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A General Theory of Power Concentration:

Demographic Influences on Political Organization[*]

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Abstract

Why is the exercise of political power highly concentrated in some polities and widely dispersed in others? We argue that one persistent causal factor is demographic. Populous polities are characterized by less concentrated structures of authority. To explain this relationship we invoke two mechanisms: efficiency and trust. The theory is demonstrated with a wide variety of empirical measures and in two settings: (1) cross-country analyses including most sovereign states and extending back to the 19th century and (2) within-country analyses focused on states, counties, and localities in the United States.

Introduction

Since Aristotle pondered the virtues of rule by one, few, and many the question of political concentration has played a key role in debates about good governance. Many writers believe that only when power is diffused across many levels and many institutions are conditions optimal for constraining the abuse of power, achieving stability and credible commitment, ensuring property rights, and maximizing the utility of citizens with diverse values and interests (Breton 1996; Buchanan 1995; Elazar 1987; Gordon 1999; Inman & Rubinfeld 1997; Kollman 2013; North & Weingast 1989; Oates 1972; Ostrom 1971; Tiebout 1956; Weingast 1995). Others view power dispersion more skeptically – as an invitation to special interest politics, weak government, and collective action dilemmas (Bagehot 1867/1963; Bardhan & Mookherjee 2000; Gerring & Thacker 2008; Keefer, Narayan & Vishwanath 2006; Prud'homme 1995; Schattschneider 1942). According to a third perspective, the success of dispersion is contingent, i.e., dependent on contextual factors and on the type of decentralization being considered, or mixed, setting in motion offsetting virtues and vices with no straightforward implications for the overall quality of governance (Bardhan 2002; Enikolopov & Zhuravskaya 2007; Oxhorn, Tulchin & Selee 2004; Treisman 2007; Tsebelis 2000).

In this study, we focus on the prior question. *Why* is the exercise of political power highly concentrated in some polities and widely dispersed in others? At one extreme stands North Korea, where a small cadre micro-manages the personal lives of citizens with virtually no constraints. At another extreme lie polities like India, Switzerland, and the United States – along with confederations and international organizations such as the European Union, the United Nations, and the World Trade Organization – where decisionmaking power is diffused across many independent actors. What might account for the extraordinary variation we find in power concentration throughout the world today?

While the causes of democracy have received a great deal of attention from scholars (Coppedge 2012), the sources of power concentration are less often studied. Extant work on the subject focuses mostly on the vertical dimension, i.e., the balance of power between higher- and lower-level governments. Analyses are generally centered on democracies, the OECD, and the postwar era (e.g., Arzaghi & Henderson 2005; Garrett & Rodden 2003; Gibler 2010; Hooghe & Marks 2013; Hooghe, Marks & Schakel 2010; Letelier 2005; Wibbels 2005). Many studies are limited to a small set of countries, especially those that are highly decentralized or have recently centralized or decentralized (e.g., Benz & Broschek 2013; Dickovick 2011; Eaton 2004; Eaton & Dickovick 2004; Falleti 2005, 2010; Garman, Haggard & Willis 2001; Grossman & Lewis 2014; Manor 1999; Montero & Samuels 2004; O'Neill 2005; Wibbels 2005; Willis,

Garman & Haggard 1999; Ziblatt 2006).

As a complement to these focused studies we intend to broaden the theoretical and empirical purview. Our theory encompasses both the vertical and horizontal dimensions of power. It applies to all manner of polities – supra-national, national, and subnational – so long as each unit enjoys some degree of policymaking autonomy and so long as the community of individuals within that polity is beyond the number that could conveniently congregate in one location.[1] The purview of the analysis extends throughout the modern era, inaugurated by the English, American, and French Revolutions.

With this set of scope-conditions, we argue that the degree of power concentration in a polity is affected by the number of people residing within that polity. The larger the population, the more likely that power will be diffused. Undergirding this relationship are two causal mechanisms: a search for greater *efficiency* and a quest to resolve problems of *trust*. Each of these mechanisms, we claim, exerts pressure on leaders and citizens of a large polity to diffuse power.

To test the relationship between size and power concentration we compile a cross-country dataset that incorporates most sovereign countries and a panel format extending as far back as the data will allow (in some cases to the early nineteenth century). We also provide a more focused examination of a single country – the United States – which offers a range of levels and types of government and a rich array of data with which to measure the degree of power concentration across subnational units.

The paper begins with a presentation of the argument. We then turn to crossnational empirical work on the subject, followed by a set of empirical tests. In the third section, we briefly review studies focused on the United States and then conduct our own tests. A speculative conclusion explores possible extensions of the argument.

I. Theory

A theoretical *maximum* of power concentration is achieved when a single individual or ruling group makes all important policy decisions in a polity. A theoretical *minimum* is harder to define. Taking the existence of political elites as a given, we shall say that this ideal is achieved in a setting where power is widely dispersed, where numerous actors hold effective vetoes, and where rulers are compelled to abide by these limitations (e.g., by constitutional provisions that cannot easily be changed and are enforced by an active judiciary). Henceforth, near-synonyms

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[1] In micro-communities (e.g., bands, villages, neighborhoods, city-states) citizens may implement some form of direct democracy (Raaflaub, Ober & Wallace 2007) or rely on informal, non-institutionalized mechanisms to reach decisions (Ostrom 1990). Here, power is apt to be highly diffuse for the simple reason that face-to-face networks are convenient and there is little need to concentrate authority in the hands of a single leadership group.

such as centralization, concentration, and consolidation, and antonyms such as decentralization, de-concentration, diffusion, dispersion, and fragmentation, will be used interchangeably. All are understood to refer to the overall concentration/dispersion of power in a polity.

So defined, our topic intersects with, and to some extent subsumes, adjoining topics such as constitutional federalism (Filippov, Ordeshook & Shvetsova 2004; Riker 1964; Watts 1998), regionalism and multilevel governance (Hooghe, Marks & Schakel 2010), local governance (Bardhan & Mookherjee 2006), fiscal federalism (Boadway & Shah 2009; Gadenne & Singhal 2014; Oates 1972; Rodden 2005), public administration (Dubois & Fattore 2009), separate powers (Vile 1967/1998), veto points (Tsebelis 2002), devolution (O'Neill 2000), delegation (Mookherjee 2006), direct and indirect rule (Gerring et al. 2011), consensus/majoritarian institutions (Lijphart 1999), and the size of states (Alesina & Spolaore 1997, 2003; Alesina, Perotti & Spolaore 1995; Bolton & Roland 1997; Colomer 2007; Lake & O'Mahony 2004; Wittman 1991, 2000). Each of these topics is in some respects unique, justifying the focused approach taken by extant work. Yet, there is also considerable semantic and empirical overlap across these concepts. Indeed, they are difficult to disentangle.

Consider the distinction between *vertical* concentration (e.g., between higher and lower levels of government) and *horizontal* concentration (i.e., between political bodies at a single level of government). While useful for many purposes this distinction is not entirely clear-cut, as the two dimensions of power tend to intermingle (Hueglin & Fenna 2006). Let us consider a few examples. First, constitutional federalism is almost invariably combined with a second legislative chamber whose goal is to represent subnational polities (aka states, territories, or provinces), and whose representation is usually asymmetric with the lower house, generating a consequential division between the two chambers. Second, separate powers at the national level – between the executive and legislature – probably reinforce federalism, while federalism reinforces separate powers (Cameron & Falleti 2005: 257; Eaton 2004: 20-22). Third, both separate powers and federalism enhance the development of judicial review (Whittington 2009), and judicial review may help to entrench separate powers and federalism (Johnston 1969). More generally, it may be argued that divisions between branches at the national level enhance the power of subnational political forces, while powerful subnational forces enhance divisions at the national level. Vertical and horizontal fragmentation is mutually constitutive. From this perspective, and because of our quest for a unified theory, it seems appropriate to treat vertical and horizontal dimensions as manifestations of a single latent concept.

Although we strive for an encompassing definition of power concentration we do not intend to envelope the adjacent concept of *regime-type*. Democracy, we shall assume, may be

achieved in highly concentrated polities (e.g., the United Kingdom, until quite recently) or highly de-concentrated systems (e.g., the United States). Likewise, undemocratic polities may be concentrated (e.g., the French and Spanish empires and contemporary North Korea) or de-concentrated (e.g., the British and Ottoman Empires and contemporary China). Of course, we recognize that the nature of a regime affects the degree to which power can be concentrated or de-concentrated at any given point in time. There are also important interactions between institutions that structure regimes and institutions that structure power concentration, complicating our ability to test arguments focused on the latter. These difficulties notwithstanding, regime-type serves as a background condition – not a constitutive element – of power concentration. We assume the causes of regime-type are not identical to the causes of concentration.

Causes

Extant research on our topic is focused mostly on the vertical dimension of power – especially constitutional federalism and fiscal federalism[2] – and on proximal causes of centralization, e.g., the dynamics of party competition, the interplay between national and subnational elites, and economic crisis (e.g., Benz & Broschek 2013; Crémer & Palfrey 1999; Dickovick 2011; Eaton & Dickovick 2004; Falleti 2005, 2010; Grossman & Lewis 2014; Manor 1999; Montero & Samuels 2004; O'Neill 2005; Strøm & Graham 2014; Wibbels 2006).

 While proximal factors are obviously important, we should not lose sight of less visible distal factors that may be operating beneath the surface. This includes technology (communications, transport, military), geography, economic development, urbanization, inequality, globalization, external threats (including outright war), colonial heritage, ethnocultural diversity, and regime-type (Arzaghi & Henderson 2005; Dickovick 2011; Eaton & Dickovick 2004; Garrett & Rodden 2003; Gibler 2010; Hooghe & Marks 2013; Hooghe, Marks & Schakel 2010; Letelier 2005; Manor 1999; Strøm & Graham 2014; Veliz 1980; Wibbels 2005). We suspect that most of these factors are limited in purview: they may affect some aspects of power concentration but not others. Some evidence will be offered for this conjecture, though it is not our goal to comprehensively assess all possible influences on this outcome.[3]

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[2] A good deal of the literature on vertical concentration is concerned with what has been labeled the *assignment problem*, i.e., the appropriate allocation of specific duties and responsibilities across levels of government. Our concern is not with who does what (specifically) but rather with the *overall* concentration or dispersion of power in a polity.

[3] We assume that ideational factors are pervasive. De-concentrated political institutions are more likely to be instigated and reproduced when actors believe they provide better governance, and the popularity of decentralization has waxed and waned over the past century, influencing the spread – and now, perhaps, the retraction – of decentralization initiatives (Manor 1999). However, to say that actors are responsive to ideas offers

Our goal is to home in on one distal cause that, we conjecture, is fairly universal, namely, the size of a polity, understood as the number of permanent residents within its boundaries.[4] This provides the foundation for a general theory of power concentration. Before sketching that theory it is important to appreciate the changing historical role of size as a limiting condition of politics.

In the pre-modern era, population and power concentration were, by most accounts, strongly correlated (Downing 1992; Ember 1963; Ember, Ember & Russett 1997; Feinman 2011; Gledhill, Bender & Larsen 1988; McIntosh 1999; Stevenson 1968; Vengroff 1976).[5] Large states and empires were highly concentrated (taking into account technological constraints operating at the time), and smaller bands and tribes less so. The reasons for this may be briefly reviewed, building on the literature cited above. First, the establishment of concentrated authority was critical to the rise of civilization, including population growth. Second, a large population fueled the concentration of the state apparatus by providing opportunities for revenue extraction, including forced labor. Third, populations were generally incorporated and controlled by military force, so a synergy existed between control and size – with strong states gaining population and weak states losing population. For all these reasons, size and power concentration were inseparable through most of human history, though it would be complicated to sort out cause and effect. (Presumably, they influenced each other in a reciprocal fashion, as suggested by this short explanatory sketch.)

In recent times, due to developments in technology, ideology, and political organization, relationships between state and society have changed in fundamental ways. First, the demographic transition plays out in ways that are difficult for states to control. It is no longer the case that centralized governance paves the way for population growth; if anything, it is the reverse.[6] Second, state boundaries, once fluid, are now fairly rigid. Once a state gains international recognition its borders tend to remain fairly static through time. Inter-state conflict, though persistent, does not usually result in a dramatic realignment of borders (Zacher 2001). This means that the longstanding association between militarily strong – and presumably highly concentrated – states and expanding territory no longer exists, or barely exists. Even

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an explanation that is nearly circular. A better explanation would reveal the prior causes of those ideas. Our hypothesis focuses on the size of a polity.

[4] An early formulation of this theory, focused on territory rather than population, can be found in Dahl & Tufte (1973: 40).

[5] Osafo-Kwaako & Robinson (2013) reaffirm this classical view, though they argue that Africa does not fit the mold. Note that the classical view is often focused on population density, whereas our focus is on total population. However, most of the arguments about density also apply to population.

[6] While aggressive population policies – either pro-natalist or anti-natalist – are fairly common, many demographers view such efforts as having only a marginal influence on the long-run growth of populations (Childs et al. 2005; van de Kaa 2006).

weak states survive (Diehl & Goertz 1992; Jackson & Rosberg 1982). Third, border changes, when they do occur, generally follow a logic of fission or fusion among peoples rather than the naked expropriation of territory by states. When borders realign it is usually with the approval, and often the connivance, of populations on the ground. People choose states, in addition to states choosing people.[7]

These historic transformations in the relationship of states and populations suggest that demographic factors may now serve as a largely exogenous force in political development, and that the direction of that influence may be very different in the modern era.[8] We argue that a polity's institutions are affected by the population that it has, or aspires to have (if the polity is not yet formed or is at a re-founding juncture). The larger the polity, the more fragmented its institutional design.

By way of entrée, let us consider an example of nested polity types: (1) United Nations (global), (2) European Union (supra-national), (3) France (national), (4) Midi-Pyrenees (regional), (5) Haute-Garonne (departmental), (6) Toulouse Métropole (metropolitan), and (7) Toulouse (commune). Because these governing units are nested within each other we can compare political organization across levels, holding constant some of the historical and cultural factors that might be expected to influence constitutional choices. A glance at our exemplars suggests that power at top levels is fairly diffuse, with numerous limitations on the exercise of executive power and most consequential decisions reserved for lower levels. Power at bottom levels is more concentrated, with fewer horizontal or vertical constraints.[9]

Of course, polities at lower levels face constraints from above – France is constrained by the EU just as Toulouse (commune) is constrained by Toulouse Metropole. However, our theory pertains to the internal organization of polities, not external constraints. One must also appreciate that comparisons across levels of government are fraught with complications since each level carries a different constitutional mandate, and some of the institutional features of interest to us may derive from those differing mandates. That is why most of the analyses to

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[7] At one point or another in history, migration accounts for the original inhabitants of all areas of the world except East Africa (the generally acknowledged point of origin of the human species). Our concern is with migration occurring over the past two centuries and its possible association with the outcomes of interest. A recent study of this subject finds that states exercised little control over their citizens' comings-and-goings until the contemporary era, at which point democracies began to limit in-migration while autocracies limited out-migration. The net effect is a shift of citizens from democracies to autocracies (Breunig, Cao & Luedtke 2012). It is unclear whether the numbers involved are sufficient to impact the causal analyses presented in the following section. To the extent that it might, the impact of migration seems to run counter to our hypothesis and thus makes any positive effect of population on power diffusion/constraints less likely.

[8] This fits with a growing body of work that regards demography as a moving force of history (Goldstone et al. 2011).

[9] Fodder for this gross generalization may be found in Cole (2010: 307), Loughlin (2007), Loughlin et al. (2001). [To scour]

follow in the empirical section of this study focus on comparisons across the *same type* of polity. Nonetheless, it is consistent with our theory that variations across different levels of government usually correspond to variations in power concentration. The largest polities tend to be the least centralized; the smallest polities are generally the most centralized.

A schematic illustration of the theorized relationship between size and concentration is provided in Figure 1. Here, we visualize three exemplars, where the size of each shape indicates the size of its population. The large polity features many independent power centers – three at the top tier, thirteen at the second tier, and twenty-three at the lowest tier. The medium-sized polity features just two tiers, with just two independent power centers at the top tier and twelve at the bottom tier. The small polity has no independent power centers and is thus highly concentrated. The modular quality of Figure 1 corresponds neatly to our theory – though it must be stressed that this is a highly stylized representation.

Figure 1: Schematic Rendering of Polity Size and Concentration
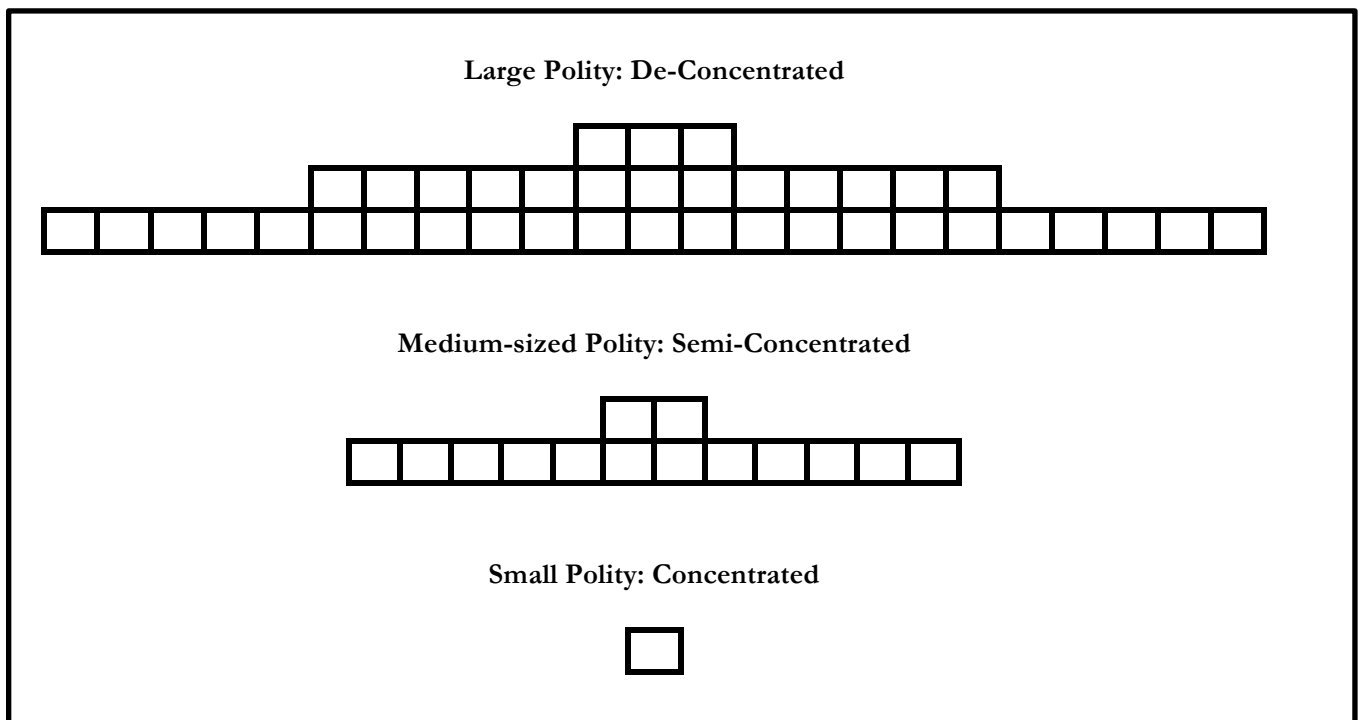
Subdivisions within a polity represent independent power centers, organized vertically and horizontally.

To explain the apparent connection between demography and institutions we identify two likely causal mechanisms – efficiency and trust. In sketching out these mechanisms we consider the dynamic that obtains when the population of a polity grows while other conditions remain the same. In this setting we surmise that leaders face pressure to place limits on the

exercise of power, either by fragmenting power at the center (horizontal de-concentration) and/or devolving power from center to periphery (vertical de-concentration). Sometimes, these institutional reforms are undertaken in an explicit and intentional fashion, e.g., by statute or constitutional reform. At other times they occur unobtrusively, perhaps even without notice.

Efficiency

The size of a polity affects the relative efficiency of different organizational forms (Hooghe & Marks 2013). Because of its larger tax base, as well as presumed economies of scale, a large polity can afford to develop highly de-concentrated political and administrative structures staffed with well-trained personnel. More importantly, the complexity of tasks facing a large polity may require a more diffuse structure of decisionmaking and implementation. Note that larger populations are generally more heterogeneous. Heterogeneity is manifested in the cultural sphere, i.e., in core values, ways of life, languages, religions, ethnicities, and so forth. It is also manifested in the economic sphere, as larger populations are likely to generate more diverse economies and hence a greater variety of sectors, occupations, and social strata. We shall assume that heterogeneity – cultural and/or economic – enhances the challenges of governance. Informational inputs are a lot more complicated and one-size-fits all solutions are unlikely to be very satisfactory. From this perspective, de-concentration is not simply a luxury afforded to a larger polity but also a functional necessity.

Work across many disciplines suggests that the size of a unit enhances its complexity, and complexity stimulates greater specialization (aka division of labor). Research has identified such a relationship in sociobiology, where it is found at the level of individual organisms as well as animal societies (Bonner 1988, 2004; Jeanson et al. 2007), in human economies and societies (Carneiro 1967; Durkheim 1893/1964; Smith 1776), in firms (Chandler 1962; Chaney & Ossa 2013; Penrose 1959), and in professional associations (Campbell & Akers 1970). It seems plausible that the same law might hold true for polities, where the size of a community enhances the complexity of governance tasks. Leaders must gather information on citizens, synthesize that information into the decisionmaking process, and then implement appropriate policies. With a larger population there are more people to monitor, to comprehend, to rule, and a greater number of demands to process (even if leaders are concerned only with stability and not with representing the interests of their constituents).

Of course, greater specialization, by itself, does not mandate de-concentration of power. (Consider insect colonies, primate colonies, and many pre-modern polities.) However, in the modern era, and in human societies, there is good reason to suppose that specialization and de-

concentration go hand in hand. Research on firms suggests that this is the case (Bloom, Sadun & Van Reenen 2012; Miller 1992: ch 4), and the same dynamics may also apply on a broader scale to polities. Miller (1992: 79) points out that "even the most autocratic executives find that they must depend on subordinates with the knowledge of 'particular circumstances of time and place.' This information monopoly…makes necessary some degree of delegation or sharing of decision-making authority." Arguably, there are few benefits to specialization unless accompanied by a degree of policymaking autonomy. Vertical and horizontal deconcentration ensures that administrators possess the local knowledge they need to make the right decisions and can make adjustments to those decisions as needed (Hooghe & Marks 2013).

It follows that as a population grows leaders may be obliged to institute a division of labor among administrators and/or elected officials, with different bodies having jurisdiction over different policies and/or different peoples. Horizontal de-concentration involves the development of different institutions to serve different functions (e.g., executive, legislative, and judicial) or constituencies – e.g., native courts and colonial courts, as in the classic modality of indirect rule (Lange 2009; Morris 1972), laws that apply differentially to citizens of diverse faiths (Waldron 2002), and so forth. Vertical de-concentration is practicable wherever preferences, values, and identities are geographically aligned. Here, Pareto optimal outcomes may be attained by devolving power to subnational bodies (Alesina et al. 1995: 754; Besley & Coate 2003; Bolton & Roland 1997: 1057-58; Breuss 2004: 40; Hooghe & Marks 2013: 181; Musgrave 1959; Oates 1972; Rubinchik-Pessach 2005). Note that vertical de-concentration is efficient only if externalities across regions are limited. Here, too, size also makes a contribution, as a larger subnational grouping is more likely to internalize costs and benefits (Hooghe & Marks 2013: 181; Oates 2005, 357). It is therefore easier to decentralize power without introducing negative externalities in a large polity than in a small polity.

Trust

Efficiency is assessed according to material metrics of wellbeing, e.g., income, health, education, infrastructure, and the like. Trust engages a different dimension and calls forth somewhat different demands on government. Note that the problem of trust cannot be solved simply by adjusting policy outputs, and often runs contrary to considerations of efficiency.

Trust engages questions of security and respect, i.e., non-tangible goods. Trust is also forward looking; it concerns actions that may (or may not) be taken in the future. When a group distrusts government it means that they are anxious about what that government might do next. Concentrated bodies, by their very nature, are incapable of achieving credible commitment to

policies that they might pursue in the future (North & Weingast 1989). As such, the problem of trust augurs for institutional solutions, i.e., constraints on the center that cannot be easily overcome, regardless of who happens to control the executive.

Research suggests that feelings toward government are affected by the size of government. "Big government" (understood here as a unit that rules over large masses of people) is distrusted while "small government" (a unit that rules over a small, and presumably local, group of people) is trustworthy. Consequently, local institutions are generally more trusted than regional institutions, regional institutions are more trusted than national institutions, and national institutions are more trusted than supra-national institutions (Berezina & Diez-Medrano 2008; Nielsen 1981). Likewise, trust in large states is lower than in small states (Matsubayashi 2007; Turner 2011), and across localities with identical functions larger localities garner lower trust than smaller localities (Denters 2002). Size is also inversely correlated with political participation, efficacy, and satisfaction with democracy (Hansen 2014; Lassen & Serritzlew 2011; Oliver 2000; Remmer 2010; Weldon 2006) – features that we presume are correlated with political trust. In sum, a body that stands closer in proximity to the citizen is apt to be trusted more than one that stands afar, all other things being equal.[10]

A polity need not be responsive or in any respect democratic in order for considerations of trust to come into play. Even when state elites are not inclined to implement citizen demands they must be cognizant of the costs of maintaining a form of political organization that is not perceived as legitimate. Illegitimacy may result in lax observance of the laws, tax avoidance, refusal of military service, and at the limit, secession – costs that even the most authoritarian ruler is obliged to reckon with.

By way of illustration, let us consider an oft-noted dynamic in the founding or reform of polities. Here, fissiparous groups may be granted a share of power, a guarantee of rights, or a constitutional settlement that assures their rights, as a condition of their agreement to join (or remain within) a larger polity (Arzaghi & Henderson 2005; Lijphart 1977; Riker 1964; Stepan

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[10] the lack of trust accorded to distant rulers in a centralized policy might be understood as a rational response to uncertainty; if one cannot assure that one's policy preferences will be respected it is logical to demand a devolution of power to those who are more likely to share one's policy preferences, or whose actions can be more effectively monitored and controlled. Or, there may be a primordial connection between polity size and legitimacy deeply rooted in human evolution, and therefore not a purely rational response to uncertainty. Arguably, the roots of group identity and corresponding suspicion of perceived outsiders is sociobiological insofar as evolutionary pressures favor cooperation among small groups that are geographically separated from one another (Hamilton 1964; Olsson, Ebert, Banaji & Phelps 2005). If so, the norm of "self-rule" is as old as group identity and follows logically from the latter. Note that local rule usually corresponds to rule by people who are perceived to be "like us," while distant rule corresponds to rule by people who are classified as "them." A third possibility is that the norm of self-rule, evidenced by the rise of ethno-nationalism as a global ideology, is a response to modernity and therefore neither purely rational (in the narrow sense of maximizing utility) nor sociobiological (Gellner 1983; Hechter 2009: 292; Kedourie 1960).

1999). In this manner, vertical or horizontal de-concentration serves as a pre-condition for the birth or survival of a polity. Of course, changes to the structure of a polity are not always based on threats of dissolution. Many changes, especially those that do not involve constitutional features of a polity, occur in an incremental fashion and are scarcely perceptible except over long periods of time. This would include levels of revenue and expenditure and other more nuanced measures of relative power (see Sections II-III). Insofar as demography functions as a cause of anything at a macro-level it is often a subtle relationship, more apparent in spreadsheets than in newspaper headlines or history texts. Even so, the highly visible, macro-level negotiations noted above may be indicative of a pervasive political dynamic, one that affects power negotiations at every level.

II. Cross-Country Analyses

While the relationship of size to democracy is a storied topic (Anckar 2008; Dahl & Tufte 1973; Gerring et al. 2015; Ott 2000; Veenendaal 2013), the relationship of size to political concentration is less often attended to. Five recent crossnational studies attempt to probe this relationship with non-negligible samples (Arzaghi & Henderson 2005; Garrett & Rodden 2003; Hooghe & Marks 2013; Panizza 1999; Treisman 2006). Among these studies, country samples vary from 39 to 66 (with an average of 52), temporal coverage varies from 3 to 57 years (with an average of about 7), and four outcomes are considered – government consumption, constitutional federalism, regional authority, and fiscal decentralization – as summarized in Table 1.

Table 1: Recent Crossnational Studies

Study	Countries	Period	Outcome	Size	Finding
Arzaghi & Henderson 2005	48	1975-1995	Gov consumption	Population	+
				Territory	0
			Federalism	Population	0
				Territory	+
Garrett & Rodden 2003	47	1982-1989	Fiscal decentralization	Population	0
				Territory	+
Hooghe & Marks 2013	39	1950-2006	Regional authority	Population	+
				Territory	0
Panizza 1999	60	1975-1985	Fiscal decentralization	Population	0
				Territory	+
Treisman 2006	66	1993-95	Fiscal decentralization	Population	0
				Territory	+
MEAN or TOTAL	52	6.6	4	Population	2/6
				Territory	4/6

Units of analysis: countries or country-years. *Countries/Period:* refers to the largest sample in which population or land area is included as part of the analysis. *Finding:* size is correlated with dispersed power in a cross-sectionally dominated analysis (+) or not (0).

All five studies test both population and territory as predictors of de-concentration. These measures are transformed by the natural logarithm in accordance with the well-established notion that their impact on various outcomes depreciates in a sub-linear fashion. Most analyses are cross-sectionally dominated, as the variables of interest tend to be sluggish and offer few opportunities for through-time analysis. (Where authors include both, we focus on the cross-sectional analysis.) Territory fares better as a predictor of de-concentration, achieving statistical significance and robustness (in various specification tests) in 4 out of 6 analyses, as shown in the final columns of Table 1. Population is vindicated in only 2 out of 6 analyses.

One must bear in mind that the chosen samples in these studies are relatively small and centered on the OECD, and thus un-representative of the universe of nation-states. Likewise, only four measures of de-concentration are tested, a rather meager representation of this vast – and difficult-to-operationalize – subject. Note that constitutional federalism can be defined and measured in many different ways; as a result, extant measures demonstrate little convergent validity (Blume & Voigt 2011). Fiscal decentralization, as measured by the IMF's Government Finance Statistics, leaves aside the question of autonomy (are local revenue raisers able to set their own rates and spend money in ways they see fit?)[11] Moreover, none of the studies reviewed in Table 1 address the possible causes of *horizontal* concentration.

Outcomes

In situations where individual measures of a concept are problematic it makes sense to draw on multiple measures. We regard this as a form of triangulation. If a relationship demonstrates persistence across many indicators, measurement error is less worrisome. Broadening the empirical field should also make the theory more falsifiable, as it has more chances to fail. Additionally, we may be able to provide clues to the probable scope of the theory. For all these reasons, a wide-angle approach seems worthwhile.

Our analysis encompasses all facets of power concentration, including both horizontal and vertical dimensions, so long as they can be measured reliably across a large number of countries (100+), representing all regions of the world. Where multiple indicators purport to measure the same concept, we choose that indicator in which we have greatest confidence and/or which offers the most extensive coverage.

In this fashion, we arrive at a set of nineteen measures. Many are derived from the recently completed Varieties of Democracy project ("V-Dem"; Coppedge et al. 2015). Others

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[11] For further discussion see Gadenne & Singhal (2014), Hooghe & Marks (2013), Rodden (2004).

are constructed from the Comparative Constitutions Project ("CCP"; Elkins, Ginsburg & Melton 2009), the Database of Political Institutions ("DPI"; Beck et al. 2001), the Political Constraints index ("PolCon"; Henisz 2002), Government Finance Statistics ("GFS"; International Monetary Fund), World Development Indicators ("WDI"; World Bank various years), and Centripetalism (Gerring & Thacker 2008). Readers are referred to these sources for in-depth discussion of coding procedures and sources. One variable is constructed from original data collection by the authors, as described below.

The first set of indicators focuses primarily on vertical concentration (i.e., centralization). *Federalism* is understood as an institutionalized division or sharing of responsibilities between a national authority and semiautonomous regional units, usually codified in a constitution. Following Gerring & Thacker (2008: 88), polities are coded 0 if they are nonfederal (regional governments, if they exist, are granted minimal policy-making power), 1 if they are semifederal (there are elective governments at the regional level but constitutional sovereignty is reserved to the national government), or 2 if they are fully federal (elective regional governments plus constitutional recognition of subnational authority). *Subnational government layers* is comprised of two variables measuring whether (a) local or (b) regional governments exist, as coded by research assistants and regional experts enlisted by V-Dem. These are added together to form a three-level index: 0=none, 1=one level, or 3=both levels. *Subnational elections* measures the existence or non-existence of elections at subnational levels, as coded by country experts enlisted by the V-Dem project. *Autonomous regions* measures the existence/nonexistence of regions enjoying substantial autonomy from the national government, as coded by the DPI. *Revenue decentralization* is subnational revenue considered as share of total public revenue, based on the GFS and compiled by Enikolopov & Zhuravskaya (2007). *Government consumption* includes all (central) government current expenditures for purchases of goods and services, including payment of employees and most expenditures on national defense and security (but not those considered part of government capital formation), considered as a share of GDP, as compiled by the WDI.[12]

A second set of indicators focuses primarily on horizontal concentration at national levels. *Separate powers* is coded as 1 if the dominant executive (either the head of state or head of government) is directly elected, 0 otherwise, based on coding by research assistants enlisted by the V-Dem project. *Divided party control* measures the extent to which a single party or coalition

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[12] Because this variable focuses on the central government it offers an informative measure of the extent to which that government is able to extract resources and control the economy (Arzaghi & Henderson 2005; Oates 1972). Though it does not focus explicitly on decentralization it complements our measure of revenue decentralization, offering superior coverage across countries and through time.

controls both the executive and legislative branches of national government, based on coding by country experts enlisted by the V-Dem project. *Decentralized parties* measures how decentralized the process of candidate selection for the national legislature is – specifically, the extent to which national party leaders control the process or share power with constituents and local and regional party actors, as judged by country experts enlisted by the V-Dem project.[13] *Judicial review* attempts to judge whether any court in the judiciary has the legal authority to invalidate governmental policies (e.g. statutes, regulations, decrees, administrative actions) on the grounds that they violate a constitutional provision, as coded by country experts enlisted for the V-Dem project. *Constitution length* records the number of words in the constitution, as recorded by the CCP. *Constitution scope* judges the scope of a constitution based on the proportion of selected issues that are covered, following standard CCP categories. *Constitution rigidity* measures the number of actors required to approve constitutional amendments, according to the constitution, as coded by the CCP.[14] *Bicameralism* measures the existence of two chambers in the national legislature and – if they exist – how closely matched their powers are, based on the coding of country experts enlisted by the V-Dem project. (If one chamber overshadows the other we regard this as an example of weak bicameralism.) *Legislative committees* measures whether the lower (or unicameral) chamber of the legislature has a functioning committee system and, if so, whether they are permanent (or special) and whether they have a strong influence on the course of policymaking, as coded by experts enlisted for the V-Dem project. *Legislative fractionalization* measures the probability that two randomly drawn representatives from the lower (or unicameral) chamber of the legislature will be from different parties, as measured by the PolCon dataset. *Political constraints* refers to "the extent to which a change in the preferences of any one actor may lead to a change in government policy" (Henisz 2002: 363), taking into account the number of independent branches of government and the preferences of each of these branches, as measured by the PolCon dataset. *Checks & balances* refers to "the number of veto players in a political system, adjusting for whether these veto players are independent of each other, as determined by the level of electoral competitiveness in a system, their respective party affiliations, and the electoral rules" (Beck et al. 2001), as measured by the DPI and transformed by the natural logarithm.

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[13] Following a long tradition of work, we regard the structure of parties as a key element of centralization (Filippov, Ordeshook & Shvetsova 2004; Riker 1972; Rodden 2005; Samuels & Shugart 2010; Wibbels 2006; Willis, Garman & Haggard 1999), and candidate selection as a key influence on the relative centralization of parties (Gallagher & Marsh 1988).

[14] This measure of rigidity seems superior to others by virtue of offering significant variation across polities and strong country coverage. We do not regard actual constitutional changes as indicative of rigidity because of the confounding feature that more detailed constitutions – fostered by larger countries – are likely to need more frequent revision.

A final indicator, *Capital city*, encompasses both vertical and horizontal dimensions of power concentration. Here, we measure the population of the capital city in a polity as a share of that polity's total population, transformed by the natural logarithm (Authors). This is regarded as a summary measure of concentration, following the assumption that in polities where power is concentrated both material resources and human resources will be concentrated at the center.[15] Note that most of the tests that follow include a covariate measuring overall urbanization, so as not to confuse the status of the capital city with demographic conditions obtaining in the country at large.

This set of nineteen indicators of concentration offers a broad – but certainly not comprehensive – survey of the topic. Note that virtually any feature of government may be viewed as indicative of power concentration; as such, our topic is unbounded. One might, for example, examine particular policy areas to gauge which actors are actively engaged in policymaking and, accordingly, how concentrated that policy-area is. Sophisticated efforts of this nature (e.g., Hooghe & Marks 2010; Hooghe et al. 2016) are limited in coverage and thus not relevant for present purposes. Nonetheless, there is no reason in principle why finely-honed indicators could not be expanded to include a broader sample of countries.[16]

Summary features of the chosen outcomes are listed in Table 2. In addition to sources, we indicate coverage – number of countries, years, and observations – for each measure of concentration. We also show descriptive statistics – mean, standard deviation, and the scale of the index. Note that chosen indicators include a mix of continuous, left-censored, ordinal, and binary scales. All are re-scaled to 0-1 so that results can be easily compared.

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[15] Galiani & Kim (2011: 128) comment: "First, government agencies and workers are concentrated in capital cities. Second, since governments make laws and redistribute income, capital cities may attract significant lobbying activity. To the extent that political corruption or rent-seeking behavior contributes to primacy, their impact is likely to be manifested in the growth of capital cities. Finally, capital cities may attract a disproportionate share of government resources for local infrastructure and amenities." Note that previous work (Ades & Glaeser 1995; Henderson 2003) focused on the population of capital cities, which seems less useful for present purposes.

[16] One apparent omission deserves special mention. We do not regard *electoral rules* as having a predictable impact on centralization or decentralization. Note that district magnitude, probably the most important aspect of electoral law, has offsetting effects. Larger districts generally enhance the size of the party system but also enhance the role of national party elites in candidate selection. An increase in district magnitude thus decentralizes the party system while centralizing parties. Moreover, the impact of electoral laws is dependent upon contextual factors that are difficult to anticipate, and are open to change.

Table 2: Outcome Measures and Estimation Strategies

Measure		Coverage			Description			Tests		
Indicator	Source	Countries	Years	Obs	Mean	SD	Scale	Pooled	Panel	H
1. Federalism	Centripetalism	160	103	6,354	0.191	0.374	Ordinal	O. logit		+
2. Subnational gov. layers	V-Dem	171	115	16,181	0.931	0.176	Ordinal	O. logit		+
3. Subnational elections	V-Dem	172	115	16,212	0.638	0.291	Continuous	OLS	RE	+
4. Autonomous regions	DPI	176	38	6,139	0.122	0.327	Binary	Logit		+
5. Revenue decentraliz.	GFS	103	29	1,398	0.282	0.241	Continuous	OLS	RE	+
6. Gov. consumption	WDI	176	51	6,638	0.188	0.092	Continuous	OLS	RE	−
7. Separate powers	V-Dem	174	115	16,477	0.232	0.422	Binary	Logit		+
8. Divided party control	V-Dem	174	115	16,106	0.549	0.266	Continuous	OLS	RE	+
9. Decentralized parties	V-Dem	174	115	16,281	0.339	0.199	Continuous	OLS		+
10. Judicial review	V-Dem	174	115	16,403	0.543	0.293	Continuous	OLS		+
11. Constitution length	CCP	197	225	960	0.031	0.080	Continuous	OLS		+
12. Constitution scope	CCP	195	225	765	0.575	0.158	Continuous	OLS		+
13. Constitution rigidity	CCP	191	225	906	0.318	0.265	Ordinal	O. logit		+
14. Bicameralism	V-Dem	183	115	17,547	0.344	0.328	Continuous	OLS		+
15. Legislative committees	V-Dem	172	115	12,106	0.533	0.173	Continuous	OLS	RE	+
16. Legislative fractionaliz.	PolCon	156	213	8,504	0.477	0.289	Censored	Tobit	RE	+
17. Political constraints	PolCon	165	213	14,808	0.220	0.290	Censored	Tobit	RE	+
18. Checks & balances	DPI	177	38	6,004	0.246	0.229	Continuous	OLS	RE	+
19. Capital city	Authors	186	111	19,895	0.509	0.120	Continuous	OLS	RE	−

All variables re-scaled from 0-1. **H:** hypothesized relationship to polity size. *O. logit:* ordered logit. *RE:* random effects.

In the final columns of Table 2 we preview empirical tests to come. Following the distributions suggested by each scale, we adopt a variety of estimators in pooled regression tests. Ten of the chosen outcomes are suitable for panel analysis, which is to say there is a sufficiently long time-series with significant variation over time in the outcome of interest. These outcomes will be analyzed with a random effects estimator and a lagged dependent variable. Finally, Table 2 notes the hypothesized relationship of polity size to the chosen indicator. Measures of concentration (Government consumption and Capital city) are expected to be negatively correlated with polity size, while measures of dispersion (all others) are expected to be positively correlated.

Appendix A includes a number of additional descriptive analyses pertaining to the chosen outcomes. Table A3 shows that they are generally (but not always) correlated with one another in the expected direction. A principal components analysis, shown in Table A4, shows the first component explains only a small portion (about a fourth) of the variance. (For this reason, attempting to reduce the information contained these indicators to a smaller number of dimensions based on some version of factor analysis seems impracticable.) Evidently, these nineteen indicators are capturing multiple dimensions of the underlying concept. This sets a high bar to empirical confirmation. It is plausible that a single variable may be correlated by accident with multiple highly correlated outcomes. It is less likely that a single predictor will be correlated by accident with multiple weakly correlated outcomes.

Tests

In Table 3, we summarize a broad array of tests focused on population as a predictor of power concentration. To economize, we show estimates only for the key variable of theoretical interest – population (logged). Each cell thus represents a separate regression analysis – 175 in all. Complete results from these tests are included in Appendix B and further information on definitions, coding, and sources for covariates can be found in Table A1.

Table 3: Cross-country Tests of Power Concentration

Analysis *Population* *Sample*	Pooled t-1 Full 1	Pooled t-1 Full 2	Pooled t-1 Full 3	Pooled t-50 Full 4	Pooled 1900 Full 5	Pooled 1900 2000 6	Pooled t-1 Imputed 7	Pooled t-1 Electoral 8	Panel t-1 Full 9	Pooled t-1, IV Full 10
Vertical										
1.Federalism	1.028***	0.362***	1.126***	0.986**	0.834**	0.732***	0.277***	1.097***		0.643***
	(0.310)	(0.129)	(0.307)	(0.400)	(0.330)	(0.282)	(0.068)	(0.328)		(0.119)
2.Subnational gov layers	0.546**	0.513***	0.789*	0.331	0.353	1.289*	0.335***	0.477*		0.026**
	(0.271)	(0.110)	(0.416)	(0.282)	(0.233)	(0.711)	(0.093)	(0.256)		(0.010)
3.Subnational elections	0.037***	0.048***	0.038***	0.034***	0.031***	0.028**	0.014***	0.031***	0.003***	0.038***
	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)	(0.014)	(0.003)	(0.010)	(0.001)	(0.012)
4.Autonomous regions	0.555**	0.496***	0.482*	0.718**	0.419*	0.687	0.404***	0.543*		0.170
	(0.267)	(0.151)	(0.255)	(0.296)	(0.225)	(0.456)	(0.113)	(0.286)		(0.138)
5.Revenue decentraliz.	0.080***	0.048***	0.073***	0.099***	0.069***	0.033***	0.010***	0.083***	0.005***	0.123***
	(0.011)	(0.015)	(0.012)	(0.014)	(0.014)	(0.010)	(0.002)	(0.012)	(0.002)	(0.021)
6.Government consumpt.	-0.014***	-0.014***	-0.013***	-0.005	-0.010***	-0.003	-0.009***	-0.009**	-0.001**	-0.014***
	(0.004)	(0.002)	(0.003)	(0.004)	(0.003)	(0.004)	(0.002)	(0.004)	(0.000)	(0.005)
Horizontal										
7.Separate powers	0.416***	0.192***	0.357**	0.314*	0.269**	0.373**	0.086	0.541**		0.174*
	(0.139)	(0.070)	(0.165)	(0.161)	(0.114)	(0.177)	(0.065)	(0.227)		(0.091)
8.Divided party control	0.023**	0.021***	0.026***	0.030***	0.024**	0.045**	0.005*	0.029***	0.002**	0.017
	(0.009)	(0.007)	(0.010)	(0.011)	(0.009)	(0.018)	(0.003)	(0.011)	(0.001)	(0.013)
9.Decentraliz parties	0.026***	0.021**	0.025**	0.022**	0.024***	0.019**	0.010***	0.030***		0.021**
	(0.008)	(0.009)	(0.010)	(0.009)	(0.008)	(0.008)	(0.003)	(0.009)		(0.009)
10.Judicial review	0.021*	0.022**	0.018	0.006	0.020*	0.021*	0.012***	0.027**		0.025*
	(0.012)	(0.011)	(0.013)	(0.013)	(0.011)	(0.012)	(0.003)	(0.012)		(0.014)
11.Constitut. length	0.000***	0.000	0.000***		0.000*		-0.000	0.000**		-0.000
	(0.000)	(0.000)	(0.000)		(0.000)		(0.001)	(0.000)		(0.000)
12.Constitut. scope	0.022***	0.012*	0.020***		0.012*		0.006***	0.026***		0.001
	(0.006)	(0.006)	(0.007)		(0.006)		(0.002)	(0.009)		(0.008)
13.Constitut. rigidity	0.216***	0.024	0.051		0.155*		0.029	0.262***		-0.054
	(0.073)	(0.045)	(0.085)		(0.081)		(0.018)	(0.099)		(0.082)
14.Bicameral-ism	0.061***	0.055***	0.059***	0.059***	0.053***	0.053***	0.019***	0.078***	0.005***	0.054***
	(0.010)	(0.009)	(0.013)	(0.016)	(0.011)	(0.017)	(0.003)	(0.011)	(0.001)	(0.013)
15.Legislative committees	0.027***	0.034***	0.024***	0.027***	0.027***	0.025***	0.018***	0.033***	0.001***	0.024***
	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.006)	(0.003)	(0.008)	(0.000)	(0.009)
16.Legislative fractionaliz	0.021*	0.017	0.023***	0.015	0.022*	0.047***	0.012***	0.011***	0.002*	-0.002
	(0.013)	(0.017)	(0.009)	(0.012)	(0.012)	(0.015)	(0.002)	(0.001)	(0.001)	(0.016)
17.Political constraints	0.037***	0.077**	0.028***	0.025***	0.029*	0.065***	0.013***	0.019***	0.002**	-0.024
	(0.002)	(0.031)	(0.001)	(0.002)	(0.017)	(0.020)	(0.002)	(0.001)	(0.001)	(0.028)
18.Checks & balances	0.022***	0.008	0.015***	0.032***	0.022***	0.035***	0.014***	0.017*	0.004***	0.018*
	(0.007)	(0.009)	(0.005)	(0.008)	(0.006)	(0.010)	(0.003)	(0.009)	(0.001)	(0.010)
Vertical/Horizontal										
19.Capital City	-0.033***	-0.034***	-0.026***	-0.029***	-0.028***	-0.023***	-0.033***	-0.037***	-0.000**	-0.035***
	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.002)	(0.003)	(0.000)	(0.004)
Covariates										
Basic	✓		✓	✓	✓	✓	✓	✓	✓	✓
Additional		✓								
Y_{t-1}									✓	

Outcome measures of power concentration (re-scaled from 0-1) regressed against population (logged) and selected

covariates. Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. *Basic covariates:* per capita GDP (logged), Urbanization, Legal origin dummies, Latitude, Muslim, Protestant, OPEC dummy, Region dummies, Year dummies. (Year dummies are excluded from CCP outcomes – Constitution Length, Scope, Rigidity – because of collinearity.) *Additional covariates:* Lexical index of electoral democracy, Ethnolinguistic fractionalization. Y_{t-1}: lagged outcome. Electoral system dummies included in tests of Divided party control (row 8) only. Coefficients and standard errors shown for population. *Estimators:* ordinary least squares (for continuous outcomes), tobit (for left-censored outcomes), ordered logit (for ordinal outcomes), logit (for binary outcomes), random effects (for panel estimation in Model 9). Standard errors clustered by country except in model 6 where they are robust. *p<.10 **p<.05 ***p<.01 Model 7: datasets imputed with Amelia. Model 8: country-years in which multiparty elections are on course (Lexical>2). Model 9: panel analysis, conducted only with continuous outcomes that show substantial temporal variation. Model 10: second-stage results of a two-stage analysis, where land area (logged) and arable land (%) serve as instruments for population. Complete results displayed in Appendix B.

Units of analysis are country-years with right-side variables measured at *t*-1, unless otherwise noted. Estimators for pooled analyses include ordinary least squares for continuous outcomes, tobit for left-censored outcomes, ordered logit for ordinal outcomes, and logit for binary outcomes, as indicated in Table 2. Standard errors are clustered by country. Several cells in Table 3 are empty, signaling that there are insufficient observations, or insufficient variation over time, to provide a meaningful test.

Model 1, shown in the first column, tests a basic specification including per capita GDP (logged), Urbanization, Legal origin (dummies for English, French, German, Scandinavian, Socialist), Latitude (distance from equator, logged), Muslim (share of population), Protestant (share of population), OPEC (dummy), Region (dummies for Eastern Europe & Central Asia, Latin America, Middle East & North Africa, sub-Saharan Africa, Western Europe & North America, East Asia, Southeast Asia, Pacific, Caribbean), and Year (dummies for each year in the panel). Electoral system dummies (measuring a variety of electoral rules) are included in tests of Divided party rule, as this outcome is strongly affected by party system size. We shall regard this as our benchmark model since all of these factors have been identified as possible causes of concentration. Estimated coefficients for population are correctly signed and statistically significant (p<.10) in all of these tests.

Model 2 is a bivariate analysis in which a measure of concentration is regressed against population (logged). While this minimal specification may seem implausible it has the virtue of dispensing with post-treatment confounding – an important consideration in situations where covariates may be influenced by the causal factor of interest. Estimated coefficients for population are correctly signed for all outcomes in this simple model, and statistically significant (p<.10) in all but four.

Model 3 builds on the benchmark model with the addition of two covariates often regarded as causes of (de)concentration: democracy, measured by the Lexical index of electoral

democracy (Skaaning et al. 2015), and ethnolinguistic fractionalization (the probability of two randomly chosen individuals belonging to the same ethnolinguistic group). Estimated coefficients for population are correctly signed in all tests and statistically significant (p<.10) in all but two tests. (These factors are excluded from the benchmark model because both regime-type and ethnicity may be endogenous to polity size.)

Model 4 returns to the benchmark specification, this time lagging right-side variables fifty years (rather than a single year). To the extent that relationships persist, this reduces concerns about *X:Y* endogeneity and common-cause confounders, especially when – as in this case – the chosen lag is very far behind the outcome and the other predictors. Note that because the CCP variables are limited to discrete points in time they cannot be analyzed in this fashion and are therefore excluded. Estimated coefficients for population are correctly signed in all sixteen remaining tests and statistically significant (p<.10) in all but three.

Model 5 takes this approach further, measuring population in 1900 while other right-side variables are measured at *t-1*. Samples are therefore limited to the twentieth and twenty-first centuries. Since population is fixed at one point in time it cannot be affected by developments occurring later in the century, which might otherwise serve as confounders. Estimated coefficients for population are correctly signed in all of these tests and statistically significant (p<.10) in all but one.

Model 6 continues to measure population in 1900 while measuring all other variables in 2000. This purely cross-sectional analysis has the benefit of weighting all countries equally and – arguably – measuring outcomes at a point when they have moved closer to equilibrium. It also allows us to test the possibility of a very long-memoried causal relationship between demography and political structure. CCP variables are again excluded as they are not measured in 2000. Estimated coefficients for population are correctly signed in all sixteen tests and statistically significant (p<.10) in all but two.

Model 7 deals with potential bias arising from missing data by imputing full datasets utilizing the Amelia multiple-imputation algorithm (Honaker & King 2010). With an imputation model that takes into account the time-series cross-sectional nature of the data, we impute missing data for all variables and all sovereign countries beginning with the first year of observed data for each measure of power concentration. We then run each model on 20 imputed data sets. Estimated coefficients for population are correctly signed in all but one test and statistically significant (p<.10) in all but three. In most cases, coefficient estimates are quite close to the benchmark model, suggesting that our sample is not systematically biased.

Model 8 restricts the analysis to country-years in which multiparty elections are on

course, as measured by the Lexical index of electoral democracy, where Lexical>2. This is a fairly low threshold, indicating the existence – but not the quality or competitiveness – of multi-party elections for the legislature and executive. It is an important probe, nonetheless, as institutions may operate differently in democratic and autocratic contexts. In the event, estimated coefficients for population are correctly signed and statistically significant (p<.10) in all tests. They are also comparable to coefficients estimated for our benchmark model (Model 2). Viewed alongside results for Model 3 (where Lexical serves as a covariate), this suggests that relationships between population and various measures of concentration are not dependent on regime-type, or only marginally so.

Model 9 departs from our pooled regression approach by adopting a panel format. This format is viable only for outcomes that have registered significant changes during the observed time period, as discussed. For these ten outcomes, we adopt a random effects estimator and add a lagged dependent variable to the benchmark specification. Estimated coefficients for population are correctly signed and statistically significant (p<.10) in all of these tests. (Note that coefficients in a lagged dependent variable model measure the short-term effect of a change in population, and are therefore not directly comparable to coefficients estimated in other models.)

Model 10 provides an instrumental-variable analysis in which two factors are utilized as instruments: *territory* and *arable land*. Territorial expanse is measured by the land area of a polity (square kilometers), transformed by the natural logarithm. Arable land (as share of total land area) is measured in 1960, the first year for which broad coverage is available from the Food and Agriculture Organization (collated by the WDI). While it might be preferable to measure this factor in 1900, this statistic is extremely sluggish over the observable period (1960-2010), and we expect it to be equally sluggish in the previous historical period. By measuring this quantity at one point in time we are thus gaining a reasonably stable estimate of a country's available agricultural resources across the 20th century.

Encouragingly, territory and arable land together explain 75% of the variation in population (logged). However, to serve as viable instruments we must also assume that whatever effect territory and arable land have on power concentration operates through population and not through other channels, conditional on observed covariates. We must also assume that there is no reciprocal causation (from Y to X), and that there is no interference across units. Several potential problems deserve discussion.

First, we consider the possibility that territory affects power concentration directly, rather than indirectly. This is explored in a set of analyses presented in Appendix E, where we

show that population generally outperforms territory as a predictor of power concentration. Empirically, territory behaves more like an indirect cause than a direct cause – though this of course does not rule out the possibility that in some instances, or to some degree, it may function as a direct cause.

Second, one might be concerned that arable land influences modernization, which in turn may affect political structures. However, our model conditions on per capita GDP and urbanization, so this potential source of bias is presumably blocked.

Third, it is possible that political structures affect the territory of a country, with highly concentrated states preferring larger countries (Alesina & Spolaore 2003: 69). There is no easy solution to this selection effect. However, to the extent that it affects the data generating process it introduces a conservative bias into the analysis, making it harder to reject the null.[17] Accordingly, estimates from this instrumental-variable analysis may be regarded as a lower bound.

Fourth, many studies have noted that country boundaries are affected by international-system factors such as economies of scale, burdens of heterogeneity, necessity of self-defense, the prominence of international trade, technological developments affecting transport, communications, warfare, and administration, and threats to sovereignty (Alesina & Spaolore 2003; Hiscox & Lake 2001; Wittman 1991, 2000). However, because these factors affect all countries equally they lie orthogonal to our cross-country analysis. To the extent that international-system factors change over time their influence are captured by annual dummies in our models.

A confusing element of our analysis is that the boundaries of countries are mutually constituted. A change in one country's borders (in the modern era) affects another country's borders, and hence its population. This violates a strict interpretation of the stable unit treatment value assumption (Rubin 2005). However, as noted, border changes are modest over the period under observation. Most polities in our dataset retain similar boundaries from the time of independence to the present-day. Limiting the analysis to the post-1960 period or to countries that have retained stable borders in that period (or since independence) has little impact on the results reported in this analysis.

For these reasons, we regard the instrumental variable analysis shown in Model 10 of Table 3 as a highly plausible identification strategy. Estimated coefficients for population in this

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[17] Insofar as (de)centralization is correlated with regime-type – decentralized regimes being more democratic – it is worth noting that there does not appear to be any causal relationship between regime-type and secession. Walter (2006) demonstrates that regime-type does not predict violent attempts at secession, and Sambanis & Milanovic (2009) find that economic factors, not regime type, predict calls for sovereignty in 48 economically decentralized states.

model are correctly signed in all tests, statistically significant (p<.10) in all but seven, and comparable to the benchmark in most instances. However, because this analysis depends upon assumptions that cannot be proven, and are certainly open to question, we regard Model 10 as a robustness test, not a primary identification strategy.

Discussion

Any single analysis using observational data at the country-level is open to skepticism. That is why we have enlisted a large number of empirical tests that incorporate multiple measures of power concentration, multiple specifications, and multiple estimators, including cross-sectional, panel estimators, and instrumental-variable estimators. Reassuringly, estimated coefficients for the key variable of theoretical interest are fairly stable across these tests, as shown in Table 3. (As noted, Model 9 is a dynamic model and hence not comparable to the results of pooled regressions shown elsewhere in Table 2.)

Granted, each of these nineteen outcomes could have been modeled differently, and we might have endeavored to provide a unique specification for each outcome. However, introducing novel features to each analysis would enhance the possibility of "just-so" specifications. By adopting a common framework we limit options for selecting covariates and estimators that support our favored thesis. In the event, the addition (or subtraction) of covariates, or of new estimators, is unlikely to change the overall pattern of findings, which seem consistent across a wide variety of settings. The balance of the evidence suggests that the population of a country impacts constitutional arrangements such that power is more dispersed when a polity is more populous.

Is this effect significant in everyday ("real") terms? To gauge the extent of this effect we construct a series of graphs showing predicted values for each outcome at different population levels based on our benchmark model (Model 2 in Table 3), as shown in Figures B1-B19. Where outcomes are ordinal or binary the estimated values reflect the probability of falling into the highest category in the index. Predicted values are bracketed by 95% confidence intervals, suggesting the variability of these estimates. Estimates are more precise near the left and center of the population distribution, as is to be expected – given that this is where most of the data is concentrated (there are many more small and medium-sized countries than large countries). At the bottom of each graph we list the minimum and maximum value and standard deviation for each outcome so the reader can judge how much variation might be accountable to demographic forces. Following our logarithmic scale, the impact of a given shift in population is much greater at lower population levels than at higher population levels.

The effects registered in these figures are not huge, but neither are they trivial. Size appears to affect the degree of power concentration in a polity, measured in many different ways. By contrast, none of the other structural factors tested in our models – including per capita GDP, urbanization, legal origin, latitude, Muslim, Protestant, OPEC, democracy, ethnic fractionalization, or region – is consistently related to concentration, as shown in Tables B1-B19. Population appears to be the only generalizable (distal) cause.

II. Within-Country Analyses

Problems of causal inference often arise when nation-states form the primary units of analysis (Kittel 2006). For better identification strategies we turn to within-country tests. Institutional forms do not vary as much within countries as across countries, limiting our choice of outcome measures. Nonetheless, there is substantial variation in the degree to which power is concentrated within states, counties, and cities across the United States, and such variation as exists is less subject to confounding.

While many studies have exploited subnational variation in the US to understand the impact of (de)centralization on the quality of governance (e.g., Zax 1989), few have studied the sources of power concentration and only two studies explore the relationship with size. Wallis & Oates (1988) examines revenue decentralization across the fifty states and Clark (1968: 585) briefly reports on community structures across fifty-one localities. Results from these studies provide some support for our thesis, despite limitations in sample size and in the purview of outcomes surveyed.

Tests

In the analyses that follow, reported in Table 4, we explore institutional variation at state, county, and city levels. Detailed variable definitions are provided in Table C1 and descriptive statistics in Table C2. As previously, all outcomes are re-scaled from 0-1 to facilitate comparisons.

Table 4: Within-Country Tests

Polities	State					County		City		
Outcome	City-county/ total expenditures	City-county/ total revenue	Special purpose governments	Independent school districts	CSSO selection	City/total expenditure	City/total revenue	Executive veto	Executive term limit	Mayor-council
Hypothesis	+	+	+	+	+	+	+	+	+	+
Estimator	OLS	OLS	OLS	OLS	Logit	OLS	OLS	Logit	Logit	Logit
Sample	Full	Full	Full	Full	Full	Full	Full	Full	Full	pop>50k
	1	2	3	4	5	6	7	8	9	10
Population (ln)	0.104*** (0.018)	0.124*** (0.019)	0.124*** (0.030)	0.028*** (0.006)	1.713** (0.626)	0.044*** (0.003)	0.043*** (0.003)	0.212*** (0.030)	0.460*** (0.042)	0.380** (0.193)
Polities	51	51	51	51	51	3,153	3,153	7,503	7,503	2,225
Years	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	2000	2000	1986-2011	1986-2011	1986-2011
Obs	250	250	252	253	200	2,642	2,641	16,955	16,439	1,903
R2	0.612	0.610	0.419	0.475	0.196	0.757	0.787	0.079	0.100	0.237

Data drawn from states, counties, and cities in the United States. Covariates for state-level analyses: Income per capita, urbanization, Democratic vote share, College, Unemployment, Minority (%), Region (dummies). Covariates for county-level analyses: Urbanization, Minority (%), Income per capita, Democratic vote, State (dummies). Covariates for city-level analyses: Urbanization, Black (%), Asian (%), Latino (%), Income per capita, County (dummies). County analyses are cross-sectional. State and city analyses represent a short panel, with standard errors clustered at the state and city level, respectively. *p<.10 **p<.05 ***p<.01

At the *state* level, we employ five measures of power concentration: city-county share of expenditures (Model 1), city-county share of revenue (Model 2), the number of special purpose governments (Model 3), the number of independent school districts (Model 4), and the method of selection for the Chief State School Officer (CSSO), which may be either appointive or elective (Model 5). Measures of fiscal decentralization are widely used in crossnational studies (see Table 1) as well as in studies focused on the United States (Wallis and Oates 1988; Xie et al. 1998; Zax 1989). The number of special purpose governments and independent school districts is viewed as a key measure of political concentration in federalist systems (Foster 1993; Hammond et al. 2011; Nelson & Foster 1999). An elective CSSO presumably signals the independence of this official relative to other elected officials. All model specifications include a range of covariates that may affect power concentration, and may (plausibly) serve to block confounders: GDP per capita, urbanization, party control of state government, post-secondary education, unemployment, median household income, percent minority, and regional dummies (South, Northeast, Midwest, West).

County-level analyses focus on revenue decentralization (Model 6) or expenditure decentralization (Model 7), i.e., fiscal instruments controlled by cities as a share of total city-county revenue or expenditures. These specifications include covariates measuring urbanization, percent minority, income per capita, Democratic presidential vote, and state dummies.

At the *city* level, we are able to test three measures of power concentration. In Model 8 we examine executive veto power – the ability of the top official (usually a mayor) to veto council legislation. In Model 9, we look at executive term limits, i.e., the imposition of any sort of term limit on the chief executive (usually a mayor). In Model 10, we focus on the choice of a mayor-council form of government – as opposed to a council-manager or commission format. Note that because very small cities often cannot afford to hire a city manager they may be constrained to adopt a mayor-council form of government where the mayor serves pro bono or for a nominal salary. This cost-constraint, which hinges on the willingness of elected officials to accept lower remuneration than appointed officials, lies outside the scope of our theory and has no plausible applicability to larger polities such as nation-states. Consequently, we limit the analysis in Model 10 to cities of at least 50,000 citizens. Data for city-level analyses are drawn from municipal surveys conducted by the International City/County Management Association (ICMA) over six years – 1986, 1992, 1996, 2001, 2006, 2011 – generating a short panel. Specifications include covariates measuring urbanization, percent black, Latino, and Asian, income per capita, and county dummies. This means that comparisons are being drawn across cities within the same county. To protect against serial correlation in this short panel standard errors are clustered by city.

Analyses at all three levels support our contention that the size of a polity influences the way its institutions are structured, with larger polities developing less concentrated systems of rule. Judging by the estimated coefficients the effects are sizeable. For example, moving from a state with a population in the 25th percentile to a state with a population in the 75th percentile increases the probability of a directly elected CSSO by nearly 47 percent. Moreover, the impact of population on power concentration is consistent across all measured outcomes, as shown in Table 4. Indeed, population is the only variable among those tested in the foregoing models – including income, education, urbanization, minority share, and partisanship – that consistently predicts these outcomes in within-country analyses, as shown in Appendix D.

For a variety of reasons, which may now be summarized, we are fairly confident that the relationships depicted in Table 4 are causal. First, analyses below the state level enlist very large samples. Instead of 100+ nation-states we are able to draw upon 3,000+ counties and 7,000+ cities. This diminishes the possibility of stochastic error as well as problems of collinearity among right-side variables. Second, the possibility of X:Y endogeneity seems remote. Even if Tiebout sorting occurs, it is unlikely that varying levels of concentration across units have systematic effects on the quality of governance sufficient to stimulate widespread patterns of migration. Third, the borders of subnational units, while by no means random, are unlikely to

be affected by the outcome of interest, as they might be at national levels.[18] Fourth, subnational units within a single country share many background characteristics, limiting the number of potential confounders. Ceteris paribus conditions are especially strong when comparing counties within a single state (using state fixed effects) or cities within a single county (using county fixed effects). Indeed, county- and city-level analyses are remarkably stable in the face of changes in specification, reflecting the large sample and the fact that covariates are not highly correlated with the variable of theoretical interest (population). Finally, the possibility of omitted confounders seems remote given that we have been able to measure, and condition on, many factors that might influence – or that might be correlated with factors that influence – institutional choices.

III. Tradeoffs

We have argued that the size of a polity in the modern era affects its institutional form, with larger (more populous) polities developing less concentrated systems of rule. We have presented evidence for this pattern across nation-states and across subnational units (states, counties, and cities), using a wide variety of outcome measures focused on the vertical and horizontal dimensions of power concentration. The reasons for this persistent relationship, we theorized, rest on the quest for greater efficiency and trust.

If our argument is correct there is an important tradeoff between *extensive* and *intensive* rule. Increasing the size of a polity decreases its probable concentration of power, while decreasing its size increases its probable concentration. It follows that polities may be organized to rule intensively (in a concentrated fashion) over a small populace or extensively (in a de-concentrated fashion) over a large populace.

This tradeoff faced the New England colonists in the eighteenth-century just as it faces the current members, and prospective members, of the European Union today. Our theory suggests that had the thirteen colonies evolved into independent states, rather than joining together in a confederation, they would have developed fairly concentrated systems of rule. Our theory also suggests that the larger the EU becomes the more fissiparous its governance

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[18] State boundaries are a product of a variety of geographic and historical forces that are too complicated to review (Stein 2008) but which may be regarded as random with respect to the causal question of theoretical interest. Once admitted to the union, states have maintained their historical boundaries – meaning that almost all state boundaries have been fixed for at least a century and a half. By contrast, county and city boundaries have evolved considerably over time, largely in response to demographic factors (the growth and movement of population) and political pressures. Sometimes population growth stimulates a fusion of units, sometimes it stimulates fission. But, unlike nation-state formation, we do not expect fission or fusion to be affected by the institutional format of a subnational unit.

structure is likely to become, and the more it is likely to emulate the previous condition of Europe as a region of (formally) independent states.

The intensive/extensive tradeoff has important implications for problems of coordination, and hence for governance. Briefly, where states are small (and unified), problems of coordination arise *between* states. Where states are large (and fragmented), problems of coordination arise *within* states while coordination problems between states is mitigated by their smaller numbers.

The intensive/extensive tradeoff also has important implications for democratic theory. When one considers opportunities for participation, the achievement of accountability, and other democratic virtues, the position of a citizen in a small polity with concentrated institutions may be roughly equivalent to the position of a citizen in a large polity with dispersed institutions. Citizens may be loosely governed by a larger, more fragmented polity in which considerable power is delegated to local officials. Or they may be tightly governed by a smaller, more centralized polity.

One must also consider that larger polities usually enjoy greater de facto sovereignty, which may be understood in terms of military power (Davis 1954; Hendershot 1973; Organski & Organski 1961), soft power (Nye 2005), or freedom from external obligations and constraints (Lake 2009).[19] While large states delegate "down" (to various institutions within the state), small states delegate "up" (to international organizations), surrendering some aspects of sovereignty in the process (Hawkins et al. 2006). This means that the citizen of a large polity enjoys greater self-rule than the citizen of a small polity, being less dependent upon the actions of international institutions, bilateral and multilateral agreements, foreign countries, and the vagaries of international trade. Insofar as democracy presumes sovereignty, the citizen in a larger polity enjoys a greater degree of that ineffable quantity.

The strongest formulation of our argument suggests that there is an equilibrating feature inherent in political organization in the modern era such that a similar level of citizen engagement and influence, sovereignty, and overall coordination is retained regardless of the size of the political unit(s).[20] An implication of this argument is that the size question (how large should a polity be?), which has preoccupied scholars and state-makers for millennia, is no longer as consequential as it once was. Large polities reproduce the features of small polities by

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[19] While measuring sovereignty across nation-states is complicated, it is fairly easy to measure this concept across counties and cities at the subnational level in the US. It turns out that the right of "home rule" is much more likely to be achieved by larger municipalities than by smaller municipalities, as shown in Table F1.

[20] This is presuming that small and large polities are equally likely to sustain multi-party competition, i.e., that size has no impact on regime-type, a subject about which there is no consensus (Anckar 2008; Dahl & Tufte 1973; Gerring et al. 2015; Ott 2000; Veenendaal 2013).

diffusing power internally, both vertically and horizontally. Small polities reproduce the features of large polities by delegating power externally. We do not mean to suggest that all things are truly equal, and that size is therefore irrelevant. But it does seem appropriate to conclude that the substantive differences arising from polity size are often overdrawn. Size affects structure, but in ways that are re-equilibrating.

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Appendix A: Cross-country Data Description

Table A1: Variable Definitions

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Left-side Variables

Federalism. An institutionalized division or sharing of responsibilities between a national authority and semiautonomous regional units, usually codified in a constitution. 0=nonfederal (regional governments, if they exist, are granted minimal policy-making power), 1=semifederal (there are elective governments at the regional level but constitutional sovereignty is reserved to the national government), 2=federal (elective regional governments plus constitutional recognition of subnational authority). Rescaled from 0-1. Source: Gerring & Thacker (2008: 88). *federalism_GT*

Subnational gov layers. Comprised of two variables measuring whether local and regional governments exist, as coded by research assistants and regional experts enlisted by V-Dem. These are added together to form a three-level index: 0=none, 1=one level, or 3=both levels. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *subnational_layers*

Subnational elections. Measures the existence (=1) or non-existence (=0) of elections at subnational levels, as coded by country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms the binary variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2elffelrbin*

Autonomous regions. Measures the existence (=1) or nonexistence (=0) of regions enjoying substantial autonomy from the national government. Rescaled from 0-1. Source: DPI (Beck et al. 2001). *e_dpi_auton*

Revenue decentralization. Subnational revenue as share of total public revenue. Rescaled from 0-1. Source: GFS, as compiled by Enikolopov & Zhuravskaya (2007). *Decentraliz_rev_EZ*

Government consumption. Central government current expenditures for purchases of goods and services, including payment of employees and most expenditures on national defense and security (but not those considered part of government capital formation), as a share of GDP. Rescaled from 0-1. Source: WDI (World Bank 20??).

Separate powers. 1=the dominant executive (either the head of state or head of government) is directly elected, 0=otherwise. Coding by research assistants and regional experts enlisted by the V-Dem project. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *prez_JG2*

Divided party control. The extent to which a single party or coalition controls both the executive and legislative branches of national government, based on coding by country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. (The nominal V-Dem variable is reordered to reflect an ordinal scale.) Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *Natparmms*

Decentralized parties. Measures how centralized the process of candidate selection for the national legislature is – specifically, the extent to which national party leaders control the process or share power with constituents and local and regional party actors, as judged by country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2pscnslnl*

Judicial review. Measures whether any court in the judiciary has the legal authority to invalidate governmental policies (e.g. statutes, regulations, decrees, administrative actions) on the grounds that they violate a constitutional provision, as coded by country experts enlisted for the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2jureview*

Constitution length. Records the number of words in a constitution. Rescaled from 0-1. Source: CCP (Elkins, Ginsburg & Melton 2009). *Length*

Constitution scope. Measures the scope of a constitution based on the proportion of selected issues (following standard CCP categories) that are covered. Rescaled from 0-1. Source: CCP (Elkins, Ginsburg & Melton 2009). *Scope*

Constitution rigidity. Measures the number of actors required to approve constitutional amendments, according to the constitution. Rescaled from 0-1. Source: CCP (Elkins, Ginsburg & Melton 2009). *Apprs*

Bicameralism. Measures the existence of two chambers in the national legislature and – if they exist – how closely matched their powers are, based on the coding of country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into

</div>

an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *Legbalance*

Legislative committees. Measures whether the lower (or unicameral) chamber of the legislature has a functioning committee system and, if so, whether they are permanent (or special) and whether they have a strong influence on the course of policymaking, as coded by experts enlisted for the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2lgcomslo*

Legislative fractionalization. Measures the probability that two randomly drawn representatives from the lower (or unicameral) chamber of the legislature will be from different parties. Rescaled from 0-1. Source: PolCon (Henisz 2002). *Legfralower*

Political constraints. "The extent to which a change in the preferences of any one actor may lead to a change in government policy," taking into account the number of independent branches of government and the preferences of each of these branches. Rescaled from 0-1. Source: PolCon (Henisz 2002: 363), where it is referred to as *PolConIII*. *polconiii*

Checks & balances. "The number of veto players in a political system, adjusting for whether these veto players are independent of each other, as determined by the level of electoral competitiveness in a system, their respective party affiliations, and the electoral rules." Rescaled from 0-1. Source: DPI (Beck et al. 2001), where it is referred to as *Checks1*. *Checks_DPI*

Capital city. Population of capital city as a share of total population, transformed by the natural logarithm. Calculated by authors. Rescaled from 0-1. Sources for capital city population: UN (2014), supplemented by other sources. *capital_pop_share_ln*

Right-side Variables

Population. Total population, missing data within a time-series interpolated. Source: Clio Infra (clio-infra.eu), drawing on Goldewijk, Beusen & Janssen (2010), History Database of Global Environment (www.pbl.nl/hyde). *e_pepopula_ipo_2_ln*

GDP per cap (ln). Gross domestic product per capita, missing data within a time-series interpolated, transformed by the natural logarithm. Source: Bolt & van Zanden (2014). *e_migdppc_2_ipo_ln*

Urbanization. Share of total population living in cities, missing data within a time-series interpolated. Missing data interpolated within a time-series. Sources: Clio Infra (clio-infra.eu) based on a variety of underlying sources. *e_urbaniz*

English legal origin. Dummy variable indicating English legal origin. Source: La Porta et al (1999). *English_legal_origin*

French legal origin. Dummy variable indicating French legal origin. Source: La Porta et al (1999). *French_legal_origin*

German legal origin. Dummy variable indicating German legal origin. Source: La Porta et al (1999). *German_legal_origin*

Scandinavian legal origin. Dummy variable indicating Scandinavian legal origin. Source: La Porta et al (1999). *Scandinavian_legal_origin*

Socialist legal origin. Dummy variable indicating Socialist legal origin. Source: La Porta et al (1999). *Socialist_legal_origin*

Latitude (ln). Distance from equator, transformed by natural logarithm. *Latitude_ln*

Lexical index of electoral democracy. A 7-level ordinal scale measuring the electoral components of democracy in a cumulative fashion. Source: Skaaning, Gerring & Bartusevi ius (2015). *lexical_scale*

Muslim. Percent Muslim. Source: CIA WorldFactbook (on-line). *Muslim*

Protestant. Percent Protestant. Source: CIA WorldFactbook (on-line). *Protestant*

OPEC. Dummy variable indicating membership in the Organization of Petroleum Exporting Countries. *OPEC*

Ethnolinguistic fractionalization. Probability of two randomly chosen individuals being members of the same ethnolinguistic group. Source: Easterly & Levine (1997), missing data imputed from other sources. *Ethnolinguistic_fract_imp*

Territory. Land area, square kilometers, transformed by the natural logarithm. Source: WDI (World Bank 2007). *wdi_area_extended_ln*

Arable land. Percent of state's territory that is arable land in 1960. Source: WDI (World Bank 2005). *Land_use_arable_ext_1960*

Table A2: Descriptive Statistics

Left-side variables	Obs	Mean	SD	Min	Max
Federalism	6,354	0.191	0.374	0	1
Subnational government layers	16,181	0.931	0.176	0	1
Subnational elections	16,212	0.638	0.291	0	1
Autonomous regions	6,139	0.122	0.327	0	1
Revenue decentralization	1,398	0.282	0.241	0	1
Government consumption	6,638	0.188	0.092	0	1
Separate powers	16,477	0.232	0.422	0	1
Divided party control	16,106	0.549	0.266	0	1
Decentralized parties	16,281	0.339	0.199	0	1
Judicial review	16,403	0.543	0.293	0	1
Constitution length	960	0.031	0.080	0	1
Constitution scope	765	0.575	0.158	0	1
Constitution rigidity	906	0.318	0.265	0	1
Bicameralism	17,547	0.344	0.328	0	1
Legislative committees	12,106	0.533	0.173	0	1
Legislative fractionalization	8,504	0.477	0.289	0	1
Political constraints	14,808	0.220	0.290	0	1
Checks & balances	6,004	0.246	0.229	0	1
Capital city	19,895	0.509	0.120	0	1
Right-side variables					
Population (logged)	96,479	6.239	2.568	-2.157	14.101
GDP per capita (logged)	20,764	0.350	0.251	0.008	1.000
Urbanization	10,907	7.844	1.037	5.315	10.667
English legal origin	40,635	0.333	0.471	0.000	1.000
French legal origin	20,256	0.423	0.494	0.000	1.000
German legal origin	20,256	0.037	0.189	0.000	1.000
Scandinavian legal origin	20,256	0.021	0.144	0.000	1.000
Socialist legal origin	20,034	0.187	0.390	0.000	1.000
Latitude (logged)	40,205	-1.596	0.950	-4.500	-0.341
Muslim	40,850	23.255	35.890	0.000	99.900
Protestant	39,576	12.686	22.863	0.000	98.000
OPEC	41,065	0.058	0.233	0.000	1.000
Lexical index of electoral democracy	17,248	2.820	2.363	0	6
Ethnolinguistic fractionalization	21,441	0.342	0.281	-0.072	1.000
Territory (logged)	41,065	11.280	2.725	0.693	16.612
Arable land	21,620	14.049	14.119	0.043	66.250

Sample constrained to 1789- period.

Table A3: Inter-Correlation among Measures of Power Concentration

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
1. Federalism	1.00																	
2. Subnational gov layers	0.16	1.00																
3. Subnational elections	0.26	0.10	1.00															
4. Autonomous regions	0.07	0.04	0.08	1.00														
5. Revenue decentraliz	0.55	0.16	0.25	0.14	1.00													
6. Govt consumption	-0.04	-0.04	-0.01	0.01	0.14	1.00												
7. Separate powers	-0.02	0.09	0.21	0.01	-0.05	-0.21	1.00											
8. Divided party control	0.01	0.07	0.03	0.04	0.17	-0.04	0.01	1.00										
9. Decentralized parties	0.28	-0.08	0.38	0.08	0.46	0.16	0.09	0.01	1.00									
10. Judicial review	0.20	0.04	0.26	0.09	0.21	0.03	0.28	0.08	0.29	1.00								
11. Constitution length	0.22	-0.05	0.25	-0.05	-0.04	-0.18	0.12	0.02	0.26	0.36	1.00							
12. Constitution scope	0.09	0.03	0.18	0.00	0.05	-0.15	0.23	0.04	0.17	0.34	0.68	1.00						
13. Constitution rigidity	0.04	-0.02	0.03	-0.08	-0.02	-0.03	0.05	0.10	0.09	0.18	0.23	0.20	1.00					
14. Bicameralism	0.32	0.08	0.40	0.05	0.26	-0.09	0.27	0.02	0.34	0.34	0.22	0.18	0.15	1.00				
15. Leg. committees	0.12	0.05	0.36	0.20	0.31	0.02	0.21	0.11	0.35	0.43	0.23	0.32	0.11	0.26	1.00			
16. Leg. fractionalization	0.05	-0.08	0.29	0.09	0.18	0.03	-0.10	0.25	0.44	0.39	0.20	0.15	0.12	0.26	0.47	1.00		
17. Political constraints	0.15	-0.14	0.42	0.11	0.25	0.08	0.00	0.08	0.55	0.45	0.28	0.22	0.16	0.30	0.54	0.73	1.00	
18. Checks & balances	0.18	-0.09	0.39	0.15	0.29	0.01	0.03	0.12	0.49	0.56	0.27	0.26	0.18	0.34	0.54	0.69	0.73	1.00
19. Capital city	-0.37	-0.20	-0.11	-0.15	-0.33	0.21	0.06	-0.07	0.00	0.03	0.09	0.04	0.02	-0.11	0.02	0.09	0.03	0.00

Includes all outcome variables employed in Tables 2 and 3.

Table A4: Principal Components Analysis of Measures of Power Concentration

Component	Eigenvalue	Difference	Proportion	Cumulative
1	4.889	3.072	0.257	0.257
2	1.817	0.248	0.096	0.353
3	1.570	0.476	0.083	0.436
4	1.093	0.030	0.058	0.493
5	1.063	0.050	0.056	0.549
6	1.014	0.113	0.053	0.602
7	0.901	0.047	0.047	0.650
8	0.854	0.029	0.045	0.695
9	0.825	0.038	0.043	0.738
10	0.787	0.080	0.041	0.780
11	0.707	0.085	0.037	0.817
12	0.622	0.065	0.033	0.850
13	0.557	0.030	0.029	0.879
14	0.527	0.044	0.028	0.907
15	0.482	0.029	0.025	0.932
16	0.453	0.080	0.024	0.956
17	0.373	0.119	0.020	0.975
18	0.255	0.042	0.013	0.989
19	0.213	.	0.011	1

Variable	Component 1	Unexplained
Federalism	0.132	0.915
Subnational government layers	0.050	0.988
Subnational elections	0.260	0.670
Autonomous regions	0.093	0.958
Revenue decentralization	0.175	0.851
Government consumption	-0.041	0.992
Separate powers	0.086	0.964
Divided party control	0.099	0.952
Decentralized parties	0.266	0.654
Judicial review	0.311	0.526
Constitution length	-0.063	0.981
Constitution scope	0.275	0.630
Constitution rigidity	0.139	0.905
Bicameralism	0.236	0.727
Legislative committees	0.354	0.387
Legislative fractionalization	0.360	0.367
Political constraints	0.364	0.351
Checks & balances	0.362	0.361
Capital city	-0.116	0.935

Principal components analysis (un-rotated), retaining the first component. Missing data for all countries over the period, 1976 to 2015, is replaced with the average of 20 imputed data sets generated by the Amelia II program. *N* = 7,934. *Rho* = 0.2927.

Figure A1: Histogram of Population (ln)
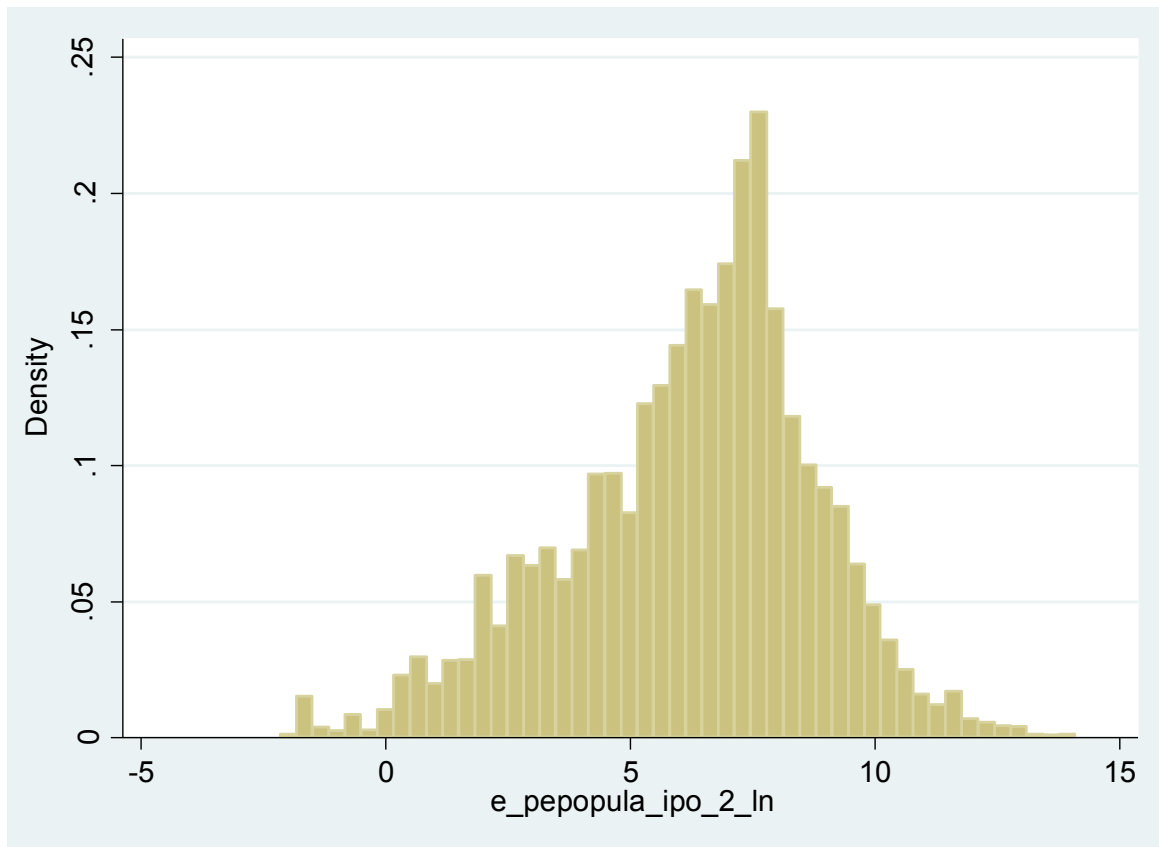
Appendix B: Cross-country Tests, Full Reports

Table B1: Federalism

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Population (log)	0.362***	1.028***	1.126***	0.986**	0.834**	0.732***	0.277***	1.097***	0.643***
	(0.129)	(0.310)	(0.307)	(0.400)	(0.330)	(0.282)	(0.068)	(0.328)	(0.119)
Urbanization		-0.779	0.076	-2.478	0.046	5.295*	0.073	-1.178	1.361
		(2.124)	(1.719)	(3.356)	(1.967)	(3.055)	(0.589)	(2.390)	(1.129)
GDPpc (logged)		1.773**	2.205***	1.619*	1.604**	0.242	0.162	1.806**	0.726**
		(0.691)	(0.797)	(0.923)	(0.648)	(0.719)	(0.120)	(0.767)	(0.345)
English legal origin		3.794*	4.397**	5.385**	3.740*	[omitted]	1.530**	4.448**	1.050
		(2.116)	(2.233)	(2.279)	(2.061)		(0.735)	(2.131)	(1.001)
French legal origin		1.053	0.972	2.433	1.274	[omitted]	0.735	1.677	-0.192
		(1.631)	(1.669)	(1.704)	(1.637)		(0.685)	(1.612)	(0.877)
German legal origin		[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]
Scandinavian legal Origin		[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]
Latitude (logged)		-0.277	-0.436	-0.133	-0.338	0.006	-0.148	-0.248	-0.327
		(0.461)	(0.475)	(0.545)	(0.445)	(0.367)	(0.133)	(0.519)	(0.201)
Muslim		0.032*	0.040	0.041	0.031**	0.028	0.011**	0.028	0.016**
		(0.017)	(0.026)	(0.049)	(0.016)	(0.022)	(0.005)	(0.018)	(0.008)
OPEC		2.011	2.406*	2.896	1.923	0.725	0.836	2.508*	0.567
		(1.225)	(1.409)	(2.317)	(1.253)	(1.335)	(0.630)	(1.350)	(0.749)
Protestant		-0.014	-0.032	0.007	-0.005	-0.001	0.006	-0.013	-0.013
		(0.024)	(0.026)	(0.027)	(0.026)	(0.020)	(0.008)	(0.026)	(0.011)
Democracy (lexical scale)			0.223*						
			(0.126)						
Ethnolinguistic fract.			5.658**						
			(2.337)						
Region FE		✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓
Observations	6,266	4,823	4,706	3,524	4,776	114	19,982	4,215	3,678
Countries	157	125	125	107	125	114	202	122	104
Years	103	103	103	103	101	1	115	103	103
R2 (pseudo)	(0.061)	(0.403)	(0.451)	(0.381)	(0.376)	(0.350)		(0.411)	

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01
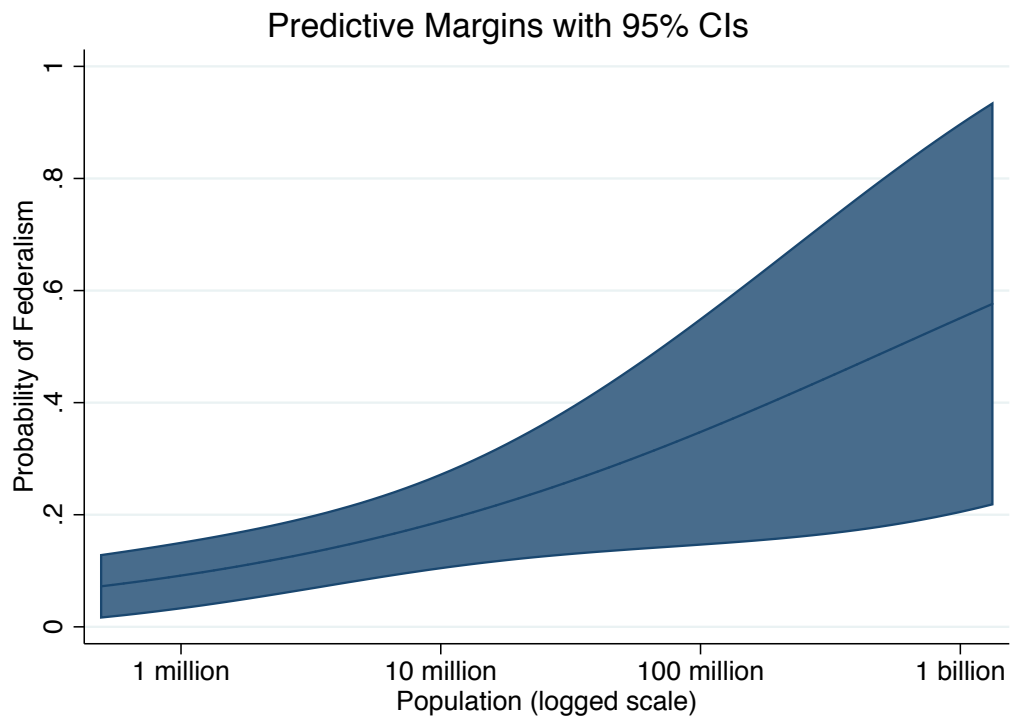
Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B1.

Table B2: Subnational Government Layers

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit	O.logit
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Population (log)	0.513***	0.546**	0.789*	0.331	0.353	1.289*	0.335***	0.477*	0.026**
	(0.110)	(0.271)	(0.416)	(0.282)	(0.233)	(0.711)	(0.093)	(0.256)	(0.010)
Urbanization		0.896	-0.157	-0.718	1.318	7.030**	1.497	2.163	0.047
		(1.841)	(2.095)	(2.860)	(1.866)	(3.340)	(0.928)	(1.968)	(0.090)
GDPpc (logged)		-0.916**	-0.622	-1.314*	-1.079**	-1.891**	-0.426*	-1.299***	-0.039**
		(0.445)	(0.533)	(0.774)	(0.461)	(0.958)	(0.217)	(0.425)	(0.019)
English legal origin		-18.154**	[omitted]	[omitted]	[omitted]	-12.666***	-0.471	[omitted]	-0.056
		(7.253)				(2.355)	(0.726)		(0.049)
French legal origin		-17.252***	-17.513***	-18.291***	-16.240***	-12.923***	0.344	[omitted]	0.000
		(5.875)	(5.960)	(5.588)	(2.442)	(1.599)	(0.716)		(0.033)
German legal origin		2.006	[omitted]	0.667	1.967**	4.180**	1.576*	[omitted]	0.086**
		(4.373)		(5.721)	(0.978)	(1.831)	(0.912)		(0.038)
Scandinavian legal Origin		[omitted]	[omitted]	-5.951	0.096	2.595	3.382***	[omitted]	0.000
				(4.028)	(2.845)	(2.289)	(1.164)		(0.057)
Latitude (logged)		-0.538	-0.960	-0.333	-0.470	-1.117	0.040	-0.466	-0.023
		(0.474)	(0.697)	(0.469)	(0.467)	(1.640)	(0.199)	(0.499)	(0.015)
Muslim		-0.005	-0.005	-0.007	-0.004	-0.016	-0.005	-0.007	-0.000
		(0.009)	(0.011)	(0.014)	(0.009)	(0.017)	(0.007)	(0.010)	(0.000)
OPEC		-0.033	-1.244	1.329	0.069	-3.631*	0.723	3.163**	0.005
		(1.385)	(1.289)	(1.442)	(1.412)	(2.065)	(0.807)	(1.474)	(0.052)
Protestant		0.026	0.046**	0.085***	0.030	0.036	0.003	0.034*	0.001
		(0.018)	(0.022)	(0.026)	(0.019)	(0.035)	(0.008)	(0.018)	(0.001)
Democracy (lexical scale)			-0.050						
			(0.075)						
Ethnolinguistic fract.			-0.716						
			(1.224)						
Region FE		✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓
Observations	15,119	10,807	9,175	7,241	10,720	143	19,982	7,139	10,391
Countries	158	144	144	127	144	143	202	140	140
Years	112	112	112	115	110	1	115	112	112
R2 (pseudo)	(0.126)	(0.271)		(0.372)	(0.246)	(0.428)		(0.319)	0.192

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B2: Subnational Government Layers

Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B2.

Table B3: Subnational Elections

	1	2	3	4	5	6	7	8	9	10
Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
Population (log)	0.048***	0.037***	0.038***	0.034***	0.031***	0.028**	0.014***	0.031***	0.003***	0.038***
	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)	(0.014)	(0.003)	(0.010)	(0.001)	(0.012)
Urbanization		0.033	-0.014	-0.198*	0.056	0.037	0.018	-0.019	0.002	0.021
		(0.104)	(0.092)	(0.114)	(0.105)	(0.156)	(0.036)	(0.102)	(0.009)	(0.094)
GDPpc (logged)		0.067***	0.054***	0.083**	0.060***	0.035	0.016**	0.064***	0.005**	0.062***
		(0.021)	(0.019)	(0.034)	(0.021)	(0.034)	(0.007)	(0.023)	(0.002)	(0.020)
English legal origin		-0.009	-0.051	0.099*	0.011	0.244**	0.069*	0.038	0.003	0.021
		(0.060)	(0.062)	(0.056)	(0.058)	(0.118)	(0.037)	(0.067)	(0.005)	(0.058)
French legal origin		-0.121**	-0.157***	-0.037	-0.111**	0.107	0.022	-0.104	-0.009**	-0.099*
		(0.055)	(0.052)	(0.049)	(0.054)	(0.118)	(0.034)	(0.068)	(0.005)	(0.054)
German legal origin		0.091	0.060	0.166**	0.094	0.231**	0.075*	0.059	0.012**	0.149**
		(0.067)	(0.068)	(0.064)	(0.067)	(0.103)	(0.042)	(0.071)	(0.006)	(0.066)
Scandinavian legal Origin		-0.150*	-0.164*	-0.023	-0.153*	0.045	-0.028	-0.114	-0.009	-0.125
		(0.090)	(0.089)	(0.097)	(0.089)	(0.139)	(0.047)	(0.094)	(0.009)	(0.091)
Latitude (logged)		-0.009	-0.036**	-0.025	-0.009	-0.033	0.008	0.010	-0.002	-0.012
		(0.020)	(0.018)	(0.021)	(0.020)	(0.027)	(0.009)	(0.019)	(0.002)	(0.019)
Muslim		0.001	0.001*	0.001	0.001	0.001	0.000	0.001	0.000	0.001
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
OPEC		-0.072	-0.092	-0.078	-0.072	-0.038	-0.015	0.005	-0.006	-0.070
		(0.079)	(0.061)	(0.080)	(0.077)	(0.087)	(0.034)	(0.109)	(0.007)	(0.079)
Protestant		0.000	0.000	0.000	0.001	-0.001	0.000	-0.000	0.000	0.001
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Democracy (lexical scale)			0.033***							
			(0.005)							
Ethnolinguistic fract.			0.107							
			(0.071)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	15,151	10,890	9,258	7,230	10,803	144	19,982	7,203	10,808	10,474
Countries	158	145	145	128	145	144	202	141	145	141
Years	112	112	112	115	110	1	115	112	111	112
R2 (pseudo)	0.095	0.327	0.404	0.319	0.319	0.278		0.336		0.345

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B3: Subnational Elections

Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B3.

Table B4: Autonomous Regions

	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Analysis	Logit	Logit	Logit	Logit	Logit	Logit	Logit	Logit	Logit
Estimator	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1, IV
Population	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full
Sample	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Population (log)	0.496***	0.555**	0.482*	0.718**	0.419*	0.687	0.404***	0.543*	0.170
	(0.151)	(0.267)	(0.255)	(0.296)	(0.225)	(0.456)	(0.113)	(0.286)	(0.138)
Urbanization		-1.591	-1.668	-2.550	-1.412	-3.524	-0.561	-2.251	-0.707
		(2.437)	(2.629)	(2.805)	(2.447)	(2.323)	(1.171)	(2.321)	(0.426)
GDPpc (logged)		0.464	0.618	0.615	0.451	-0.981	0.024	0.658	0.285
		(1.208)	(1.200)	(0.831)	(1.125)	(1.709)	(0.315)	(1.097)	(0.134)
English legal origin		16.368***	14.652***	14.558***	16.003***	16.257***	4.792***	16.507	5.020***
		(0.378)	(2.051)	(1.380)	(1.739)	(2.216)	(1.166)	(34.483)	(0.470)
French legal origin		17.039***	15.292***	15.356***	16.579***	18.134***	5.085***	17.423	5.303***
		(1.055)	(1.683)	(1.430)	(1.643)	(1.814)	(1.088)	(37.027)	(0.459)
German legal origin		-2.804	-3.806	-2.871	-2.939		2.128	-1.098	
		(2.536)	(2.662)	(1.792)	(2.393)		(1.315)	(38.071)	
Scandinavian legal Origin		19.255***	17.865***	17.468***	18.354***	18.231***	6.844***	19.334	6.495***
		(1.427)	(2.531)	(2.048)	(2.402)	(3.126)	(1.756)	(24.023)	(0.751)
Latitude (logged)		0.949	0.886	1.247	0.795	0.264	0.272	0.766	0.500
		(0.921)	(0.907)	(1.045)	(0.819)	(0.635)	(0.389)	(0.672)	(0.097)
Muslim		0.016	0.018	-0.005	0.018	0.012	0.018**	0.017	0.007
		(0.010)	(0.012)	(0.019)	(0.011)	(0.011)	(0.008)	(0.011)	(0.002)
OPEC		0.893	0.661	1.270	0.857	1.934**	0.659	-0.429	0.605
		(1.125)	(1.218)	(1.430)	(1.139)	(0.967)	(0.831)	(1.265)	(0.258)
Protestant		-0.027*	-0.031*	-0.028	-0.023	-0.004	-0.015	-0.024	-0.017*
		(0.016)	(0.016)	(0.018)	(0.016)	(0.021)	(0.011)	(0.016)	(0.006)
Democracy (lexical scale)			0.152						
			(0.099)						
Ethnolinguistic fract.			2.383**						
			(1.171)						
Region FE		✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓
Observations	5,834	4,916	4,817	3,272	4,916	133	7,498	3,038	4,470
Countries	171	147	147	128	147	133	200	128	134
Years	37	37	37	38	37	1	40	37	37
R2 (pseudo)	(0.096)	(0.317)	(0.338)	(0.368)	(0.303)	(0.415)		(0.280)	

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B4: Autonomous Regions

Predictive Margins with 95% CIs

Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B4.

Table B5: Revenue Decentralization
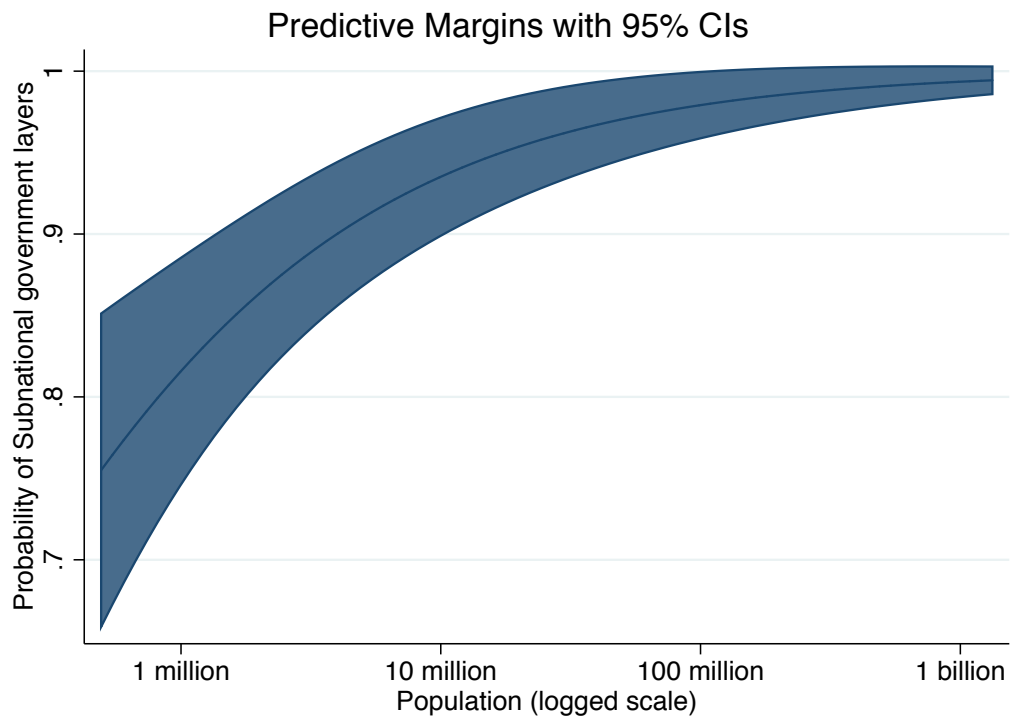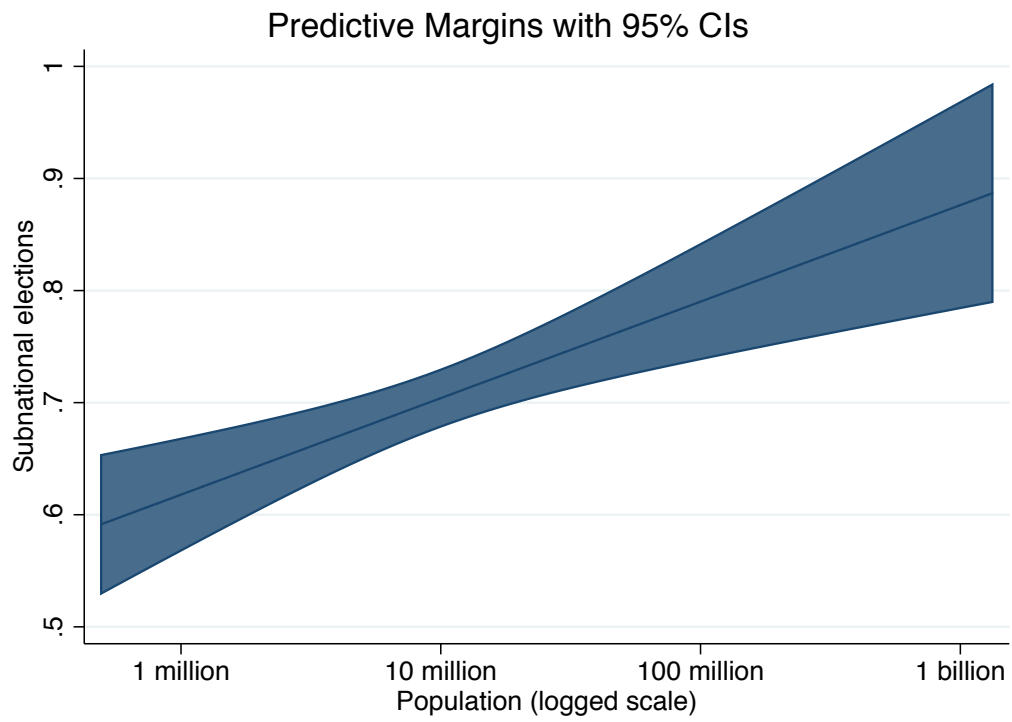
Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	2	3	4	5	6	7	8	9	10
Population (log)	0.048***	0.080***	0.073***	0.099***	0.069***	0.033***	0.010***	0.083***	0.005***	0.123***
	(0.015)	(0.011)	(0.012)	(0.014)	(0.014)	(0.010)	(0.002)	(0.012)	(0.002)	(0.021)
Urbanization		0.110	0.047	-0.298*	0.114	0.204*	0.054**	0.059	-0.003	0.018
		(0.148)	(0.167)	(0.152)	(0.155)	(0.120)	(0.023)	(0.176)	(0.013)	(0.172)
GDPpc (logged)		0.053	0.064	0.122	0.051	-0.018	-0.002	0.025	0.011***	0.068
		(0.040)	(0.046)	(0.075)	(0.040)	(0.031)	(0.005)	(0.047)	(0.003)	(0.049)
English legal origin		-0.737***	-0.679***	-0.562***	-0.713***	0.042	-0.069**	-0.144	-0.052***	-0.520***
		(0.148)	(0.133)	(0.124)	(0.149)	(0.103)	(0.029)	(0.131)	(0.017)	(0.151)
French legal origin		-0.857***	-0.820***	-0.781***	-0.843***	-0.061	-0.079***	-0.322**	-0.059***	-0.650***
		(0.132)	(0.112)	(0.092)	(0.133)	(0.123)	(0.027)	(0.134)	(0.017)	(0.128)
German legal origin		-0.379***	-0.351***	-0.282***	-0.387***	0.228	0.034	0.188	-0.034***	-0.134
		(0.086)	(0.082)	(0.079)	(0.088)	(0.147)	(0.043)	(0.184)	(0.009)	(0.082)
Scandinavian legal Origin		-0.573***	-0.481***	-0.414**	-0.617***	0.084	-0.000	-0.005	-0.043***	-0.273
		(0.180)	(0.152)	(0.167)	(0.187)	(0.185)	(0.046)	(0.230)	(0.017)	(0.179)
Latitude (logged)		-0.008	0.006	-0.023	-0.010	0.011	-0.005	0.013	0.004*	-0.008
		(0.032)	(0.035)	(0.055)	(0.032)	(0.032)	(0.005)	(0.039)	(0.002)	(0.037)
Muslim		0.002***	0.002***	0.003	0.002**	0.001	0.000*	0.003**	0.000*	0.003***
		(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
OPEC		-0.228***	-0.267***	-0.251***	-0.229***	-0.088*	-0.029*	-0.181***	-0.018***	-0.308***
		(0.061)	(0.064)	(0.055)	(0.066)	(0.048)	(0.017)	(0.058)	(0.007)	(0.066)
Protestant		0.002	0.001	0.001	0.002	0.001	0.001**	0.002	0.000	0.001
		(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.000)	(0.002)	(0.000)	(0.002)
Democracy (lexical scale)			0.002							
			(0.007)							
Ethnolinguistic fract.			0.324***							
			(0.115)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	1,378	1,268	1,265	899	1,268	59	8,029	1,032	1,148	1,238
Countries	101	94	94	58	94	59	201	81	91	92
Years	29	29	29	29	29	1	43	29	28	29
R2 (pseudo)	0.111	0.582	0.630	0.654	0.557	0.641		0.619		0.540

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B5: Revenue Decentralization

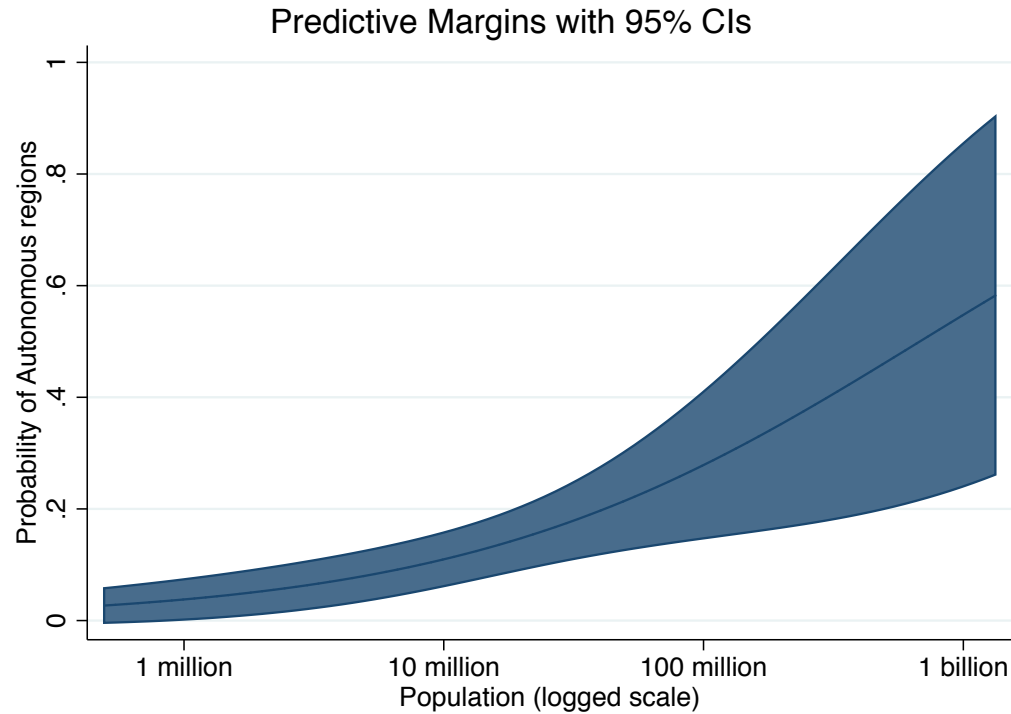Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B5.

Table B6: Government Consumption

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	2	3	4	5	6	7	8	9	10
Population (log)	-0.014***	-0.014***	-0.013***	-0.005	-0.010***	-0.003	-0.009***	-0.009**	-0.001**	-0.014***
	(0.002)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.002)	(0.004)	(0.000)	(0.005)
Urbanization		0.077**	0.077**	0.126***	0.071**	0.085	0.022	0.050	0.004	0.097***
		(0.034)	(0.034)	(0.045)	(0.034)	(0.054)	(0.024)	(0.034)	(0.004)	(0.035)
GDPpc (logged)		0.009	0.009	-0.013	0.012	0.014	0.007	0.010	0.002**	0.015*
		(0.008)	(0.007)	(0.011)	(0.008)	(0.012)	(0.005)	(0.008)	(0.001)	(0.008)
English legal origin		-0.069	-0.069	-0.072	-0.077	-0.045	-0.062*	0.057**	-0.007	-0.066
		(0.062)	(0.061)	(0.075)	(0.061)	(0.065)	(0.034)	(0.023)	(0.005)	(0.063)
French legal origin		-0.090	-0.089	-0.090	-0.094	-0.060	-0.070**	0.031	-0.010*	-0.095
		(0.064)	(0.062)	(0.077)	(0.063)	(0.066)	(0.035)	(0.020)	(0.005)	(0.065)
German legal origin		-0.119**	-0.121**	-0.094	-0.118**	-0.094	-0.081**	-0.021	-0.012**	-0.124**
		(0.053)	(0.051)	(0.062)	(0.053)	(0.057)	(0.031)	(0.041)	(0.005)	(0.057)
Scandinavian legal Origin		-0.052	-0.053	-0.029	-0.048	-0.005	-0.033	0.078**	-0.004	-0.047
		(0.066)	(0.064)	(0.077)	(0.065)	(0.066)	(0.039)	(0.034)	(0.006)	(0.068)
Latitude (logged)		0.008	0.007	0.011	0.008	0.014	-0.003	0.011*	0.001	0.005
		(0.006)	(0.006)	(0.008)	(0.006)	(0.011)	(0.009)	(0.007)	(0.001)	(0.007)
Muslim		-0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000*	-0.000	0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
OPEC		-0.000	-0.001	0.011	-0.003	0.002	-0.007	0.007	-0.001	-0.000
		(0.017)	(0.018)	(0.015)	(0.018)	(0.028)	(0.014)	(0.019)	(0.002)	(0.016)
Protestant		0.000	0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Democracy (lexical scale)			0.001							
			(0.002)							
Ethnolinguistic fract.			-0.014							
			(0.023)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	6,521	5,625	5,527	3,631	5,625	142	9,957	3,703	5,465	5,397
Countries	171	146	146	127	146	142	201	132	146	139
Years	51	51	51	51	51	1	54	51	50	51
R2 (pseudo)	0.080	0.333	0.341	0.388	0.323	0.375		0.427		0.362

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B6: Government Consumption

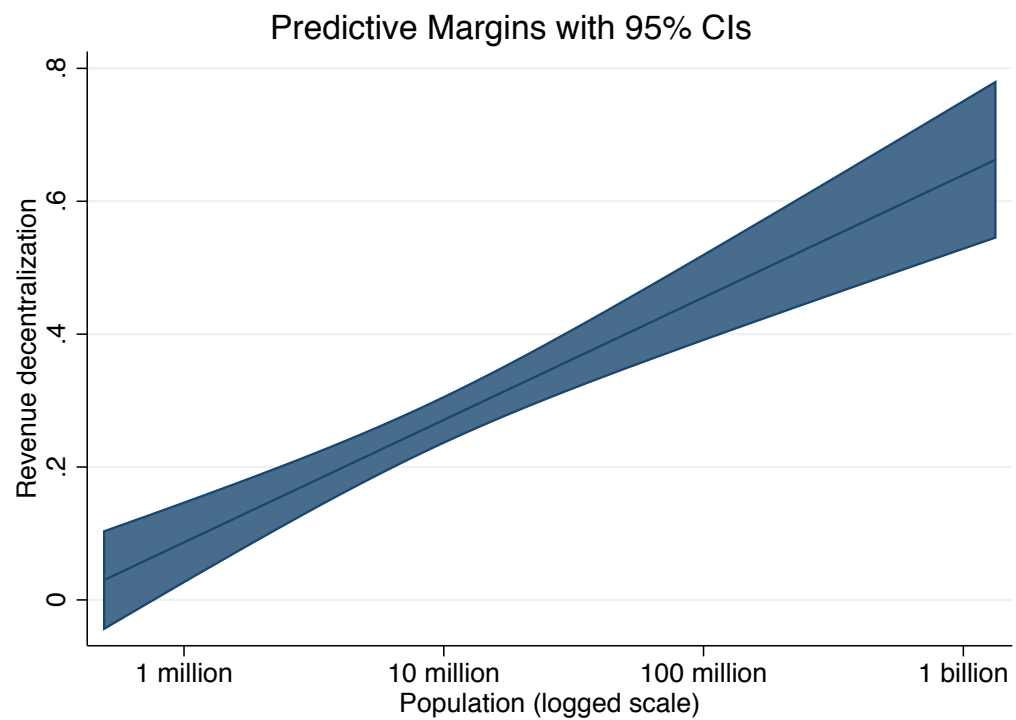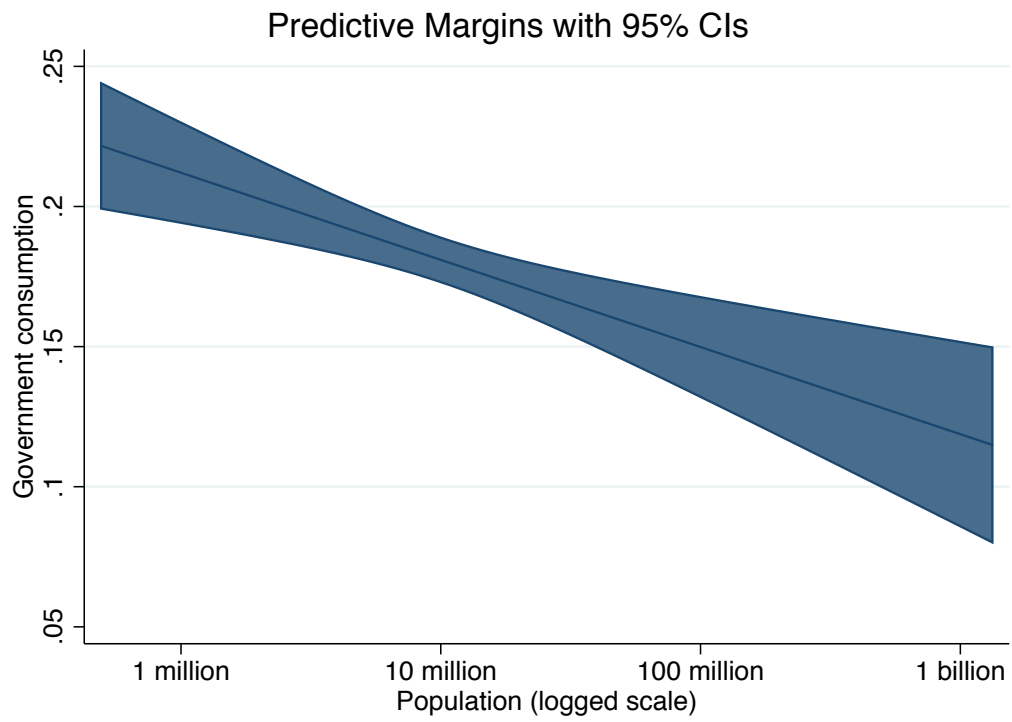Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B6.

Table B7: Separate Powers

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	Logit	Logit	Logit	Logit	Logit	Logit	Logit	Logit	Logit
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Population (log)	0.192***	0.416***	0.357**	0.314*	0.269**	0.373**	0.086	0.541**	0.174*
	(0.070)	(0.139)	(0.165)	(0.161)	(0.114)	(0.177)	(0.065)	(0.227)	(0.091)
Urbanization		0.879	0.396	-2.823*	1.032	0.754	1.558***	1.430	0.300
		(0.931)	(1.022)	(1.669)	(0.934)	(1.646)	(0.491)	(1.343)	(0.413)
GDPpc (logged)		-0.135	-0.201	0.519	-0.233	-0.437	-0.108	-0.571	-0.054
		(0.268)	(0.316)	(0.464)	(0.258)	(0.400)	(0.117)	(0.349)	(0.122)
English legal origin		1.384	0.673	0.739	1.598*	31.118***	-0.866	-0.076	0.579
		(0.843)	(0.866)	(0.893)	(0.867)	(2.127)	(0.699)	(0.939)	(0.429)
French legal origin		2.149***	1.667**	1.815**	2.174***	31.202***	-0.768	0.325	1.047***
		(0.770)	(0.738)	(0.791)	(0.802)	(2.077)	(0.700)	(0.942)	(0.421)
German legal origin		1.893*	1.185	1.129	1.757*	17.733***	-1.637*	-1.341	
		(1.079)	(1.123)	(1.217)	(1.056)	(1.804)	(0.910)	(1.476)	
Scandinavian legal Origin		2.081	1.356	1.510	1.903		-0.759	0.831	0.950
		(1.853)	(1.737)	(1.759)	(1.894)		(1.491)	(1.917)	(0.762)
Latitude (logged)		-0.389**	-0.477**	-0.229	-0.348*	-0.215	-0.319***	-0.396	-0.221**
		(0.189)	(0.220)	(0.237)	(0.182)	(0.345)	(0.119)	(0.251)	(0.092)
Muslim		0.017***	0.020***	0.011	0.017***	0.012	0.016***	0.016**	0.010***
		(0.006)	(0.007)	(0.009)	(0.006)	(0.009)	(0.004)	(0.007)	(0.002)
OPEC		-1.435***	-1.387**	-1.041**	-1.317***	-0.674	-1.055***	-1.190	-0.786***
		(0.496)	(0.558)	(0.508)	(0.471)	(0.923)	(0.368)	(0.774)	(0.254)
Protestant		0.018	0.019	0.021	0.019	0.007	-0.000	0.013	0.010
		(0.012)	(0.012)	(0.016)	(0.012)	(0.017)	(0.007)	(0.014)	(0.006)
Democracy (lexical scale)			0.238***						
			(0.073)						
Ethnolinguistic fract.			0.889						
			(0.725)						
Region FE		✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓
Observations	15,398	10,996	9,339	7,314	10,909	141	22,815	7,140	10,156
Countries	160	146	146	129	146	141	204	140	138
Years	112	112	112	115	110	1	115	112	112
R2 (pseudo)	0.0211	0.336	0.335	0.417	0.322	0.290		0.457	

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B7: Separate Powers

Predictive Margins with 95% CIs

Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B7.

Table B8: Divided Party Control

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Population (log)	0.021***	0.023**	0.026***	0.030***	0.024**	0.045**	0.005*	0.029***	0.002**	0.017
	(0.007)	(0.009)	(0.010)	(0.011)	(0.009)	(0.018)	(0.003)	(0.011)	(0.001)	(0.013)
Urbanization		-0.128	-0.146	-0.154	-0.113	-0.163	-0.054*	-0.085	-0.020*	-0.072
		(0.101)	(0.107)	(0.153)	(0.100)	(0.200)	(0.028)	(0.116)	(0.011)	(0.098)
GDPpc (logged)		0.032	0.016	0.047	0.027	0.017	0.006	0.016	0.004	0.019
		(0.024)	(0.024)	(0.045)	(0.024)	(0.042)	(0.007)	(0.027)	(0.003)	(0.025)
English legal origin		-0.091	-0.175**	0.000	-0.077	0.118	0.007	-0.231***	0.002	-0.067
		(0.060)	(0.074)	(0.114)	(0.060)	(0.199)	(0.027)	(0.066)	(0.008)	(0.067)
French legal origin		-0.042	-0.110*	0.059	-0.036	0.127	0.004	-0.123**	0.003	-0.030
		(0.050)	(0.065)	(0.110)	(0.049)	(0.194)	(0.024)	(0.054)	(0.007)	(0.057)
German legal origin		0.056	-0.011	0.137	0.064	0.177	0.028	-0.008	0.007	0.088
		(0.065)	(0.073)	(0.117)	(0.066)	(0.200)	(0.031)	(0.088)	(0.009)	(0.094)
Scandinavian legal Origin		0.041	0.013	0.246*	0.047	0.169	0.082**	-0.065	0.023*	0.048
		(0.098)	(0.103)	(0.137)	(0.099)	(0.237)	(0.040)	(0.107)	(0.012)	(0.104)
Latitude (logged)		-0.005	-0.012	0.004	-0.007	0.023	-0.001	-0.006	-0.001	-0.005
		(0.023)	(0.024)	(0.031)	(0.023)	(0.046)	(0.009)	(0.026)	(0.002)	(0.023)
Muslim		0.001	0.001	0.000	0.001	0.000	-0.000	-0.000	0.000	0.001
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
OPEC		-0.026	-0.044	-0.167**	-0.031	-0.147	0.051**	-0.123*	0.005	-0.034
		(0.078)	(0.074)	(0.077)	(0.077)	(0.096)	(0.024)	(0.065)	(0.006)	(0.079)
Protestant		0.001*	0.001	-0.000	0.001*	0.003	-0.000	0.002*	0.000	0.001*
		(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.000)	(0.001)	(0.000)	(0.001)
Democracy (lexical scale)			0.018**							
			(0.008)							
Ethnolinguistic fract.			0.149*							
			(0.079)							
Electoral system FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓			✓	✓	✓	✓
Observations	8,894	7,719	7,178	3,661	7,714	130	19,982	5,813	10,751	7,459
Countries	156	142	142	113	142	130	202	136	146	139
Years	111	111	111	75	110	1	115	111	111	111
R2 (pseudo)	0.037	0.137	0.160	0.209	0.139	0.197		0.148		0.091

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B8: Divided Party Control

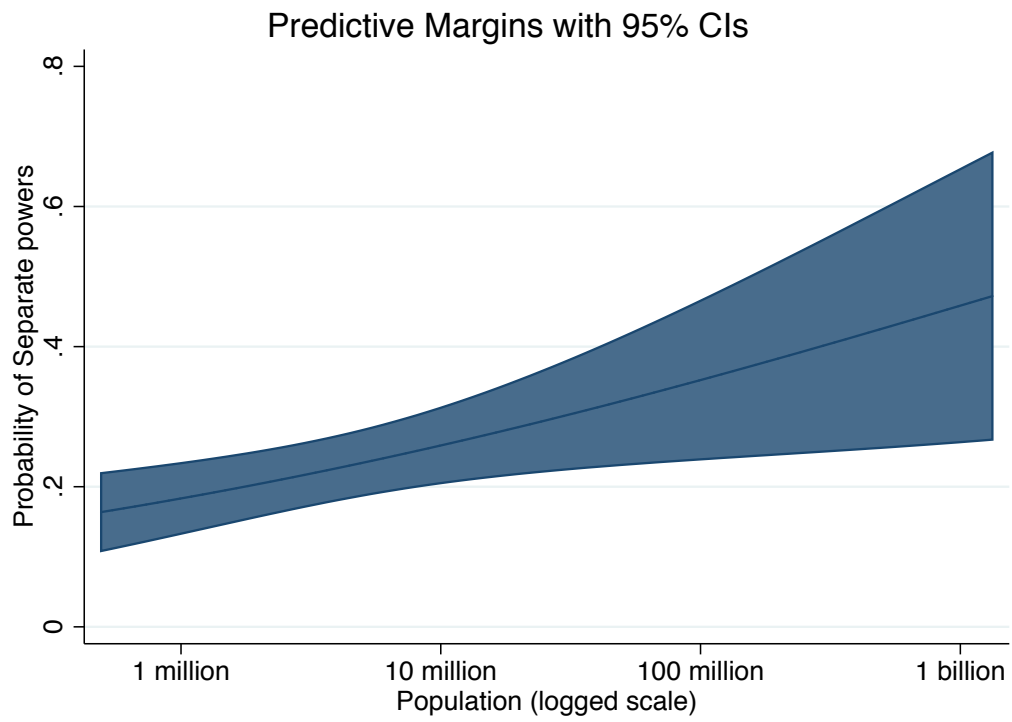Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B8.

Table B9: Decentralized Parties

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Population (log)	0.021**	0.026***	0.025**	0.022**	0.024***	0.019**	0.010***	0.030***	0.021**
	(0.009)	(0.008)	(0.010)	(0.009)	(0.008)	(0.008)	(0.003)	(0.009)	(0.009)
Urbanization		0.197**	0.164**	0.029	0.217***	0.096	0.125***	0.247***	0.233***
		(0.080)	(0.077)	(0.111)	(0.078)	(0.099)	(0.033)	(0.083)	(0.077)
GDPpc (logged)		0.009	-0.008	0.038	0.004	-0.006	0.001	0.012	-0.004
		(0.018)	(0.018)	(0.025)	(0.017)	(0.022)	(0.007)	(0.020)	(0.017)
English legal origin		0.072	0.046	0.179***	0.085*	0.263***	0.037	-0.041	0.089*
		(0.051)	(0.052)	(0.056)	(0.051)	(0.077)	(0.026)	(0.048)	(0.049)
French legal origin		-0.060	-0.075*	-0.003	-0.053	0.144*	-0.047*	-0.217***	-0.045
		(0.045)	(0.045)	(0.043)	(0.045)	(0.074)	(0.024)	(0.041)	(0.042)
German legal origin		0.120	0.102	0.160**	0.125	0.274**	0.029	-0.059	0.151*
		(0.079)	(0.080)	(0.069)	(0.080)	(0.107)	(0.046)	(0.112)	(0.089)
Scandinavian legal Origin		0.076	0.018	0.118	0.079	0.310***	0.048	-0.019	0.082
		(0.097)	(0.099)	(0.103)	(0.097)	(0.118)	(0.051)	(0.096)	(0.097)
Latitude (logged)		0.011	0.010	0.014	0.010	0.008	-0.003	0.005	0.010
		(0.013)	(0.014)	(0.017)	(0.013)	(0.019)	(0.009)	(0.014)	(0.013)
Muslim		0.000	0.000	0.000	0.000	-0.001*	0.001	0.000	0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
OPEC		0.000	0.017	-0.011	-0.002	0.008	0.002	-0.034	0.003
		(0.038)	(0.047)	(0.030)	(0.039)	(0.060)	(0.021)	(0.032)	(0.036)
Protestant		0.001	0.002*	0.002*	0.001	0.000	0.001**	0.001	0.001
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)
Democracy (lexical scale)			0.024***						
			(0.003)						
Ethnolinguistic fract.			0.010						
			(0.041)						
Region FE		✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓
Observations	15,205	10,897	9,240	7,189	10,814	145	19,982	7,206	10,481
Countries	160	146	146	129	146	145	202	142	142
Years	112	112	112	115	110	1	115	112	112
R2 (pseudo)	0.037	0.531	0.564	0.601	0.528	0.471		0.616	0.542

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

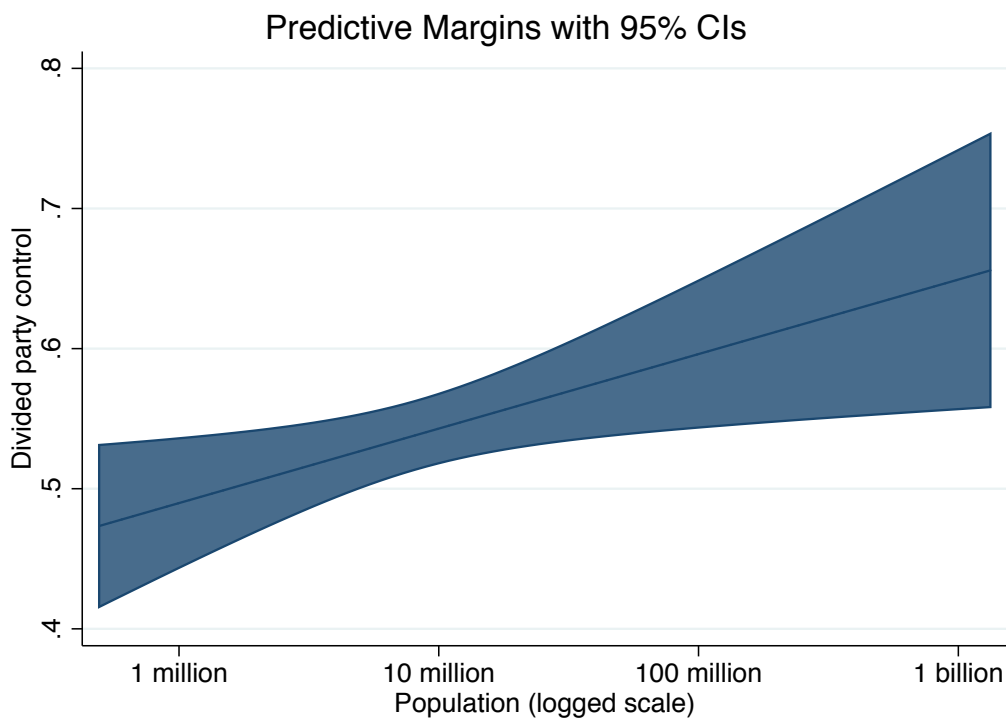Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B9.

Table B10: Judicial Review

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Population (log)	0.022**	0.021*	0.018	0.006	0.020*	0.021*	0.012***	0.027**	0.025*
	(0.011)	(0.012)	(0.013)	(0.013)	(0.011)	(0.012)	(0.003)	(0.012)	(0.014)
Urbanization		0.158*	0.122	0.419***	0.175*	0.059	0.088***	0.266***	0.168*
		(0.093)	(0.087)	(0.159)	(0.094)	(0.120)	(0.026)	(0.090)	(0.094)
GDPpc (logged)		0.025	-0.009	-0.038	0.021	-0.002	0.014**	0.014	0.015
		(0.025)	(0.027)	(0.044)	(0.025)	(0.025)	(0.006)	(0.028)	(0.026)
English legal origin		0.347***	0.270**	0.377***	0.359***	0.826***	0.043	0.092	0.334***
		(0.107)	(0.114)	(0.102)	(0.109)	(0.118)	(0.027)	(0.126)	(0.110)
French legal origin		0.250**	0.195	0.264**	0.256**	0.749***	0.009	-0.067	0.236*
		(0.118)	(0.119)	(0.107)	(0.119)	(0.115)	(0.027)	(0.146)	(0.121)
German legal origin		0.343***	0.292**	0.380***	0.349***	0.754***	0.026	-0.022	0.316***
		(0.095)	(0.113)	(0.089)	(0.096)	(0.111)	(0.033)	(0.154)	(0.115)
Scandinavian legal Origin		0.632***	0.579***	0.662***	0.635***	1.030***	0.124**	0.415***	0.621***
		(0.143)	(0.146)	(0.150)	(0.144)	(0.163)	(0.052)	(0.158)	(0.145)
Latitude (logged)		-0.041	-0.057**	-0.030	-0.042	0.011	-0.013	-0.032	-0.041
		(0.025)	(0.028)	(0.031)	(0.025)	(0.026)	(0.009)	(0.027)	(0.025)
Muslim		0.000	0.001	0.000	0.000	-0.002**	-0.000	0.000	0.000
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)
OPEC		-0.140	-0.084	-0.086	-0.141	-0.262**	-0.055	-0.137	-0.140
		(0.088)	(0.080)	(0.085)	(0.089)	(0.101)	(0.034)	(0.103)	(0.087)
Protestant		-0.004***	-0.004***	-0.004***	-0.004***	-0.004***	-0.001***	-0.006***	-0.004***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)
Democracy (lexical scale)			0.050***						
			(0.007)						
Ethnolinguistic fract.			0.022						
			(0.071)						
Region FE		✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓
Observations	15,336	11,001	9,344	7,293	10,914	145	19,982	7,248	10,585
Countries	160	146	146	129	146	145	202	142	142
Years	112	112	112	115	110	1	115	112	112
R2 (pseudo)	0.021	0.320	0.412	0.351	0.319	0.552		0.378	0.309

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B10: Judicial Review

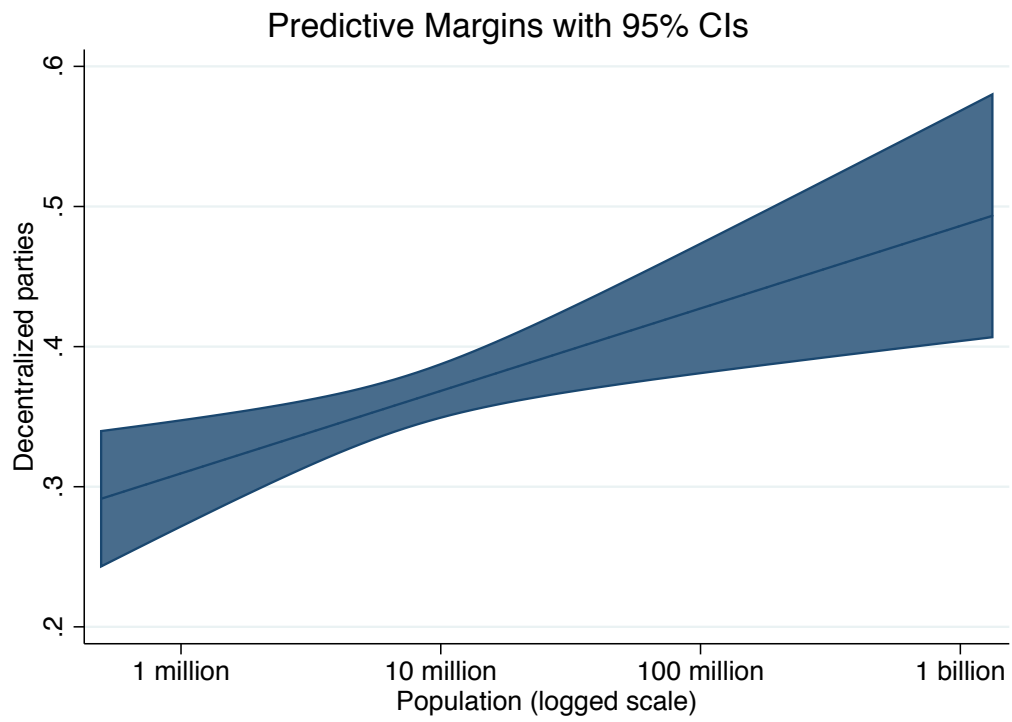Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B10.

Table B11: Constitution Length

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Population	t-1	t-1	t-1	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Imputed	Electoral	Full
	1	**2**	**3**	**5**	**7**	**8**	**10**
Population (log)	0.000	0.000***	0.000***	0.000*	-0.000	0.000**	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Urbanization		0.000***	0.000*	0.000***	-0.009	0.000***	0.000***
		(0.000)	(0.000)	(0.000)	(0.008)	(0.000)	(0.000)
GDPpc (logged)		0.000	0.000**	0.000	-0.001	0.000	0.000
		(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)
English legal origin		0.000*	0.000	0.000**	0.009	0.000***	0.000**
		(0.000)	(0.000)	(0.000)	(0.014)	(0.000)	(0.000)
French legal origin		-0.000*	-0.000**	-0.000*	-0.011	-0.000	-0.000*
		(0.000)	(0.000)	(0.000)	(0.012)	(0.000)	(0.000)
German legal origin		0.000*	0.000	0.000	-0.002	0.000***	0.000
		(0.000)	(0.000)	(0.000)	(0.013)	(0.000)	(0.000)
Scandinavian legal Origin		-0.000	-0.000	-0.000	-0.013	0.000	-0.000
		(0.000)	(0.000)	(0.000)	(0.020)	(0.000)	(0.000)
Latitude (logged)		-0.000	-0.000	-0.000	-0.002	0.000	-0.000
		(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)
Muslim		-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
OPEC		-0.000	-0.000	-0.000	-0.002	-0.000	-0.000
		(0.000)	(0.000)	(0.000)	(0.006)	(0.000)	(0.000)
Protestant		0.000	-0.000	0.000	0.000	-0.000	0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Democracy (lexical scale)			0.000				
			(0.000)				
Ethnolinguistic fract.			0.000				
			(0.000)				
Region FE		✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓	✓	✓
Observations	731	523	454	456	23,810	210	505
Countries	185	145	129	141	202	117	136
Years	195	148	142	99	215	94	145
R2 (pseudo)	0.005	0.458	0.466	0.459		0.531	0.439

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B11: Constitution Length

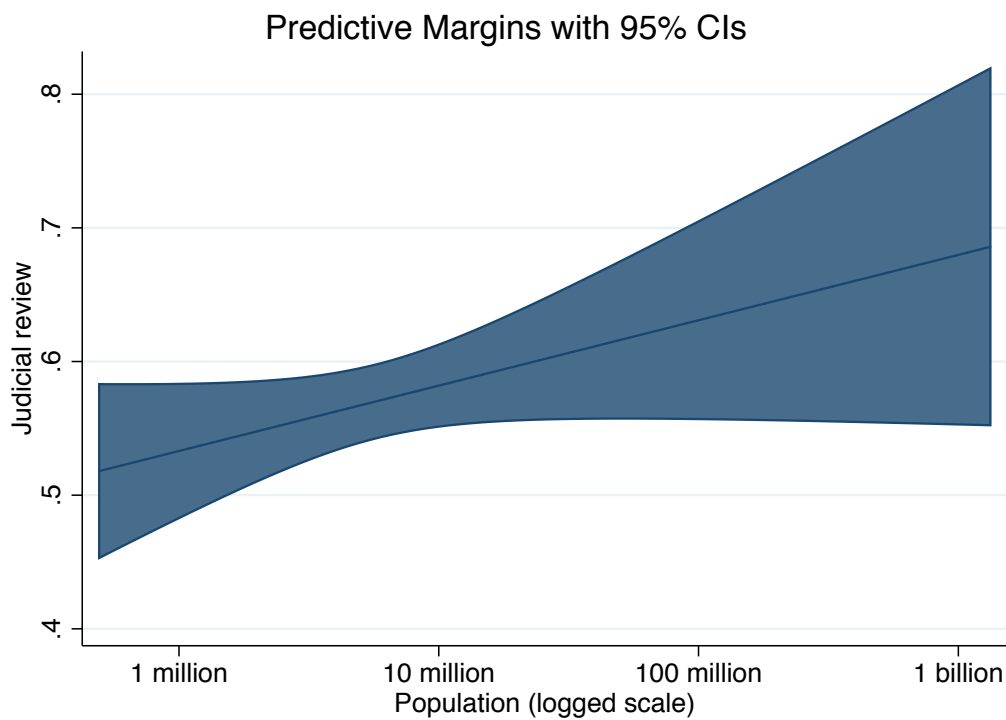Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B11.

Table B12: Constitution Scope

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Population	t-1	t-1	t-1	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Imputed	Electoral	Full
	1	**2**	**3**	**5**	**7**	**8**	**10**
Population (log)	0.012*	0.022***	0.020***	0.012*	0.006***	0.026***	0.001
	(0.006)	(0.006)	(0.007)	(0.006)	(0.002)	(0.009)	(0.008)
Urbanization		0.166**	0.192***	0.217***	0.052***	0.116	0.262***
		(0.066)	(0.073)	(0.073)	(0.016)	(0.089)	(0.069)
GDPpc (logged)		0.039**	0.037*	0.023	0.009***	0.049**	0.028
		(0.017)	(0.019)	(0.019)	(0.003)	(0.019)	(0.018)
English legal origin		0.001	0.017	0.035	0.011	0.038	0.018
		(0.028)	(0.037)	(0.031)	(0.030)	(0.102)	(0.031)
French legal origin		0.003	0.000	0.032	-0.001	0.067	0.007
		(0.027)	(0.035)	(0.029)	(0.029)	(0.101)	(0.027)
German legal origin		0.069	0.043	0.005	0.020	0.143	0.021
		(0.048)	(0.050)	(0.052)	(0.031)	(0.094)	(0.050)
Scandinavian legal Origin		0.035	-0.015	-0.102	0.041	0.096	-0.006
		(0.074)	(0.093)	(0.095)	(0.039)	(0.118)	(0.080)
Latitude (logged)		-0.011	-0.022*	-0.013			
		(0.009)	(0.013)	(0.011)			
Muslim		0.000	0.001**	0.001			
		(0.000)	(0.000)	(0.000)			
OPEC		-0.071***	-0.082***	-0.072***			
		(0.018)	(0.018)	(0.026)			
Protestant		0.000	0.001	0.001			
		(0.001)	(0.001)	(0.001)			
Democracy (lexical scale)			0.002				
			(0.004)				
Ethnolinguistic fract.			-0.015				
			(0.038)				
Region FE		✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓	✓	✓
Observations	722	526	455	459	23,810	212	507
Countries	185	145	129	141	202	119	136
Years	190	148	142	99	215	95	145
R2 (pseudo)	0.023	0.244	0.280	0.220		0.283	0.236

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B12: Constitution Scope
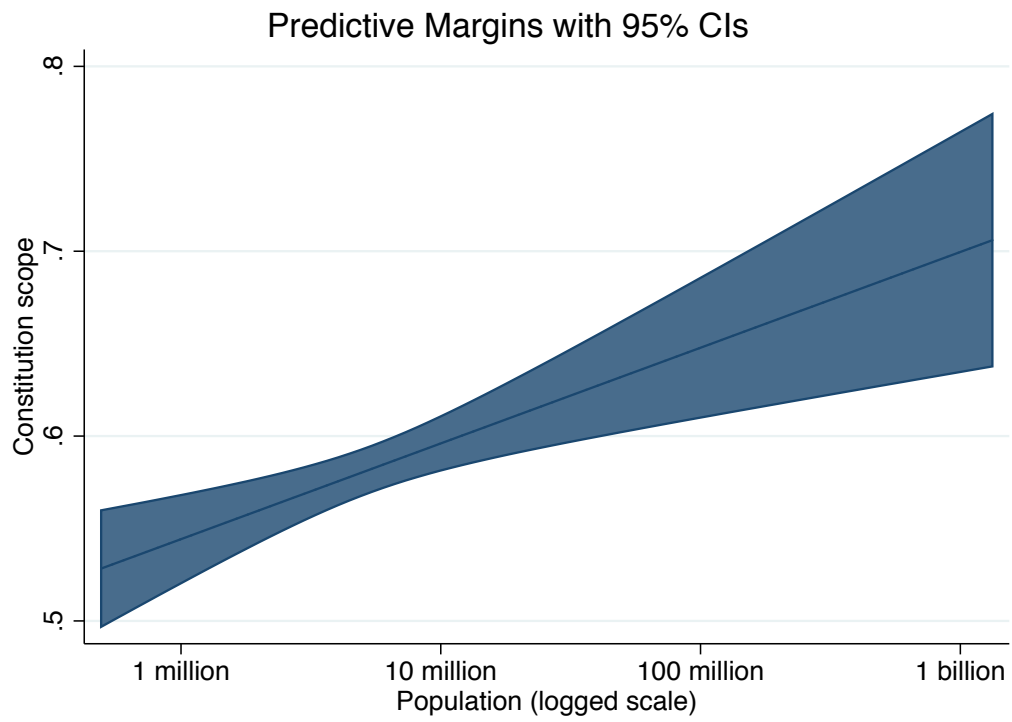
Predictive Margins with 95% CIs

Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B12.

Table B13: Constitution Rigidity
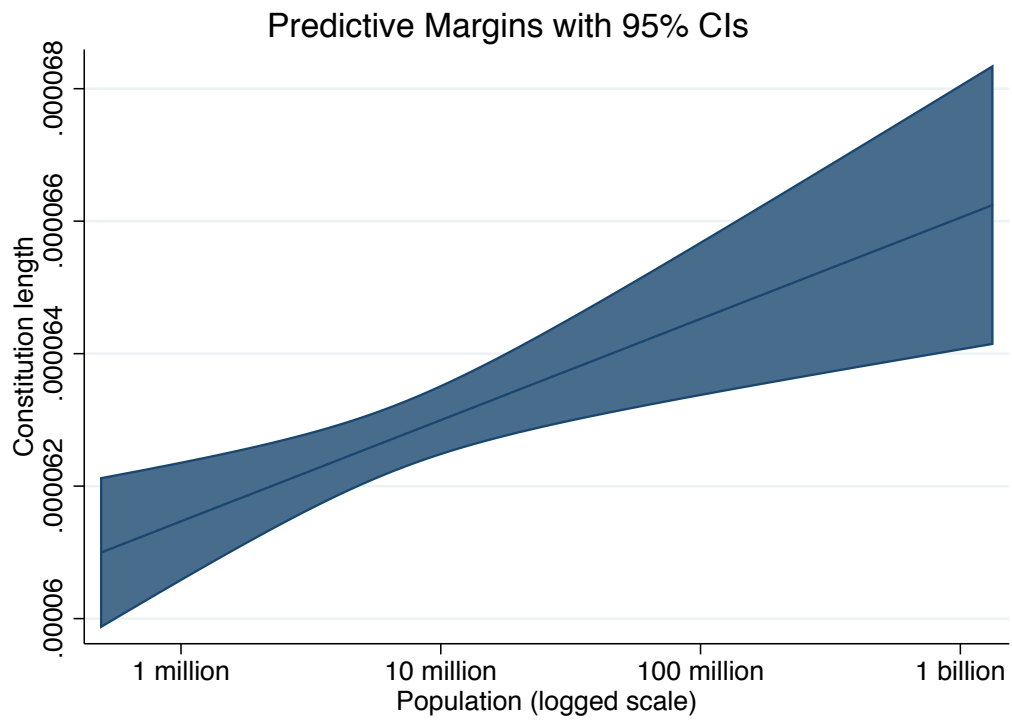
Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Population	t-1	t-1	t-1	1900	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Imputed	Electoral	Full
	1	2	3	5	7	8	10
Population (log)	0.024	0.216***	0.051	0.155*	0.029	0.262***	-0.054
	(0.045)	(0.073)	(0.085)	(0.081)	(0.018)	(0.099)	(0.082)
Urbanization		1.565*	2.150**	1.765**	0.501**	1.785*	2.615***
		(0.840)	(0.973)	(0.871)	(0.205)	(1.023)	(0.711)
GDPpc (logged)		-0.109	-0.321	-0.065	-0.017	-0.177	-0.323**
		(0.208)	(0.238)	(0.207)	(0.045)	(0.256)	(0.155)
English legal origin		0.362	1.142**	0.325	0.211	0.984	0.221
		(0.646)	(0.487)	(0.628)	(0.445)	(0.826)	(0.510)
French legal origin		0.095	0.227	0.054	-0.035	1.094	0.024
		(0.614)	(0.490)	(0.597)	(0.445)	(0.740)	(0.535)
German legal origin		[omitted]	[omitted]	[omitted]	[omitted]	[omitted]	[omitted]
Scandinavian legal Origin		2.417*	3.329**	2.230	0.589	1.474	2.191**
		(1.390)	(1.394)	(1.682)	(0.570)	(2.197)	(0.927)
Latitude (logged)		0.010	-0.072	0.217	-0.006	0.048	-0.066
		(0.157)	(0.148)	(0.168)	(0.061)	(0.179)	(0.097)
Muslim		-0.003	-0.004	-0.005	-0.001	-0.003	-0.004
		(0.004)	(0.005)	(0.004)	(0.002)	(0.004)	(0.003)
OPEC		0.528	0.567	0.552	0.100	0.613	0.168
		(0.385)	(0.360)	(0.446)	(0.194)	(0.448)	(0.285)
Protestant		-0.004	-0.015	-0.009	-0.001	0.008	-0.013*
		(0.010)	(0.011)	(0.010)	(0.002)	(0.014)	(0.007)
Democracy (lexical scale)			0.097*				
			(0.050)				
Ethnolinguistic fract.			-0.880				
			(0.624)				
Region FE		✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓	✓	✓
Observations	859	616	503	536	23,810	273	568
Countries	181	142	127	139	202	121	127
Years	198	157	148	104	215	108	152
R2 (pseudo)	(0.000)	(0.038)	(0.049)	(0.038)		(0.055)	

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B13: Constitution Rigidity

Predictive Margins with 95% CIs

Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B13.

Table B14: Bicameralism

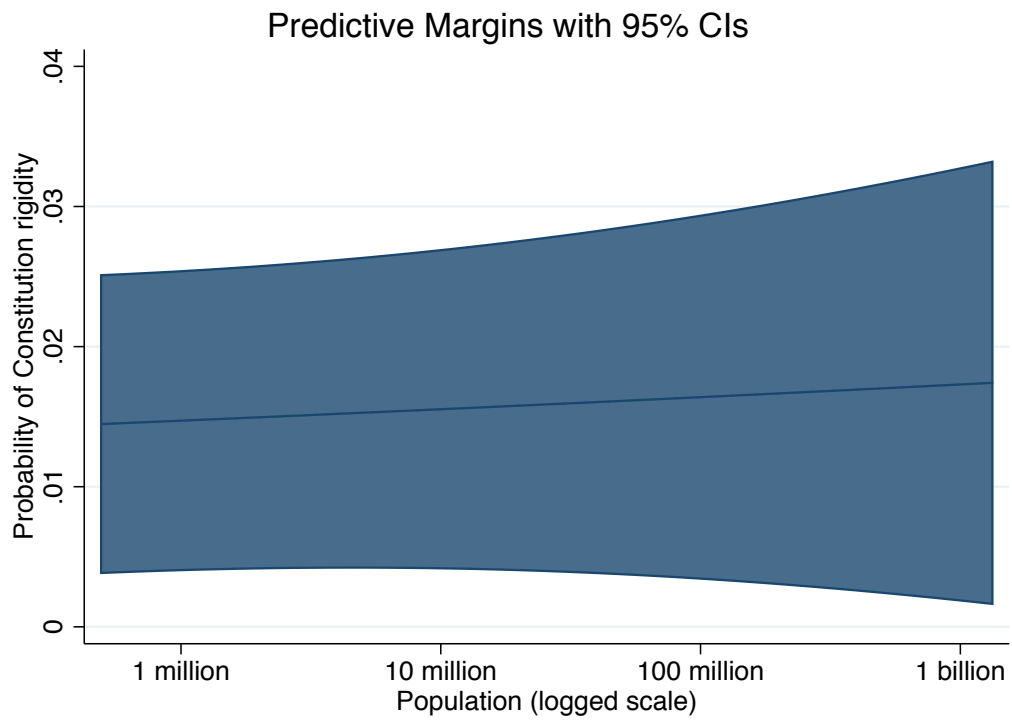| Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Population (log)	0.055***	0.061***	0.059***	0.059***	0.053***	0.053***	0.019***	0.078***	0.005***	0.054***
	(0.009)	(0.010)	(0.013)	(0.016)	(0.011)	(0.017)	(0.003)	(0.011)	(0.001)	(0.013)
Urbanization		0.249**	0.241*	0.274	0.287***	0.051	0.079***	0.366***	0.017	0.310**
		(0.106)	(0.125)	(0.174)	(0.109)	(0.188)	(0.030)	(0.118)	(0.011)	(0.130)
GDPpc (logged)		0.057***	0.049*	0.020	0.046**	0.044	0.006	0.039	0.006***	0.050**
		(0.021)	(0.026)	(0.044)	(0.021)	(0.042)	(0.005)	(0.025)	(0.002)	(0.024)
English legal origin		-0.031	-0.078	0.036	-0.001	0.150	0.059**	-0.250***	-0.009	0.026
		(0.073)	(0.079)	(0.089)	(0.071)	(0.163)	(0.029)	(0.082)	(0.006)	(0.075)
French legal origin		-0.017	-0.053	0.105	-0.001	0.160	0.046	-0.228**	-0.008	0.033
		(0.085)	(0.078)	(0.084)	(0.085)	(0.160)	(0.032)	(0.104)	(0.007)	(0.083)
German legal origin		0.181	0.157	0.329**	0.181	0.245	0.111**	-0.014	0.009	0.314**
		(0.121)	(0.122)	(0.127)	(0.122)	(0.170)	(0.044)	(0.179)	(0.010)	(0.148)
Scandinavian legal Origin		-0.044	-0.094	0.000	-0.053	-0.047	0.013	-0.246*	-0.011	0.019
		(0.139)	(0.145)	(0.162)	(0.142)	(0.226)	(0.053)	(0.143)	(0.012)	(0.134)
Latitude (logged)		0.013	-0.007	0.015	0.014	0.038	0.003	0.019	0.000	0.009
		(0.020)	(0.022)	(0.033)	(0.020)	(0.043)	(0.006)	(0.026)	(0.002)	(0.020)
Muslim		0.000	0.001	-0.001	0.000	0.001	0.000	-0.000	0.000	0.000
		(0.000)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
OPEC		-0.049	-0.017	-0.036	-0.046	-0.078	-0.011	-0.061	-0.006	-0.052
		(0.060)	(0.059)	(0.078)	(0.058)	(0.120)	(0.021)	(0.100)	(0.005)	(0.063)
Protestant		0.000	-0.000	0.001	0.000	0.001	0.000	-0.000	-0.000	-0.000
		(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.000)	(0.001)	(0.000)	(0.001)
Democracy (lexical scale)			0.032***							
			(0.008)							
Ethnolinguistic fract.			-0.067							
			(0.090)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	16,326	11,207	9,396	7,387	11,117	147	19,982	7,393	11,101	10,504
Countries	169	150	149	132	150	147	202	147	150	142
Years	112	112	112	115	110	1	115	112	111	112
R2 (pseudo)	0.108	0.318	0.333	0.269	0.308	0.215		0.448		0.308

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B14: Bicameralism

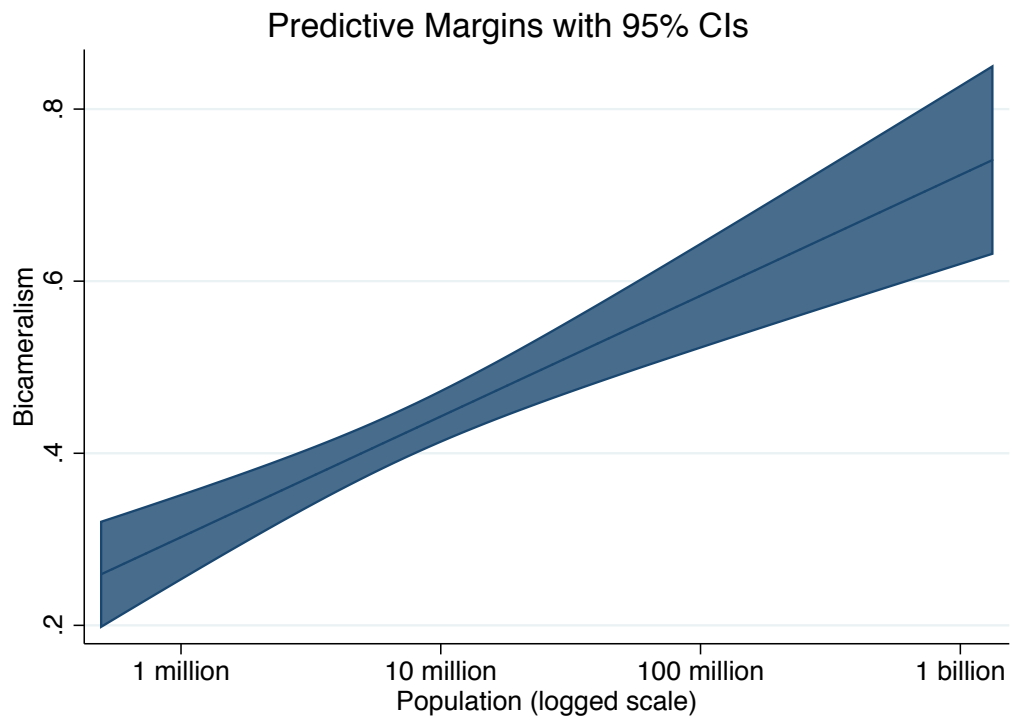Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B14.
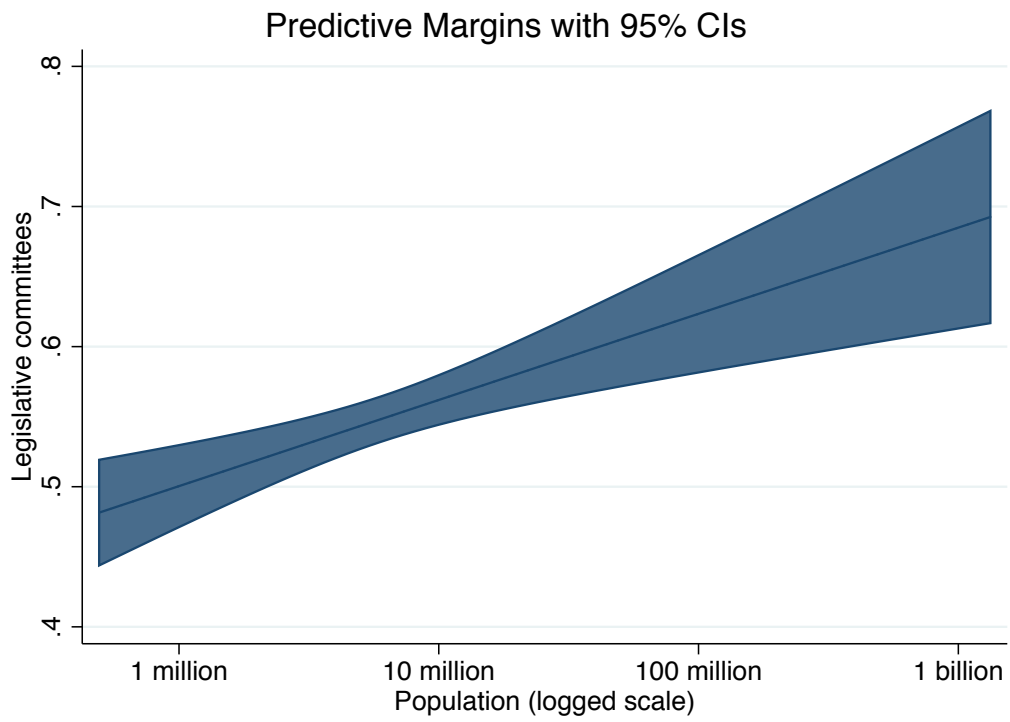
Table B15: Legislative Committees

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Population (log)	0.034***	0.027***	0.024***	0.027***	0.027***	0.025***	0.018***	0.033***	0.001***	0.024***
	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.006)	(0.003)	(0.008)	(0.000)	(0.009)
Urbanization		0.208***	0.161**	0.345***	0.230***	0.066	0.158***	0.255***	0.000	0.222***
		(0.070)	(0.062)	(0.090)	(0.069)	(0.070)	(0.031)	(0.069)	(0.002)	(0.068)
GDPpc (logged)		0.036**	0.029*	-0.009	0.031**	0.011	0.017***	0.021	0.000	0.036**
		(0.015)	(0.015)	(0.023)	(0.015)	(0.018)	(0.006)	(0.016)	(0.001)	(0.016)
English legal origin		0.054	-0.008	0.117***	0.069*	0.174***	0.009	0.032	0.006***	0.052
		(0.040)	(0.042)	(0.033)	(0.039)	(0.062)	(0.023)	(0.044)	(0.002)	(0.042)
French legal origin		0.082**	0.034	0.167***	0.089***	0.165***	0.021	0.067*	0.006***	0.077**
		(0.033)	(0.034)	(0.023)	(0.033)	(0.055)	(0.022)	(0.040)	(0.002)	(0.035)
German legal origin		0.060	-0.010	0.156***	0.070*	0.208***	0.004	0.026	0.006***	0.050
		(0.038)	(0.041)	(0.030)	(0.037)	(0.053)	(0.025)	(0.060)	(0.001)	(0.048)
Scandinavian legal Origin		0.206**	0.118	0.228***	0.214**	0.260***	0.107*	0.199**	0.008***	0.202**
		(0.089)	(0.084)	(0.081)	(0.090)	(0.082)	(0.056)	(0.096)	(0.003)	(0.091)
Latitude (logged)		-0.021	-0.026*	-0.006	-0.022*	-0.017	-0.008	-0.014	-0.000	-0.021
		(0.013)	(0.014)	(0.016)	(0.013)	(0.016)	(0.008)	(0.013)	(0.001)	(0.013)
Muslim		-0.001	-0.000	-0.001	-0.000	-0.001**	-0.000**	-0.001*	-0.000*	-0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
OPEC		-0.071*	-0.048	-0.069*	-0.075**	-0.054	-0.021	-0.066	-0.002	-0.072*
		(0.039)	(0.035)	(0.037)	(0.038)	(0.049)	(0.026)	(0.041)	(0.002)	(0.039)
Protestant		-0.000	0.000	0.001	0.000	-0.000	-0.000	-0.000	0.000	-0.000
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Democracy (lexical scale)			0.027***							
			(0.004)							
Ethnolinguistic fract.			0.032							
			(0.040)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	11,428	9,385	8,434	6,396	9,324	139	19,982	6,497	9,123	9,103
Countries	160	146	146	129	146	139	202	140	146	142
Years	112	112	112	115	110	1	115	112	111	112
R2 (pseudo)	0.117	0.409	0.458	0.422	0.415	0.437		0.469		0.399

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B15: Legislative Committees

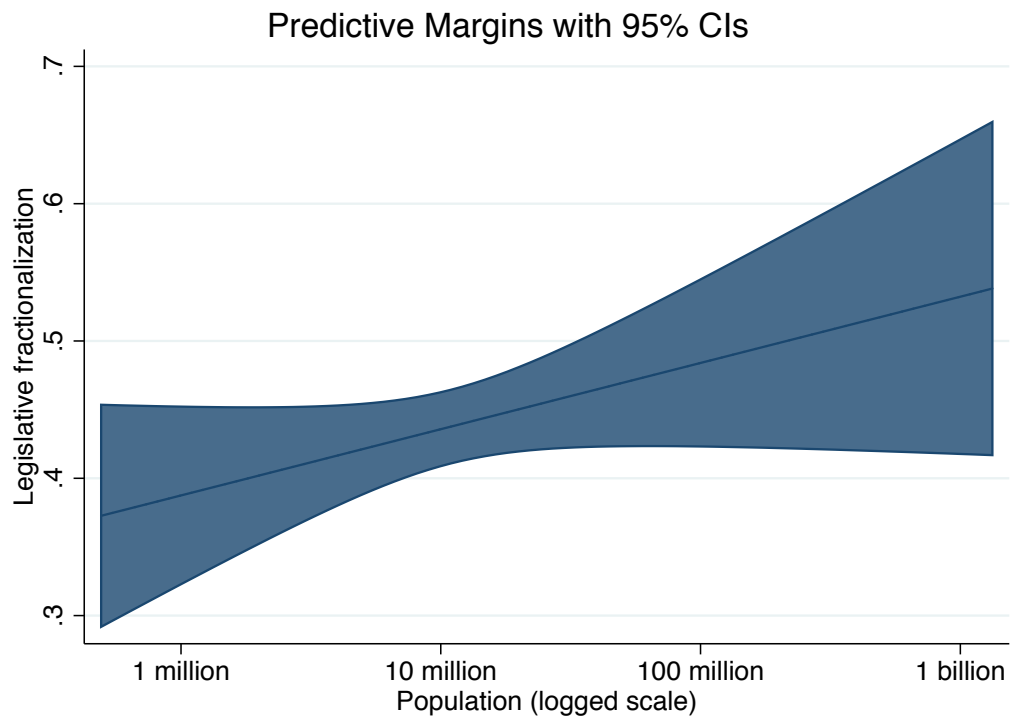Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B15.

Table B16: Legislative Fractionalization

Analysis *Estimator* *Population* *Sample*	Pooled Tobit t-1 Full 1	Pooled Tobit t-1 Full 2	Pooled Tobit t-1 Full 3	Pooled Tobit t-50 Full 4	Pooled Tobit 1900 Full 5	Pooled Tobit 1900 2000 6	Pooled Tobit t-1 Imputed 7	Pooled Tobit t-1 Electoral 8	Panel RE t-1 Full 9	Pooled Tobit t-1, IV Full 10
Population (log)	0.017	0.021*	0.023***	0.015	0.022*	0.047***	0.012***	0.011***	0.002*	-0.002
	(0.017)	(0.013)	(0.009)	(0.012)	(0.012)	(0.015)	(0.002)	(0.001)	(0.001)	(0.016)
Urbanization		0.037	-0.009	-0.176	0.054	-0.108	0.058*	-0.022*	0.007	0.150
		(0.115)	(0.091)	(0.150)	(0.117)	(0.159)	(0.030)	(0.012)	(0.010)	(0.429)
GDPpc (logged)		0.023	-0.017	0.053*	0.019	0.030	0.013***	0.011***	-0.003	0.034
		(0.026)	(0.022)	(0.029)	(0.026)	(0.043)	(0.004)	(0.001)	(0.002)	(0.132)
English legal origin		0.654***	0.312***	0.592***	0.668***	0.484***	0.046*	-0.091***	0.035***	0.680***
		(0.121)	(0.093)	(0.135)	(0.122)	(0.143)	(0.027)	(0.006)	(0.008)	(0.445)
French legal origin		0.659***	0.378***	0.685***	0.659***	0.610***	0.045*	-0.013*	0.037***	0.669***
		(0.121)	(0.092)	(0.132)	(0.122)	(0.131)	(0.026)	(0.007)	(0.008)	(0.399)
German legal origin		0.774***	0.475***	0.723***	0.789***	0.780***	0.086***	0.012**	0.046***	0.771***
		(0.118)	(0.090)	(0.131)	(0.121)	(0.134)	(0.030)	(0.005)	(0.008)	(0.450)
Scandinavian legal Origin		0.822***	0.495***	0.743***	0.851***	0.618***	0.118***	0.048***	0.048***	0.842***
		(0.136)	(0.104)	(0.147)	(0.136)	(0.164)	(0.034)	(0.008)	(0.011)	(0.683)
Latitude (logged)		0.035	-0.000	0.017	0.032	-0.014	-0.001	0.013***	0.001	0.008
		(0.024)	(0.018)	(0.025)	(0.024)	(0.030)	(0.007)	(0.004)	(0.002)	(0.137)
Muslim		-0.003***	-0.002***	-0.002*	-0.003***	-0.002	-0.001***	-0.002***	-0.000**	-0.002***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.002)
OPEC		-0.045	-0.048	-0.069	-0.049	-0.041	-0.025	0.122***	-0.003	-0.048
		(0.094)	(0.071)	(0.080)	(0.093)	(0.107)	(0.021)	(0.008)	(0.006)	(0.233)
Protestant		-0.001	-0.000	0.000	-0.001	0.002	-0.000	0.000	-0.000	-0.001
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.006)
Democracy (lexical scale)			0.089***							
			(0.007)							
Ethnolinguistic fract.			0.047							
			(0.058)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	8,186	7,286	7,078	5,109	6,920	135	23,810	5,370	7,035	7,031
Countries	151	143	143	125	143	135	202	135	143	136
Years	212	191	191	162	110	1	215	182	191	191
R2 (pseudo)	(0.006)	(0.597)	(0.902)	(1.054)	(0.578)	(1.505)		(-4.989)		

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B16: Legislative Fractionalization

Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B16.

Table B17: Political Constraints

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	Tobit	Tobit	Tobit	Tobit	Tobit	Tobit	Tobit	Tobit	RE	Tobit
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	2	3	4	5	6	7	8	9	10
Population (log)	0.077**	0.037***	0.028***	0.025***	0.029*	0.065***	0.013***	0.019***	0.002**	-0.024
	(0.031)	(0.002)	(0.001)	(0.002)	(0.017)	(0.020)	(0.002)	(0.001)	(0.001)	(0.028)
Urbanization		0.140***	0.077***	0.024	0.070	-0.353*	0.045	0.045**	0.004	0.269
		(0.025)	(0.016)	(0.034)	(0.156)	(0.196)	(0.029)	(0.021)	(0.011)	(0.400)
GDPpc (logged)		0.097***	0.009***	0.069***	0.103***	0.050	0.026***	0.036***	0.004	0.091**
		(0.002)	(0.001)	(0.002)	(0.035)	(0.044)	(0.005)	(0.002)	(0.002)	(0.124)
English legal origin		0.594***	0.191***	0.615***	0.669***	0.721***	0.055**	0.315***	0.023***	0.618***
		(0.014)	(0.008)	(0.015)	(0.139)	(0.179)	(0.026)	(0.010)	(0.006)	(0.354)
French legal origin		0.585***	0.254***	0.689***	0.604***	0.786***	0.050*	0.348***	0.026***	0.559***
		(0.015)	(0.010)	(0.015)	(0.128)	(0.170)	(0.026)	(0.013)	(0.006)	(0.324)
German legal origin		0.814***	0.400***	0.814***	0.866***	1.014***	0.071*	0.531***	0.039***	0.681***
		(0.020)	(0.009)	(0.018)	(0.158)	(0.169)	(0.036)	(0.016)	(0.007)	(0.359)
Scandinavian legal Origin		0.605***	0.250***	0.620***	0.717***	0.704***	0.079*	0.340***	0.023**	0.560***
		(0.018)	(0.012)	(0.017)	(0.167)	(0.228)	(0.041)	(0.014)	(0.010)	(0.651)
Latitude (logged)		0.078***	0.025***	0.030***	0.084**	0.097**	0.009*	0.060***	0.004**	0.048
		(0.007)	(0.005)	(0.008)	(0.034)	(0.046)	(0.005)	(0.006)	(0.002)	(0.113)
Muslim		-0.003***	-0.001***	-0.002***	-0.003***	-0.004***	-0.000***	-0.003***	-0.000***	-0.003***
		(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.002)
OPEC		-0.266***	-0.143***	-0.221***	-0.264***	-0.038	-0.042***	-0.044***	-0.009**	-0.272**
		(0.017)	(0.010)	(0.016)	(0.098)	(0.132)	(0.015)	(0.013)	(0.004)	(0.250)
Protestant		0.002***	0.001***	0.003***	0.001	0.001	0.000	0.001***	0.000**	0.001
		(0.000)	(0.000)	(0.000)	(0.001)	(0.002)	(0.000)	(0.000)	(0.000)	(0.006)
Democracy (lexical scale)			0.144***							
			(0.002)							
Ethnolinguistic fract.			0.078***							
			(0.017)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	14,167	11,271	10,880	7,175	9,429	148	23,810	6,203	11,107	10,760
Countries	159	150	149	132	150	148	202	143	150	140
Years	212	211	211	163	110	1	215	193	211	199
R2 (pseudo)	(0.024)	(0.434)	(0.728)	(0.452)	(0.399)	(0.468)		(0.444)		

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B17: Political Constraints
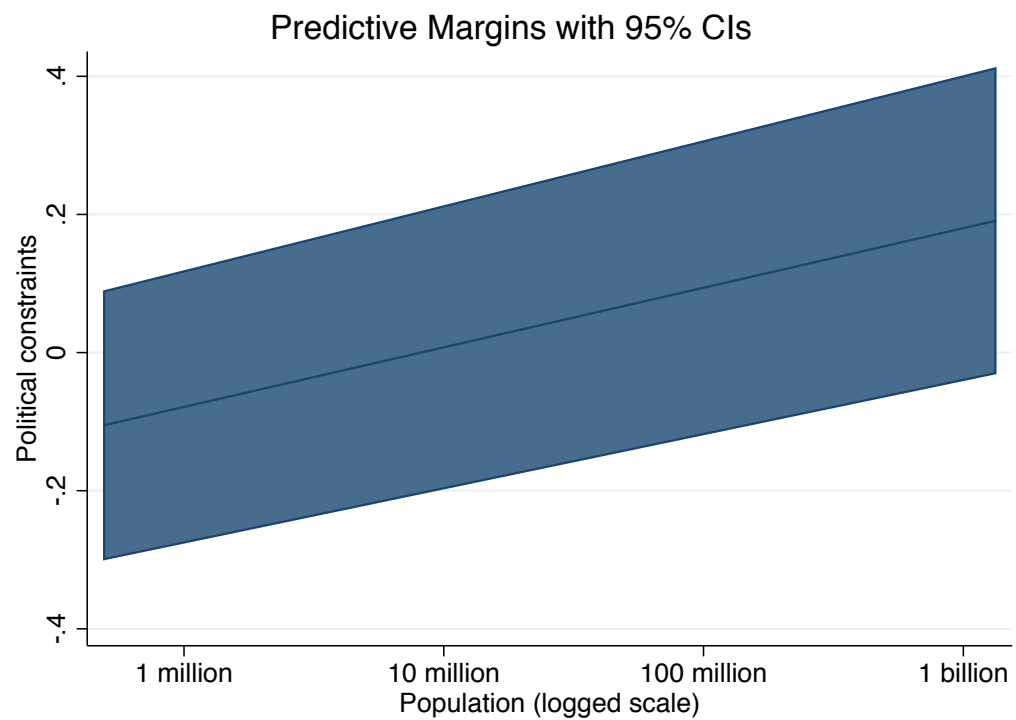
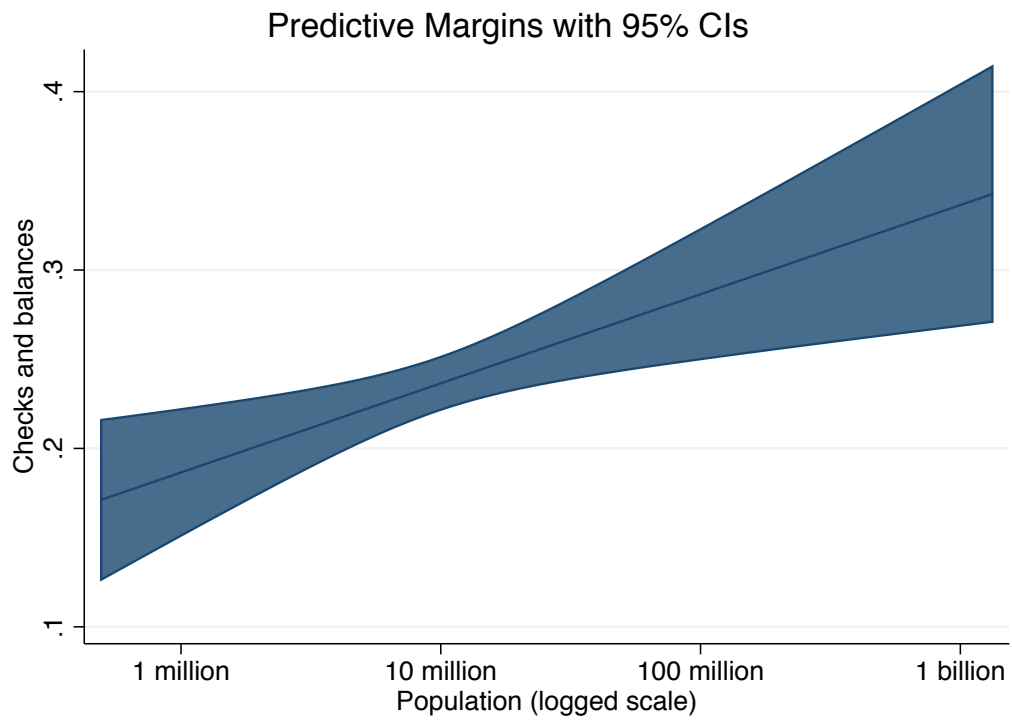Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B17.

Table B18: Checks & Balances

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Population (log)	0.008	0.022***	0.015***	0.032***	0.022***	0.035***	0.014***	0.017*	0.004***	0.018*
	(0.009)	(0.007)	(0.005)	(0.008)	(0.006)	(0.010)	(0.003)	(0.009)	(0.001)	(0.010)
Urbanization		0.036	0.060	0.044	0.054	0.145	0.031	0.037	0.013	0.073
		(0.064)	(0.045)	(0.088)	(0.065)	(0.107)	(0.024)	(0.080)	(0.010)	(0.066)
GDPpc (logged)		0.034*	0.002	0.011	0.031*	0.002	0.014**	0.018	0.000	0.038**
		(0.018)	(0.011)	(0.020)	(0.018)	(0.023)	(0.006)	(0.022)	(0.003)	(0.019)
English legal origin		0.344***	0.114***	0.411***	0.360***	0.484***	0.165***	0.343***	0.056***	0.369***
		(0.039)	(0.036)	(0.034)	(0.038)	(0.056)	(0.041)	(0.065)	(0.007)	(0.036)
French legal origin		0.271***	0.060*	0.318***	0.277***	0.414***	0.134***	0.243***	0.047***	0.282***
		(0.033)	(0.033)	(0.027)	(0.033)	(0.047)	(0.040)	(0.063)	(0.006)	(0.031)
German legal origin		0.272***	0.055*	0.351***	0.279***	0.448***	0.141***	0.251***	0.047***	0.302***
		(0.042)	(0.030)	(0.033)	(0.041)	(0.056)	(0.042)	(0.064)	(0.006)	(0.038)
Scandinavian legal Origin		0.460***	0.210***	0.548***	0.466***	0.657***	0.197***	0.440***	0.078***	0.493***
		(0.061)	(0.059)	(0.062)	(0.062)	(0.102)	(0.049)	(0.080)	(0.011)	(0.060)
Latitude (logged)		0.016	-0.016*	-0.015	0.014	0.037	0.003	0.005	0.001	0.005
		(0.012)	(0.009)	(0.014)	(0.012)	(0.024)	(0.006)	(0.016)	(0.002)	(0.011)
Muslim		-0.001***	-0.000	-0.001	-0.001**	-0.001	-0.001***	-0.001*	-0.000***	-0.001***
		(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)
OPEC		-0.077**	-0.034	-0.066	-0.076**	-0.119**	-0.045**	-0.024	-0.009*	-0.083**
		(0.036)	(0.030)	(0.046)	(0.035)	(0.054)	(0.018)	(0.056)	(0.005)	(0.038)
Protestant		-0.002***	-0.001**	-0.002***	-0.002***	-0.001	-0.000	-0.002**	-0.000***	-0.002***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Democracy (lexical scale)			0.065***							
			(0.003)							
Ethnolinguistic fract.			0.003							
			(0.027)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	5,702	4,915	4,819	3,285	4,915	144	7,498	3,036	4,740	4,625
Countries	171	150	150	132	150	144	200	131	149	141
Years	37	37	37	38	37	1	40	37	36	37
R2 (pseudo)	0.004	0.516	0.725	0.505	0.519	0.516		0.263		0.515

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B18: Checks & Balances

Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B18.

Table B19: Capital City

Analysis	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Pooled	Panel	Pooled
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	RE	OLS
Population	t-1	t-1	t-1	t-50	1900	1900	t-1	t-1	t-1	t-1, IV
Sample	Full	Full	Full	Full	Full	2000	Imputed	Electoral	Full	Full
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Population (log)	-0.034***	-0.033***	-0.026***	-0.029***	-0.028***	-0.023***	-0.033***	-0.037***	-0.000**	-0.035***
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.002)	(0.003)	(0.000)	(0.004)
Urbanization		0.147***	0.161***	0.159***	0.142***	0.109***	0.091***	0.136***	0.002**	0.209***
		(0.024)	(0.028)	(0.044)	(0.022)	(0.028)	(0.025)	(0.025)	(0.001)	(0.028)
GDPpc (logged)		-0.006	-0.006	-0.004	-0.002	-0.001	0.003	-0.007	-0.000	-0.004
		(0.007)	(0.007)	(0.013)	(0.007)	(0.011)	(0.006)	(0.007)	(0.000)	(0.006)
English legal origin		0.024*	0.010	0.016	0.001	0.017	0.031	0.028*	-0.000	0.014
		(0.014)	(0.020)	(0.018)	(0.019)	(0.027)	(0.022)	(0.015)	(0.000)	(0.012)
French legal origin		0.041***	0.031*	0.030**	0.032**	0.055**	0.039*	0.051***	0.000	0.029***
		(0.010)	(0.018)	(0.014)	(0.016)	(0.022)	(0.022)	(0.011)	(0.000)	(0.009)
German legal origin		0.070***	0.074***	0.078***	0.059***	0.051	0.048*	0.066***	0.001*	0.059***
		(0.015)	(0.017)	(0.020)	(0.022)	(0.033)	(0.025)	(0.019)	(0.001)	(0.013)
Scandinavian legal Origin		0.052*	0.073**	0.108***	0.092***	0.100**	0.045	0.054	0.001*	0.051*
		(0.030)	(0.034)	(0.034)	(0.035)	(0.042)	(0.029)	(0.033)	(0.001)	(0.027)
Latitude (logged)		-0.001	-0.001	0.002	0.004	-0.001	-0.000	-0.001	-0.000	-0.000
		(0.007)	(0.008)	(0.009)	(0.005)	(0.005)	(0.006)	(0.008)	(0.000)	(0.008)
Muslim		-0.000*	-0.000	-0.000*	-0.000**	-0.000	-0.000	-0.000	-0.000	-0.000
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
OPEC		-0.014	-0.005	-0.015	-0.002	-0.022	-0.004	-0.027**	-0.000	-0.016
		(0.015)	(0.021)	(0.018)	(0.014)	(0.015)	(0.014)	(0.012)	(0.000)	(0.016)
Protestant		-0.001*	-0.001*	-0.001***	-0.001***	-0.001*	-0.000	-0.001*	-0.000**	-0.001**
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Democracy (lexical scale)			0.001							
			(0.001)							
Ethnolinguistic fract.			-0.019							
			(0.023)							
Region FE		✓	✓	✓	✓	✓	✓	✓	✓	✓
Year FE		✓	✓	✓	✓		✓	✓	✓	✓
Observations	37,954	15,326	11,310	8,431	11,386	147	23,810	10,032	15,292	14,353
Countries	186	151	150	132	151	147	202	146	151	142
Years	210	210	210	161	109	1	215	210	209	198
R2 (pseudo)	0.497	0.594	0.528	0.523	0.588	0.584		0.613		0.463

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust.
*p<.10 **p<.05 ***p<.01

Figure B19: Capital City
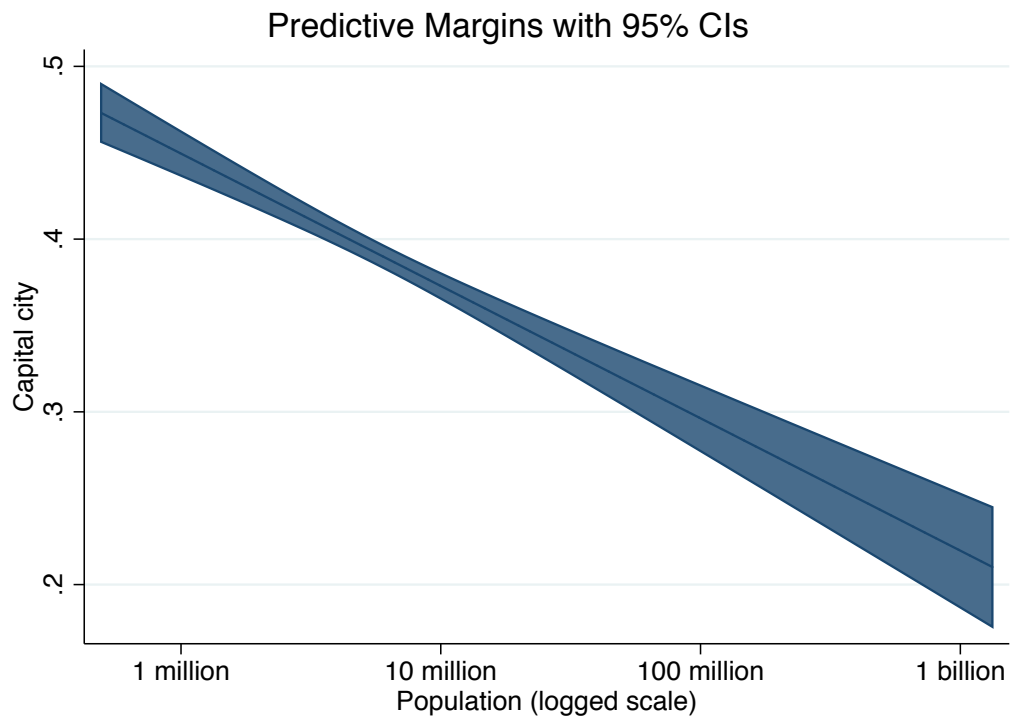
Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B19.

Appendix C: Within-Country Data Description

Table C1: Variable Definitions

Left-side Variables

City-county share total expenditures. Share of state expenditures attributed to cities and counties. Source: 1942-2012 Census of Governments. *state_localshare_exp*

City-county share total revenue. Share of state revenue attributed to cities and counties. Source: 1942-2012 Census of Governments. *state_localshare_genrev*

Special purpose governments. Number of governmental bodies designated as special purpose within the state. Source: 1942-2012 Census of Governments. *state_spgs*

Independent school districts. Number of independent school districts operating within the state. Source: 1942-2012 Census of Governments. *state_indep_schooldsts*

CSS0 selection. Chief State School Officer is appointed (=0) or elected (=1) by direct ballot. Source: National Association of State Boards of Education (2016). *state_selection_csso*

City share city-county expenditures. Share of county and local expenditures attributed to cities. Source: 1942-2012 Census of Governments. *county_cityshare_exp*

City share city-county revenue. Share of county and local revenue attributed to cities. Source: 1942-2012 Census of Governments. *county_cityshare_rev*

Executive veto. Chief executive can veto council legislation. Source: ICMA. *city_mayoral_veto*

Executive term-limits. Chief executive is limited to a fixed number of terms in office. Source: ICMA. *city_term_limits_mayor*

Mayor-council government. City has a mayor-council form of government (=1) rather than a council-manager or commission format (=0). Source: ICMA. *city_mayor_council*

Right-side Variables

Population. City, county, and state population, transformed by the natural logarithm. Source: U.S. Census. *city_logpop, state_logpop2012, county_logpop2000*

Income per capita. Income per capita by municipality, county, and state. Source: U.S. Census & ICPSR County Characteristics, 2000-2007. *city_incomepercapitainterp, county_percapita_perincome05, state_lnincome*

Urbanization. Urban population as share of total population at state and municipal level. Source: U.S. Census. Rural-Urban Continuum code at county levels. Source: ICPSR County Characteristics, 2000-2007. *state_percent_urban, city_urbanpctpop, county_RuralurbanContinuumCode*

Democratic vote. For states, the percentage of votes received by the Democratic presidential candidate for the closest election year. Source: Federal Election Commission. At county-level, percent of voters that cast their ballot for John Kerry in 2004 presidential election. Source: ICPSR County Characteristics, 2000-2007. *county_PctKerry04state_pctdemvote*

College. Percentage of residents with a bachelor's degree or higher. Source: U.S. Census Bureau, American Community Survey. *state_bachelorplus*

Unemployment. Statewide unemployment rate. Source: U.S. Census Bureau, American Community Survey. *state_unemploymentrate*

Percent minority. Percent of residents in state or county that are non-white or of Hispanic/Latino origin. Source: U.S. Census. *state_percent_minority, county_Per_Minority00*

Region. Dummies for West, Midwest, Northeast, and South. Source: Authors. *state_region*

Black. Percentage of municipal residents that identify as black. Source: U.S. Census. *city_pctblkpopinterp*

Asian. Percentage of municipal residents that identify as Asian. Source: U.S. Census. *city_pctasianpopinterp*

Latino. Percentage of municipal residents that identify as Latino/Hispanic. Source: U.S. Census. *city_pctlatinopopinterp*

Table C2: Descriptive Statistics

Left-side variables	Obs	Mean	SD	Min	Max
City-county share total expenditures	348	0.488	0.172	0	1
City-county share total revenue	348	0.556	0.172	0	1
Special purpose governments	352	0.165	0.188	0	1
Independent school districts	355	0.076	0.139	0	1
CSSO selection	366	0.271	0.445	0	1
City share city-county expenditures	2,677	0.703	0.221	0	1
City share city-county revenue	2,676	0.679	0.232	0	1
Executive veto	23,559	0.291	0.454	0	1
Executive term limits	24,224	0.080	0.271	0	1
Mayor-council form of government	25,237	0.364	0.481	0	1
Right-side variables					
Population (logged, state)	356	14.771	1.085	11.192	17.453
Population (logged, county)	3,003	10.196	1.380	4.205	16.069
Population (logged, city)	19,753	9.252	1.237	3.091	15.136
Income per capita (logged, state)	306	9.058	1.115	6.874	11.221
Income per capita (logged, county)	3,086	10.192	0.218	8.546	11.444
Income per capita (logged, city)	19,737	10.542	2.340	8.363	23.024
Urbanization (state)	356	65.626	17.582	19.8	100
Urbanization (county)	3,143	5.129	1.682	1	9
Urbanization (city)	20,270	38.729	40.521	0	100
Democratic vote share (state)	353	45.702	12.062	19.6	95.7
Democratic vote share (county)	3,113	38.754	12.520	7.1	89.18
College	357	13.204	7.375	0	39.1
Unemployment	255	5.985	2.595	2.3	34.7
Percent minority (state)	354	16.974	15.277	0.1	77.3
Percent minority (county)	3,143	15.770	18.152	0.132	97.76
Region	357	2.588	1.193	1	4
Black	19,735	0.097	0.818	0	84.4
Asian	19,735	0.027	0.415	0	54.8
Latino	19,735	0.095	0.259	0	22.4
Territory (logged, state)	357	11.481	1.466	5.063	14.221
Territory (logged, county)	3,140	6.492	0.908	0.688	11.891
Territory (logged, city)	22,026	2.598	1.141	-2.302	8.918

Appendix D: Within-Country Tests, Full Reports

Table D1: **State-level Outcomes (US)**

Outcomes	City-county/total expenditure		City-county/total revenue		Special purpose governments		Independent school districts		CSSO selection	
	1	2	3	4	5	6	7	8	9	10
Population	0.104***	0.070***	0.124***	0.082***	0.124***	0.096***	0.028***	0.024***	1.713***	-0.095
	(0.017)	(0.013)	(0.019)	(0.016)	(0.030)	(0.024)	(0.006)	(0.008)	(0.626)	(0.303)
Income per capita	-0.036**		-0.029*		0.008		-0.010***		0.161	
	(0.014)		(0.017)		(0.015)		(0.004)		(0.205)	
Urbanization	0.002		0.002		-0.001		-0.0002		-0.129**	
	(0.001)		(0.001)		(0.001)		(0.0004)		(0.051)	
College	-0.001		-0.001		-0.0004		-0.0001		-0.042*	
	(0.001)		(0.001)		(0.002)		(0.0003)		(0.023)	
Unemployment	-0.004		-0.007		-0.009		-0.002		-0.320**	
	(0.004)		(0.006)		(0.011)		(0.002)		(0.130)	
Minority	-0.004*		-0.004**		-0.00002		0.0002		0.009	
	(0.002)		(0.002)		(0.001)		(0.0003)		(0.032)	
Democratic vote	-0.003**		-0.001		-0.0003		-0.00007		-0.077**	
	(0.001)		(0.001)		(0.002)		(0.0005)		(0.035)	
Region										
Midwest	-0.005		-0.037		-0.024		0.023		-3.265***	
	(0.034)		(0.032)		(0.086)		(0.015)		(1.098)	
Northeast	-0.078**		-0.090**		-0.114*		-0.004		‎———	
	(0.037)		(0.043)		(0.063)		(0.015)			
South	-0.047		-0.079**		-0.163**		-0.031*		-4.281***	
	(0.031)		(0.033)		(0.069)		(0.018)		(1.563)	
Polities	51	51	51	51	51	51	51	51	51	51
Years	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	2012
Obs	250	348	250	348	252	352	253	355	200	336
R2	0.612	0.187	0.610	0.255	0.419	0.297	0.475	0.034	0.196	0.002

Full specifications from Table 4 along with minimal specifications. *p<.10 **p<.05 ***p<.01

Table D2: County-level Outcomes (US)

Outcomes:	City/total expenditure		City/total revenue	
	1	**2**	**3**	**4**
Population	0.044***	0.033***	0.043***	0.032***
	(0.003)	(0.002)	(0.003)	(0.002)
Income per capita	-0.045***		-0.054***	
	(0.013)		(0.013)	
Urban	0.004***		0.004***	
	(0.001)		(0.001)	
Minority	0.0002		-0.000008	
	(0.0002)		(0.0002)	
Democratic vote	-0.001**		-0.004	
	(0.0002)		(0.0002)	
State dummy	√	√	√	√
Polities	3,153	3,153	3,153	3,153
Years	2000	2000	2000	2000
Obs	2,642	2,677	2,641	2,676
R2	0.756	0.773	0.787	0.799

Full specifications from Table 4 along with minimal specifications. *p<.10 **p<.05 ***p<.01

Table D3: City-level Outcomes (US)

Outcomes	Executive veto		Executive term limits		Mayor-council government	
	1	**4**	**2**	**5**	**3**	**6**
Population	0.212***	0.107***	0.460***	0.431***	0.380**	0.547***
	(0.030)	(0.024)	(0.042)	(0.037)	(0.193)	(0.170)
Income per capita	-0.012**		-0.029**		0.007	
	(0.006)		(0.010)		(0.014)	
Urbanization	0.003***		-0.002*		0.003	
	(0.001)		(0.001)		(0.004)	
% Black	-0.075		-0.668*		3.797***	
	(0.202)		(0.350)		(0.942)	
% Asian	-3.139***		0.981		0.105	
	(1.002)		(0.898)		(0.917)	
% Latino	-3.381***		0.759***		-0.747	
	(0.335)		(0.292)		(0.989)	
County dummy	√	√	√	√	√	√
Polities	7,503	7,503	7,503	7,503	2,225	2,225
Years	1986-2011	1986-2011	1986-2011	1986-2011	1986-2011	1986-2011
Obs	16,955	18,345	16,439	17,866	1,903	1,944
R2	0.079	0.050	0.100	0.093	0.237	0.198

Full specifications from Table 4 along with minimal specifications. *p<.10 **p<.05 ***p<.01

Appendix E: People or Territory?

We have operationalized size according to the population of a polity rather than its territory, even though these two features are obviously linked and also highly correlated – at least across nation-states (Pearson's r=0.79). This is premised on an assumption that population exerts greater – or at any rate, more direct – impact on power concentration than territory.

In previous historical eras, when modes of transport, communication, and control were primitive, and when modes of political control leaned more heavily on coercion, land may have posed a formidable constraint on the shape of political institutions (Stasavage 2010). In the modern era, however, it seems likely the number of people living within a political unit is a more important conditioning factor than the size of the territory they inhabit, for reasons laid out in Section I.

Extant work on the question (as it pertains to the modern era) is mixed, as shown in Table 1.[21] It remains to be seen what picture emerges when a wider set of concentration measures and a broader sample of countries is encompassed.

In Table E1 we replicate benchmark cross-country tests (Model 1 from Table 3), this time including territory as an additional predictor. As previously, we present results only for the variables of interest – population and territory, both transformed by the natural logarithm. These tests confirm the superiority of territory as a predictor of constitutional federalism and revenue decentralization (fiscal federalism), as reported in previous studies. Territory is also correlated with bicameralism, which may be regarded as a by-product of federalism. However, for other outcomes population is generally a more successful predictor. While the estimated coefficient for territory is statistically significant in the expected direction in only four out of nineteen tests, the estimated coefficient for population is statistically significant (p<.10) in the hypothesized direction in fourteen tests.

In Table E2 we replicate within-country tests (from Table 4) with the addition of territory. Again, we present results only for the variables of theoretical interest. Here, results are stark. The estimated coefficient for population is correctly signed in all eight tests and statistically significant (p<.05) in seven. By contrast, territory is incorrectly signed in five tests and is never statistically significant in the expected direction.

It would seem that population is more strongly related to measures of power concentration than territory, at least in the modern era. Of course, this does not rule out the

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[21] Government consumption (Arzaghi & Henderson 2005) and regional authority (Hooghe & Marks 2013) seem to be more strongly predicted by population while federalism (Arzaghi & Henderson 2005) and fiscal decentralization (Garrett & Rodden 2003; Panizza 1999; Treisman 2006) are more strongly predicted by territory.

possibility that territory might affect some outcomes (e.g., constitutional federalism and fiscal federalism) but not others, or that it might have a small impact on all outcomes that is not detectable in our tests by reason of sample size, measurement error, or specification errors. However, if one is inclined to regard power concentration as a coherent theoretical outcome, and hence subject to similar causes, the evidence suggests that population trumps territory.

In our view, the impact of territory is best conceptualized as a prior cause – one that affects population but has little or no direct impact on most outcomes of theoretical interest to us here. This is the rationale for our choice of instruments in the two-stage analysis presented in Table 3 (Model 10). We exclude territory from other models in previous tests because of potential problems of collinearity and also, more fundamentally, because the interpretation of both variables changes when the other is included in a model. (Controlling for territory, population becomes a measure of population density.)

Table E1: Cross-country Tests of Population and Territory

Model	Outcome	H	POPULATION β/SE	C	TERRITORY β/SE	C	Countries	Obs	R2 (pseudo)
1	Federalism	+	0.195 (0.263)		1.146 (0.321) ***	✓	124	4,807	(0.502)
2	Subnational gov layers	+	0.097 (0.438)		0.450 (0.261) *	✓	143	10,695	(0.295)
3	Subnational elections	+	0.031 (0.013) **	✓	0.007 (0.010)		144	10,778	0.329
4	Autonomous regions	+	1.085 (0.338) ***	✓	-0.494 (0.259) *		146	4,879	(0.339)
5	Revenue decentraliz	+	-0.008 (0.024)		0.078 (0.019) ***	✓	94	1,268	0.691
6	Govt consumption	−	-0.018 (0.006) ***	✓	0.004 (0.004)		146	5,625	0.337
7	Separate powers	+	0.420 (0.156) ***	✓	-0.006 (0.099)		145	10,884	(0.334)
8	Divided party control	+	0.028 (0.013) **	✓	-0.005 (0.011)		141	7,656	0.139
9	Decentralized parties	+	0.014 (0.011)		0.012 (0.009)		145	10,785	0.535
10	Judicial review	+	0.026 (0.014) *	✓	-0.006 (0.012)		145	10,889	0.319
11	Constitution length	+	0.000 (0.000) **	✓	-0.000 (0.000) *		144	522	0.652
12	Constitution scope	+	0.016 (0.009) *	✓	-0.003 (0.006)		144	525	0.552
13	Constitution rigidity	+	0.022 (0.015)		0.002 (0.012)		141	615	0.408
14	Bicameralism	+	0.034 (0.012) ***	✓	0.027 (0.009) ***	✓	148	11,033	0.325
15	Leg. Committees	+	0.030 (0.010) ***	✓	-0.003 (0.007)		145	9,322	0.408
16	Leg. Fractionalization	+	0.038 (0.014) ***	✓	-0.019 (0.011) *		142	7,247	(0.601)
17	Political constraints	+	0.080 (0.002) ***	✓	-0.052 (0.001) ***		148	11,161	(0.452)
18	Checks & balances	+	0.027 (0.009) ***	✓	-0.006 (0.007)		149	4,878	0.519
19	Capital city	−	-0.032 (0.004) ***	✓	-0.001 (0.003)		150	15,265	0.591

Replication of benchmark models in Table 3 (Model 2) with the addition of Territory (square kilometers, logged). *H:* hypothesized relationship. *C:* hypothesis corroborated. Outcome measures of power concentration (re-scaled to 0-1 scale) regressed against key variables and "basic" covariates: per capita GDP (logged), Urbanization, Legal origin dummies, Latitude, Muslim, Protestant, OPEC dummy, Region dummies, Year dummies. (Year dummies not included for CCP outcomes – Constitution Length, Scope, Rigidity – because of collinearity.) Electoral system dummies included in tests of Divided party control (row 8) only. Right-side variables measured at t-1. *Estimators:* ordinary least squares (for continuous outcomes), tobit (for left-censored outcomes), ordered logit (for ordinal outcomes), logit (for binary outcomes). Estimated coefficients and standard errors (clustered by country) shown for variables of theoretical interest. *p<.10 **p<.05 ***p<.01

Table E2: Within-Country Tests of Population and Territory

Polities	State					County		City		
Outcome	City-county/ total expenditures	City-county/ total revenue	Special purpose governments	Independent school districts	CSSO selection	City/total expenditure	City/total revenue	Executive veto	Executive term limit	Mayor-council
Hypothesis	+	+	+	+	+	+	+	+	+	+
Estimator	OLS	OLS	OLS	OLS	Logit	OLS	OLS	Logit	Logit	Logit
Sample	Full	Full	Full	Full	Full	Full	Full	Full	Full	pop>50k
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Population	0.077***	0.103***	0.118***	0.021**	1.749***	0.043***	0.043***	0.516***	0.412***	1.331***
	(0.023)	(0.028)	(0.037)	(0.008)	(0.620)	(0.003)	(0.003)	(0.050)	(0.077)	(0.325)
Territory	0.040*	0.032	0.007	0.009	-0.432	0.0002	-0.003	-0.340***	0.058	-0.821***
	(0.024)	(0.028)	(0.028)	(0.008)	(0.499)	(0.005)	(0.005)	(0.047)	(0.081)	(0.245)
Polities	51	51	51	51	51	3,153	3,153	7,503	7,503	2,225
Years	1942-2012	1942-2012	1942-2012	1942-2012	1942-2012	2000	2000	1986-2011	1986-2011	1986-2011
Obs	250	250	252	253	200	2,642	2,641	16,872	16,362	1,859
R2	0.638	0.625	0.420	0.490	0.202	0.756	0.787	0.087	0.099	0.270

Replication of models in Table 4 with the addition of Territory (square kilometers, logged). Data drawn from states, counties, and cities in the United States. Covariates for state-level analyses: Income per capita, urbanization, Democratic vote share, College, Unemployment, Minority (%), Region (dummies). Covariates for county-level analyses: Urbanization, Minority (%), Income per capita, Democratic vote, State (dummies). Covariates for city-level analyses: Urbanization, Black (%), Asian (%), Latino (%), Income per capita, County (dummies). County analyses are cross-sectional. State and city analyses represent a short panel, with standard errors clustered at the state and city level, respectively.
*p<.10 **p<.05 ***p<.01

Appendix F: Municipal Sovereignty

Table F1: Municipal Sovereignty

Outcome:	Charter	Home rule (any type)	Home rule structural	Home rule functional	Home rule fiscal
	1	**2**	**3**	**4**	**5**
Population	0.155***	0.290***	0.195***	0.172***	0.106***
	(0.031)	(0.048)	(0.043)	(0.036)	(0.034)
Polities	7,503	7,503	7,503	7,503	7,503
Years	1986-2011	1986-2011	1986-2011	1986-2011	1986-2011
Obs	8,204	17,273	17,493	17,273	17,119
R2	0.072	0.138	0.135	0.098	0.118

Measures of municipal sovereignty regressed on Population (logged) and additional covariates (not shown): Urbanization, Black (%), Asian (%), Latino (%), Income per capita, and County (dummies). Logistic regression, standard errors clustered by city. *p<.10 **p<.05 ***p<.01