>-.016* (.007)</td>
</tr>
<tr>
<td>(log) GDP pc</td>
<td>.482** (.050)</td>
<td>.424** (.064)</td>
</tr>
<tr>
<td>Political rights</td>
<td>.129** (.023)</td>
<td>.118** (.024)</td>
</tr>
<tr>
<td>Urbanization</td>
<td>-.004 (.005)</td>
<td>-.005 (.004)</td>
</tr>
<tr>
<td>Exp. school years</td>
<td>.034 (.026)</td>
<td>.024 (.026)</td>
</tr>
<tr>
<td>Fractionalization</td>
<td>.051 (.188)</td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>.002 (.040)</td>
<td></td>
</tr>
<tr>
<td>Federalism</td>
<td>-.104 (.130)</td>
<td></td>
</tr>
<tr>
<td>Legal origin</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Random part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level-1 error (\hat{\sigma}_e)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level-2 error (\hat{\sigma}_u)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Constant</td>
<td>-9.21** (1.23)</td>
<td>-9.36** (1.93)</td>
</tr>
<tr>
<td>Observations</td>
<td>176</td>
<td>162</td>
</tr>
<tr>
<td>Model fit</td>
<td>(r^2 = .77)</td>
<td>(r^2 = .81)</td>
</tr>
<tr>
<td></td>
<td>F = 141.7**</td>
<td>F = 110.2**</td>
</tr>
<tr>
<td>Turning point</td>
<td>81m</td>
<td>61m</td>
</tr>
</tbody>
</table>

Dependent variable: Government Effectiveness; standard errors in parentheses; cross-sectional models: OLS estimates with robust standard errors, REWB model with random intercept at the country level estimated via MLE; turning point in million population; ‘ p<0.1, * p<0.05, ** p<0.01
Table 3.2 Regression results for democracies

<table>
<thead>
<tr>
<th></th>
<th>Cross-Section 2014</th>
<th>REWB</th>
<th>REWB without India</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(within)</td>
<td>(between)</td>
<td>(within)</td>
</tr>
<tr>
<td>(log) population</td>
<td>.837** (.262)</td>
<td>.623** (.178)</td>
<td>1.591* (.665)</td>
</tr>
<tr>
<td>log population</td>
<td>1.092* (.604)</td>
<td>.623** (.178)</td>
<td>1.591* (.665)</td>
</tr>
<tr>
<td>[(log) population]^2</td>
<td>-.024** (.008)</td>
<td>-.018** (.006)</td>
<td>-.076** (.022)</td>
</tr>
<tr>
<td>log GDP pc</td>
<td>.478** (.072)</td>
<td>.429** (.046)</td>
<td>.411** (.017)</td>
</tr>
<tr>
<td>Political rights</td>
<td>.266* (.112)</td>
<td>.254** (.052)</td>
<td>.098** (.024)</td>
</tr>
<tr>
<td>Urbanization</td>
<td>-.006 (.004)</td>
<td>-.005* (.003)</td>
<td>-.008** (.003)</td>
</tr>
<tr>
<td>Exp. school years</td>
<td>.027 (.031)</td>
<td>.036 (.024)</td>
<td>.033 (.023)</td>
</tr>
<tr>
<td>Legal origin</td>
<td>yes</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Random part</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level-1 error (\hat{\sigma}_\epsilon)</td>
<td>-</td>
<td>.174 (.004)</td>
<td>.174 (.004)</td>
</tr>
<tr>
<td>Level-2 error (\hat{\sigma}_\mu)</td>
<td>-</td>
<td>.296 (.023)</td>
<td>.294 (.023)</td>
</tr>
<tr>
<td>Constant</td>
<td>-12.64** (2.16)</td>
<td>-10.18** (1.39)</td>
<td>-11.18** (1.51)</td>
</tr>
<tr>
<td>Observations</td>
<td>74</td>
<td>N= 92, Total obs.= 1187</td>
<td>N= 91, Total obs.= 1171</td>
</tr>
<tr>
<td>Model fit</td>
<td>(r^2=.86)</td>
<td>Model (\chi^2=286.5**)</td>
<td>Model (\chi^2=288.1**)</td>
</tr>
<tr>
<td>Turning point</td>
<td>29m</td>
<td>29m</td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Government Effectiveness; standard errors in parentheses; cross-sectional models: OLS estimates with robust standard errors, REWB model with random intercept at the country level estimated via MLE; turning point in million population; † p<0.1, * p<0.05, ** p<0.01
3.4 Robustness checks
The exclusion of China and India (see Table 3.2 and Table 7.4 in appendix) showed that the effect is not driven by these extreme outliers in population size.\(^{21}\) This section presents further reliability checks. First, as discussed above, all measures of public service performance are disputed and may involve measurement error. In order to address this measurement validity problem, I replace the dependent variable government effectiveness by other indicators of public service performance (for results see Table 3.3, for data description and sources see Appendix 7.1.1). Archival data are often viewed as the gold standard in public management because of their supposed objectivity (Walker, Boyne, and Brewer 2010, 12), but I am not aware of any archival indicator measuring the broad concept of national-level public service effectiveness across countries, which

\(^{21}\) The models’ robustness was also checked under the exclusion of micro-states below certain thresholds (50,000, 100,000 and 500,000 population); the size coefficients became less significant and the turning points increased but the restricted models still estimated an inverse U-shaped effect. However, in contrast to India and China, which are influential outliers skewing the distribution of country size (Figure 7.2), there are no true outliers at the lower end of the size scale as micro and small states are the norm rather than the exception.
clearly limits this paper as well as other comparative studies of national public service effectiveness. Therefore, I rely on perceptual measures of performance for the robustness checks; as they are not all available in longitudinal format, the models are cross-sectional; control variables are used as before (see Table 3.1, Model 2). One alternative is the measure “regulatory quality”, also from the World Bank’s Worldwide Governance Indicators, capturing “the ability of the government to formulate and implement sound policies” (Kaufmann, Kraay, and Mastruzzi 2009, 6), which includes public service performance. In a global sample, population size significantly exerts the expected inverse U-shaped effect on regulatory quality (Table 3.3, Model 1). Another measure is “government efficiency” from Bertelsmann’s Sustainable Governance Indicator measuring “a government’s implementation performance”. A model with “government efficiency” as dependent variable yields the expected signs for (log) population size and its squared term (Table 3.3, Model 2), but the latter coefficient reaches only the .1 level of significance because of the limited number of observations for this indicator. Remarkably, the estimated turning points are approximately equal for these two dependent variables and well in the range of those previously calculated for democratic countries. Finally, “Impartiality” from the Quality of Government’s Expert Survey II is used as dependent variable; in a global sample it leads to correctly signed but insignificant coefficients for the size variables; these become significant if only advanced Western countries are considered (Table 3.3, Models 3 and 4). While the appropriateness of this third alternative for measuring public service performance is debatable, it supports previous findings at least partly.

A second problem that deserves attention is endogeneity; one may argue that there is reverse causality running from public service performance to population size. A well performing public sector could, for example, encourage people to have more children or it could attract immigrants, which both increases population size in the long run. A standard approach to correct for potential endogeneity is instrumental variable (IV) regression where a third, completely exogenous variable, which is often challenging to find, is used as an instrument. I follow the lead by political scientists and economists (Gerring, Jaeger, and Maguire 2016; Rose 2006) who have used (log) area as an instrument for (log) population size. It cannot be ruled out completely that area has an independent effect on performance but it is very unlikely. A country’s geographical size and the

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22 Western Europe, North America, Australia and New Zealand
resulting internal distances were certainly a constraint on effective public service in historical eras when transport and communication were slow (Gerring, Jaeger, and Maguire 2016, 92). In the modern time period covered in this study with modern means of transport and communication, however, area seems to be less influential and exercises its main effect on performance via population size with which it is strongly correlated ($r=.85$ in 2014). Based on this assumption, I use (log) area and [(log) area]² as instruments for (log) population size and its squared term. Table 7.6 in the appendix reports detailed results and test statistics of both stages of the two-stage-least-squares (2SLS) estimation with the same controls as before, first for the global sample and then only for democracies. A Hausman test fails to reject the null hypothesis, that the population size variables are exogenous, for democracies so the original OLS model in Table 3.2 can be regarded as sufficiently unbiased. For the global sample, however, the test rejects exogeneity and supports the use of instrumental variables. Accordingly, Table 3.3 (Model 5) reports a short version of the second-stage results for the global sample; they confirm the inverse U-shaped effect found in previous models and the explanatory power of the model remains high. With regards to the IV approach it should be borne in mind that its interpretation and reliability depend on the exogeneity assumption for area, and it is left to the reader to judge the plausibility of this assumption. Anyway, the threat of reverse causality is limited in the context of this study: While public service performance can arguably influence population growth, this would change the absolute population size, in a global comparison, only marginally and rather in the long than in the short term. All countries’ population size in 2014 and 1984, i.e. 30 year earlier, correlate at a spectacularly high $r=.99$, which shows that population size is extremely sluggish and above all driven by past levels of population size.
Table 3.3 Robustness checks. Cross-sectional models for 2014.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(log) population</td>
<td>.898** (.205)</td>
<td>4.56* (2.219)</td>
<td>.489 (.670)</td>
<td>1.997* (.733)</td>
<td>.885** (.292)</td>
</tr>
<tr>
<td>[(log) population]^2</td>
<td>-.027** (.007)</td>
<td>-.156* (.068)</td>
<td>-.015 (.018)</td>
<td>-.065* (.023)</td>
<td>-.027** (.009)</td>
</tr>
<tr>
<td>Observations</td>
<td>162</td>
<td>39</td>
<td>103</td>
<td>21</td>
<td>162</td>
</tr>
<tr>
<td>r^2</td>
<td>.72</td>
<td>.32</td>
<td>.67</td>
<td>.80</td>
<td>.80</td>
</tr>
<tr>
<td>Turning point</td>
<td>19m</td>
<td>19m</td>
<td>-</td>
<td>9m</td>
<td>12m</td>
</tr>
</tbody>
</table>

Controls added as in Table 3.1, Model 2 but not shown for lack of space; first four models are OLS models with robust standard errors in parentheses; fifth model is 2SLS IV regressions with only second-stage regression results reported with (log)area and [(log)area]^2 as instruments for LPOP and LPOP^2, dependent variable is government effectiveness, for complete results of IV regressions see Table 7.6 in appendix; turning point in million population; ^ p<0.1, * p<0.05, ** p<0.01

3.5 Discussion and conclusion

This paper set out to theoretically explain and empirically test the inverse U-shaped relation between population size and public service performance, which was expected by scholars like Alesina and Spolaore (2005, 7) and Boyne (1995, 220) but never tested before at the national level. The use of cross-sectional and REWB models proved appropriate because both isolate the theoretically relevant between-country effect of size. The various models provide strong evidence for the existence of economies of scale: a positive and steep effect of size on performance at lower levels of country size. These results fill an empirical gap that earlier conceptual contributions in the field of small states studies had left open (Alesina and Spolaore 2005; Randma-Liiv 2002). The findings support the idea that small country size limits effectiveness (Dahl and Tufte 1973, 113–17) and specify that size makes a difference specifically among so-called small states: micro-states such as Monaco or Tuvalu are substantially different from small or medium-small states such as Ireland or Tunisia that benefit already from economies of scale. The squared population size is also significant in most models and under different robustness checks, but the broad confidence intervals (see Figures 3.1 and 7.3) leave the question whether there is only saturation at higher levels of population size or a downward slope, as expected under the first hypothesis (H1). In either case,
diseconomies of scale are effective and clearly stop the positive size effect of economies of scale after the optimal size is reached. With regard to the second hypothesis (H₂), the estimated turning points support the expectation that the maximum of public service performance is found at medium population size. The turning points vary between models and samples used, from 15m to 94m, but they do not vary randomly: They are lower when extremely large countries such as India and China are excluded or when only democracies are considered.²³ The finding that a medium country size is optimal for public service effectiveness also fills an empirical gap and shows that negative effects of smallness are dominant up to a medium population size. This finding was only possible by expanding the sample and variance in population size compared to previous studies which assumed, for a lack of variation in country size, that the observed processes apply only to very small countries (for many: Dumont and Varone 2006; Randma-Liiv 2002; Veenendaal 2014). Due to the nature of these findings, there are several significant contributions to public administration and management theory and practice, discussed in the remainder of the paper.

The diverging findings for different sub-samples point at the effects of political institutions and regime types. The curvilinear size effect is substantially larger for the democratic sub-sample than for the global sample; democracies drive the effect in the global sample, whereas the effect does not appear among non-democratic countries. This indicates that the theorized mechanisms, derived mainly from literature on advanced democracies (for many: Andrews and Boyne 2009; J. L. Campbell and Hall 2017; Urwick 2003), work best in democratic countries. Democracies share the goal of high public service performance almost by design; aiming for re-election, democratic politicians must be responsive and responsible to their citizens for the goods and services provided through the bureaucracy. This “democracy advantage” based on “three core characteristics of representative government: shared power, openness, and self-correcting capacity” (Halperin, Siegle, and Weinstein 2010, 13) is also reflected in the higher level of government effectiveness for democracies on average, regardless of country size (see Figure 3.1 and coefficient for political rights in all models). Non-democratic countries, in contrast, are a much more heterogeneous group with regards to institutional setup and incentives for public service performance and, thus, more difficult to compare. Empirical studies have shown that there is

²³ For a more technical discussion of the variation in turning points see Appendix 7.1.2.
systematic variation in performance between autocratic regime types (Bäck and Hadenius 2008; Chang and Golden 2010; Charron and Lapuente 2011; Menaldo 2012). The degree to which non-democracies rely on output legitimacy through the provision of public goods and services depends mainly on the regimes’ time horizon, long vs. short-term orientation related to rules of power transition, and, on the other hand, on the scope of the ruling group or the need for co-optation (see studies cited before and Bueno de Mesquita et al. 2003). The more short-term oriented the regime and the more people it must buy off for support, the lower the investment in the general public service and the lower the public service performance. Consequently, the hypothesized size effects are overlaid by these differences in non-democracies, so scholars and practitioners should not underestimate the political effects on public service performance. Especially when analyzing bureaucracies in non-democratic countries, public administration and management research must consider the political system, country-specific power relations and incentives, and benefits from cross-fertilization with political science.

This paper wants to raise awareness for the potentially restricting effects of very small and very large population size for public service performance among scholars and practitioners who are (re-)designing public management structures and instruments or ranking and comparing countries based on their public service performance. The practical implications are most acute for cases in which a change in country size via secession is seriously discussed as in Catalonia, Quebec or Scotland. While these discussions build largely on political and emotional arguments, this study sounds an empirical note of caution: The same income level and legal system do not guarantee a small seceding state the same level of public service performance as the larger ‘mother country’; to the contrary, falling below the golden mean could pose serious challenges to the public service effectiveness in potentially new states. Besides these highly political but rare cases, the findings have further implications even if country size is set. To put it short: If population size affects public service performance and cannot easily be changed, then our understanding of public service performance must change. This study joins previous critics (Goldfinch and Wallis 2010; Pollitt and Bouckaert 2017, 12, 26) of one-size-fits-all approaches to bureaucratic reform and shows specifically that one size (of management) does not fit very large and very small countries. For the former, countries that are clearly larger than the golden mean, the division of the country into smaller administrative units is advisable, which speaks to
practitioners and scholars of decentralization. Federal countries (see Table 7.4 in appendix) reach the golden mean at a higher population size than others because under federalism, used here as representative of decentralization, diseconomies of scale become effective only at larger size; yet, this study does not have direct implications for the optimal size of the resulting subnational units (see e.g. Andrews and Boyne 2009). For small countries, in contrast, choosing federalism increases the distance to the golden mean, as it reinforces the problematic lack of economies of scale through additional fragmentation (see Veenendaal 2014, 191). The practical recommendation that follows for small states, instead, is to aim for synergies by increasing the number of citizens or users served by an administrative unit. One possibility is the centralization of administrative support functions such as IT or human resource management in one national agency where economies of scale can rather be exploited than when these tasks are scattered across all governmental departments. The small island states of the Eastern Caribbean are an example in point for another creative solution: they pool their limited resources at the supra-national level to approach the golden mean, reduce costs and increase public service effectiveness in various fields. For example, the Organisation of Eastern Caribbean States (OECS) offers specialized trainings for civil servants, while monetary and telecommunication policies are outsourced to a regional central bank and telecommunications authority, respectively. Outsourcing public services to such regional bodies works particularly well for technical or advisory functions but also poses its own challenges (Favaro and Peretz 2008). We need further and more in-depth research in the conditions and effectiveness of such innovative forms of public service provision as they are a promising road for small states for improving public services. International organizations which rely on performance measures for their rankings (e.g. OECD), financial allocations (World Bank, IMF) or admission (EU and its accession criteria) should take into account, by differentiating and adjusting their analyses or criteria, that these measures are moderately but systematically affected by country size. To help small countries overcome their structural disadvantage, international organisations should moreover open up to and support pragmatic and unorthodox solutions; the World Bank’s (2016) specialized small state program is a step in this direction.

For public administration and management theory the findings imply, first of all, that country size is a relevant factor that shapes a bureaucracy’s environment or context and affects performance. O’Toole and Meier (2014, 240–
formulate their ‘logic of context’ through an interaction effect between management and context \(^{24}\); but then they conceptualize context primarily (not exclusively) as a moderator of the effect of management tools on outcome. Somewhat ironically, this perspective appears to put management at the center of a theory of context by asking under which circumstances the intended management effect holds, which too often degrades context to a qualitative side note in research practice, as the authors (ibid., 241, 252) note themselves. Following Lynn, Heinrich and Hill’s (2000, 244–46) ‘logic of governance’ framework instead, which more flexibly allows for a mix of direct and indirect effects of environmental factors, we can reinterpret O’Toole and Meier’s interaction effect and consider management a moderator of the effect of context on outcome (see also Andrews and Boyne 2008, 795). This means that, in order to optimize performance, management practices should be adapted to influential contextual factors which can hardly be changed (ibid., 802). This study has shown that country size is an example in point for such an influential, sluggish contextual factor at the country level and putting it at the center of this study reflects the change in perspective that results from considering context a causal factor and management its moderator, and not vice versa. This illustrates that choosing one of the two perspectives on the interaction affects the research questions we ask and the findings we get. One caveat of this study is that it neither controls for management practices nor for its interaction with population size (except for federalism as a means of state organization). Since the level of analysis in this study is the country level, it would be methodologically inconsistent and practically extremely challenging to control for organizational-level management tools in national public services. If management was empirically correlated with size, I would suppose small states to either intuitively or explicitly adapt their management tools to use synergies and larger states to use management to counter diseconomies. This strengthens the results because I find an inverse u-shaped effect even though countries with extremely small or large sizes are probably already using management to counter their unfavorable size and maximize performance within their national contexts. Future studies should analyze the nature and effects of this interplay between management practices and country size more thoroughly, which means either to collect management data (the COCOPS or the Quality of Government surveys are possible starting points) and

\[ \text{Outcome} = \beta_1 \text{Management} + \beta_2 \text{Context} + \beta_3 \text{Controls} + \beta_4 \text{Management} \times \text{Context} + \epsilon \]
environmental data in one cross-country data set for more sophisticated quantitative tests of interaction effects or to qualitatively analyze successful small and large countries to learn from their practices. Treating less studied extremely small or large countries and their management tools not as exceptions or deviations from the norm but as part of the full variety of possible solutions and as cases succeeding under adverse circumstances, we can learn about smart solutions and management innovations that may also be fruitful in other settings. A truly context-focused theory of context should ask how management can be adapted to optimize the context-performance relation. The theory section of this study suggested various mechanisms which could be leverage points for management tools: Future research could analyze approaches to increase professionalism and promote bureaucratic autonomy in small states’ bureaucracies or to increase trust and motivation in large states’ bureaucracies because these are ways to improve public service performance. Another theoretically and practically pressing question is under which circumstances the desirable effects of smallness such as informal coordination dominate the negative effects like clientelism and capture. Country size is an essential part of these research questions, because when it comes to improving countries’ public service performance, one solution does not fit all sizes. Instead, form should follow function and public management should follow country size.
CHAPTER FOUR

Blind spots and the paradox of vulnerability: Why Germany was less prepared to respond to the refugee crisis than Luxembourg

4.1 Introduction

Following Angela Merkel’s decision to welcome refugees, who were stranded in Hungary, to Germany in September 2015, the German Chancellor, and Germany more generally, became the focus of worldwide media attention and political debate around what has since been termed the refugee crisis (Niemann and Zaun 2018, 4; Poguntke and Von dem Berge 2016, 110). The situation classifies indeed as a crisis according to the well-known definition of crises as phases of disorder marked by a threat to the basic structure and fundamental norms and values of a system that require important decisions to be made under conditions of uncertainty and urgency (Boin et al. 2017, 5). Merkel’s decision and the following increased influx of asylum seekers made the German public abruptly aware that they were directly affected by conflicts in the Middle East, most prominently the war in Syria. While many considered Merkel’s decision an act of generosity and humanity by Europe’s economic powerhouse, the following weeks revealed a puzzling lack of preparedness of Germany’s multi-level government system to appropriately receive, register and house the arriving people (Bogumil, Hafner, and Kuhlmann 2016; Hahlen and Kühn 2016; Spiegel Online 2018). This article argues that the shortcomings in crisis preparedness and reaction were due to blind spots (Bach and Wegrich 2019), attention biases that prevented the responsible authorities from seeing the considerable increase in refugee numbers, and the resulting demand for administrative handling and housing, coming and prepare accordingly.

Curiously, the authorities in Germany’s small neighboring country Luxembourg were arguably better prepared as they had started to develop an emergency plan as early as July 2015 (MFAMIGR 2015, 150) after sharp increases in international protection seekers had been noted at Europe’s Mediterranean shores, especially in Greece, and on the Balkan Route to Central and Northern Europe (Frontex 2015, 20–21). In the following months, Luxembourg experienced
less political controversy and had less visible trouble than Germany (Bump 2018) in registering and hosting a number of asylum seekers that was comparable with the German numbers in relation to the overall population. Luxembourg succeeded to house all asylum seekers in vacant buildings, while the use of tents and the occupation of local school gyms was common, and highly controversial, in Germany. Why did the Luxembourghish decision-makers, despite their more limited administrative and political capacities, take the increasing numbers more seriously than their German counterparts? Why was there no, or a less severe, blind spot in Luxembourg? In this article, I argue that the key to this puzzle is the difference in country size. The small size of Luxembourg and of its politico-administrative system prevented the occurrence of blind spots via two mechanisms: First, the smallness and less specialized structure of Luxembourg’s bureaucracy fostered a shared problem perception, allowed for a quick passing of important information from the working level to the political decision-makers and made horizontal and vertical coordination between authorities easier (see section 3.2.2), which limited structure-based attention biases. Second, Luxembourg’s experience as a small country led to the “paradox of vulnerability” (J. L. Campbell and Hall 2017; ’t Hart 2013, 103), which consists of small and vulnerable states being more aware of their own vulnerability and of potential risks and crises, and which limited identity-based attention biases. Conversely, Germany’s complex and specialized multi-level governance structure led to selective problem perception (Radtke and Hustedt 2019, 52) and inhibited swift communication and coordination, while Germany’s identity as Europe’s leader, especially during the Greek bailout in summer 2015 (Poguntke and Von dem Berge 2016, 106), left decision-makers unaware of their vulnerability to the creeping crisis at Europe’s shores and the need for internal solidarity.

This paper combines literatures that have not spoken to each other before: on the one hand the literature on attention biases in public administration in general and crisis management in particular and, on the other, the literature on the characteristics of small states. It contributes to these literatures by combining them analytically and applying them empirically to a comparative case analysis. It also fills empirical gaps: Whereas national-level decisions and policies that Germany enacted after the peak of refugee numbers in fall 2015 is rather well

25 In 2015, Germany experienced an inflow of 5.4 asylum seekers per 1,000 inhabitants compared to 4.1 in Luxembourg (OECD 2017, 191, 211).
researched (see for example Bogumil, Hafner, and Kuhlmann 2016; Radtke and Fleischer 2019), we know much less about the developments that took place until summer 2015. Likewise, the Luxembourgish reaction to the comparably high per capita influx of asylum seekers has received little scholarly attention to this point. The article proceeds as follows. The next section develops the theoretical framework through which country size is expected to drive variation in public organizations’ attention biases in crisis management; it concludes with hypotheses. The subsequent section explains the case selection that aims at minimizing confounding factors by choosing two wealthy, neighboring EU member states; it further describes the data used as well as the European and national context. Then I present the context in both countries, their previous experience with immigration and asylum as well as the formal task allocation between government institutions. The penultimate, empirical section compares the political and administrative processes and measures taken in terms of preparation, sense-making, and immediate reaction to the 2015 crisis in both countries. The final section discusses the findings and implications.

4.2. Theory: The migration crisis, blind spots, and country size

4.2.1 Blind spots in crisis management

The massive influx of asylum seekers in Europe starting in summer 2015 was commonly referred to as ‘migration crisis’ or ‘refugee crisis’; and, indeed, from the perspective of the host countries it fulfills the defining criteria for a crisis in which “a social system [...] experiences an urgent threat to its basic structures or fundamental values, which harbors many ‘unknowns’ and appears to require a far-reaching response” (Boin et al. 2017, 5). Many Europeans perceived the large numbers of incoming migrants as threats to the social and political status quo in their countries, others considered the shortage of appropriate accommodation for the newcomers a humanitarian threat, and politicians feared the collapse of the EU’s Schengen and Dublin systems, which meant that policy-makers urgently had

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26 I use the term crisis to describe the specific situation in 2015 as a combination of high numbers of migrants and insufficiently prepared host countries in Europe, which indeed had the potential to change the social composition of European societies and mix up national and supranational political debates and rules. However, I clearly distance myself from any statements that denote the migrants or refugees themselves as threats to European societies. While alternative terms including “humanitarian crisis” or “administrative crisis” have their advantages, I employ the most widely used term “refugee crisis”.

to make important decisions, regarding the status of Europe’s internal and external borders as well as regarding the reception and handling of the newly arrived people, while lacking essential information about the nature, scope and consequences of the influx. Whereas the transboundary character (Ansell, Boin, and Keller 2010), the political interpretation (in crisis management jargon: meaning-making and accounting) and consequences of this crisis have received broad scholarly attention (Niemann and Zaun 2018 and papers cited therein), the present article focuses on the domestic preparedness and immediate reaction to the 2015 crisis. The crisis management literature offers ideal-typical distinctions of the tasks and challenges decision-makers face in crisis management, which can be adapted and applied to the focus of this study: While it is impossible by definition to prepare for a specific crisis before its onset (Boin et al. 2017, 11–12), general crisis preparedness results from (1) learning from previous crises and (2) sense-making. Learning from previous (in this case: immigration) crises can result in increased awareness for the own vulnerability to potential future crises and in more resilient structures (here: within and between public organizations in the asylum sector) due to reforms based on the lessons learned (ibid., 19, 135). Sense-making includes capacities to early detect and analyze an emerging crisis (here: an extraordinary migration flow) as well as efficient communication of crucial information to the responsible decision-makers to allow as much time as possible for the following step (Ansell, Boin, and Keller 2010, 201; Boin et al. 2017, 23–48). This is (3) the immediate crisis-response that depends on decision-making (here: regarding the registration and housing of asylum seekers) under conditions of urgency and uncertainty as well as on a timely and coordinated implementation of these decisions (comprising a variety of actors required for these tasks).

The exceptional refugee influx in 2015 constitutes a crisis with high visibility and broad impact that cut across policy fields and sectors; its management required coordinated efforts by a variety of actors including national governments and various government organizations. Failures in the preparation for or response to a crisis can be conceptualized as the result of biased attention or blind spots. The concept of blind spots has been used in the crisis management literature to label limitations in response capacities (’t Hart 2013, 106) as well as in public administration research (most recently by Bach and Wegrich 2019) to refer more broadly to widespread pathologies of bureaucratic organizations. Following the latter, blind spots are understood here as “biased attention and coordination problems in the public sector” (Bach and Wegrich 2019, 4) grounded in the specific
organizational structure or identity (ibid., 10-11). Boin and colleagues (2017) argue that the organizational structure as well as the actors’ mental frames based on organizational or professional culture and identity can impede efficient sense-making (pp. 33-42), decision-making and implementation (pp. 54-73). Several comparative studies (Christensen et al. 2016, 328; Kuipers et al. 2015, 13; Parker, Persson, and Widmalm 2019, 14–15) come to ambiguous results about the effects of disaster management structures (hierarchical vs. decentralized/networked) and emphasize, instead, the effect of organizational culture on the success of crisis management. In her study of “positive asymmetry”, Cerulo (2006, 187–92, 225–31) convincingly shows that organizational structures characterized by centralized control and rigid channels of communication and organizational cultures focusing on rules and efficiency impede effective crisis preparedness as they prevent actors from envisioning worst-case scenarios. Building on this, Fligstein and colleagues (2017) show how the American Federal Reserve was long unable to make sense of the emerging economic crisis of 2008 because of group identity and dominant professional frames. The two latter studies show how large, professional bureaucracies are unable to imagine an extreme crisis scenario or see it coming: “the worst can become a perceptual blind spot, obscured or blurred by a variety of routine and patterned socio-cultural practices” (Cerulo 2006, 2). The present study builds on these theoretical approaches and connects them to country size: I argue that the varying effectiveness of the management of the refugee crisis in Germany and Luxembourg was neither caused by a difference in national politicians’ cognitive capacities nor their political attitudes (on political factors see section 4.4.1), but that it was due to the countries’ varying size that determined the structure and identity of the politico-administrative apparatus and, thus, the existence of blind spots.

4.2.2 Effects of country size on crisis preparedness and reaction

Country size is defined here as population size, which is a simple, continuous and widely used operationalization (see e.g. Crowards 2002). Country size is closely related to (a) bureaucratic structure and (b) identity: (a) Countries that are large in terms of population size also tend to have large bureaucracies in absolute staff numbers, both numbers correlate very strongly across the world (see footnote 11). In terms of bureaucratic structure, a larger size allows more horizontal and vertical specialization and professionalization (Hooghe and Marks 2013, 191–94; Gerring, Maguire, and Jaeger 2018), but it also fuels attention biases through
selective perception and coordination problems (Bach and Wegrich 2019, 11–12; Downs 1967). In small states, societies as well as bureaucracies are, instead, characterized by polyvalence (see Katzenstein 1985a, 89; Sutton 1987, 15): due to small numbers of people, individuals occupy several roles in professional and private lives, which leads to overlapping professional and private relations and, together with a less complex structure of public organizations, to limited specialization of each bureaucrat and a more generalist perspective (Lijphart 1977, 68; Dahl and Tufte 1973, 38–40). (b) I argue that size affects the identity of public officials via two mechanisms. First, and following from bureaucratic structure, a larger and more specialized bureaucracy can nurture distinct and conflicting identities among different public organizations, which impedes the identification with common goals and joint action. For example, Yasuda (2015, 750–51) relates turf wars in the Chinese bureaucracy to the country’s and bureaucracy’s large size. In small states, instead, less segmented structures and overlapping identities allow for an identification with broader societal goals. Secondly, size affects national identity: Katzenstein (1985a, 32–35, 80, 208), Lijphart (1977, 66) as well as Campbell and Hall (2017, especially 4–13) argue that the historical experience of vulnerability to external (e.g. military, economic, environmental) threats relative to limited resources, the feeling of “everybody sitting in the same boat”, leads to a permanent rally-round-the-flag effect and strong national solidarity (see section 1.3.1). Small-state identity is characterized by the salience of this vulnerability (or the “self-dramatization of smallness”, Katzenstein 1985a, 32) and the willingness for sacrifices, compromise and coordination for the sake of the common national good. Looking at the coping of several small states with the global financial crisis, Campbell and Hall (2017) show the paradox of vulnerability, that small states with a historically engrained sense of vulnerability were comparatively quick in reacting to the crisis and formulating a comprehensive response. Based on this literature, I argue that small country size fosters awareness for vulnerability to potential future crises, while the perception of their own susceptibility to crises is limited in larger countries. Applying these features of country size to potential blind spots in crisis preparation and response, I come to the following hypotheses (ceteris paribus):

\[ H_1: \text{The level of awareness of their country’s vulnerability to crises is higher for political and administrative actors in small (than in large) countries because their national identity is shaped by previous experiences with external challenges.} \]
**H2**: Large states detect an emerging crisis faster (than small states) because they dispose of more specialized administrative capacities for monitoring.

**H3**: The communication of relevant information on crisis-detection is quicker in small (than in large) countries because of less complex bureaucratic structures.

**H4**: Coordination of a crisis response is quicker in small (than in large) countries because of less complex bureaucratic structures.

### 4.3 Case selection and data

This article applies the theoretically developed hypotheses about the effects of country size on crisis preparedness to the refugee crisis in Europe in the summer of 2015. I employ a comparative case study approach (Slater and Ziblatt 2013) and compare the preparedness and response to the crisis in Luxembourg and Germany. The selection of these two states serves, on the one hand, to investigate whether and via which mechanisms country size made a difference and, on the other hand, to control for alternative explanations. Luxembourg and Germany approximate a most-similar systems design with extreme variation on the explanatory variable size (with Luxembourg having a population of around 560,000 and Germany of around 81 million in 2015) and minimal variation on contextual factors that might constitute rival explanations: both are wealthy EU founding members and have coalition governments as well as a continental administrative tradition. The comparative public administration literature largely ignores Luxembourg and does not classify it with a specific administrative tradition or legacy. However, Luxembourg is a continental European administration influenced, in terms of language as much as administrative tradition, by France and Germany (Demmke and Moilanen 2010, 150; Ziller 2007, 167). With Germany it shares not only legal and administrative traditions but also the adherence to these traditions and lack of comprehensive administrative reforms (Toonen 2007, 303). Two factors, federalism and party politics, differ between the countries, but I argue that they do not invalidate the country size argument. Germany and Luxembourg are prime examples of a federal and a unitary state, respectively, but this difference in state organization follows directly from their respective size. Federalism is, thus, not a confounding factor but an intermediate variable connecting large size and state performance in Germany. It is a manifestation of the specialization that I expect to see in large states (see section 1.3.1). The difference in party-political government composition is addressed in section 4.4.1.
This empirical study is based on the analysis of and triangulation between two types of sources: written sources and expert interviews. The written sources comprise newspaper articles, interviews with and books written by members of government, documents and press releases from government organizations and reports from the European Migration Network (EMN). The expert interviews were conducted in Germany and Luxembourg between October 2018 and August 2019. In total, I conducted 20 interviews with 26 experts ranging from ministers to journalists and welfare organization managers, but most interviewees are bureaucrats who were leading or working at the management level of the involved ministries, agencies, or departments in 2015. Appendix 7.2 lists all interviews; as most interviews were only possible on condition of confidentiality, no names but only the organizational affiliations in 2015 are reported. The interviewees were chosen for the German case based on the mentioning of relevant individuals or administrative units in newspaper and research articles (especially Aust et al. 2015; Bogumil, Hafner, and Kuhlmann 2016) and, in a few cases, on snowballing. The choice of interview partners from Luxembourg was based on the mentioning of actors, departments and agencies in a report by the lead ministry (MFAMIGR 2015, 150–57). The interviews lasted 55 minutes on average with a total range from 25 to 114 minutes. Most interviews were conducted in person and a smaller number on the phone; most interviewees agreed to recording. The interviews were semi-structured: I first asked interviewees to recount from their perspective the most important moments and events for preparation and response to the 2015 crisis, and then I asked more specific follow-up questions (except for interviews #6 and 11 which were unstructured). All interviews were conducted in German; original newspaper articles, documents, and interviews are also primarily in German and less frequently in French or English; where appropriate, quotes in this study are translated by me.

4.4 The German and Luxembourgish context

4.4.1 Immigration and asylum: Data and politics

The two neighboring countries Luxembourg and Germany have both experienced significant immigration and arrivals of asylum seekers before 2015. The largest migrant group in Germany are Turkish, who mostly came to (West) Germany as guest workers after the Second World War, followed by Polish nationals (bpb 2018). Similarly, Luxembourg has received many foreign workers especially from
Italy and Portugal with the latter remaining the largest foreign group today (OECD 2017, 210). In 2015, Luxembourg’s population was made up by approximately 46% of non-nationals, the highest number in the EU, and these non-nationals were joined by more than 150,000 citizens from neighboring Belgium, France, and Germany who commute to the Grand Duchy every day (ibid.). Germany and Luxembourg have also accommodated considerable numbers of refugees before 2015; Figure 4.1 shows the number of asylum seeker received per 1,000 inhabitants since 1990. Overall, Luxembourg’s curve is more uneven than that for Germany. Both countries experienced high per-capita inflows, primarily from war-torn ex-Yugoslavia, in the 1990s. The EU’s visa liberalization for Serbia, Macedonia and Montenegro in late 2009 (European Commission 2011, 5) had a related but not identical effect in both countries. In Luxembourg it led to a temporary increase of asylum applications from an absolute 786 in 2010 to 2,172 in 2011, which was considerable in relation to the countries’ small size (Luxemburger Wort 2012; see also section 4.5.1). In Germany, the effect was a rather slow but steady increase from 2011 onwards.

**Figure 4.1 Yearly inflow of asylum seekers per 1,000 inhabitants.**

Sources: BAMF, MAEE (interview #1), World Bank. Note: Numbers for Germany between 1990 and 1995 are slightly overstated as they do not distinguish between first-time applicants and subsequent applications.

After Italy and Greece had been challenged by high numbers of arriving migrants and refugees for years, the sinking of two ships causing the dead of more than 300 migrants near the Italian island of Lampedusa in October 2013 was perceived as a wake-up call by many European decision-makers (interview #3). In May 2015 the European Commission adopted a “European Agenda on Migration”
and pressed for a joint European effort to respond to the growing challenge (Niemann and Zaun 2018, 5). The crisis became manifest in Germany in June when the numbers of registered incoming asylum seekers and asylum applications increased considerably, and they accelerated exponentially in September 2015 (bpb 2019). In Luxembourg, the crisis became acute in September 2015, when the arrival and application numbers almost doubled compared to the previous month (interview #1). Additionally, the EU agreed on an emergency relocation procedure in September 2015 aiming to relocate 160,000 asylum seekers from Greece and Italy to other member states (Niemann and Zaun 2018, 6); so Germany as well as Luxembourg additionally received refugees through resettlement and relocation schemes. As shown in Figure 4.1, Luxembourg registered a total of 2,300 asylum applications in 2015, about 4 per 1,000 inhabitants; the number of all arrivals was likely slightly higher as not all those who arrived filed an asylum application (interview #1). In Germany, the numbers of actual arrivals, registered arrivals and asylum applications diverged significantly in 2015. It is estimated that 890,000 asylum seekers arrived in 2015 (BMI 2016), but only 441,900 (i.e. 5.4 per 1,000 inhabitants) could register their asylum application still in 2015, which shifts the peak of applications in Figure 4.1 to 2016. The numbers of arrivals in both countries significantly dropped from March 2016 onwards when an agreement between the EU and Turkey was signed and several states, in a joint effort, effectively closed the (Western) Balkan Route (Niemann and Zaun 2018, 4, 8). However, the numbers remain high until today when compared to pre-2015 levels, especially in Luxembourg (interview #1).

It is relevant for this analysis to note that the German and Luxembourgish governments were motivated to achieve a joint European solution and both played a decisive role to solve this issue at the EU level in 2015. Luxembourg held the presidency of the Council of the EU in the second half of 2015 (Dumont and Kies 2016, 181), and Germany and Chancellor Angela Merkel shaped the developments not only through Merkel’s decision to accept asylum seekers from Hungary in September 2015 (see section 4.5.4) but also by promoting the EU-Turkey agreement (Niemann and Zaun 2018, 17). Although the detailed analysis of these measures at the EU level is beyond the scope of this article, they reflect the comparable general attitude and determination of the heads of governments in both states when faced with the acute crisis. Luxembourgish Prime Minister Xavier Bettel’s “Wir können das meistern” (“We can master this”; Luxemburger Wort 2015b) is strikingly similar to Angela Merkel’s famous “Wir schaffen das”
(“We will do it”). The main alternative to the explanations proposed in this article is a party-political explanation: Since elections in 2013, Luxembourg was governed by a coalition between Bettel’s liberal party with greens and social democrats, while Germany was under a grand coalition between Merkel’s conservatives and the social democrats since 2013. However, most interviewees (interviews #2, 3, 7, 9, 14) clearly ruled out party effects on crisis management: “The [Luxembourgish] opposition wouldn’t have done it [crisis management] differently” (interview #7) and “[Party politics] played no role in this.” (interview #14). Some German respondents (interviews #12, 15, 17, 19) mention the effect of the political focus on austerity on the lack of preparedness, but a focus on reducing expenditures was also present in the more progressive Luxembourgish government (Dumont and Kies 2016, 180) and did not prevent crisis preparation, as I show below. Rival explanations based on political factors are, thus, unconvincing.

4.4.2 Task allocation among government organizations

The allocation of tasks in the fields of asylum policy and crisis management are summarized in Figure 4.2. In the Federal Republic of Germany, responsibilities in the policy area of immigration and asylum are shared between the federal (national) level, the Länder (states) and municipalities (for an overview see Bogumil, Hafner, and Kuhlmann 2016) and offer a superb example of what Scharpf (1988) called the joint decision trap. At the federal level the Ministry of the Interior (BMI) is responsible for general guidelines for immigration and asylum policy; in the period under study the minister was Thomas de Maizière (Christian Democrats). The Federal Agency for Migration and Refugees (BAMF), supervised by the BMI, monitors migration numbers and handles asylum applications. At the sub-national level, the Länder are responsible for the reception and housing of asylum seekers. This results in 16 Länder-specific procedures but most of them consist of a first stage of initial reception organized centrally in each Land, during which applicants register and file their asylum application (with the BAMF), and a second stage of decentral housing organized by the municipalities for the duration of the asylum procedure. The close linkage between the levels becomes apparent in the mutual reliance between the BAMF and the Länder: the Länder strongly rely on the BAMF’s projection of the number of asylum seekers for planning their reception capacities (Küpper 2016; interviews #13, 15); on the other hand, the BAMF locates its branch offices where the Länder decide to open
reception facilities. And while the Länder are de jure responsible for the registration of asylum seekers, they left this task de facto to the BAMF for long (interview #19). After the decision on an asylum procedure, the responsibility lies either with the Länder for deportation of rejected applicants or with the municipalities for social and labor market integration of recognized refugees. Responsibilities in the field of crisis and disaster management are also complex (see Boin et al. 2019, 362–66). Again, the Federal Ministry of the Interior (BMI) is responsible for developing policies and it oversees two pivotal agencies in the field: BBK and THW. The Federal Office for Civil Protection and Disaster Assistance (BBK) was established “to integrate all issues regarding federal crisis management and disaster protection at the federal level in an all-hazards approach, collect expertise […] as well as host different crisis management instruments” (ibid., 364). The Federal Agency for Technical Relief (THW) relies primarily on volunteers and is organized at the national, regional and local level; it provides technical and logistical support on the ground in various kinds of crises. Following the subsidiarity principle, the Länder, usually with the Länder ministries of the Interior, are in charge of operative crisis management. Overall, crisis management in Germany is decentralized with the BBK coordinating between the federal government and the Länder (Christensen et al. 2016, 322; Kuipers et al. 2015, 7).

In the Grand Duchy of Luxembourg, the responsibilities for immigration and asylum lie primarily with ministries and agencies at the national level and secondly with the municipalities, which reflects the centralized state organization as a characteristic of a small states. At the national level, the Direction for Immigration in the Ministry of Foreign and European Affairs (MAEE) handles asylum procedures. The Ministry for Family, Integration and the Grand Region (MFAMIGR), headed at the time and until today by Minister Corinne Cahen (Liberals), and its subordinate Reception and Integration Agency (OLAI) oversee the reception, housing, and integration of asylum seekers. The OLAI coordinates the initial reception facilities (Centres de primo-accueil) in the country, some of which are managed directly by the OLAI and others by welfare organizations (interviews #5, 6). After the decision on an asylum application, the responsibility lies either with the MAEE’s Direction for Immigration for deportation of rejected applicants or with the OLAI and the municipalities who organize second-phase housing as well as social and labor market integration for recognized refugees. The field of disaster and crisis management in Luxembourg is also centrally organized.
There are two key authorities at the national level, which are comparable to the German BBK and THW: The High Commissioner for Civil Protection (HCPN) is the government’s central agent for crisis coordination and directly subordinated to the Prime Minister. The HCPN’s tasks include “preventing and managing crises of any kind affecting the vital interests or essential needs of all or part of the country or population” (Le gouvernement luxembourgeois 2018). Technical assistance and civil protection relies primarily on volunteers; during the period under study, it was organized in the Rescue Services Agency (ASS), supervised by the Ministry of the Interior, but has since been restructured.
**Figure 4.2 Task allocation in asylum policy and civil crisis management in 2015**

**GERMANY**

**ASYLUM POLICY**

- Federal Ministry of the Interior (BMI)
  - Policy formulation

  - Federal Agency for Migration and Refugees (BAMF)
    - Monitoring, (registration)

  - Federal Office for Civil Protection and Disaster Assistance (BBK)
    - Cross-level co-

  - Federal Agency for Technical Relief (THW)
    - Technical support

**CRISIS MANAGEMENT**

16 Länder governments

- Housing, registration
- Crisis management on the ground

**LÜXEMBOURG**

**ASYLUM POLICY**

- Ministry of Foreign Affairs (MAEE), Direction for Immigration
  - Registration

  - Ministry of Family and Integration (MFAMIGR)
    - Integration policy

  - Luxembourg Reception and Integration Agency (OLAI)
    - Monitoring, housing

**CRISIS MANAGEMENT**

- State Ministry

  - High Commissioner for Civil Protection (HCPN)
    - Co-ordination

  - Rescue Services Agency (ASS)
    - Technical support
4.5 Comparative analysis: Country size and crisis management

The following account contrasts the developments in Germany and Luxembourg and is organized in four sections that correspond to the crisis management tasks identified in the theory part: learning, sense-making including crisis-detection and communication, and coordination of response.

4.5.1 Learning from previous crises: Identity and awareness

Concerning general crisis awareness, two interviewees (#3, 5) explicitly refer to the crucial role of Luxembourg’s identity as a small state, which is strongly informed by the occupation by its larger neighbor Germany during two world wars. This experience results in the common identity of being vulnerable to external developments; Luxembourgers are aware that adverse things from the outside can happen to their country and to any individual. As commonly assumed for small states (seminally Keohane 1969), this leads to Luxembourg’s strong preference for supranational cooperation, specifically European integration, as a shelter. Moreover, the interviewees (#3, 5) argue, the historically engrained awareness that all Luxembourgers themselves may quickly become displaced and in need of help led to a preference for not only a European but also a humanitarian solution of the refugee issue. Smallness, via the self-perception as vulnerable, thus led to awareness and double external solidarity, with the affected member states and the refugees. Holding the EU presidency in 2015, Luxembourg’s government wanted to lead by example and show citizens as well as fellow member states that the reception and integration of refugees can succeed (interviews #1, 3, 10); this motivated their quick domestic reaction to the crisis.

To be clear, smallness affected the identity and awareness of Luxembourgish authorities not only through the experience of vulnerability during times of war. Smallness also influenced how previous experiences of

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27 This motivation should caution us to interpret politicians’ symbolic acts and their retrospective assertion of humanitarian motives and successful asylum policies with a grain of salt. One such symbolic act occurred in September 2015 (Luxemburger Wort 2015a; MFAMIGR 2016, 154), when, upon a request for help from German authorities, Luxembourg received 42 asylum seekers who had experienced an odyssey through several German Länder which could not provide them with appropriate accommodation. This isolated case illustrates Luxembourg’s political will to lead by example as well as the variation in coordination and overall reception performance between the two countries.
immigration shaped the collective identity and induced learning. The 2,172 asylum seekers who came to Luxembourg in 2011 (compared to 786 in 2010, source: MAEE, interview #1) are a case in point of an external challenge of comparatively small absolute size (and therefore high probability), which, however, from the perspective of a small country and in relation to its resources, becomes a major and highly visible issue (see Figure 4.1). Several interviewees (#5, 6, 10) from the public and welfare sector mention that the failure of the asylum system in 2011 shaped their awareness for a potential refugee crisis in the future. Due to a strong influx from the Western Balkan, Luxembourg’s reception facilities were fully occupied in 2011, tents had to be used (interview #10; Luxemburger Wort 2012) and in some individual cases newcomers were still left without a place to sleep (interview #5). The situation also left a mark on Corinne Cahen, who volunteered in refugee aid in 2011 and became Minister of Integration in 2013. Discontent with the accommodation in tents in 2011, she was determined to prepare better for a potential future crisis (interviews #7, 10; Bernard n.d.): “Nobody wanted to experience a situation as in 2011 again” (Cahen, interviewed in Karger 2018). This is an illustrative example, first, of polyvalence where her previous role as a volunteer shaped the Minister’s awareness, and second, of learning from a previous crisis. The paradox of vulnerability translated into the intention to be better prepared for and better handle any similar situation in the future. Part of that preparation was an audit of the OLAI’s structures and capacities in 2014 (interview #10; Antzorn 2014). The audit was followed by the appointment of a new OLAI director who took office in February 2015 and reorganized the agency (Le Quotidien 2015). Moreover, the OLAI’s staff has grown significantly over the years preceding the 2015 crisis (interview #8) and the construction of a new reception facility was underway in 2014 (interview #9; MFAMIGR 2015, 185). This contrasts with the German BAMF, which was obviously understaffed until 2015 and was reorganized only at the peak of the crisis in September 2015. Finally, the identity as being vulnerable in combination with a small size and little specialization of the political and administrative system led to strong internal solidarity: conflicting organizational identities and bureaucratic politics are

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28 In the months before the refugee crisis, a referendum put the vulnerability of the Luxembourgish national identity high on the public agenda. The extremely high share of foreign nationals among Luxembourg’s population led to the proposal to grant non-nationals voting right in parliamentary elections, which was rejected fiercely with 78% by the native population in January 2015 (Dumont and Kies 2016, 176; Z. Turner 2015).
virtually absent from accounts of the Luxembourgish 2015 crisis reaction in newspapers and interviews. Instead, several interviewees (#5, 7, 8, 9) emphasize the pragmatic consensus among all involved actors from the government to those working on the ground and their willingness to contribute to a joint national reaction.

In Germany, in contrast, the years and months before September 2015 were marked by internal controversies and a lack of general awareness for the migration issue. Although somewhat similarly to Luxembourg, the number of asylum seekers especially from Western Balkan countries had increased since 2011 and resulted in scarcity in accommodation and the use of tents, this did not lead to learning effects or general awareness of the public or the national government (interview #17, 19). Instead, this situation was portrayed as local problems of reception capacity (interview #15). For several years, the national government did not listen to the BAMF and the Länder who repeatedly asked for attention to the issue and for more resources (see section 4.5.3). This reflects the national government’s (and long also the BMI’s) lack of attention and awareness for a possible aggravation of the asylum situation as well as a lack of trust in the alarms and those who sounded them (interviews #16, 17). Two issues dominated the national government’s attention instead: in the long-term, the austerity plans for a balanced budget were of top priority and prevented the hiring of new public personnel in general and in the BAMF in particular (interviews #12, 15, 17, 19). In the short-term, the Greek bailout crisis occupied Germany’s political system and public opinion through much of summer 2015, as one interviewee explains:

“The Chancellor dealt with things [...] earlier it was the Greek crisis and after that she had a clear head and saw that something [the refugee crisis] is befalling us.”
(interview #19, my emphasis)

In the Greek bailout crisis, the government and leading newspapers took a strict pro-austerity position to enforce Germany’s presumable economic interests and moral standards without much consideration for how this was perceived by other countries and could potentially have negative effects on European integration and, ultimately, Germany (Irwin 2015; Krugman 2015). This shows the lack of any feeling of vulnerability and a lack of awareness for critical external developments, which is grounded in Germany’s identity as the EU’s largest member state and economic powerhouse, and stands in stark contrast to Luxembourg’s strategic behavior on the European scene despite broadly similar economic interests.
Hypothesis $H_1$ is thus supported by the data in that Luxembourg’s (and its political and administrative key actors’) identity as a small country, its experience of two world wars at the abstract level and of a concrete migration crisis in 2011 led to a great awareness of the country’s vulnerability to a potential future migration crisis. This translated into a reform of the responsible agency OLAI and the planning of additional capacities before the onset of the 2015 crisis. The fact that the high refugee numbers in 2011 were remembered as a crisis and enabled learning is related directly to the small size of the country; similar numbers did not lead to a broad learning process in Germany. In contrast, the opposite of vulnerability, a feeling of the country’s strength, dominated German public opinion in the months preceding the manifest crisis. Conflicting identities between government levels and organizations (Hahlen and Kühn 2016, 167) further prevented a common awareness for the country’s susceptibility to external migration flows.

4.5.2 Crisis-detection: Between capacities and resoluteness

Germany disposed of a professional structure in the BAMF for the monitoring of migration flows and, thus, the detection of a possible crisis. To this end, about 20 officials, partly with statistical expertise, consulted reports from various national and international sources, considered legal and administrative factors that might change Germany’s attractiveness as host country and regularly compiled projections of the expected number of arrivals for the next (quarter) year (interview #15, 19; see also BAMF 2015). These projections have been a reliable source for the Länder’s planning of reception facilities for years (Küpper 2016; interview #13, 17). From 2011 onwards, the BAMF experts noted an increase in asylum applications, but their projection for 2015 was famously wrong. In February 2015 the BAMF published a projection of 250,000 newcomers for the whole year 2015 and raised it to (only) 400,000 in May (Aust et al. 2015). These low numbers resulted from the focus on asylum seekers from the Western Balkans, whose number was expected to decrease due to several legal and administrative measures (interview #15; Vates 2015). The BAMF experts were well aware of the worsening situation in Syria and the refugee camps in neighboring countries and of the increasing number of refugees arriving at Europe’s southern shores. Although they mentioned these developments repeatedly in their reports, they were unsure if this would have a strong impact on the arrival numbers in Germany and hesitated to include it in their projection number (interview #15, BAMF 2015).
The BAMF’s priority was to produce an accurate projection instead of a timely one (this understanding also resonates in interview #20):

“You don’t know whether such a wave [of refugees] is steady and if it will go on and on or possibly end. This means that the usual procedure is for everybody to wait for the time being. […] So, you wait and see.” (interview #12)

The BAMF raised its yearly projection to 600,000 in August 2015 but the BMI hesitated to communicate this updated information to the Länder (Bewarder and Pauly 2015; see section 4.5.3 below). None of the German interviewees report having connected the dots or assessed the situation by themselves. For many the actual number of refugees reached in 2015 had been “unimaginable” (interview #16) before and especially the influx from outside Europe was “not foreseeable and also, as far as I know, no one has foreseen it” (interview #19). Independent of the BAMF projection, the German Länder and municipalities noticed the increasing numbers of asylum seekers in their reception facilities at least since 2013; they felt that the BAMF projection was out of touch with the reality on the ground (Aust et al. 2015). In reaction, several Länder developed their own estimations in 2015, which were based on forecasting the previous trend and less on detailed factual knowledge, but were often closer to the actual number than the BAMF’s projection from early 2015 (interview #13, 14, 15).

In contrast, there was no professional structure in Luxembourg to formally project future immigration numbers before the crisis. Instead, the OLAI routinely reported the number of asylum seekers in retrospect and used this information together with international media reports to estimate the future need for reception places (interview #10). As politicians and bureaucrats in Luxembourg had no formal projection to rely on, and felt that an accurate projection was impossible (Bervard n.d.), they often drew their own conclusions based on international media reports, previous experiences, and individual intuition. This resulted in the correct and widespread perception that Luxembourg would face a very high number of asylum seekers soon (interviews #1, 2, 5, 8, 9, 10). A leading official from the Luxembourgish MFAMIGR recalls having realized the imminence of a critical situation in “March or April 2015” (interview #10), whereas a leading official in the German BMI dates this moment to summer 2015 and finds this “very early” (interview #17); both answers are representative of the respective

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29 In September 2015, an evaluation cell was set up as part of the emergency plan (see section 4.5.4 below).
country. The approach of the subordinate agencies differed as well: While the German BAMF was hesitant to forward extreme estimations (see above), Luxembourg’s OLAI pragmatically warned its parent ministry and the government in early summer 2015 that its reception facilities would not suffice in light of the current international developments:

“It was clear that a high number would come to Luxembourg. At this point, we had to react, not wait. It was the OLAI’s task to sound the alarm.” (Interview #8)

Later, Luxembourg’s crisis management plan (see section 4.5.4) relied on the “worst case [scenario] as the basis” (interview #2) as a matter of course.

In sum, the evidence regarding hypothesis H2 is mixed. The larger country Germany disposed of more specialized and professional capacities to detect a migration crisis, but this did not lead to a quicker or more effective crisis detection than in Luxembourg where several involved actors analyzed the situation more intuitively and autonomously. The German experts focused on accuracy and were hesitant to correct their projection and communicate a higher number and thus a negative scenario to their superiors. This is a clear case of positive asymmetry and reflects a legalistic administrative culture aimed at avoiding mistakes and unable to switch to a crisis improvisation mode, which is typical for large bureaucracies (Boin et al. 2017, 62). The officials in Luxembourg, in contrast, favored a timely notification about a possible worst-case scenario. The reliance on the BAMF’s expertise prevented actors in the German national government (and partly in the Länder) from an autonomous assessment of the situation. When the inaccuracy of the highly institutionalized projection became apparent in mid-2015, the resulting disputes and uncertainty tied up political and administrative attention and resources. In sum, Germany’s division of labor proved ineffective when faced with a crisis. In the moment of crisis, the less professional estimates by the Luxembourgish OLAI and the German Länder were quicker and more accurate than the resource-intensive BAMF projection. Contrary to the hypothesis, lower professional capacities in Luxembourg did not lead to a blind spot.

4.5.3 Communication and sense-making: Forwarding and listening to crucial information

The next step in the crisis management refers to the communication of the detected crisis to those institutions that need to make crisis-relevant decisions. As described above, the BAMF and the Länder were the first to recognize the
tightening situation in Germany. The BAMF communicated this to its parent ministry BMI since 2011 and asked for more staff in order to handle the increasing number of asylum applications (interview #15). For a considerable time, the BMI allocated neither the requested attention nor the resources (interviews #17, 19), so the BAMF turned to an alternative channel of communication: the press. In the years before 2015 the BAMF president regularly gave media interviews to raise awareness for the issue and its urgency (interview #15), but “he was let down essentially” (interview #13; also #19). Since 2013, the Länder felt strong pressure on their reception facilities and asked the federal government to provide more financial support and to accelerate the asylum procedures (interview #13), also long with no reply. Although the national government took some regulatory and budgetary measures (declaring more “countries of safe origin” and funding more staff for BAMF) in late 2014, these were barely sufficient for the present influx of asylum seekers mainly from Western Balkan countries (interview #17) and certainly no preparation for the incipient much stronger influx from the Middle East (interview #15). When the Länder complained vocally to the federal government in February 2015 about the insufficient BAMF projection for the current year, which was out of touch with their experience on the ground, the federal government did, again, largely nothing (Aust et al. 2015) except for actively rejecting the more negative scenarios (i.e. higher numbers) assumed by the Länder (Berliner Morgenpost 2015). These communication problems are related to Germany’s size or, more precisely, the size of its bureaucracy and resulting specialization. In the present case, the federal government was not involved with the day-to-day management of the asylum sector, which was by law and on purpose left to the Länder and the BAMF (interview #12, 15, 17). Nevertheless, because of interrelations between administrative tasks, action by the federal government would have been necessary to ensure the functioning of this complex system when confronted with increasing numbers: Germany was caught yet again in the joint decision trap. The Länder’s housing task was practically interrelated with a functioning asylum procedure (and monitoring) by the BAMF, which depended on federal-level resources: “It’s cog wheels that interlock, it’s a synthesis. Even if the BAMF decides swiftly [on asylum applications], this does not yet mean a relief for the Länder because [housing and] deportations are still pending.” (interview #15, see also Küpper 2016). As the national government and the top level of the BMI were not involved in the handling of daily problems, they were less aware of the continuous worsening of the situation and additional
resource requirements, but continued to focus, instead, on general budgetary concerns. One Länder official complained: “The federal government, the BMI was too far away from problems on the ground” (interview #13). Diverging problem perceptions, political goals and compartmentalized mindsets (“us against them”) prevented a common problem awareness, a feeling of joint responsibility (interviews #16, 18) and, ultimately, effective crisis communication. Another communication problem occurred in August 2015, when the BAMF had updated its projection to a more realistic 600,000 and forwarded it to the BMI as usual before publishing. Despite the urgency of the situation, the BMI waited for two weeks before changing it to 800,000 to avoid yet another adjustment in the future months and releasing it (Bewarder and Pauly 2015; BMI 2015a; interviews #11, 17). The delay was arguably caused by BMI officials’ uncertainty about which data base and counting method should be used (Aust et al. 2015); accuracy was given preference over timeliness again.

Compared to the complex situation in Germany, the crisis communication in the Luxembourgish case, which occurred in two dimensions, appears more effective. On the broader, horizontal dimension, the leadership of the OLAI and the MFAMIGR, including Minister Cahen, began in spring 2015 to inform and sensitize a broad range of governmental and non-governmental actors about the expected dramatic increases in asylum numbers. The Minister for Integration used several public appearances since March 2015 to communicate and discuss the situation with local officials and representatives from other ministries (Syvicol 2015; MFAMIGR 2016, 157). As the situation tightened during spring, Minister Cahen asked the municipalities to provide available buildings or real estate to increase the capacities for first- and second-phase housing (interview #4; Syvicol 2016, 48). Between April and July, the management of the OLAI and the MFAMIGR held formal and informal talks with other government authorities to raise their awareness for the issue and for the necessity of a joint response, which was met with great willingness to cooperate (interview #10). In spring, the OLAI also approached the non-state welfare organizations (interview #5) and in June, Minister Cahen informed the public together with the Minister for Asylum and Immigration and the Minister for Education (Le gouvernement luxembourgeois 2015). The second dimension of crisis communication occurred vertically along hierarchical lines: In early summer 2015, the OLAI formally reported to the MFAMIGR and the government that its reception facilities would not be sufficient to a part of the refugees that were moving towards and within Europe would come
to Luxembourg, i.e. assuming a negative scenario (interview #10). Minister Cahen reinforced this information by swiftly proposing the development of an emergency coordination plan to the government (MFAMIGR 2016, 150). The recipient of this message, the government, took it seriously and immediately launched a joint crisis response (see section 4.5.4).

In line with hypothesis $H_3$ I observe a straightforward communication of the crucial information in Luxembourg and a much more complex communication pattern between the involved actors in federal Germany. In Luxembourg, the communication of crucial information about the imminent insufficiency of housing facilities was forwarded from the responsible agency OLAI to its parent ministry and the national government, who reacted without hesitation by proposing (MFAMIGR) and mandating (the government) an emergency plan. This reflects the common crisis awareness and the confidence of each organizational level in its own competence as well as trust in the respective inferiors’ assessments. In Germany, several attempts to inform the national government about the scarcity of resources for housing (by the Länder) and the asylum procedure (by the BAMF) and, from spring 2015 on, about the manifestation of the crisis, were left undervalued and unanswered. The Länder as well as the BAMF recurred to alternative channels of communication, namely the press, to raise awareness for the problem, but the national government for long did not react and did not make sense of the crisis and its responsibility to act. This failed communication results from the complex institutional setup of Germany’s refugee policy sector and the selective perception problem. The hesitant forwarding of the new BAMF projection via the BMI to the Länder in August 2015 further shows the lack of a common crisis perception and instead a focus on administrative rules and details. Based on the observations for crisis-detection ($H_2$) and communication ($H_3$), I conclude that the sense-making phase was considerably shorter in Luxembourg than in Germany.

4.5.4 Coordination of a crisis response: Installing crisis committees

In early summer, Luxembourgish Integration Minister Cahen proposed to the government to mandate the High Commissioner for National Protection (HCPN),

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30 This section analyses and compares inter-institutional coordination mechanisms but is no exhaustive account of the governments’ crisis responses. For an overview of specific measures see
whose job description includes preventing and managing severe crises of any kind, with the development of an emergency plan for refugee reception and housing. The government formally issued this mandate on 24 July and the HCPN immediately started coordinating measures first with the MFAMIGR and OLAI (interview #10), and then with more and more state and non-state actors with the “worst case [scenario] as the basis” (interview #2). The final emergency concept, which was approved by the government on 11 September, includes (a) a coordination group, chaired by the HCPN and MFAMIGR and including state actors (e.g. the army, the Finance Ministry, Ministry of Education and Youth, Ministry of Health, Public Buildings Authority) and non-state actors (Red Cross and Caritas), (b) an evaluation cell chaired by the OLAI to monitor the number of incoming applications, and (c) a logistic cell chaired by the Civil Defense Service (ASS) to set up and equip emergency accommodation facilities for short-term use (MFAMIGR 2015, 150–56). Involved actors recall a strong political mandate from the government in general but also from the respective minister to each involved administrative unit to contribute to a joint and successful handling of this challenge (interviews #1, 2, 8, 9). The resort to the HCPN allowed for special budget procedures, which accelerated the procurement process (interviews #1, 5), and meant that the coordinating body had a clear service orientation, crisis management experience and no self-interest or stakes in previous bureaucratic politics games in the asylum sector (in contrast to the BMI and Chancellery in Germany). The coordination of a crisis response was further enabled by a net of personal acquaintances and relations connecting actors from different organizations, which several interviewees (#7) mentioned together with institutionally “short ways” to decision-makers:

“Everybody has everybody’s mobile phone number. It can happen that the minister calls and asks a question. [...] I do find it [...] practical to have short ways, and when you have a question, you can simply directly call the person who can make the decision. Then you often get a decision more quickly.” (interview #5).

Through these formal and informal coordination channels, a joint response was organized to ensure sufficient housing and administrative capacities in face of the high numbers of asylum seekers (see MFAMIGR 2016, 150–65). Although the time until decision on an application remained high in European comparison, this did not become a pressing issue for public opinion or the functionality of the asylum

the European Migration Network’s (EMN) two country reports: Grote (2018) and Nienaber et al. (2016).
system as in Germany. The centralized crisis management had the downside that it was less open to local volunteers and less flexible than the structures on the ground in Germany, (e.g. centralized but expensive food provision through the OLAI; interview #7).

In Germany the Länder were the first to enact emergency measures; they were confronted with a sharp increase of asylum seekers since June and the scarcity of accommodation on the ground and had waited in vain for an adequate federal response. Most Länder installed crisis management committees along established disaster management routines in the course of summer 2015 with the aim to coordinate the work of state and non-state actors to set up accommodation facilities (interviews #13, 14, 18 Radtke and Hustedt 2019, 56). The need for a nation-wide coordination was met with fragmented structures that did not resort to established crisis management routines: In August, a new and specialized staff (KFA) within the lead ministry BMI tried to horizontally coordinate a federal crisis response by asking other ministries to provide additional capacities, e.g. for housing, transport, funding (interview #20). Besides some support from the Federal Ministry of Defense and the Federal Ministry of Transport, the rest of the federal government did not help substantially (interviews #17, 19, 20; Freudlsperger and Weinrich 2018, 8 and communication with the authors). One interviewee (#20) explains this lack of cooperation with the fact that “every ministry has its pride” (see also Hahlen and Kühn 2016, 167). On 26. August, a new vertical, cross-level coordination committee for asylum (BLKA) was founded and located at the BMI to coordinate the Länder’s response and to discuss and agree on procedural matters (BMI 2015b; interview #13, 17, 19, 20). It brought representatives of the Länder and the BMI together. Other federal ministries, which could have mobilized additional resources, were not permanent members of the BLKA committee and often sent only mid-level bureaucrats without authority to decide (interview #17). Vertical and horizontal coordination remained, therefore, separate in the BLKA and KFA, both were newly established crisis management structures headed by the same state secretary (interview #20). Remarkably and in contrast to the committees at the Länder level, the national-level crisis coordination did not rely on existing crisis management expertise, namely in the Federal Disaster Management Agency BBK. Additionally, several stipulated and practiced disaster management procedures ("Stäbe") within the BMI and between the federal and Länder level were left unused on (political) purpose (interviews #16, 18). Since these procedures would have clarified
responsibilities and accelerated the crisis response, leading officials later considered their non-use a mistake (interview #16; Roth 2017, 6). On 4 September chancellor Angela Merkel, in an allegedly unilateral and therefore unprepared and much-debated move, which was not coordinated with the Länder, decided not to close the borders for refugees who were first walking from Budapest to Germany and then sent in buses (Haselberger et al. 2015). In the following weeks, the country experienced unprecedented numbers of incoming asylum seekers that visibly overwhelmed the administration, but the federal government still hesitated to recognize this as a national challenge (Küpper 2016; interview #16). For a lack of federal-level coordination, Bavaria, the Land at Germany’s south-eastern border, where most newcomers arrived, coordinated their distribution among all Länder in an improvised manner (interviews #14, 16 Roth 2017, 9–10). The Länder organized emergency accommodation through their crisis committees in cooperation with municipalities, welfare organizations, volunteers and with the help of the national army and the Federal Agency for Technical Relief (THW; interview #18). At this acute point, the BMI searched for possibilities to support the Länder; it took over the coordination of the distribution of refugees in mid-September (interviews #13, 16) and mandated the THW to set-up of two large reception facilities close to the southern border (interviews #16, 18, 20). Notably, the BMI relied on the BBK and THW’s resources, but not on the former’s crisis management structures (interview #16). Several interviewees (#17, 20) recall solidarity within and between public organizations due to the emergency, but in contrast to Luxembourg, signs of solidarity appeared only after the outbreak of the crisis. Due to IT problems and high numbers, not all newcomers could be registered at the border (de Maizière 2019, 75), and the BAMF, working at its limits already before, was unable to register, let alone process and decide, all applications in a timely manner, which led to follow-up problems in housing and integration (interviews #14, 15, 18). One interviewee (#15) finds that the registration system practically broke down. At the end of September, the national government proposed a first (joint) political response, a package of regulatory measures aimed at making Germany less attractive for newcomers and facilitating asylum procedures and deportation (Bundesregierung 2015; interview #17). A setback on the road towards a coordinated crisis response was the resignation of the BAMF president at the peak of the crisis in September. Despite his early and repeated requests for more political support and more qualified staff, he came under public criticism and political pressure for leading the agency ineffectively (interviews
which is the opposite of the internal cohesion and solidarity observed in Luxembourg. Against previous practice, his replacement was chosen by the Chancellery and accepted instructions predominantly from the government center. The original oversight role of the BMI was thus weakened and its functional expertise on the asylum procedure less demanded (interview #19). More generally, in October, a new coordination structure was introduced with the operational coordination of the crisis response remaining with the BMI but the political coordination of the refugee issue moving to a crisis team at the Chancellery (for a more detailed description see Radtke and Fleischer 2019). Based on its central position within the government, the Chancellery could better enforce the cooperation across ministries than the BMI could (Bundesregierung 2015; interviews #16, 19, 20). This new arrangement led to a smoother coordination and a better distribution of work within the federal government (interview #17) but, on the other hand, also to additional needs for coordination between the two coordination centers BMI and Chancellery (interview #20). It also marks the end of the immediate response and emergency measures in the German case. Overall, the various coordination committees led to inefficiencies and left one interviewee (#13) with the feeling of "sitting on meetings forever", whereas another (#16) found that establishing new structures while leaving existing ones unused was essentially “a loss of time”.

The evidence is rather supportive of hypothesis $H_4$. The coordination of the crisis response was obviously less complex in Luxembourg, where one body, the government, quickly made an authoritative political decision to rely on the expertise and capacity of the HCPN who developed an emergency plan for integrated crisis coordination. In short, institutional responsibilities were very clear. The swift coordination of a crisis response was facilitated by a clear understanding of the crisis shared by political and administrative actors, the simple institutional structure and personal relations. In Germany, in contrast, the actual crisis-coordination was fragmented between the Länder, which set up individual crisis committees, and the federal level, here split again between the BMI and the Chancellery, which led to unclear responsibilities and inefficient coordination efforts. At the national level it was long unclear who was responsible for crisis decision-making (the BMI, the Chancellery or only the Länder) and when the decisions for crisis coordination were taken, they led to the installation of new committees and staffs instead of using existing and tested structures (e.g. BBK) and de facto to changed lines of accountability (BAMF oversight switched from BMI to...
the Chancellery). The final federal coordination structure started working in October 2015, which was later than in Luxembourg, especially given that refugee numbers increased steeper and earlier in Germany.

4.6. Discussion and conclusion

The detailed analysis of the two cases has revealed differences in the preparedness and reaction to the 2015 refugee crisis and unpacked the effect of country size via identity and structure. In empirical case-based research it is almost impossible to find two cases that are exactly the same except on one decisive variable; Germany and Luxembourg present two most similar cases but they are not perfectly similar. In particular, less asylum seekers per capita arrived in Luxembourg in 2015 than Germany; this should be taken into account when judging the overall performance or the success of specific measures. This qualification, however, strengthens my arguments about the quicker sense-making and crisis response: With fewer absolute and relative arrivals, I would expect a less resolute crisis response in Luxembourg, but the analysis revealed that Luxembourg switched quicker into crisis mode although the objective pressure was lower than in Germany. Luxembourg’s small size and the related historical experiences and identity as a vulnerable small state has led not only to internal solidarity and a joint crisis response of several state and non-state actors, as Campbell and Hall’s (2017) paradox of vulnerability would predict, but also to a higher awareness among political and bureaucratic actors of the country’s vulnerability to a potential crisis before the actual outbreak. This shared awareness facilitated communication and in turn accelerated the switch from crisis detection to sense making and crisis response because the alarms sounded by lower levels were deemed plausible by decision makers. In larger Germany, in contrast, there was no feeling of vulnerability. This prevented the BAMF from envisioning the worst-case scenario for 2015 and led it to disregard available information. It also had a devastating effect on communication and sense making: The alarms sounded by the Ländere and the BAMF long went unheard by the national government, which showed no solidarity with the Länder and no trust in the BAMF’s problem definition until the outbreak of the crisis. These aspects of the German system are closely related to the complex bureaucratic structure that follows directly from the large size of the country and its administration (Boin et al. 2017, 33). The structural complexity is also reflected in the coordination of a crisis-response through several committees at different levels but without recourse to the resources of the experienced Federal
Disaster Management Agency BBK. The division of labor between the national and subnational level and specialization within the national-level administration ultimately led to selective perception, denial of responsibility and lack of trust between organizations; and this organizational culture hampered all steps of crisis management. The *paradox of professionalization*, as I would call it, is that the highly formalized, hierarchical and rigid communication channels between the well-staffed BAMF, BMI, and national government and the focus on rules and accuracy prevented effective sense making when the crisis unfolded, so the worst-case scenario and due preparation became a blind spot. In sum, the deficiencies of the German crisis management resemble some of those that 't Hart (2013) identified in the Fukushima crisis: an “illusion of invulnerability (‘it won’t happen here’)” (p. 103), “elite paternalism [manifesting] itself in a reluctance to share information […] in a timely and comprehensive manner” (p. 106) and “pivotal actors [who] accord that work [collaboration] low priority” (p. 108). In the contrasting case of small Luxembourg, the unitary organization of the state and the general scarcity of resources (staff) meant that there were no organizational overlaps and, thus, clear responsibilities and a need to rely on each other. As is typical of small states (see Sutton 1987, 15; Thorhallsson 2000, 80–84), the individual bureaucrat (and organization) became relatively important and *autonomous* as she was the only person (organization) fulfilling a specific task and others necessarily had to trust and rely on her: the government relied on the MFAMIGR which relied on the OLAI. Additionally, the structural feature of polyvalence was widespread in the Luxembourgish case and resulted in a general openness to information through other than formal communication channels: the overlap of sectoral roles increased Integration Minister Cahen’s awareness for the refugee issue through experience as a volunteer, and relations from previous collaboration or private life together with flat institutional hierarchies facilitated the communication between decision-makers and street-level actors implementing the crisis response. Notably, most interviewees brought up the smallness of the countries by themselves and assessed it as a helpful feature (e.g. interviews #1, 3, 5, 9). In sum, the smallness-induced aspects of the Luxembourgish crisis management are strikingly similar to Cerulo’s (2006) preconditions for negative asymmetry that enable crisis preparation and reaction: In the Luxembourgish case and in clear contrast to the German one, I observed the features of “individual autonomy”, “porous communication boundaries” (p. 192), a “service orientation” (pp. 192, 218) of the coordination center as well as a
“substantive rationality” (p. 187) focusing on common goals that are driven by a shared identity. It can, thus, be concluded that smallness has enabled an effective crisis response in Luxembourg. This conclusion is obviously limited to the specific case of the 2015 refugee crisis and does not allow conclusions about the everyday effectiveness of small bureaucracies, which remains limited due to a lack of economies of scale (see chapter 3). The practical lessons for crisis management in Germany, and potentially other large states, are not to create new coordination structures, committees or groups but to implement measures to develop a more open and cooperative administrative culture and increase diversity in professional backgrounds and experiences.

This study yields broader implications for the research on crisis management, blind spots in bureaucracies, and governance in small states. Comparative studies on European crisis management and civil security systems have so far (a) ignored the case of Luxembourg, just as small countries are widely ignored in the social sciences (Veenendaal and Corbett 2015), and have (b) portrayed Germany as a civil security system that is in theory decentralized but coordinated through the BBK (Kuipers et al. 2015, 7, 13; Christensen et al. 2016, 322), which was, however, not the case in practice during the actual crisis studied here. The two cases in this study, therefore, make a double empirical contribution to this literature: Looking at the hitherto overlooked case of Luxembourg reveals that smallness can foster the combination of a hierarchical structure on the one hand and an organizational culture of trust, shared norms, and emphasis on coordination on the other, which have been shown to enable effective crisis management (Parker, Persson, and Widmalm 2019, 6, 14). In Germany, in contrast, the crisis response was indeed decentralized but (a) not coordinated by the designated agency BBK and (b) still required resources from the national level, where the organizational culture was driven by hierarchy, formality and accuracy and characterized by a lack of improvisation and of shared goals. This article exemplifies that the study of crisis management systems benefits from comparative approaches and from studying performance in actual crisis situations instead of potential crisis management capacities. The findings of this study also lend support to the blind spot approach and its combination of structure-based and identity-based factors to explain dysfunctional bureaucratic behavior. This means that, to get to the root of the phenomenon, future analyses of public bureaucracies should focus not only on formal structures but also on the identities that are specific to the organization and to the broader cultural context.
I have shown that country size is a factor that can determine not only structure, through the rather intuitive correlation of size with specialization and decentralization, but also identity and organizational culture. In the fortunate case of Luxembourg, smallness had favorable effects on these informal aspects that largely prevented blind spots. This is, however, not the case in all small states and it remains an important avenue for future research to identify the conditions under which smallness induces such favorable features.
CHAPTER FIVE

Concluding remarks

5.1 Summary of size effects and implications
All three empirical chapters find that country size affects state performance significantly. Each chapter contributes, first, to the small state literature by taking up one of its themes and analyzing it with a variance-based approach comparing small and large countries and, second, to another literature by establishing country size as an important explanatory factor: Chapter 2 addresses the literature on authoritarian (specifically monarchic) survival, Chapter 3 contributes to the literature on determinants of public service performance, and Chapter 4 refers to the literatures on crisis management and organizational blind spots. The contribution to the respective literature is described in detail in each chapter. Here I focus on more general questions: Is there an optimal country size? What are the normative and practical implications of these size effects?

Chapter 2 find that small size stabilizes monarchic regimes. Small country size thus appears desirable for the goal of political and regime stability. From a democratic perspective, however, small size is less desirable as it would hinder the change from authoritarian monarchy to a democratic regime; stability can turn bad in this sense. This finding seriously questions the small-state literature’s “small is democratic” hypothesis and its insufficient distinction between regime emergence and survival (e.g. D. Anckar 2002; Corbett and Veenendaal 2018; Ott 2000). For large states, the findings suggest that an overthrow of authoritarian monarchy is more likely, but this does not necessarily result in a democratic regime (as the Egyptian case shows). Large states are prone to instability but not necessarily to democratic governance. The normative assessment of political stability and instability depend fundamentally on the status quo: stability is desirable in democracy but instability (or the possibility of regime change) is desirable in authoritarian regimes. State performance in terms of regime stability can, therefore, not be normatively judged without ambiguity. Since chapter 2 focuses on the few cases of monarchic regimes, the normative implications are limited to these cases. Nonetheless, I presume that the stabilizing effect of small size also holds for other regimes, democratic as well as authoritarian, which
should be tested in future research (see section 5.3). Based on this assumption, medium country size should be the most desirable from a normative perspective: it does not lock an authoritarian regime in as small size does, but allows for a change towards a democratic regime, and in contrast to large states it still allows for a reasonable level of political stability and regime survival in case of democracy.

Chapter 3 finds that medium country size is conducive to the effectiveness of national bureaucracies. This is based on the theoretically expected trade-off of advantages of small and large size and supported by the empirical findings. While extreme small or large size is shown to lead to ineffectiveness, medium size (the golden mean) is expected to be largely exempt from these negative effects but to combine the advantages of small size, mainly informal coordination through trust and motivation, with those of large size, formal specialization and economies of scale. The normative assessment appears easy because administrative effectiveness is clearly desirable from a normative point and because the turning point, i.e. the level of population size at which effectiveness is maximized, is explicitly modeled. The estimated turning points remained at a medium level but varied from 15 million to 94 million with the control variables and the country sample used. While the evidence for the existence of a golden mean is strong, these estimates should be interpreted with caution. Furthermore, the estimates are based on the study period 1996-2014 and cannot be generalized beyond that time. Even when focusing on one performance aspect only, there is no simple or definite conclusion about the optimal country size.

Chapter 4 finds that large country size (in Germany) led to attention biases that inhibited preparation and reaction in the 2015 migration crisis. Small size (in Luxembourg), on the other hand, favored crisis awareness as well as swift communication and coordination, as expected. The most interesting finding, from a normative perspective, is that small states are not necessarily slower in crisis detection although they have less formal, specialized capacities to monitor external developments that might turn into crises. While I observe limited formal capacities in the small state and more specialized monitoring capacities in the large state, this gap does not translate directly into a similar gap in crisis detection, but the small state Luxembourg made up for this lack of formal capacities by pragmatic analytical capacities. Paradoxically, the larger state commanded more formal resources but the outcome, crisis detection, was less satisfactory. In brief,
the small state outperformed the larger one on all four aspects of crisis management analyzed; small country size demonstrably favors crisis preparation and reaction. The normative implications are, nevertheless, limited as the analysis relies on two singular cases and a singular crisis. It is not clear, for example, whether the effect of size is uniform across regional contexts, types of government or types of crises.

In sum, I agree with Dahl and Tufte (1973, 135) who argue that there is no one optimal size but that “[d]ifferent problems require political units of different sizes.” One important aspect of state performance, which should be part of any final or broader assessment, has been neglected in this dissertation: transnational coordination, which presumably becomes more difficult the more (small) countries exist that must coordinate among each other. For example, in a hypothetical world made up entirely of small states, I would expect coordination problems between these states similar to the coordination problems I observed between the Länder within Germany (chapter 4). The previous normative considerations favor either small or medium country size but are highly dependent on context. One thing should be clear in any case: These findings do not justify to break-up countries or reduce population size in any other way. I explicitly distance myself from any claims that defend or propagate secession, nationalism, ethnic or cultural homogeneity or cleansing. Practical implications must, instead, take country size as given as an important contextual variable and tailor the institutional set-up or governance structures to fit this specific context. Notably, Chapters 3 and 4 show that several countries and their political and administrative actors have already developed strategies to overcome size-related disadvantages, practical recommendations can be based on these context-specific best practices. Along these lines, chapter 3 (see section 3.5) confirms the intuitive idea that federalism or de-centralization are suited to increase administrative effectiveness in large states because they attenuate or delay disadvantages of too large countries and too large administrations. The practical implication for small states is, instead, to develop synergies by centralizing certain administrative services or collaborating with other (small) states. Chapter 4 (see section 4.6) yields practical lessons for large states in crisis management: instead of creating new, ad-hoc crisis coordination structures they should develop a more generalist open and cooperative administrative culture, for example by rotating staff between ministries and between levels of government, or by recruiting administrative staff with more diverse professional backgrounds. The general policy recommendation
that follows from this dissertation is that governance structures should be tailored to the context, including country size, and the specific purpose or performance goal. Making these two points explicit is an important first step in overcoming one-size-fits-all solutions and improving state performance sustainably.

5.2 Synthesis of size related characteristics and mechanisms
This sub-section synthesizes the findings regarding the three characteristic features of small and large states, which were introduced in section 1.3.1. Having established that country size matters in the context of all three empirical chapters, this section searches for parallels in how it affects politics, administration and governance. Table 5.1 reports the empirical findings on the three size-related characteristics. As expected, the small state characteristics vulnerability, social proximity and homogeneity, and centralization and power concentration were detected in the small state cases (Jordan in chapter 2 and Luxembourg in chapter 4) and were also plausible explanations for small states’ administrative performance (chapter 3). The fact that I found indications for all three factors in all three chapters and with regards to three different dimensions of state performance corroborates and broadens the findings of previous studies on small states. Additionally, I found evidence for the impact of the large-state characteristics suggested in section 1.3.1. Here, I take a higher level of abstraction to synthesize and refine these characteristics:

1. I expected a lack of awareness for external threats in large countries and I found this in the empirical cases of Egypt (chapter 2) and Germany (chapter 4). Although these two cases are hardly comparably, there are some structural similarities: In both cases there was no awareness of the vulnerability (i.e. the fragility of independence in Egypt and Germany’s affectedness by migration flows in the Middle East and Mediterranean), instead public opinion and political debate focused on the country’s outward strength (Egypt’s self-image as regional leader and role model for Arab countries; Germany’s focus on the Greek bailout crisis and Germany’s leadership role in Europe). In both cases I find internal conflicts outweighing considerations of external threats: In Egypt, the proud self-image clashed with the humiliation during the Arab-Israeli war, which led to dissatisfaction with the regime, to opposition and ultimately its overthrow. In Germany the illusion of invulnerability prevented pressure to cooperate, instead various government organizations cultivated distinct and conflicting institutional identities and goals. In both cases, the
overestimation of the country’s strength led to the perception that there is time and room for internal conflicts, for *questioning* who is and who should be in charge. Another pertinent example for this large-state characteristic is the British debate around Brexit. In contrast, in the small and vulnerable states analyzed here, the focus was rather on *trusting* and *supporting* those who are in charge. In sum, the lower awareness for vulnerability to external threats in larger states promotes internal rivalry and conflict.

2. I also expected diversity of social groups and distance between them in larger states. In Egypt (chapter 2), I observed diversity in terms of socio-economic groups, political groups and parties. In addition to their high number, these groups were largely separated from each other, the Muslim brotherhood even maintained their own system of social services; there were hardly any overlaps of professional or political roles with private roles or kin relations as typical of small states. Based on the literature (chapter 3) I argued that the political and administrative spheres are clearly separated from each other in large states and play distinct roles in society. I found empirical evidence for this in Germany (chapter 4), where different rationalities dominated the two spheres and no social or informal ties bridged these professional boundaries. I would not consider the lacking overlap of private and professional roles, which I found repeatedly, a concrete characteristic of large states but, rather the other way around, an absent small-state characteristic. Interestingly, in none of the empirical chapters did ethnic heterogeneity play a decisive role; I would thus advocate a broader understanding of societal diversity related to large country size.

3. The third characteristic expected in large states concerns specialization and de-centralization. Indeed, I found specialization of the state apparatus in Egypt (chapter 2): there was a distinct, specialized and professional military, trained at a specialized military academy. The monarch and his closest advisors in court were not involved with military matters but let them to the specialists. Through the economy’s diversity, economic resources were not centrally controlled by the regime but spread across industries and available to a range of political actors. The classic public administration literature also has strong expectations about specialization and de-centralization increasing with size and resulting in economies of scale, and these are supported by several empirical studies at sub-national level (chapter 3). In the case of Germany (chapter 4), the division of labor between government ministries and agencies
and between the central and Länder levels in the federal state were formative. A commonality of the Egyptian and the German case is that specialization of the state apparatus did not only have obvious effects on structures, complicating communication and coordination among units, but they also affected identity: in Egypt the specialized military developed their own identity, first independent from and later opposing the monarchic regime, and in Germany the separation of tasks, goals and resources promoted distinct and conflicting identities of the Länder administrations and individual government ministries. In a similar vein, Yasuda (2015, 750–51) reports turf wars in the Chinese bureaucracy which result from the country’s sheer size and contribute to policy failure. This diversity of identities relates back to the lacking awareness for external threats.
Table 5.1 Synthesis of the findings on three size-related characteristics

<table>
<thead>
<tr>
<th>Aspect of performance:</th>
<th>Chapter 2</th>
<th>Chapter 3</th>
<th>Chapter 4</th>
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</thead>
<tbody>
<tr>
<td>Findings based on:</td>
<td>Case study</td>
<td>Theoretical &amp; case-based literature</td>
<td>Case study</td>
</tr>
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Small and large state characteristics

1. **Small state:** Vulnerability
   - Rally-around-the-flag effect boosts regime legitimacy
   - Common national goals are clearer & increase motivation
   - Rally-around-the-flag effect boosts regime legitimacy

2. **Small state:** Social proximity & homogeneity
   - Easy identification of few elites to co-opt & opposition groups to repress, monarch close to people
   - Informal coordination & trust
   - Informal communication & trust speed up coordination

3. **Small state:** Centralization & role accumulation
   - Regime controls economic resources, easy to oversee state apparatus
   - Accumulation of tasks, flatter hierarchies, limited professionalization, generalist
   - Flat hierarchies, lack of formal forecasting capacity leads to pragmatic approach

4. **Small state:** Specialization & de-centralization
   - Specialized group (officers) within the state with distinct identity; economic independence of opposition groups
   - Economies of scale but higher internal administrative and communication costs) specialized tasks impede motivation
   - Selective perception & denial of responsibility impede coordination between ministries, agencies, federal and *Länder* level

5. **Large state:** Lack of awareness for external threats
   - Humiliation of proud large country sparks opposition
   - Illusion of invulnerability, worst-case scenario not considered

6. **Large state:** Social diversity & distance
   - Diversity of opposition groups impedes complete repression & co-optation
   - Professional identity, separation of political & administrative sphere
   - Diversity of institutional identities & professional distance impedes quick reaction

7. **Large state:** Specialization & de-centralization
   - Specialized group (officers) within the state with distinct identity; economic independence of opposition groups
   - Economies of scale but higher internal administrative and communication costs) specialized tasks impede motivation
   - Selective perception & denial of responsibility impede coordination between ministries, agencies, federal and *Länder* level
5.3 Limitations and avenues for future research

In all three empirical chapters, I discussed their individual limitations ranging from measurement and data problems to the limited generalizability of the findings. This sub-section reflects more broadly on the limitations of the overall approach of this dissertation and suggests how these can become starting points for interesting and relevant future research. I focus on three major points.

The first limitation concerns causality. Since this dissertation relied on observational data, it cannot establish causality, strictly speaking. However, I attempted to rule out potentially confounding factors, or plausible alternative explanations, through careful case selection in chapters 2 and 4 and through several control variables used in chapter 3. Additionally, I employed small-N comparisons to achieve internal validity, i.e. to show in as much detail as possible how the theorized mechanisms play out in empirical cases. A more specific point related to causality is that this dissertation treats population size as an exogenous variable. This might be problematic since population size can arguably be affected by state performance. For example, well governed countries might attract migrants for political or economic reasons and badly performing countries are prone to falling population numbers via emigration, high death rates or low birth rates. Strictly speaking, countries in a cross-country model are not entirely independent observations if their rise and fall in population numbers are related via migration. In chapter 3, I addressed this potential endogeneity problem by presenting the extremely strong correlation of present and past data on population size and by employing an instrumental variable regression with area as an instrument for population size. Population size might also be endogenous via another way: Throughout history, only certain small states have survived, presumably the well performing ones, one could argue. In this case, the reason why today’s small states perform well would not be because they are small but because they always used to perform well. And this would apply to size regardless of its operationalization as population or area. Addressing this puzzle through natural experiments seems tempting, but cases where the merger or split of a country (e.g. in Czechoslovakia or Germany) leads to abrupt changes in population size are not useful because they are not ceteris-paribus situations. They are accompanied by major social and political disruptions, which means the observations before and after such treatments differ by more than just country size and the size effect cannot be isolated. Moreover, my explanation for the relation between size and performance involves identity (vulnerability) and social
relations (social proximity) and these are organic features of human communities that evolve very slowly over time and cannot be expected to change completely due to a singular treatment. Therefore, instead of searching for the exceptional case where population (or area) was changed as-if randomly, I suggest tackling the endogeneity question precisely by addressing the origins and determinants of population size from a systematic, historical perspective. The relation between state performance, country size and survival could be disentangled in a long-term case study that compares the past and present performance of two small territories of which one has remained independent while the other has lost independence. Another approach would be large-N panel analyses of historical data on state performance (e.g. taxation or political stability), state size and survival. The increasing availability of comparative and historical data sets is promising for this task and allows analyzing long-term effects and legacies of historical performance. Such research could also inspire the search for better instrumental variables for today’s country size, which could improve estimations of its causal effects. A potential instrument for country size might be topography as it can be suspected to drive the survival of small states throughout history: many of them are geographically isolated in mountainous regions (e.g. Andorra, Bhutan, Lesotho), which may have prevented conquests, or on islands (especially in the Caribbean, the Pacific and the Indian Ocean), which often did not prevent colonization but the incorporation into larger colonial empires or territories. In sum, broadening the historical perspective is promising as it can help understand the evolution of countries and societies as well as the roots of their identities which still affect their performance today.

Another limitation is the conceptual oversimplification of small vs. large states. In the preamble as well as in the empirical chapters, I criticized previous research on country size for ignoring large states. One could criticize this dissertation, in turn, for not giving clear definitions of small and large states, and for widely ignoring medium-sized states. Indeed, I established large states as a theoretical and empirical antipole to small states without defining it in numerical terms. I pleaded for the development of two ideal-types (small and large state) that manifest themselves more or less strongly in empirical cases. I believe that a definition (or threshold) should be formulated based on our empirical and theoretical understanding; only when we know what characterized a large state, can we start defining it in numerical terms. So, the empirical investigation of the characteristics and effects of large country size were a first step to this
understanding and towards a future definition. Regarding medium-sized countries, a numerical definition is even more difficult as it requires a lower and an upper threshold. The pressing theoretical question is whether medium-sized countries combine characteristics of both small and large (the best of both worlds? or perhaps the worst of both worlds?) or whether they are characterized rather by the absence of such size-related characteristics. In chapter 3, I theorized, based on previous theoretical work and supported by the empirical finding of a golden mean, that medium-sized countries combine the positive features of both extremes. This question deserves more theoretical and empirical investigation in the future. Comparisons between micro, small and medium-sized countries, for example, can lead to more nuanced results about size effects and can illuminate whether size effects are uniform across the size scale or how they vary. In Goertz’ (2006, 30–35) terms, this dissertation has explicitly analyzed the other end of the size scale (large states) and the next step should be to theorize the continuum or the gray area between the two poles (small and large). Another caveat related to the conceptualization of country size is that its three underlying features have been empirically observed (see Table 5.1), but their relationship with size has been largely assumed. Future studies should analyze systematically across countries and time whether external threats, societal plurality, and institutional centralization co-vary uniformly with size or whether there are scope conditions.

The final limitation to be mentioned here is the limited scope in terms of dimensions of state performance and empirical cases. While state performance, as in the title and overarching research question of this dissertation, is a broad concept, the three empirical chapters focused on few aspects of the procedural dimension of state performance; the achievement of substantive policy goals has been largely ignored. The empirical base is limited to a few performance indicators in chapter 3 and to selected country cases in chapters 2 and 4. This limited scope was, on the one hand, necessary to conduct sound empirical research, but it leaves room for further studies of size effects on state performance. Chapter 2 analyzed the important performance goal of regime stability but only for an empirical niche: authoritarian monarchies. The small number of relevant cases, however, helped to substantiate the size argument and refine its scope conditions, and laid the foundation for broader analyses. Future studies could test the hypothesis that small state characteristics stabilize regimes on larger data sets comprising all authoritarian regimes or even all regime types including democracy. Survival models are a promising way forward to estimate whether population size, or one
of the discussed size-related characteristics, explains which regimes survive (longer) and which break down (sooner). Just as I found for monarchies, I expect other types of authoritarian regimes as well as democracies to be more stable and survive longer in smaller states. Another important question in this regard is whether regime emergence is systematically affected by size. Such analyses can contribute substantially to our understanding of the global distribution of regime types across time and space. Chapters 3 and 4 are characterized by a focus on a few aspects of procedural performance. An interesting question is whether the found variations in procedural performance between governments in small and large states result in clear variations of policy outcomes. The performance against substantive policy goals was not part of this dissertation but is an obvious way forward in researching effects of country size. Knowing that small and large states work different internally, does that make a systematic difference for their citizens and economies? To answer this question, regression analysis of several output and outcome indicators across policy fields could be used. I do not, however, expect clear-cut patterns because policy outcomes depend on a variety of other factors ranging from citizens’ and political preferences to specific aspects of the socio-economic context.

This dissertation set out to answer an ambitious question that has intrigued thinkers and scholars for centuries. The fact that it ends with many new questions and ideas for future research testifies the relevance of country size for politics, administration and governance. Despite its limitations, this dissertation has shown that country size (i.e. not only small country size) affects three selected aspects of state performance. Further analyses are needed to explore how much of a broader impact it has. The publication of the first research paper reflects that country size is of interest for wider audiences and encourages further research in this direction. More broadly, I have studied three important puzzles and shown that engaging with a structural explanation can lead to nuanced results and unveil interesting empirical patterns that provoke even more thoughts and questions.
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7. APPENDIX

7.1 Appendix to chapter 3

7.1.1 Data description and data sources

Government Effectiveness is a perception-based indicator measuring “the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.” It relies on a number of public, commercial and non-governmental data providers and surveys (see article, data section). Based on an unobserved components model, the underlying sources are aggregated into one standardized score for each country, ranging thus from approximately -2.5 to 2.5. The data are available biannually from 1996 to 2000 and annually since 2002; this study uses the 2015 updated version of the indicator with data up to 2014. The measure is one of the World Bank’s Worldwide Governance Indicators (Kaufmann, Kraay, and Mastruzzi 2009).

http://info.worldbank.org/governance/wgi/#doc The website provides general information and links concerning the Worldwide Governance Indicators. For a comprehensive list of all data sources and individual variables, which were used to construct the GE indicator, click on “Government Effectiveness” on this website. The data sources differ in their country coverage and the score for each country-year may be based on a different number and combination of sources. The ideal-typical scores for 2014 (assuming a country was featured in all sources) are based by approximately one third on commercial business information providers, by another third on international organizations, and the last third is divided between information from surveys and non-governmental organizations. Most items directly refer to aspects of public service effectiveness, yet some others refer to other, yet, related concepts such as red tape, quality of policy outputs in education or transportation, citizen satisfaction with policies or the environment for business activities. Conceptual validity is ensured by the unobserved components model, which is used to aggregate the data to a final index. This model attributes greater weight to original measures that correlate more with others because they are deemed more reliable since, according to Kaufmann, Kraay and Mastruzzi (2009, 13), any correlation between two of those measures “is due to their common,
but unobserved, signal” (ibid. 13) of government effectiveness. The unobserved components model is, thus, not only a tool for aggregation but also a means of triangulation. For reasons of space, here I only present an illustrative selection of indicators (and sources) used to construct this measure:

- Quality of bureaucracy/ institutional effectiveness; Excessive bureaucracy/ red tape (both Economist Intelligence Unit)
- Satisfaction with public transportation system/roads and highways/education system (Gallup World Poll)
- Bureaucratic Quality (Political Risk Services’ International Country Risk Guide)
- Quality of public administration (African Development Bank, Asian Development Bank, World Bank)
- Government handling of public services (Afrobarometer)
- Government decisions are not effectively implemented; Bureaucracy hinders business activity (Institute for Management and Development World Competitiveness Yearbook)

(log) population: The data for (log) population size are available annually from the World Bank. For this study, the natural logarithm of the original data is used because the original measure is strongly right-skewed (see Figure 7.2).
http://data.worldbank.org/indicator/SP.POP.TOTL

(log) GDP pc: The variable (log) GDP per capita is based on data for GDP per capita (in current US$) from the World Bank. The original data are log-transformed for this study. http://data.worldbank.org/indicator/NY.GDP.PCAP.CD

Political rights: The variable political rights is a procedural measure of democracy (regime type) based on Freedom House’s measure of political rights*. The original scale ranging from 1 (free) to 7 (not free) was inversed for this study so higher values mean higher levels of political rights (now: 1 – not free; 7 – free/democratic).

Ethnic fractionalization: The measure for ethnic fractionalization was developed by Alesina, Devleeschauwer, Easterly, Kurlat & Wacziarg (2003)*. It measures the probability that two randomly selected individuals in a country belong to different ethnic groups; its scale ranges from 0 (perfectly homogenous) to 1 (every individual in the country belongs to a different ethnic group).

Urbanization: The share of urban population is based on absolute numbers of population in urban areas from the World Bank’s World Development Indicators*.
These absolute numbers are divided by absolute population numbers for each country and then multiplied by 100 to calculate the relative measure of urban population as a share of the total population. The measure theoretically ranges from 0 to 100 percent.

Population growth is calculated annually from the yearly changes in the absolute population size of each country.

Expected school years: The variable expected average years of schooling (school life expectancy) was chosen as a measure of education. It is obtained from the CIA World Factbook for almost all countries in the world for around the year 2010. Its wide country coverage was the main reason for choosing this (static) measure over other measures of education.

Federalism: The dummy variable for federalism is based on Norris’ “Democracy Timeseries Data Set” (2009)*. The original data were transformed so that federal countries score 1 and all other countries (including hybrids) score 0; the data were also extended in order to cover all country-years in the study.
https://www.hks.harvard.edu/fs/pnorris/Data/Data.htm

Legal origin: Five dummy variables are used for indicating a country’s legal origin following La Porta, Lopez-de-Silanes, Shleifer, & Vishny (1999)*. While these scholars based their argument on the type of legal system implied by each tradition, the variables are used here as a broader measure of cultural, politico-historical influence. The respective dummy variables: are for British legacy (used in analysis as omitted reference category), Socialist, French, German and Scandinavian legacy. As usual, a score of 1 indicates that a country has the respective legal origin and 0 that it does not.

Regulatory quality is another one of the World Bank’s Worldwide Governance Indicators and, just as government effectiveness, it is based on perception data from various sources that were aggregated into standardized country scores. It captures “the ability of the government to formulate and implement sound policies and regulations” (Kaufmann, Kraay, and Mastruzzi 2009, 6). Conceptually, regulatory quality is the closest indicator to government effectiveness; together they form the subgroup of indicators measuring government capacity.
http://info.worldbank.org/governance/wgi/#home
Government efficiency is a measure from Bertelsmann’s Sustainable Governance Indicators. It is based on expert judgments of the performance of national governments in implementing their policy objectives on a scale from 10 (best) to 1 (lowest). The measure is available for 41 OECD and EU countries.

http://www.sgi-network.org/2016/Downloads

Impartiality: The index of impartiality (impartial public administration) from the Quality of Government Institute’s Expert Survey II aggregates expert judgments and measures to what extent government institutions exercise their power impartially. It covers a wide range of countries from all continents.

http://qog.pol.gu.se/data/datadownloads/qogexpertsurveydata

(log) area: The variable (log) area is the natural logarithm of countries’ territory (land area in square km), which is provided by the World Bank. In this paper, it is used as an instrument for population size (as well as the respective squared terms) because it is expected to affect public service performance not directly but only indirectly via population size with which it is highly correlated.

http://data.worldbank.org/indicator/AG.LND.TOTL.K2

* The data from original data sources marked with an asterisk were obtained through:


http://qog.pol.gu.se/data/datadownloads/qogstandarddata
Figure 7.1. Illustration of missing ICRG data on bureaucratic quality. Shown on a scatter plot of (log) population size and government effectiveness, 2011.

Countries with missing ICRG data but with WGI’s Government effectiveness data in 2011 (plotted as diamonds): Afghanistan, Antigua and Barbuda, Barbados, Belize, Benin, Bhutan, Bosnia and Herzegovina, Burundi, Cape Verde, Cambodia, Central African Republic, Chad, Comoros, Djibouti, Dominica, Equatorial Guinea, Eritrea, Fiji, Georgia, Grenada, Kiribati, Kyrgyzstan, Laos, Lesotho, Liechtenstein, Macedonia FYR, Maldives, Marshall Islands, Mauritania, Mauritius, Micronesia, Nepal, Palau, Rwanda, Samoa, Sao Tome and Principe, Seychelles, Solomon Islands, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Swaziland, Tajikistan, Tonga, Turkmenistan, Tuvalu, Uzbekistan, Vanuatu
Figure 7.2. Histograms of population size and (log) population size. Global distribution of countries, 2014.
Table 7.1 Summary statistics, cross-sectional data for 2014

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>mean</th>
<th>sd</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Effectiveness</td>
<td>185</td>
<td>-.070</td>
<td>.988</td>
<td>-2.480</td>
<td>2.194</td>
</tr>
<tr>
<td>(log) population</td>
<td>187</td>
<td>15.622</td>
<td>2.170</td>
<td>9.200</td>
<td>21.034</td>
</tr>
<tr>
<td>(log) GDP pc</td>
<td>176</td>
<td>8.615</td>
<td>1.463</td>
<td>5.541</td>
<td>11.667</td>
</tr>
<tr>
<td>Political rights</td>
<td>187</td>
<td>4.626</td>
<td>2.158</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Ethnic fractionalization</td>
<td>182</td>
<td>.436</td>
<td>.258</td>
<td>0</td>
<td>.930</td>
</tr>
<tr>
<td>Urbanization</td>
<td>187</td>
<td>56.794</td>
<td>23.358</td>
<td>8.550</td>
<td>100</td>
</tr>
<tr>
<td>Population growth</td>
<td>187</td>
<td>1.378</td>
<td>1.221</td>
<td>-1.415</td>
<td>8.425</td>
</tr>
<tr>
<td>Expected school years</td>
<td>175</td>
<td>12.794</td>
<td>3.008</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Regulatory quality</td>
<td>185</td>
<td>-.081</td>
<td>.985</td>
<td>-2.202</td>
<td>2.231</td>
</tr>
<tr>
<td>Government efficiency</td>
<td>41</td>
<td>6.683</td>
<td>1.635</td>
<td>2</td>
<td>9</td>
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<tr>
<td>Impartiality</td>
<td>109</td>
<td>3.952</td>
<td>1.213</td>
<td>1.573</td>
<td>6.292</td>
</tr>
<tr>
<td>(log) area</td>
<td>187</td>
<td>11.320</td>
<td>2.727</td>
<td>.693</td>
<td>16.611</td>
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Table 7.2 Summary statistics, longitudinal data

<table>
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<tr>
<th>Variables</th>
<th>N</th>
<th>mean</th>
<th>sd</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Effectiveness</td>
<td>2939</td>
<td>-.069</td>
<td>.995</td>
<td>-2.480</td>
<td>2.430</td>
</tr>
<tr>
<td>(log) population</td>
<td>3553</td>
<td>15.488</td>
<td>2.158</td>
<td>9.154</td>
<td>21.034</td>
</tr>
<tr>
<td>(log) GDP pc</td>
<td>3453</td>
<td>8.107</td>
<td>1.625</td>
<td>4.284</td>
<td>12.174</td>
</tr>
<tr>
<td>Political rights</td>
<td>3543</td>
<td>4.582</td>
<td>2.183</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Urbanization</td>
<td>3543</td>
<td>53.995</td>
<td>23.507</td>
<td>7.412</td>
<td>100</td>
</tr>
<tr>
<td>Population growth</td>
<td>3553</td>
<td>1.523</td>
<td>1.534</td>
<td>-3.748</td>
<td>19.273</td>
</tr>
</tbody>
</table>
### 7.1.2 Additional and alternative models

**Table 7.3 Cross-sectional models for various years**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global sample, baseline model (controls as in Table 3.1, Model 1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(log) population</td>
<td>-.291</td>
<td>.099</td>
<td>.406**</td>
<td>.226</td>
<td>.355+</td>
</tr>
<tr>
<td>[(log) population]$^2$</td>
<td>.009+</td>
<td>-.002</td>
<td>-.010*</td>
<td>-.005</td>
<td>-.010+</td>
</tr>
<tr>
<td>Observations</td>
<td>166</td>
<td>177</td>
<td>180</td>
<td>181</td>
<td>181</td>
</tr>
<tr>
<td>$r^2$</td>
<td>.80</td>
<td>.75</td>
<td>.81</td>
<td>.74</td>
<td>.75</td>
</tr>
<tr>
<td>Turning point</td>
<td>-</td>
<td>-</td>
<td>288m</td>
<td>-</td>
<td>28m</td>
</tr>
</tbody>
</table>

| **Global sample, best fitting model (controls as in Table 3.1, Model 2)** | | | | | |
| (log) population | .032 | .487* | .528** | .279 | .375 |
| [(log) population]$^2$ | -.000 | -.014* | -.014* | -.007 | -.011 |
| Observations | 157 | 166 | 169 | 168 | 168 |
| $r^2$ | .83 | .81 | .84 | .80 | .80 |
| Turning point | - | 62m | 133m | - | - |

| **Global sample, full model (controls as in Table 3.1, Model 3)** | | | | | |
| (log) population | .060 | .492* | .526* | .285 | .360 |
| [(log) population]$^2$ | -.001 | -.014* | -.014* | -.007 | -.010 |
| Observations | 155 | 164 | 166 | 165 | 164 |
| $r^2$ | .84 | .81 | .85 | .80 | .80 |
| Turning point | - | 61m | 171m | - | - |

| **Democratic sample, best fitting model (controls as in Table 3.2, Model 1)** | | | | | |
| (log) population | .099 | .539* | .724** | .459 | .586+ |
| [(log) population]$^2$ | -.003 | -.016* | -.021** | -.014 | -.017+ |
| Observations | 65 | 75 | 77 | 79 | 75 |
| $r^2$ | .86 | .83 | .89 | .84 | .87 |
| Turning point | - | 33m | 25m | - | 24m |

All models are cross-sectional OLS models with Government Effectiveness as dependent variable. Model specifications and controls differ by models as indicated, data are used from the year indicated at the top. Table shows coefficients and significance level based on robust standard errors. Turning points in million population for models where (log) population is significant at least at the 0.1 level: + p<0.1, * p<0.05, ** p<0.01
Figure 7.3 Predictive margins plots for REWB model with 83.5% confidence interval. REWB between-effect for democracies without India (see Table 3.2) with 83.5% confidence interval.

On the graphical inspection of confidence intervals: Methodological considerations have shown, that judging the difference between two point estimates by examining the overlap of their 95% confidence intervals, which was done in Figure 3.1, results in an overly conservative comparison and an effective type I error rate of only 1%. In order to graphically compare the difference between two intervals with an effective significance level of 5% ($\alpha=0.05$), one should instead use “83% or 84% confidence intervals” (Payton, Greenstone, and Schenker 2003, 5; see also Kastellec and Leoni 2007). Following these considerations, Figure 7.3 shows an 83.5% confidence interval, so the non-overlap of the confidence interval at different levels of (log) population size indicates that the estimates are significantly different. The marginal effects plot in Figure 7.3 illustrates the curve resulting from the between-country effect of the REWB model for democracies (here without India). This model still predicts a significantly higher level of government effectiveness at medium levels of population size than at extremely small or high levels.
### Table 7.4 REWB-models for additional sub-samples

<table>
<thead>
<tr>
<th></th>
<th>Federal countries</th>
<th>Global sample without China and India</th>
<th>Non-democracies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(within) (between) (within) (between) (within) (between)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(log) population</td>
<td>3.261** 1.450**</td>
<td>.033 .731** .095 .170</td>
<td></td>
</tr>
<tr>
<td>(1.204) (0.446)</td>
<td>(.359) (2.08)</td>
<td>(.449) (.299)</td>
<td></td>
</tr>
<tr>
<td>[(log) population]²</td>
<td>-.010** -.040**</td>
<td>-.011 -.022** -.005 .007</td>
<td></td>
</tr>
<tr>
<td>(.037) (.014)</td>
<td>(.012) (.007)</td>
<td>(.015) (.009)</td>
<td></td>
</tr>
<tr>
<td>(log) GDP pc</td>
<td>.036 0.895**</td>
<td>.105** .425** .103** .284**</td>
<td></td>
</tr>
<tr>
<td>(.037) (.017)</td>
<td>(.011) (.040)</td>
<td>(.015) (.062)</td>
<td></td>
</tr>
<tr>
<td>Political rights</td>
<td>-.039* .126</td>
<td>.031** .149** .027** .106**</td>
<td></td>
</tr>
<tr>
<td>(.020) (.124)</td>
<td>(.011) (.018)</td>
<td>(.008) (.025)</td>
<td></td>
</tr>
<tr>
<td>Urbanization</td>
<td>0.006 -0.035**</td>
<td>-.008** -.005* -.004 -.002</td>
<td></td>
</tr>
<tr>
<td>(0.011) (0.012)</td>
<td>(.002) (.002)</td>
<td>(.003) (.003)</td>
<td></td>
</tr>
<tr>
<td>Exp. school years</td>
<td>.020 (.056)</td>
<td>.018 (.017) .023 (.021)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.017)</td>
<td>(.017)</td>
<td></td>
</tr>
<tr>
<td>Legal Origin†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialist</td>
<td>-.0574</td>
<td>-.256** -.241*</td>
<td></td>
</tr>
<tr>
<td>(0.350)</td>
<td>(.094)</td>
<td>(.122)</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>-.060</td>
<td>-.216** -.233*</td>
<td></td>
</tr>
<tr>
<td>(0.229)</td>
<td>(.077)</td>
<td>(.102)</td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>-.423</td>
<td>.151</td>
<td></td>
</tr>
<tr>
<td>(0.287)</td>
<td>(.174)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scandinavian</td>
<td>-</td>
<td>.491**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.88)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Random part

<table>
<thead>
<tr>
<th></th>
<th>Level 1: $\hat{\sigma}_\epsilon$</th>
<th>Level 2: $\hat{\sigma}_\eta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.19.05** (.3.88)</td>
<td>-.96** (1.62)</td>
</tr>
<tr>
<td>Model $\chi^2$</td>
<td>74.1** (N= 23, Total obs. = 360)</td>
<td>434.3** (N= 168, Total obs. = 2637)</td>
</tr>
<tr>
<td>Turning point</td>
<td>-</td>
<td>79m</td>
</tr>
<tr>
<td></td>
<td>16m</td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Government Effectiveness; standard errors in parentheses; models are within-between Random Effects models calculated via Maximum Likelihood Estimation with separate coefficients for within and between effects; turning point in million population; †omitted reference category: British legal origin; * p<0.1, ** p<0.05, *** p<0.01
Table 7.5 Alternative between-effects (BE) models

<table>
<thead>
<tr>
<th></th>
<th>Global sample</th>
<th>Democracies</th>
</tr>
</thead>
<tbody>
<tr>
<td>(log) population</td>
<td>0.449*</td>
<td>0.623**</td>
</tr>
<tr>
<td></td>
<td>(0.184)</td>
<td>(0.198)</td>
</tr>
<tr>
<td>[(log) population]²</td>
<td>-0.013*</td>
<td>-0.018**</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>(log) GDP pc</td>
<td>0.416**</td>
<td>0.419**</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.049)</td>
</tr>
<tr>
<td>Political rights</td>
<td>0.145**</td>
<td>0.308**</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.116)</td>
</tr>
<tr>
<td>Urbanization</td>
<td>-0.005*</td>
<td>-0.005*</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Exp. school years</td>
<td>0.022</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Legal Origin†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialist</td>
<td>-0.220*</td>
<td>-0.200</td>
</tr>
<tr>
<td></td>
<td>(0.097)</td>
<td>(0.127)</td>
</tr>
<tr>
<td>French</td>
<td>-0.208*</td>
<td>-0.205*</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.097)</td>
</tr>
<tr>
<td>German</td>
<td>0.141</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>(0.183)</td>
<td>(0.164)</td>
</tr>
<tr>
<td>Scandinavian</td>
<td>0.542**</td>
<td>0.429*</td>
</tr>
<tr>
<td></td>
<td>(0.197)</td>
<td>(0.182)</td>
</tr>
<tr>
<td>Constant</td>
<td>-7.92**</td>
<td>-10.61**</td>
</tr>
<tr>
<td></td>
<td>(1.47)</td>
<td>(1.64)</td>
</tr>
</tbody>
</table>

Observations

<table>
<thead>
<tr>
<th></th>
<th>N= 170, Total obs.= 2669</th>
<th>N= 92, Total obs.= 1187</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model fit</td>
<td>r²=.84</td>
<td>r²=.87</td>
</tr>
<tr>
<td></td>
<td>F= 84.2**</td>
<td>F= 55.7**</td>
</tr>
<tr>
<td>Turning point</td>
<td>61m</td>
<td>30m</td>
</tr>
</tbody>
</table>

Dependent variable: Government Effectiveness; standard errors in parentheses; models are between effect models; turning point in million population; †omitted reference category: British legal origin; * p<0.1, ** p<0.01
On the variation of turning points: The discussion section mentions that the turning points, the estimates of the golden mean (H2), vary considerably, between 15m and 94m, but they do not vary randomly. It could be argued that in democracies, which show, according to the data used here, higher average government effectiveness and which are smaller on average (Congdon Fors 2014; Diamond and Tsalik 1999), economies of scale are reached at a comparatively small size and diseconomies of large size become effective more quickly than in less effective bureaucracies. The turning point is higher when the sample contains more large countries, i.e. when China and India are included or when only federal states, which tend to be larger, are considered. Being extreme outliers with regards to size, China and India have extremely high leverage on the estimated effect; when they are excluded, the golden mean for the global sample (16m) and for democracies only (15m, both from REWB models) converge considerably. Accordingly, around a population size of 15m economies of scale are effective and informal coordination mechanisms can still play out to boost effectiveness, while diseconomies are not yet at a disturbing level; this is thus the optimal middle ground between two extremes. However, when India and China are included, they change the perspective for comparison; they push one extreme far up, and a higher, although in accordance with H2 still comparably medium, population size of up to 94m is then considered the golden mean. The turning point is also relatively high when estimated on a sample of federal countries only; which confirms the intuition, forwarded among others by Diamond and Tsalik (1999), that federalism suits large states better because it counters or at least attenuates diseconomies of scale. Federal states must be considerably larger than others to reach the optimal size for high public service performance; otherwise, federalism reinforces problems in small states via fragmentation (Veenendaal 2014, 191).
### 7.1.3 Robustness checks

Table 7.6 Instrumental variable regression (two-stage least squares)

<table>
<thead>
<tr>
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<th>Global sample</th>
<th>Democracies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-stage regression</strong></td>
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<td></td>
</tr>
<tr>
<td>(log) population size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation with (log) area</td>
<td>.855**</td>
<td>.880**</td>
</tr>
<tr>
<td>Partial r²</td>
<td>.674</td>
<td>.650</td>
</tr>
<tr>
<td>Shea’s partial r²</td>
<td>.499</td>
<td>.481</td>
</tr>
<tr>
<td>F</td>
<td>156.00</td>
<td>140.25</td>
</tr>
<tr>
<td>[(log) population size]²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation with [(log) area]²</td>
<td>.834**</td>
<td>.862**</td>
</tr>
<tr>
<td>Partial r²</td>
<td>.664</td>
<td>.637</td>
</tr>
<tr>
<td>Shea’s partial r²</td>
<td>.483</td>
<td>.464</td>
</tr>
<tr>
<td>F</td>
<td>62.13</td>
<td>55.35</td>
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<tr>
<td><strong>Second-stage regression</strong></td>
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<td></td>
</tr>
<tr>
<td>(log) population size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(instrumented)</td>
<td>.885** (.292)</td>
<td>1.057** (.317)</td>
</tr>
<tr>
<td>[(log) population size]²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(instrumented)</td>
<td>-.027** (.009)</td>
<td>-0.032** (.010)</td>
</tr>
<tr>
<td>(log) GDP pc</td>
<td>.416** (.046)</td>
<td>.464** (.059)</td>
</tr>
<tr>
<td>Political rights</td>
<td>.113** (.021)</td>
<td>.245* (.101)</td>
</tr>
<tr>
<td>Urbanization</td>
<td>-.004 (.005)</td>
<td>-.006† (.003)</td>
</tr>
<tr>
<td>Expected school years</td>
<td>.036† (.020)</td>
<td>.034 (.029)</td>
</tr>
<tr>
<td>Legal Origin†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialist</td>
<td>-.083 (.108)</td>
<td>-.159 (.143)</td>
</tr>
<tr>
<td>French</td>
<td>-.200* (.092)</td>
<td>-.161 (.115)</td>
</tr>
<tr>
<td>German</td>
<td>.436* (.214)</td>
<td>.320† (.179)</td>
</tr>
<tr>
<td>Scandinavian</td>
<td>.394† (.215)</td>
<td>.271 (.188)</td>
</tr>
<tr>
<td>Constant</td>
<td>-11.41** (2.27)</td>
<td>-13.99** (2.36)</td>
</tr>
<tr>
<td>Observations</td>
<td>162</td>
<td>74</td>
</tr>
<tr>
<td>Model fit</td>
<td>r²=.80</td>
<td>r²=.85</td>
</tr>
<tr>
<td>Turning point</td>
<td>12m</td>
<td>13m</td>
</tr>
<tr>
<td>Wu-Hausman, χ² and p</td>
<td>8.01</td>
<td>p=.018</td>
</tr>
<tr>
<td>(H₀: variables are exogenous)</td>
<td>2.38</td>
<td>p=.304</td>
</tr>
</tbody>
</table>

Dependent variable: Government Effectiveness; standard errors for second stage in parentheses; turning point in million population; †omitted reference category: British legal origin; * p<0.1, ** p<0.05, *** p<0.001
### 7.2 Appendix to chapter 4

#### Table 7.7 List of interviews

<table>
<thead>
<tr>
<th>#</th>
<th>Interviewee(s)/ organization</th>
<th>Date</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Three officials at the Direction for Immigration, Ministry of Foreign and European affairs (MAEE)</td>
<td>21 Nov 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>2</td>
<td>Official at the High Commission for National Protection (HCPN) and official from the Rescue Services Agency (ASS), division of civil protection</td>
<td>22 Nov 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>3</td>
<td>Official at the Permanent Representation of Luxembourg to the EU</td>
<td>22 Nov 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>4</td>
<td>Two officials at the Association of Luxembourgish Cities and Municipalities (SYVICOL)</td>
<td>26 Nov 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>5</td>
<td>Official at the Luxembourg Red Cross (CRL)</td>
<td>27 Nov 2018</td>
<td>Bertrange</td>
</tr>
<tr>
<td>6</td>
<td>Researcher at the University of Luxembourg</td>
<td>27 Nov 2018</td>
<td>Esch-sur-Alzette</td>
</tr>
<tr>
<td>7</td>
<td>Journalist</td>
<td>3 Dec 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>8</td>
<td>Official at the Luxembourg office for reception and integration (OLAI)</td>
<td>3 Dec 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>9</td>
<td>Official at the Public Building Authority (ABP)</td>
<td>4 Dec 2018</td>
<td>Luxembourg city</td>
</tr>
<tr>
<td>10</td>
<td>Official at the Ministry of Family and Integration (MFAMIGR)</td>
<td>1 Aug 2019</td>
<td>Phone interview</td>
</tr>
<tr>
<td>11</td>
<td>Journalist</td>
<td>31 Oct 2018</td>
<td>Berlin</td>
</tr>
<tr>
<td>12</td>
<td>Official at the Federal Agency for Migration and Refugees (BAMF)</td>
<td>10 Jan 2019</td>
<td>Phone interview</td>
</tr>
<tr>
<td>13</td>
<td>Three officials at a Länderei Ministry of the Interior</td>
<td>23 Jan 2019</td>
<td>Potsdam</td>
</tr>
<tr>
<td>14</td>
<td>Official at a Länderei Ministry of the Interior</td>
<td>24 Jan 2019</td>
<td>Phone interview</td>
</tr>
<tr>
<td>15</td>
<td>Official at the Federal Agency for Migration and Refugees (BAMF)</td>
<td>4 Feb 2019</td>
<td>Phone interview</td>
</tr>
<tr>
<td>16</td>
<td>Official at the Federal Disaster Management Agency (BBK)</td>
<td>12 Mar 2019</td>
<td>Phone interview</td>
</tr>
<tr>
<td>17</td>
<td>Official at the Federal Ministry of the Interior (BMI)</td>
<td>16 May 2019</td>
<td>Berlin</td>
</tr>
<tr>
<td>18</td>
<td>Official at the Civil protection authority (THW)</td>
<td>27 May 2019</td>
<td>Phone interview</td>
</tr>
<tr>
<td>19</td>
<td>Official at the Federal Ministry of the Interior (BMI)</td>
<td>25 June 2019</td>
<td>Berlin</td>
</tr>
<tr>
<td>20</td>
<td>Official at the Federal Ministry of the Interior (BMI)</td>
<td>25 July 2019</td>
<td>Berlin</td>
</tr>
</tbody>
</table>

Note: The term "officials" broadly refers to people who worked in the named organization. The term is not further specified to ensure confidentiality, but here included are ministers, heads of agencies/departments/units and staff working in the management of relevant units. For all officials, the indicated organization is the one for which they worked during the crisis of 2015.
7.3 List of individual papers and pre-publications

This cumulative dissertation consists of an envelope (chapters 1 and 5) and three stand-alone research papers (chapters 2, 3 and 4). All three papers are single-authored.

**Chapter 2** has been published with minor changes as:


**Chapter 3** has been published as:


**Chapter 4** has not been submitted to a journal yet.

The following book chapter is related to this dissertation but not part of it: