

Demand for Constitutional Decentralization

Increasingly, decentralization has proven to be a policy fix selected by developing countries whose new governments represent a significant regime change. This analysis adds to the literature on decentralization by identifying the extent to which factors that lead to divergent policy preferences result in greater definition of decentralization in a given constitution. The principle of subsidiarity suggests that the more localities and regions vary from each other, either in terms of population, language, religion, or resource endowments, the more likely these populations' policy preferences differ. If this implication holds, one would expect the benefits of subsidiarity, and hence, decentralization to increase in such situations. As a result, one would expect pressures for decentralization on constitutional drafters to increase with a country's size, population, terrain ruggedness, number of ethnicities and religions, and regional variance in wealth. I test several aspects of this hypothesis, based upon initial data from 48 Muslim countries' constitutions. Beyond the noteworthy conclusion that population is more important than territorial size in determining constitutional definition of subnational government, the results also suggest linguistic divides play an important role in determining the heterogeneity of policy preferences within a given nation, more so than simple ethnic diversity.

Eric Alston
Scholar in Residence, Finance Division
Faculty Director of the Hernando de Soto Capital Markets Program
Leeds School of Business
University of Colorado Boulder

I. INTRODUCTION

Increasingly, decentralization has proven to be a policy fix advocated for and selected by developing countries whose new governments imply a significant regime change from that preceding it. As such, decentralization has been prioritized by numerous development agencies worldwide, as well as having received significant scholarly attention in the past decades. The subsequent analysis seeks to add to this literature by identifying the extent to which factors that lead to divergent policy preferences, such as ethnic and cultural diversity, result in greater definition and scope of decentralization in a given constitution.

This article begins with a definition of decentralization and a description of how it occurs in practice. This definition is followed by a treatment of decentralization in constitutions and an identification of factors that have been theorized to lead to a demand for decentralization. Next is a section that defines measures of constitutional decentralization. In developing three measures of the extent to which a given constitution treats decentralization, an additional contribution of this analysis is the development of measures of constitutional detail more generally. Ultimately, this analysis culminates by testing the extent to which constitutionally defined decentralization is a function of demand factors theorized to lead to greater decentralization.

Interestingly, several of these traditional demand factors prove significant in determining the extent of decentralization, whereas several others do not. Based upon a sample of 48 Muslim-majority countries, population and cultural fractionalization play a significant role in determining the extent of decentralization outcomes in these countries' constitutions. Given this same sample, however, territorial size and ethnic fractionalization did not play a role in determining constitutional decentralization outcomes. Beyond the interesting conclusion that population may be more important than territorial size in determining demand for decentralization, the results

suggest linguistic divides could play an important role in heterogeneity of policy preferences within a given nation, more so than simple ethnic diversity.

II. DEFINING DECENTRALIZATION

The most common definition of decentralization highlights three subcategories: (i) administrative; (ii) political; and (iii) fiscal decentralization.¹ In the subsequent paragraphs, these traditional components are defined so as to characterize the range of forms they may take in constitutions worldwide.² A related distinction that often becomes unclear in practice is the difference between deconcentration, delegation, and devolution.³ These can all be considered forms of decentralization, listed in increasing order of the amount of power and decision-making authority ceded to the sub-national units in a given country. A better characterization of decentralization is that of a continuum, with minimal administrative decentralization lying at one end, and federalism (or even confederalism) lying at the other. The subsequent paragraphs treat the three traditional definitions of decentralization in greater detail.

Administrative decentralization involves the transfer of responsibility for public service delivery to the sub-national or local units. This can typically take two forms, one in which the local administrative unit is accountable to the central government ministry or agency, and the other in which the local agencies or ministries are minimally accountable to analogous central ministries, if at all.⁴ Administrative decentralization captures the benefit of subsidiarity cleanly:

¹ Stacy White, “Government Decentralization in the 21st Century: A Literature Review” (2001) CSIS at 2-3.

² It should be noted there are at least two other types of decentralization. For a definition of judicial decentralization (a combination of decentralized judicial review and legal pluralism), see Cristina M. Ruggiero, *Judicial Power in a Federal System: Canada, United States and Germany* (LFB Scholarly Publishing LLC, 2012). For a definition of market decentralization, see UNDP, “Decentralized Governance for Development in The Arab States: A Background Paper on Decentralization and Local Governance Policies, Legal Frameworks, Programmes, Lessons Learned and Good Practices” (2003) at 10. Neither of these forms of decentralization appear often enough to merit extensive discussion, but they should nonetheless be mentioned.

³ Markus Böckenförde, “Decentralized Forms of Government” in *A Practical Guide to Constitution Building*. (International IDEA, 2011), at 19-20.

⁴ White, *supra* note 1 at 2; Böckenförde *supra* note 3 at 17.

local administrative units given the responsibility and authority to implement government regulations can use their superior knowledge of the sub-national unit to exercise discretion in policy implementation to better match local needs.⁵ A degree of administrative decentralization is present in the constitution of nearly every country above a certain size. This is due to the reality that past a certain geographic size (and population), policy implementation and oversight must be delegated to sub-administrators.⁶

Political decentralization can involve a number of forms in practice, but at its core, it allows local populations to influence the units that govern them. This can vary from formal election of local legislative and executive bodies to merely electing or having some form of popular constraint on the local official administering centrally defined policies. One argument for political decentralization is that it promotes horizontal accountability at the local level.⁷ If local constituents can punish or reward political actors governing them, these political actors are more likely to enact or administer policies in line with local constituents' desires. Political decentralization delineated in constitutions commonly involves the definition of different subnational units different topical areas of policy authority,⁸ with some reserved to the national level, some reserved to the sub-national level, and some exercised concurrently through a number of mechanisms.⁹ Of course, a given constitution cannot exhaustively list the number of policy areas that a state and its sub-national units will be called to legislate upon. This implies that another important area is definition of where residual authority to legislate lies.¹⁰

⁵ Cheryl Saunders, "Options for Decentralizing Power: Federalism to Decentralization" (2009) Constitution-Making.org Reports at 2.

⁶ Böckenförde, *supra* note 3 at 5.

⁷ Sunita Parikh & Barry Weingast, "A Comparative Theory of Federalism: India" (1997) 83(7) Va. L. Rev. 1593.

⁸ Cheryl Saunders, "*Federalism, Decentralisation and Conflict Management in Multicultural Societies*" (2003) Forum of Federations at 70; Wilfried Swenden, "Constitutional Political Economy; Territorial Strategies For Managing Plurinational States," in *Routledge Handbook of Regionalism and Federalism* (2013) at 67-68.

⁹ Böckenförde, *supra* note 3 at 27.

¹⁰ Saunders, *supra* note 5 at 4.

Fiscal decentralization concerns the extent to which sub-national units can manage their own financial affairs. Such autonomy actually involves a number of dimensions. Before a local or sub-national authority can spend money implementing or enforcing policy, it needs a source of revenue. Like decentralization in general, revenue authority can be thought of as a continuum between fully decentralized and limitedly decentralized, if at all.¹¹ The second aspect of fiscal decentralization is the authority to spend, or expenditure decentralization. This is an important component of fiscal decentralization: if authority to spend is largely left to the central government, this will again prevent sub-units from enforcing or implementing policy, even if they nominally have the administrative or political authority to do so.¹² Furthermore, by carefully defining the areas in which sub-national units can legislate, administrate, tax, and spend, constitutional drafters can themselves restrain some of the possible negative outcomes resultant from fiscal decentralization.

It should be noted that the emphasis of this analysis is non-normative with regards to a given extent of decentralization. Much of the literature focuses on lessons from decentralization in practice worldwide, either selecting case studies, or using panel data from a larger number of

¹¹ White, *supra* note 1 at 3; Böckenförde, *supra* note 3 at 21-22; Saunders *supra* note 5 at 3. Full authority on the part of sub-units to raise revenue would imply the ability to tax property, income, sales of goods, as well as charge user fees for public services such as roads and water. However, such a broad subnational authority can distort the national economy, especially if movement of goods into sub-national units is taxed more heavily than local goods. Therefore, a balance is often struck between which aspects of taxation authority are granted subnationally. *See, e.g.*, Edgar Kiser & Audrey Sacks, “African Patrimonialism in Historical Perspective: Assessing Decentralized and Privatized Tax Administration” (2011) 636(1) *The ANNALS of the American Academy of Political and Social Science* 129 at 143; Shah, Anwar, “Fiscal Federalism and The Political Economy of Territorial Finance,” in *Routledge Handbook of Regionalism and Federalism* (2013) at 104-107.

¹² However, the amount of evidence regarding the size of the public sector, as well as corruption and other forms of undesirable political outcomes suggest that some form of oversight authority on the national level may be optimal to restrain these outcomes. *See, e.g.*, Thushyanthan Baskaran, “Fiscal Decentralization, Ideology, and The Size of The Public Sector” (2011) 27(3) *Europ. J. Pol. Econ.* 485; *See also* Stefan Voigt & Lorenz Blume, “The Economic Effects of Federalism and Decentralization—A Cross-Country Assessment” (2012) 151(1-2) *Public Choice* 229-254. This is in addition to the decision made by constitutional drafters as to areas of authority allocated to the national government versus sub-national units, which can be a complementary alternative to expenditure and revenue oversight by an independent authority.

countries. The results of such studies are quite mixed, for a recent meta-analysis of the available literature regarding decentralization outcomes found out of 32 studies considered, 13 concluded the impact of decentralization was positive, 11 considered the impact to be negative, and 8 had mixed results.¹³ While the meta-analysis restricted itself to studies of public service provision in Asian countries, such mixed findings are characteristic of the literature regarding decentralization more generally.¹⁴

However, the question of whether constituents' preferences for decentralization are well founded based on available scholarly evidence is outside the scope of this analysis. Instead, the focus lies upon the link between factors that are likely to increase citizen demand for decentralization, and whether these factors can be linked to an increase in constitutional decentralization provisions. Nonetheless, the advantages to decentralization that scholars list are compatible with the theory developed here; the perceived advantages of decentralization may inform the belief structure underlying citizens' preferences for decentralization, whether or not such perceptions of decentralization benefits are truly appropriate to the country in question or not. The next section treats the range of options from which constitutional drafters can choose if they decide to decentralize.

III. CONSTITUTIONAL DECENTRALIZATION

Constitutional definition of subnational government can most broadly be characterized as governed by three overarching considerations: (i) the structure of subnational government; (ii) the substantive division of government authorities between different levels of government; and

¹³ B.S Ghuman & Ranjeet Singh, "Decentralization and Delivery of Public Services in Asia" (2013) 32 Pol'y & Soc'y 7-21.

¹⁴ Ramesh M, "Decentralization in Asia: Survey" (2013) 32 Policy and Society at 2-3. For a discussion of the ambiguous effects of decentralization on economic growth, *see also* Francis Amagoh & Aloysius Ajab Amin, "An Examination of the Impacts of Fiscal Decentralization on Economic Growth" (2012) 3(6) Int. J. Bus. Admin. 72.

(iii) the extent to which minority and regional interests have a voice in national governance due to the design of the political system overall. The first consideration for constitutional drafters is how to formally specify the institutional structure that will support the decentralization of authority. This can be condensed into three main questions. First, how many levels of government will there be? Many decentralization regimes follow the traditional three level structure, with a national government, an intermediate level of provinces, regions or districts, and a local level of government. A second consideration is that of how many constituent units will be defined at each sub-level. A simple example is that of the United States of America, with fifty units defined at the state level of government. A third consideration is that of what institutional framework will be created at each sub-level. More specifically, will each level of government have its own legislature, executive, and judiciary, or, as is more common, will governance institutions be more limited at one level than another?

Two concerns related to the definition of the structural framework for decentralization deal with the definition or alteration of some aspects of decentralization at a later date. The first concern is whether constitutional drafters should postpone certain aspects of decentralization for a later stage. Any decentralization regime will require post-constitutional legislative, administrative and judicial adjustment to function, and several modern decentralization programs have required such adjustment due to a lack of capacity on the sub-national level. South Africa provides a compelling example of this, where scholars have noted the lack of local capacity coupled with a decentralization of a complex set of policy responsibilities¹⁵ as resulting in a failure of service delivery and governance on the local level. Similar factors influenced Spain's

¹⁵ *The Constitution of the Republic of South Africa: December 16, 1996*. art. 104, 125, 127, 139, 151, 152, 156, and 163 (as Amended to March 26, 2009).

choice of an asymmetric means of decentralization,¹⁶ granting greater policy responsibilities to a subset of more developed regions, while delaying for years in granting those same policy responsibilities to other regions that had less economic and administrative capacity at the onset.

Another way to allow for future adjustment of decentralization is to permit modification of the structural specifications of decentralization itself. To what extent can the list of powers or areas of administrative authority ceded to sub-national units be altered?¹⁷ What does it require to do so? The lower the threshold required of the national government to alter decentralization arrangements, the less power that is actually decentralized. If the national government is given the authority to alter the powers of the lower units without their approval, then the lower units will take this power into account when making or implementing policy. The final consideration regarding the formal structure of the decentralization regime is the types of government to grant to each of the sub-national levels, and it is one of the most important. The continuum of options for constitutional drafters has its minimum at authority for policy implementation residing in field offices of the central government.¹⁸ The other extreme is that of executive, legislative, and judicial authority being vested in the national sub-units.¹⁹

The second core consideration for constitutional drafters is that of the depth of decentralization, which deals with specific competencies and policy areas that are granted to each level of government. First, what areas of broad authority will be granted to the sub-national units? This can be divided into the categories of administrative, political, and fiscal decentralization treated previously. Related to these three areas of decentralization are the formal

¹⁶ *Constitución Española*, 1978, art. 143 and 148.

¹⁷ Several countries identify the federal character of their governance as unamendable. *See*, for example, *Germany Const.* (1949), art. 79(3); *Iraq Const.* (2005), art. 126(4). India's Supreme Court also determined that federalism was an unamendable part of their constitutional structure. Singh Mahendra P., "FEDERALISM, DEMOCRACY AND HUMAN RIGHTS: SOME REFLECTIONS" (2005) 47(4) *J. of the Indian L. Inst.* 429-446.

¹⁸ *Yemeni Constitution of 1991* (as amended by the Referendum of 2-20-2001), art. 145-148.

¹⁹ *Constitution of Iraq 2005*, art. 115.

specification of topical policy areas granted to different levels of government.²⁰ This becomes necessary when the authority to legislate has been granted to sub-national units, and constitutional drafters choose which policy areas remain exclusive to the national government, and which policy areas are granted to the sub-national levels.

The third component of decentralization is that of the institutions that facilitate cooperation among different levels of government, as well as resolve conflicts in the cases where they arise. This can include choices about the structure of government on the national level, such as the extent to which constituent units are represented in central institutions. The relationship between the legislative and the executive branches of government can define the extent to which sub-national concerns play a role in policy outcomes. Presidential, semi-presidential, and parliamentary systems all have different implications for the extent to which minority and sub-national policy issues will be treated on the national level as compared to majoritarian concerns.²¹ Furthermore, the electoral system chosen, be it proportional representation or first-past-the-post, will also play a role in determining the strength of sub-national representation on the national level.

IV. DEMAND FOR DECENTRALIZATION

Given this wide range of options, constitutional drafters have a large choice set regarding the form and extent of decentralization provided by the constitution they are creating. While the principle of subsidiarity implies some forms of governance are best suited to the sub-national level, it also has a secondary implication; the more localities and regions vary from each other, either in terms of population, language, religion, terrain ruggedness or resource endowments, the more likely these populations' policy preferences are to differ. If this relationship holds, one

²⁰ *Constitution of the Federative Republic of Brazil*, art. 21-24.

²¹ Arend Lijphart, "Constitutional design for divided societies" (2004) 15(2) *J. Democr.* 101-103.

would expect the benefits of subsidiarity to increase in such situations, which implies that the benefits from decentralization would also increase. In some sense, this mirrors the point made that past a certain point, the size of a country, both in terms of population and geographical area, requires a certain degree of administrative decentralization, regardless of the extent of corresponding fiscal and political decentralization.

Several of the preceding factors regarding demand for decentralization have been highlighted in the literature for decades. Pommerehne and Kirchgässner identify population, geographical area, per capita income, and income inequality as theoretically linked to increased demand for fiscal decentralization in a given polity.²² A more recent study by Nicholas Spina links the presence of ethnoregionalist parties in a country to increased levels of decentralization.²³ This stands to reason if ethnic or regional differences correlate with different policy preferences. If so, each unit increase in autonomy to sub-units in a country with greater ethnoregional fractionalization would yield potentially greater returns in terms of the benefits the subsidiarity principle implies.

To posit that citizens with divergent policy preferences anticipate gains to sub-national unit autonomy does not require a complex political calculus on the part of citizens with such divergent policy preferences. It merely requires that citizens perceive net policy gains from increases in the autonomy of their particular sub-national unit. Perceived net policy gains, those in which the political costs of achieving a given change are outweighed by the perceived benefit of increases in sub-national policy autonomy, should be more likely as one increases those factors associated with increases in divergence of policy preferences.

²² Werner Pommerehne & Gebhard Kirchgässner, "The Demand for Fiscal Decentralization: Some Preliminary Findings" (1975) 16(2) *Sociol. Ruralis* at 209-210.

²³ Nicholas Spina, "Explaining political decentralization in parliamentary democracies" (2013) 11 *Comp. Europ. Pol'y* 428-457.

Ruggedness has itself been linked to variance in regional identity, and more directly, heterogeneity of policy preferences and decentralization outcomes writ large.²⁴ This stands to reason, for cost of governance can be argued to increase significantly with increases in transportation costs between localities. Put differently, two cities separated by a chain of large mountains may take hours to travel from one to the other, even in the event they are only separated by a few miles as the crow flies. There is reason to believe that since the advent of near-costless communication over long distances, the governance costs across large distances have fallen. However, this ignores one aspect of this geographical feature: path dependence. If ruggedness played a role in the creation of distinct units of governance in the past, there is reason to believe these units developed distinct identities from one another as centuries passed. Mountainous regions have long been associated with separatist movements and strong subnational identities all over the world. The Basque Country, Chechnya, Kashmir, Scotland, and West Virginia all have been argued to have been influenced in part by the ruggedness of their terrain, and how this ruggedness required the development of a sense of community apart from the national unit as a whole.

Pommerehne and Kirchgässner are not the only ones to identify income inequality as resultant in different preferences regarding public service delivery.²⁵ However, such inequality is more difficult to measure in a way that can effectively test questions regarding demand for decentralization, because the inequality has to exist between political sub-units in a given

²⁴ Nathan Nunn & Diego Puga, “Ruggedness: the blessing of bad geography in Africa” (2012) 94(1) *Rev. Econ. Stat.* 20–36; Daniel Berkowitz & Karen Clay, *The Evolution of a Nation: How Geography and Law Shaped The American States* (Princeton University Press, 2011); Marrisa Dell, “The Persistent Effects of Peru’s Mining Mita” (2010) 78(6) *Econometrica* 1863–903; Kenneth Sokoloff & Stanley Engerman, “History Lessons: Institutions, Factor Endowments, and Paths of Development in The New World” (2000) 14(3) *J. Econ. Persp.* 217–32; William Easterly & Ross Levine, “Tropics, Germs, and Crops: How Endowments Influence Economic Development.” (2003) 50(1) *J. Monet. Econ.* 3–39.

²⁵ John William Hatfield & Gerard Padró i Miquel, “A Political Economy Theory of Partial Decentralization” (2012) 10(3) *J. Euro. Econ. Ass’n* 605-633.

country. If every province in a country has the same level of inequality, then the theory regarding demand for public service delivery would suggest almost no demand for decentralization in a case where income inequality was equal in every area. Thus, a countrywide measure for income inequality is unlikely to capture this mechanism compared to a within-country regional measure of inequality. Pommerehne and Kirchgässner recognize this critique in their statistical analysis, and try to correct for it by using a regional measure of inequality, as opposed to a countrywide average. Interestingly, as a given country's national inequality average increases, these authors found a centralized government was more likely. However, when using levels of inequality on the regional level within countries, the authors found a positive relationship, as hypothesized if political sub-units have significantly different wealth levels.²⁶

Based upon these insights, one might expect pressures for decentralization upon constitutional drafters to increase with a country's size, population, number of ethnicities and languages, territorial ruggedness and regional variance in wealth and inequality. In the subsequent sections I test this question, with available data on a number of these factors, using a subset of the world's constitutions and the decentralization provisions contained therein.

V. MEASURING CONSTITUTIONAL DECENTRALIZATION

If these demand factors are actually linked to constitutional decentralization then one would expect measures likely to be correlated with divergent subnational policy preferences to track the level of provisions treating decentralization in a given constitution. Thus, one would expect a greater degree of detail and extent of decentralization in a country's constitution as these factors increase for that given country. A simple linear regression thus should provide additional weight to the argument that heterogeneous constituencies demand greater

²⁶ Pommerehne and Kirchgässner, *supra* note 22 at 209.

decentralization from constitutional drafters. Importantly, the question as specified requires a measure of the given demand factors from the time which the constitution was drafted. Unlike many cross-country studies, comparative analysis of constitutional moments has the advantage of occurring at a relatively fixed point in time, which establishes a clear date of reference upon which to fix the other variables of interest.

The subset of constitutions presented in this initial analysis is that of countries whose population is more than 50% Muslim.²⁷ This choice was based both in the need to pick a subset due to time constraints associated with calculating the underlying measures of decentralization, as well as several factors unique to nations with a significant Muslim populace. A corollary of the link between authoritarianism and predominantly Muslim societies²⁸ is that this same preference for authoritarian control (typically in line with the principles of Islam) can result in a preference for centralization, as opposed to decentralization. Furthermore, such a selection metric does not sacrifice diversity in terms of the subset of countries selected; the predominantly Muslim countries are drawn from every continent except North America, and display a range of wealth levels, territorial and demographic sizes, and times of constitutional drafting. Therefore, based on these two factors, if the hypothesized relationship proves to be significant in countries that may be predisposed against decentralization, it is an argument for an extension of the model to the population of countries worldwide. If the relationship is borne out in an environment where there are reasons it may be less likely to occur, then it is at least as likely to hold in the global set where these factors are less present in the aggregate.

²⁷ The subset does not include Brunei, Comoros, the Maldives, Qatar, or Surinam, due to data availability constraints for ethnic and cultural fractionalization.

²⁸ Steven Fish, "Islam and Authoritarianism" (2002) 55 *Wld. Pol.* 4-37.

Thus, the core question for this analysis is how to measure the level of decentralization contemplated by a given constitution. While measures for most of the factors theorized to create demand for decentralization are well-established in the literature, clean measurement of decentralization is anything but. Nonetheless, there are a number of ways to approximate the extent of detail a given constitution devotes to a particular topic. Fortunately, the Comparative Constitutions Project publicly provides access to all constitutions in force worldwide, and the only task remaining is to tally decentralization provisions from these constitutions.

The most obvious of the ways to measure the extent of these provisions is word count. The more words a given constitution dedicates to the topic of decentralization, the more likely it is that the decentralization regime is specified in greater detail in that constitution. However, the fact that the Comparative Constitutions Project data directly highlights the articles relevant to decentralization of power also provides another simple measure: how many articles the constitution devotes to the topic. Ultimately both these measures suffer from the same weakness: if a constitution's drafters are more prone to detail, or are comparatively long-winded in the way they articulate constitutional details, then the validity of these measures as a reflection of pressures drafters face to decentralize is weakened. Therefore, a third measure was constructed, which took the number of articles devoted to decentralization divided by the total number of articles in a given constitution. This yielded the proportion of articles that were devoted to decentralization as one way to control for the potential verbosity of one set of drafters as compared to another.

Obtaining a comparable word count across similar constitutional provisions is more labour-intensive than the casual observer might imagine. The wealth of constitutional documents contained in the CCP data banks is truly comprehensive, but the documents themselves are scans

of older documents, scans that often result in numerous errors when it comes to tracking words, not to mention separating them. Thus, in order to obtain an accurate word count, one must copy and paste the relevant provisions into a document editor, and ensure that the relevant words are faithfully replicated before beginning a word count. Furthermore, the choice of drafters to precede each article with a simple number, or with “Article #” can bias comparisons from one constitution to another. Thus, each word count of the relevant constitutional provisions does not include the numerical system chosen by drafters because it provides no additional detail to the provisions in question, and can bias comparisons of word count between constitutions.

Using several measures of the level of detail also provides a control for the fact that some countries’ drafters chose to include extensive discussion of decentralization in the schedules following the main body of their constitution. Such schedules often provide a detailed plan for the implementation of the constitution, and so, may provide more detail that in other countries is provided in initial organic legislation meant to bring the constitution to fruition. By treating number (and proportion) of articles, and considering each schedule as one article, this was one way to account for the otherwise lengthy decentralization provisions contained in these sections that might not be cleanly comparable to core constitutional provisions seen in other countries whose constitutions did not contain detailed schedules at the end. Nonetheless, such a level of detail might itself be a response to the decentralization pressures detailed previously, and so articles and proportion of articles might both be under-inclusive on this front. In short, there are a number of reasons to use these measures conjunctively, as opposed to any one measure individually.

The link between constitutional provisions and factors that lead to a demand for decentralization requires one of two assumptions. The first is that the drafting process that

created a given constitution was sufficiently representative of constituents' preferences to where the underlying demand factors would be reflected in the drafting process through an increased level of decentralization scope and detail defined in the Constitution. The alternative assumption is that the drafters are more likely to recognize the benefits of decentralization in environments where the preceding demand factors are present. If a country is larger geographically or demographically, or if a country has a greater degree of cultural fractionalization, then drafters who seek to maximize the effectiveness of the governance system they are creating will be more likely to specify a decentralization regime than drafters who are less subject to these concerns, regardless of whether or not the drafting process was truly representative of constituents' governance preferences around the nation.

Finally, a brief discussion of the measures of ethnic and cultural fractionalization is warranted. These measures were drawn from a 2002 work by James Fearon.²⁹ One of its primary contributions to the literature on ethnic and cultural diversity was the creation of a new measure of cultural fractionalization that measured how far apart different ethnicities' languages were from one another according to a linguistics heuristic. Fearon's argument was that some countries that have many ethnicities display much less cultural variance than others with a similar number of ethnicities. In line with this intuition, Fearon created two measures, one based on the number of self-identifying ethnicities within a given country's borders, and one based on the languages used by these ethnic groups. As one would expect, these measures correlated strongly (0.82), but are by no means identical, as the subsequent section will also suggest.

The other measures of demand for constitutional decentralization are much more commonplace, namely population and territorial size, which were drawn from the World

²⁹ James D. Fearon, "Ethnic and Cultural Diversity by Country" (2003) 8(2) J. Econ. Growth. 195-222.

Development Indicators index prepared by the World Bank,³⁰ and from the CIA World Factbook,³¹ respectively. The territorial size was also selected from current measures, with the exception of Sudan, whose information was taken from prior to the secession of South Sudan in 2011. Although there is some variation in territorial size due to border disputes and more accurate surveying techniques, the use of this data was based on the assumption that such changes to territorial size are negligible as compared to total territorial sizes, and such marginal changes are unlikely to affect constituents' broad demands for decentralization. Population, however, was taken from the year a given country's constitution was enacted, due to how fluid demographics are as compared to territorial size and ethnic composition.

VI. RESULTS

My analysis of 48 muslim by majority population countries yields several comparable measures of constitutional decentralization. In sum, the three measures; (i) words devoted to decentralization, (ii) articles devoted to decentralization, and (iii) articles devoted to decentralization as a proportion of total articles in the constitution; were regressed on the three factors theorized to influence demand for decentralization in the following model:

$$\text{Const. Decentralization} = \beta_0 + \beta_1 * \text{Population} + \beta_2 * \text{Territorial Size} + \beta_3 * \text{Fractionalization}$$

As an initial test of the factors detailed in this analysis, these measures of constitutional decentralization were generated for 48 countries, the vast majority (over 90%) of countries whose population is at least 50% Muslim.

³⁰ World Bank, Data retrieved February 5, 2019, from World Development Indicators Online (WDI) database. However, those countries whose current constitution was put into force prior to 1960 (Indonesia -1945; Jordan – 1952; Lebanon – 1926; and Malaysia – 1957) required a different data source, due to the World Development Indicators only beginning in 1960. The population total for each of these countries was found in Angus Maddison, *Historical Statistics for the World Economy: 1-2003 AD* (2005), online: <http://www.ggd.net/maddison/historical_statistics/horizontal-file_03-2007.xls>.

³¹ Central Intelligence Agency, *The World Factbook* (February 5, 2019), online: <<https://www.cia.gov/library/publications/the-world-factbook/>>.

As seen in Table 1 below, the coefficient on population as a determinant in constitutional decentralization remained positive and significant at the 95% level for all three decentralization measures. As notably, territorial size was insignificant across all three measures. This would indicate that the benefits of decentralization may operate more systematically when it comes to the demographic as opposed to territorial size of a given nation. Because the scale of population was huge as compared to the range of quantities displayed across the different decentralization measures, the coefficient was displayed as zero by the statistical macro despite the significance level found in all cases. In order to verify the sign of the coefficient in each of the three regressions, these regressions were run again with several different scaled down versions³² of the population variable. In each case, the coefficient was positive, and remained significant at the 95% confidence level. This result suggests that in terms of governance, the world may be getting “smaller”; laws such as the ones limiting Washington D.C.’s political influence, or requiring delays in the implementation of law across a geographically large nation, could be artifacts of a time when existing technology greatly limited the ability to govern across large distances.

While the relevance of demographic size as compared to territorial size is itself an interesting result, the outcome as pertains to cultural and ethnic fractionalization is even more so. Notably, the ethnic fractionalization measure yields numerically insignificant results in two of the cases, and a weakly negative sign in the third case, although that third case was itself indicated as insignificant via the F-statistic. In comparison, the cultural (ethnolinguistic) fractionalization measure was positive and significant at the 95% confidence level across all three measures of constitutional decentralization. Given that the other measure was consistently

³² While utilizing logarithmic transformations and scaling down by several factors of ten was sufficient to establish the sign and continued significance for the purposes of this initial analysis, more work with the population variable is needed to establish its distribution, and hence, what type of scalar is most likely to preserve that distribution.

insignificant, this suggests something particular to linguistic divides that influences governance demands, as opposed to these demands stemming from ethnic divides more broadly.

One clear interpretation of this result is that significantly different languages pose administrability concerns that different ethnicities do not. In particular, official government documents, websites, signs, and other requirements become more costly with each language that they need to be created in. Decentralizing at least some aspects of central administration to each linguistic area may simply be a cost-saving measure. This explanation is more in line with the secondary assumption that benevolent drafters, even absent strong input from soon-to-be constituents, may wish to design the most effective governance system possible. If decentralization implies significant efficiencies in cases where predominant languages are sufficiently divergent, then drafters might rationally choose to decentralize, regardless of the extent to which citizens have significant input into the drafting process.

Table 1: Coefficients for each independent variable and R^2 of each regression

Measure of Decentralization	Population at enactment	Territorial Size	Cultural Fractionalization	R^2 (Adj R^2)	Regression F-Statistic
Word count	4.782* (+)	1.185	3.025* (+)	0.4047 (0.3641)	9.9718*
Article count	3.775* (+)	0.731	2.218* (+)	0.2954 (0.2473)	6.1480*
Proportion of Articles	2.463* (+)	0.394	2.392* (+)	0.2055 (0.1514)	3.7940*

* Denotes significance at 95% Confidence, at least. Sign of coefficient appears beneath each significant variable.

However, there is reason to think that there may be more at play with linguistic divides than increased administrative costs. Recent scholarship has suggested that different language groups can result in significantly different behavior on the part of the respective populations speaking them; namely, future-oriented behavior such as savings and personal health is more

likely to occur in languages that do not have as distinct a divide in present and future tenses.³³

The implications of this for governance preferences is clear. If distinct linguistic groups behave differently across such self-rewarding actions as savings and health, it requires little to imagine that linguistic differences could also result in significantly different policy preferences on the part of the various native speakers.

An additional rationale may also be related to the comparative difficulty linguistically-dissimilar groups have in communicating with one another. Such communicative barriers can lead to the perception of these groups as being distinct from one another, even if they might otherwise share numerous policy preferences in common. If communicating these policy similarities becomes more difficult between groups as the linguistic divide between them increases, then the likelihood increases that these groups will demand their own governance regimes, distinct from that of the other group. Ultimately, even taking the results of the 2013 Chen study at face value, populations with distinct savings, health, and retirement behavior are likely to have different policy preferences governing at least these areas.

VII. EXTENSIONS IN PROGRESS³⁴

The first clear extension of this analysis is to include every constitution currently in force for which measures of population, territorial size, and ethnolinguistic fractionalization are available. The choice of Muslim-majority constitutions suggests the results may hold with similar significance worldwide. Relatedly, initial results for generation of these measures in the languages the sample was drafted in Arabic, have recently been completed by two coders fluent in Arabic and are being reconciled as of this writing. Additionally, Fearon's measures of ethnic

³³ Keith M. Chen, "The Effect of Language on Economic Behavior: Evidence from Savings Rates, Health Behaviors, and Retirement Assets" (2013) 103(2) Am. Econ. Rev. 690-731.

³⁴ It is anticipated that these extensions will be completed over the spring and summer of 2019.

and cultural fractionalization are not the only measures that attempt to define linguistic divides as at least partially distinct from ethnic ones.³⁵ To the extent that these additional measures treat enough countries to provide a robust comparison, then results of similar sign and significance using different measures of linguistic divisions would only bolster the argument that they play a role in determining constitutional decentralization outcomes.

Another clear extension is to include treatment of the terrain ruggedness variable in the regression. The available data on a given country's topographical ruggedness was first developed by Riley, De Gloria, and Elliot in 1999,³⁶ and has since been updated by Nunn and Puga in 2012.³⁷ Importantly, for the purposes of this analysis, a given country's ruggedness is nearly fixed, so inclusion of this variable would not involve the measure for each year a given country's constitution was enacted.

Of additional interest is the link between the extent of detail decentralization is given in a constitution, and levels of actual decentralization in practice. One potential way to test this question would be to examine the extent to which Pommerehne and Kirchgässner's measure of fiscal decentralization (share of total government expenditure for which central government expenditure accounts) correlates to the broader measures of constitutional decentralization provisions. Another way to test this question would be to compare each measure of constitutional definition of subnational government to the Regional Authority Index,³⁸ which measures the

³⁵ See, e.g. Klaus Desmet, Shlomo Weber, and Ignacio Ortuño-Ortín, "Linguistic Diversity and Redistribution." (2009) 7(6) J. Euro. Econ. Ass'n 1291-1318; Klaus Desmet, Ignacio Ortuño-Ortín, and Romain Wacziarg, "The Political Economy of Linguistic Cleavages" (2012) 97(2) J. Dev. Econ. 322-338; David Harmon & Jonathan Loh, *The Index of Linguistic Diversity: A New Quantitative Measure of Trends in The Status of The World's Languages* (2010).

³⁶ Shawn Riley, S.D. DeGloria, and Robert Elliot, "A Terrain Ruggedness Index That Quantifies Topographic Heterogeneity." (1999) 5(1-4) IJS 23-7.

³⁷ Nunn, and Puga, *supra* note 24.

³⁸ Liesbet Hooghe et. al., *Measuring Regional Authority, Volume I: a Postfunctionalist Theory of Governance*, (Oxford: Oxford University Press, 2016).

actual extent of decentralization in practice in nations around the world. Such a comparison evokes work by Law and Versteeg on “sham constitutions”, measuring the extent to which rights granted in a given constitution are borne out in practice.³⁹

Finally, in simultaneously applying three measures of constitutional detail, this analysis adds to the comparative constitutional analysis literature. If these measures prove useful as a proxy for the extent a constitution treats a given subject, fresh light could be shed on other more researched constitutional topics such as rights specifications and implementation. Similarly, based upon data I am in the process of obtaining from the Comparative Constitutions Project, I will soon be able to compare the word count devoted to a particular topic in a constitution to the total word count to give an idea of the proportional weight that constitution places upon the topic, a more granular measure than the currently used proportion of articles.

VIII. CONCLUSION

Although the results of this analysis provide several fruitful avenues for ongoing research, the initial findings are themselves thought-provoking. Based upon the subset of countries surveyed, the demand factors that play a role in determining levels of constitutional decentralization include population size and cultural fractionalization of a given country. Because the latter measure is based on linguistic divisions, the implication that language plays a greater role than ethnicity in determining demand for decentralization is an interesting one, albeit one that should be made more robust via a test utilizing the full set of the world’s constitutions. Nonetheless, such a result is in line with other recent research that emphasizes the role linguistic differences can play in determining a range of outcomes of interest.

³⁹ David S. Law & Mila Versteeg, "Sham Constitutions" (2013) 101 Cal. L. Rev. 863.

The preceding analysis remains applicable whether or not constituents have sufficient input to a drafting process for their demands to be reflected, for if not, drafters with foresight and an understanding of the potential benefits of decentralization are still more likely to choose decentralization specificity in the cases where it most likely to yield benefits. Namely, in more populous Muslim-majority countries with more ethnolinguistic diversity, constitutional drafters were more likely to choose a decentralized governance scheme, and treat it in greater detail when doing so.

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