Democratization

Measuring subnational democracy: toward improved regime typologies and theories of regime change

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ABSTRACT
Social scientists have been limited in their work by the paucity of global time series data about subnational institutions and practices. Such data could help scholars refine regime typologies, improve theories of democratization and regime change, better understand subnational democracy, and illuminate issues of development, conflict, and governance. This article addresses the lack of data by introducing 22 subnational measures from a new dataset, Varieties of Democracy. Validity tests demonstrate that the measures' strengths outweigh their weaknesses. The measures excel in covering all subnational levels for most countries, capturing different elements of subnational elections, and including a variety of dimensions of elections and civil liberties. The measures also offer unmatched global and temporal coverage. The article demonstrates how these strengths can provide scholars with the benefits described above.

Introduction

Attention to subnational politics can help scholars refine regime typologies, improve theories of democratization and regime change, and better understand development, conflict, and governance. Studies have shown that in countries labelled as democratic or democratizing, democracy does not necessarily exist throughout the territories.[1] Yet, scholars tend to overlook this in-country variation by treating a country where democracy is absent at the local level or from a large swath of territory the same as a country with democratic institutions and practices throughout its territory. The absence of measures of subnational institutions and practices in cross-national democracy indices has encouraged this neglect. This oversight weakens regime typologies and limits the explanatory power of regime change theories.

To facilitate research to overcome this problem, this article introduces a set of subnational measures from the new Varieties of Democracy dataset (V-Dem). Twenty-two indicators of subnational institutions and practices cover all countries of the world, except microstates, from 1900 to 2012. They provide information about typical institutions and practices, but also about variation and outliers. The measures are derived

from country expert responses to V-Dem survey instruments and are available free of charge on the internet.[2] Beyond introducing these measures, the purpose of this article is to validate them and demonstrate their utility to future research. The analysis shows that the measures capture all subnational levels for most countries, elements of subnational elections, and various dimensions of elections and civil liberties. The measures also offer excellent global and temporal coverage. The measures are weaker in capturing multiple meanings of government authority and constraints and providing valid data about which offices are elected. These subnational indicators are needed because currently there are no global time series data about subnational democratic institutions and practices. In addition, they are relevant to improving regime typologies and theories of regime change as well as to enhancing understanding of development, conflict, governance, and subnational politics.

The article proceeds by documenting the paucity of subnational data from other sources. I then describe the conceptualization and operationalization of the V-Dem subnational indicators. The next section assesses the quality of the V-Dem measures by examining their face and content validity, the data generation process, and the measures' convergent validity. The final section demonstrates how the measures can illuminate questions of importance in social science.

Limited data from other sources

Other than from V-Dem, global time series data about subnational democratic institutions and practices are not available. Most sources of subnational information examine administrative structure, government performance, and decentralization,[3] not democratic institutions or processes. Global regime and democracy datasets, such as Freedom House, Polity, and Boix, Miller, and Rosato, do not provide subnational measures. Nearly all datasets that do focus on subnational democracy provide data for only one part of the world. The Council of Europe's *Structure and Operation of Local and Regional Democracy* reports on European countries, for example.[4] Those that do cover numerous parts of the world do not include all countries and provide data for only one year or a short time period. An additional problem is that data are often not comparable across countries. For example, the Global Observatory on Local Democracy and Decentralisation (GOLD) has profiles of 101 countries, but the data provided are not consistent across countries.[5]

A swell of subnational democracy research beginning in the 1990s has provided valuable findings about subnational regimes but no global datasets. The most comprehensive coverage comes from a few studies that examine all or nearly all provinces, but only in one or two countries.[6] Most studies examine only one to four provinces in a country. The targeted focus of subnational democracy researchers has produced detailed accounts of individual subnational units – ranging from thick descriptions across decades to snapshots in time using large numbers of indicators – but each study has provided information about only a few countries and, in many cases, only a few subnational units.[7] Data from this literature are further limited by level, geography, and time. Most data are from the regional level, to the exclusion of the local level. Moreover, most of the work has been done in Argentina, Brazil, Mexico, and Russia. Germany, India, Kyrgyzstan, the Philippines, South Africa, and the United States have also been studied.[8] Most of these countries are large, were federalist, and had recently politically liberalized when they were investigated. These similarities further reduce the diversity

of the data. Data from different works are not comparable because scholars have used different conceptualizations and operationalizations, and cross-national studies are rare. Finally, temporal coverage is limited; most of the studies are of the third-wave era and examine between 10 and 30 years.

In sum, neither existing datasets nor the subnational democracy literature provide us with global time series data on subnational institutions and practices. To create such data, the first step in developing the V-Dem indicators was to conceptualize the term "subnational democracy".

Conceptualization of subnational democracy for V-Dem

For a territory within a country to be characterized as more or less democratic, it must exist as an administrative unit with its own government. Subnational government makes subnational democracy possible while also contributing to the extent of democracy in a country. Proximity of government can facilitate citizens' political engagement and thus increase the extent of participation in the country.[9] This reflects the view of democracy that emphasizes participation.[10]

The subnational government is more democratic if its offices are elected through free and fair elections. This follows from the electoral principle of democracy,[11] and it promotes the participatory principle of democracy by allowing citizens to vote for more officials. It is also important that the elected offices have authority relative to unelected offices and can constrain the actions of unelected officials. This enables elected officials to act on voters' preferences and citizens, through the electoral process, to limit the actions of government. These practices allow for responsive government, the essence of democracy.[12] To facilitate the freeness and fairness of the elections and enable citizens to engage with these offices, respect for civil liberties in the subnational units is essential. This draws on the liberal principle of democracy.[13]

Following from this logic, the V-Dem subnational indicators include three fundamental elements of democracy – elections, government authority and constraints, and civil liberties. Moreover, the indicators reflect three of the main principles of democracy – participatory, electoral, and liberal.[14]

Operationalization of V-Dem subnational indicators

Two challenges must be overcome in order to translate this conceptualization of subnational democracy into measurements: multiple subnational levels and many subnational units. To address the first problem, country experts identified two subnational levels for data collection – regional, meaning the second-highest level of government, just below the national government, and local, meaning the level below the region.[15] The online appendix provides a complete list of variables, including these, *Regional Government Exists* and *Local Government Exists*. (Details about the experts appear in "Data generation process" below.) To deal with countries that have more than two subnational levels – only about one-quarter of countries – the survey instructs the experts to select the regional level and the local level "that, in practice, has the most responsibilities (e.g. making laws, providing primary education, maintaining roads, policing, etc.) and resources to carry out those responsibilities". Of countries with more than two levels, nearly all have only three levels, so data for the majority of their subnational levels have been collected.[16]

The number of subnational units within a single country can be large. For example, Brazil has 5562 *municipios*, composing just one of its levels of subnational government.[17] Thus, it was not feasible to create a global dataset that measures the extent of democracy in each unit. Rather the V-Dem indicators collect data about subnational averages, distributions, and outliers. For example, to evaluate the freeness and fairness of subnational elections, the survey first asks about elections on average (*Subnational Elections Free And Fair*): "Taking all aspects of the pre-election period, election day, and the post-election process into account, would you consider subnational elections (regional and local, as previously identified) to be free and fair on average?" Experts then respond to questions about the distribution (*Subnational Election Unevenness*): "Does the freeness and fairness of subnational elections vary across different areas of the country?" Finally, the experts provide information about the outliers. They identify the areas with significantly less free and fair elections and significantly more free and fair elections, estimate the percentages of the country's population living in each, and identify characteristics shared by each type of outlier (*Subnational Election Area Less Free And Fair Name, Subnational Election Area Less Free And Fair Pop, Subnational Election Area Less Free And Fair Characteristics, Subnational Election Area More Free And Fair Name, Subnational Election Area More Free And Fair Population, Subnational Election Area More Free And Fair Characteristics*). The distribution and outlier measures capture within-country variation.[18] The approach to measure civil liberties is similar with two exceptions (*Subnational Civil Liberties Unevenness, Stronger Civil Liberties Population, Stronger Respect For Civil Liberties Characteristics, Weaker Civil Liberties Population, Weaker Civil Liberties Characteristics*). First, because subnational units do not typically codify civil liberties, the average can be found using the civil liberties indicators or indices for the country as a whole rather than a specific subnational measure.[19] Second, to avoid expert fatigue, the civil liberties survey did not ask experts to name specific geographic areas where government respect for civil liberties is significantly stronger and areas where it is significantly weaker. We also suspected that these areas should overlap at least somewhat with areas with more or less free and fair elections due to the importance of rights to election quality.

For other elements of subnational democracy the measures provide only information about averages for empirical and practical reasons. The existence of subnational government and offices and offices' relative power are likely to be less variable than the quality of subnational elections and respect for civil liberties. Existing research provides support for this. This more limited approach was taken for the other concepts also because of finite resources.

Following from this conceptualization and operationalization, 22 indicators were created. Four address the existence of subnational government, four the presence of subnational elections, two the authority of subnational elected offices, seven the freeness and fairness of subnational elections, and five civil liberties.[20]

Quality of V-Dem subnational measures

To what extent do the indicators of subnational democracy generate valid measures? In other words, do they capture the intended concepts? To check for this I analyse the face and content validity, data generation process, and convergent validity.

Face validity

A strong correspondence between the measures and the underlying concepts is apparent, indicating face validity. Face validity is a judgement that "the operationalization seems like a good translation of the construct".[21] I checked the face validity of the indicators by having V-Dem colleagues, 13 scholars of subnational democracy, and country experts participating in a V-Dem pilot of 12 countries comment on them.[22] After some adjustments to the indicators, V-Dem colleagues and subnational democracy scholars evaluated them again, and I made final changes based on their ideas.[23] Readers themselves can assess the face validity of the indicators by examining each and reviewing the evaluation below.

To capture the concept of "subnational", V-Dem begins with experts' identifications of local and regional government levels (*Regional Government Exists* and *Local Government Exists*). The clarifications regarding how to identify a level, described above, would seem to increase the validity of the responses. A second step in data collection, explained in the "Data generation process" section, further increases our confidence.

For the democratic elements – elections, government authority and constraints, and civil liberties – the correspondence between the measures and underlying concepts is strengthened through a variety of techniques. First, *de facto*, rather than *de jure*, data are collected. The underlying concepts are about practice, and experts are in fact reporting on what has happened instead of recounting what laws mandate. The careful question wording, including the clarification sections, also increases the face validity. These clarifications help overcome measurement challenges. For example, what does "elected" mean at the subnational level? The survey specifies for the regional offices question (*Regional Government Elected*):

> "Elected" refers to offices that are directly elected by citizens or indirectly elected by a regional elected assembly. All other methods of obtaining office – including appointment by higher or lower levels of government – are considered to be non-elected. In classifying a position as elected one is making no judgments about the freeness/fairness of the election or the relative extent of suffrage. One is simply indicating that there is an election and that the winner of that election (however conducted) generally takes office.

The survey provides a comparable clarification for the local level. The "Data generation process" section describes an additional data collection technique to strengthen validity for these two questions.

In sum, the correspondence between the measures of the democracy elements and the underlying concepts seems to be good, as suggested by the face validity tests conducted by various groups and the correspondence of the measures to the subnational levels and the *de facto* elements of democracy.

Content validity

Relative to face validity, content validity is slightly weaker. Content validity is the measure's inclusion of all of the meanings of the concept. The task of measuring rich concepts like elections for subnational units for all countries of the world is enormous, so, given resource constraints, the indicators cannot capture all meanings. This is evident for both concepts, subnational and democracy, although of the three democratic elements it is a problem just for government authority and constraints.

Concentrating on two levels means that, for most countries, we are collecting data about all subnational levels. Approximately 56% of countries have two subnational levels and 18% have one, based on a sample of 82 countries from GOLD's database.[24] Nearly all countries with more than two subnational levels have only three, so data for most, but not all, of their subnational levels have been collected. We are capturing most meanings of the concept "subnational".

For the democratic elements, content validity is relatively strong for elections and civil liberties and weaker for government authority and constraints. The electoral element has high content validity because it captures the multiple pathways through which elections matter to democracy: the existence of elected offices at regional and local levels and the holding of subnational elections enable citizens to participate (*Regional Government Elected*, *Local Government Elected*, *Subnational Elections Held*), free and fair election results reflect citizens' preferences (*Subnational Elections Free And Fair*), and regional and local elected officials have authority relative to non-elected officials to act on those preferences (*Regional Offices Relative Power*, *Local Offices Relative Power*). Moreover, the concept of free and fair elections is operationalized broadly to include many meanings of the concept: experts take "all aspects of the pre-election period, election day, and the post-election process into account" (*Subnational Elections Free And Fair*). Similarly, V-Dem provides a rich picture of civil liberties. In the civil liberties section 25 measures, such as freedom from political killings, appear. Sections on media, political parties, and civil society include other civil liberties measures, such as freedom of expression. Indicators capturing distributions and outliers then apply this information about country averages to the subnational level. Including measures of distributions and outliers, rather than just averages, further increases the content validity of the electoral and civil liberties elements.

Of the three democratic elements, government authority and constraints has the lowest content validity. Experts provide information about the power of elected offices relative to unelected offices but, given greater resources and expert energy, information could have been solicited about specific powers and limitations.

Overall, the V-Dem measures capture all the subnational levels for most countries, many aspects of elections, and different estimates of elections and civil liberties. The measures are less successful in including many meanings of government authority and constraints.

Data generation process

The data generation process increases the validity of the resulting measures through careful recruitment of country experts, reliance on multiple country experts, use of a measurement model to aggregate the data, and, for some indicators, a two-pronged data collection approach.[25]

Country experts exclusively provide the data for subnational indicators, with the exceptions of *Regional Government Exists*, *Local Government Exists*, *Regional Government Elected*, and *Local Government Elected*, for which V-Dem research assistants also gather information. The country specialists code those indicators that require expert knowledge to characterize and for which extant data are not available globally and across time. The research assistants code the indicators requiring more factual information and for which data are available.

Typically, five country experts provide information for each country-year.[26] The V-Dem team selects individuals who are, most importantly, deeply knowledgeable about a country and about one or more substantive areas. More than 80% of all experts hold PhDs or MAs and work at some type of research institution. Individuals are also recruited based on their impartiality and connection to the country. To help ensure impartiality, those who are or have been closely associated with political parties, politically affiliated think tanks, or senior government officials are not considered. Typically three of the five experts are nationals or permanent residents of the country they are coding, so they are deeply connected to the country. This global recruitment helps avoid Western and Northern bias. It is also particularly advantageous for historical data. Nationals especially, relative to non-residents, are likely to have considerable historical knowledge, as are those receiving graduate training outside US programmes, which tend to underemphasize study of history.[27] Finally, seriousness of purpose and diversity of the coders' professional background, such as employment at different universities, are taken into account in recruitment.[28] Experts respond to questions organized into topical surveys in an online interface. Each completes only those surveys in his or her area(s) of expertise. Experts are encouraged to do research if they are uncertain about an answer and are instructed to not provide a response for questions they cannot answer. All the subnational indicators, except those about civil liberties, appear in the election survey. Those about civil liberties appear in the civil liberties survey. So, experts on each of these topics are being asked to characterize elections or civil liberties both nationally and subnationally.[29]

Reliance on multiple experts for each country-year improves the quality of the measures. A measurement model aggregates the data generated by the experts so that one data point exists for each country-year. The measurement model corrects for systematic bias in coders' answers and low reliability by examining patterns in expert disagreement, and thus increases the validity of the resulting measures. The model adjusts for experts' own reported confidence in each response they give and the tendency of "domestic" coders to provide less favourable evaluations.[30]

For four of the indicators, we did not rely exclusively on the experts but instead used a two-pronged data collection approach in order to increase the validity of the measures. For the existence of local and regional government (*Local Government Exists*, *Regional Government Exists*), V-Dem research assistants double-checked the data the experts generated and arbitrated disagreements among their responses using information from the statoids.com database and country-specific sources.[31] The assistants also used the names of regional and local government units the experts provided (*Regional Government Name*, *Local Government Name*) to determine whether experts for a particular country-year were in fact identifying the same subnational level and to resolve conflicts. This approach gives us high confidence that these measures are valid.

We also used a two-pronged approach to collect data about which offices, if any, are elected at the regional and local level (*Regional Government Elected*, *Local Government Elected*). In cases of significant disagreement among experts, aggregating their responses did not generate a single mode and thus measure. In these instances, V-Dem research assistants adjudicated among responses by reviewing and cross-referencing academic articles and books for the correct information. Despite their factual nature, these questions often generated disagreement. Disagreement among experts tended to occur when countries exhibited specific types of conditions or characteristics: (1) when there had

been a national political crisis and subnational elected officials stayed in office and future elections were suspended or cancelled; (2) when two regional executives existed, such as a nationally appointed official and a second elected by the regional assembly; (3) when the timing of the implementation of a new constitution or electoral law was not clear. Time and staff constraints limited us to adjudicating only those country years where a mode was not generated. To boost validity for other country-years, users can collapse categories, increasing the average percentage of coders selecting the mode value from 84 to approximately 90% for *Regional Government Elected* and 78 to approximately 86% for *Local Government Elected*.[32]

This review of the data generation process suggests that the procedures do not introduce bias and do generate quality data. Among the indicators, however, we have less confidence about the measures of which offices are elected at the regional and local levels.

Convergent validity

The V-Dem measures closely match data from other sources. In other words, convergent validity, correspondence between two measures of the same underlying concept, is high. Scant existing data limit the scope of convergent validity testing. Also, some existing data were used in the two-pronged data collection approaches, so they cannot be used for convergent validity tests. That said, it is possible to compare multiple V-Dem measures with findings from subnational democracy research.[33]

The first test compares V-Dem measures about unevenness in subnational elections' freeness and fairness and respect for civil liberties – *Subnational Election Unevenness* and *Subnational Civil Liberties Unevenness* – with existing sources. For comparison with *Subnational Election Unevenness*, a source had to examine the conduct of subnational elections, not subnational conduct of national elections. For comparison with *Subnational Civil Liberties Unevenness*, the source had to focus on civil liberties, such as freedom of expression and association, rather than voting rights. This limited the number of comparisons with *Subnational Civil Liberties Unevenness* because subnational democracy research has focused more on elections than civil liberties.

The extent of correspondence is illustrated in Table 1. The first column lists the countries and years for which a particular source, cited in the second column, uncovered unevenness.[34] Using the V-Dem measures, we calculated the average level of unevenness in freeness and fairness of subnational elections and respect for civil liberties for each time period under consideration. For this table, the unevenness variables are standardized, so that a score of zero represents the overall mean across all countries and a score of one represents one standard deviation from the mean. So, a negative value in column four or five indicates that the V-Dem measures show below average evenness, in other words above average unevenness, for subnational election freeness and fairness or respect for civil liberties, respectively. A negative value, thus, represents a match between a V-Dem measure and the account in the existing source. An "N/A" indicates that the existing source did not examine that type of unevenness. The values in the parentheses in the last two columns are ratios of years, indicating for how many of the years identified by the source V-Dem shows below average evenness for each variable. In sum, V-Dem measures match all existing sources for subnational elections' freeness and fairness data and for respect for civil liberties measures. In 39 of the 41 election sources and 10 of the 11 civil liberties sources, V-Dem identifies the same number of years as having below average unevenness.

Table 1. Convergent validity test for unevenness.

Negative values in the last two columns indicate that V-Dem finds below average evenness (or, in other words, above average unevenness) and thus matches the sources. The ratios in those columns indicate for how many of the years identified by the source V-Dem shows above average unevenness.[a]

Country and years source identifies with unevenness	Source	Election freeness and fairness	Civil liberties
Argentina 1983–2009	Behrend	−0.736 (27/27)	N/A
Argentina 1983–2003	Gervasoni (2010, "Rentier")	−0.785 (21/21)	N/A
Argentina 2003–2007	Gervasoni (2010, "Measuring")	−0.565 (5/5)	N/A
Argentina 1983–2005	Gibson (2005)	−0.765 (23/23)	N/A
Argentina 1983–2010	Gibson (2013)	−0.742 (28/28)	N/A
Argentina 1983–2006	Giraudy (2010, 2013, 2015)	−0.757 (24/24)	N/A
Argentina 1997–2009	Giraudy (2015)	−0.565 (13/13)	N/A
Brazil 1982–1998	Borges	−0.540 (17/17)	N/A
Brazil 1970–2010	Herrmann (2014)	−0.476 (41/41)	N/A
Brazil 2002–2006	Montero	−0.703 (5/5)	N/A
India 1993–2002	Beer and Mitchell	−0.460 (10/10)	N/A
India 1970s–1990s	Lankina and Getachew (2012)	−0.679 (30/30)	N/A
India 1947–2010	Tudor and Ziegfeld	−0.629 (61/64)	N/A
Kyrgyzstan 1997	McMann	−0.610 (1/1)	−1.250 (1/1)
Mexico 1980–2000	Beer	−1.094 (21/21)	N/A
Mexico 1990–1999	Beer and Mitchell	−1.184 (10/10)	−1.898 (10/10)
Mexico 1994–2009	Benton	−1.050 (16/16)	N/A
Mexico 2008–2010	Danielson et al.	−1.000 (3/3)	N/A
Mexico 1995–2010	Eisenstadt	−1.033 (16/16)	N/A
Mexico 1989–2004	Eisenstadt and Rios	−1.132 (16/16)	N/A
Mexico 1986–2004	Gibson (2005)	−1.109 (19/19)	N/A
Mexico 1998–2010	Gibson (2013)	−1.000 (13/13)	N/A
Mexico 1977–1988	Gilley	−0.983 (12/12)	−2.159 (12/12)
Mexico 1997–2006	Giraudy (2010, 2013)	−1.000 (10/10)	N/A
Mexico 1997–2009	Giraudy (2015)	−1.000 (13/13)	N/A
Mexico 1986–2006	Herrmann	−1.098 (21/21)	−1.861 (21/21)
Mexico 1988–2000	Lawson	−1.161 (13/13)	−1.918 (13/13)
Mexico 1950–1989	Magaloni et al.	−0.973 (40/40)	N/A
Mexico 1997–2008	Rebolledo	−1.000 (12/12)	−1.637 (12/12)
Philippines 1896[b]–1995	Sidel (1999, 2014)	−1.453 (75/96)	−1.475 (96/96)
Russia 1990–1999	Hale	−1.437 (10/10)	N/A
Russia 1999–2004	Lankina and Getachew	−1.635 (6/6)	N/A
Russia 1997	McMann and Petrov	−1.732 (1/1)	N/A
Russia 1991–2000	Moraski and Reisinger (2003)	−1.539 (10/10)	N/A
Russia 1991–2001	Petrov	−1.544 (11/11)	−0.036 (10/11)
Russia 1991–2005	Saikkonen	−1.543 (15/15)	N/A
South Africa 1994–1999	Munro	−0.612 (6/6)	N/A
USA 1890[b]–1960s	Gibson (2013)	−1.344 (70/70)	N/A
USA 1940s	Hill	−1.306 (10/10)	−2.023 (10/10)
USA 1890[b]–1970	Mickey (2008)	−1.335 (71/71)	−1.906 (71/71)
USA 1890[b]–1972	Mickey (2015)	−1.317 (73/73)	−1.863 (73/73)
Total[c]		**−1.032 (362/386)**	**−1.601 (212/213)**

[a]Average unevenness is calculated on a standardized scale.
[b]V-Dem begins with 1900, so earlier data from sources are not used.
[c]The total ratios count unique country-years; they do not count the same country-year more than once.

An additional comparison can be made with the V-Dem indicators that identify outliers and their characteristics. We first identified a country and time period covered by an existing case or country statistical study. For each of the outlier variables, we then

designated the comparison a match when one or more V-Dem experts named the specific subnational unit(s) (e.g. Oaxaca) or provided a general descriptor (e.g. South) that corresponded to the specific subnational unit(s) (e.g. Oaxaca) or general descriptor (e.g. South) that the source identified. We also considered a match to exist when the V-Dem experts identified additional outliers that did not contradict the information in the existing source because they were asked to identify all outliers, whereas most sources do not investigate all outliers in a country. We designated a "partial match" when the V-Dem expert responses did not capture all the information in the existing source, the V-Dem generalization did not fit every single subnational unit named in the existing source, or the V-Dem-named subnational units did not fit every single generalization in the source. For each of the characteristics variables, the V-Dem experts chose from among 20 descriptive characteristics, such as rural or urban. To determine whether there was a match required careful reading of the existing sources and, in some cases, research with additional materials, to learn about the characteristics of the outliers the sources identified.[35]

The match rate for all the variables was quite high. For four of the six variables – *Subnational Election Area Less Free And Fair Characteristics*, *Subnational Election Area More Free And Fair Characteristics*, *Stronger Respect For Civil Liberties Characteristics*, *Weaker Civil Liberties Characteristics* – V-Dem data completely matched 79 to 92% of the sources, depending on the variable. The lower match rates for *Subnational Election Area Less Free And Fair Name* and *Subnational Election Area More Free And Fair Name*, 69 and 57%, respectively, are attributable to V-Dem experts not capturing all the information published in works by Gervasoni and Giraudy, which provide data for all the regional units within their countries of study.[36] For three variables, there was a complete mismatch with a single source. The source was about Kyrgyzstan, and the problem was that V-Dem experts provided conflicting information about the country. In all the other analyses, the V-Dem experts' responses were consistent with each other, making comparisons with existing sources more straightforward. Partial mismatches were 8 or 14% of sources for all the variables except *Subnational Election Area Less Free And Fair Name* and *Subnational Election Area More Free And Fair Name*, which had partial matches with 28 and 38% of sources, respectively.

Existing sources enabled us to conduct two different convergent validity tests on a total of eight indicators. The fact that the global, time series data from V-Dem match much of the rich information from the existing case and country statistical studies increases confidence in the validity of the V-Dem indicators.

Utility demonstration

The V-Dem measures are not only valid, but also useful. They highlight the importance of considering subnational government and democracy in global, regional, and country research. The measures are also helpful in illuminating many of the central issues of social science, including regimes and regime change, as well as development, conflict, and governance. The purpose of this section is to suggest how the measures can be useful to future research, not to present research results.

The V-Dem measures remind us of the prevalence of subnational governments and thus the value of studying them to better understand countries' politics and the importance of addressing them in programmes and policies. The proportions of countries with regional government and with local government have been consistently high

over time. As of 2012, 89% of countries had regional government, and 98% had local government. These statistics reflect simply the presence of government, not its authority or regime type – characteristics captured by other measures and illustrated below.

A comprehensive understanding of democracy in a country requires examination of regional and local politics because democratic institutions and practices exist at these levels as well. The percentages of countries with elected offices has increased, with 24% of countries having some regional elected office in 1900 and 68% having some in 2012. The figures for local offices were 43 and 87%. The percentages were mostly static until the World Wars, when there was a decline; after World War II there was a relatively steady increase to 2012. Ninety-one per cent of the countries had elected offices at at least one of these levels in 2012. Moreover, the power of elected offices relative to non-elected offices is growing. In 2012, the global averages for each level fell between value two, meaning elected and non-elected offices are approximately equal in power at the level, and value three, meaning most non-elected offices are subordinate to elected offices. (Figure 1)

As the power of elected office has increased relative to non-elected offices, their elections have also become freer and fairer. On average subnational elections around the world had improved from value two, where there was "substantial competition and freedom of participation but there were also significant irregularities. It is hard to determine whether the irregularities affected the outcome or not (who won office)". By 2012, the global average approached value three, where there were "deficiencies and some degree of fraud and irregularities but these did not in the end affect the outcome (who won office)"[37] (Figure 1).
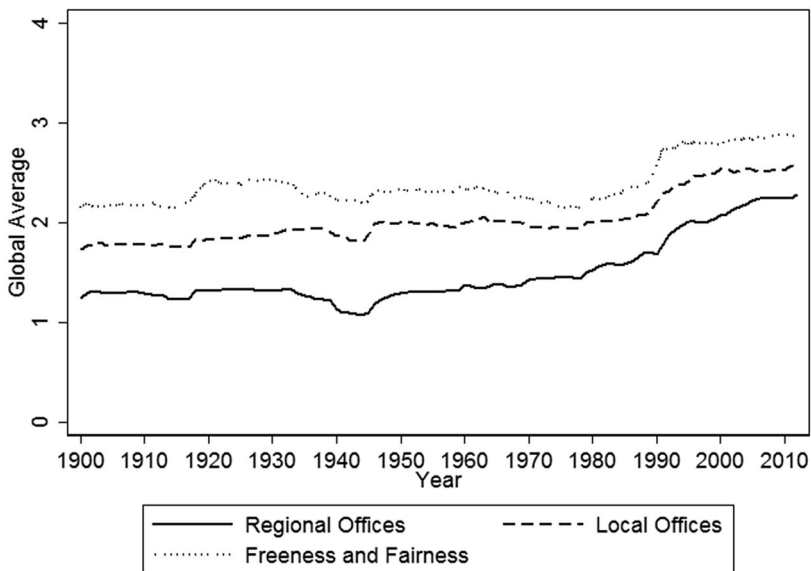

Figure 1. Power of subnational elected offices relative to unelected and freeness and fairness of subnational elections.

The V-Dem measures also emphasize the importance of examining subnational politics in regions and countries of the world. For example, in the Middle East and North Africa (MENA), as in the world, the freeness and fairness of subnational elections has increased in recent decades. The upward trend in MENA precedes the Arab Spring by decades, perhaps coming as a surprise since authoritarianism was viewed as having such a stronghold in these years.[38] However, while subnational elections have grown more free and fair, elected offices remain subordinate to unelected offices, unlike in much of the world. Local and regional offices' relative powers fall above value one, meaning "[s]ome elected offices are subordinate to non-elected offices", but they do not reach two, where "[e]lected and non-elected offices are approximately equal in power" (Figure 2).

Regional and country-level analysis with V-Dem subnational measures can also provide helpful insights, not only about local and regional politics, but also about broader phenomena. For example, according to V-Dem measures, among countries that experienced ousters during the Arab Spring, Tunisia was unique, having both elected subnational government and an increase in the freeness and fairness of subnational elections beforehand. The subnational elections improved only slightly; nonetheless, the country is distinctive from others, such as Egypt, where subnational elected offices were not common, and Yemen, where there was not a recent, sustained improvement in the quality of subnational elections.[39] Conceivably, the experience with subnational elected government and the improvement in subnational election quality in Tunisia might have contributed to the country being the site of the first ouster and, what many have called, the only Arab Spring success. This example suggests that subnational democratization might facilitate national political openings.
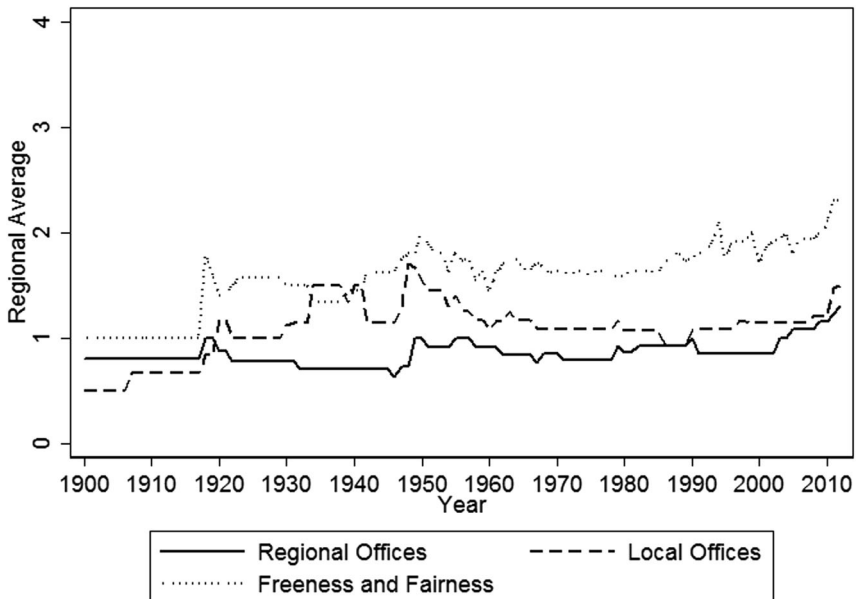

Figure 2. Power of subnational elected offices relative to unelected and freeness and fairness of subnational elections: MENA.

The role of subnational developments in national political openings is only one of many avenues of research facilitated by V-Dem subnational measures. The measures can help us refine our regime typologies. For example, "hybrid regime", defined as a regime "combining democratic and authoritarian elements",[40] has evolved to a catch-all category with an enormous number of subtypes. The V-Dem measures reveal in detail how hybrid regimes vary. For example, in approximately half the countries in the world with national hybrid regimes in 2012 subnational elected offices were more powerful than unelected offices; in the other half they were not. Additionally, in two-thirds of hybrid regimes government officials' respect for civil liberties was uneven throughout the country; in the other third it was even.[41] These global patterns of varied subnational practices and institutions can guide refinement of the concept of hybrid regimes in a way that previous subnational democracy research, which has examined only small numbers of countries, and regime research, which has focused on national institutions and practices, cannot.

The V-Dem subnational measures also hold promise for helping researchers to improve theories of regime change, namely democratization. Understanding how democratic institutions and practices develop throughout a country is part of the story linking democratic transition to democratic consolidation. Currently the different schools of democratization thought implicitly assume democracy will automatically spread throughout a country once national elites introduce competitive elections and (expanded) civil liberties or the country's socioeconomic conditions make it ripe for democracy. Yet, V-Dem measures show that globally and across time subnational regime variation is most common in countries with national hybrid regimes.[42] With the geographic and temporal limitations of earlier data, such a pattern could not be discerned. This evidence from V-Dem suggests that a key obstacle to democratic consolidation is the extension of democratic institutions and practices throughout a country. Preliminary analysis with the V-Dem subnational data indicates that certain geographic and demographic characteristics, including a rugged topography and a large and ethnically diverse population, make countries prone to subnational regime variation.[43] But, from the V-Dem time series data, researchers can also determine how some countries in the world have overcome this subnational regime variation in order to consolidate their democracies. The information from the V-Dem subnational measures about the frequency of subnational regime variation, the source of the problem, and the successes in overcoming it provides a key for unlocking the "black box" between democratic transition and democratic consolidation, and thus improving theories of democratization and, more broadly, regime change.

The V-Dem subnational indicators will also be helpful to understanding subnational democracy in particular. The outlier questions will enable scholars to identify specific subnational political units or areas of countries with subnational political units that have different institutions and practices from others in the country. Previously identifying these enclaves has been a time-consuming, labour-intensive task. With V-Dem measures new lines of inquiry are also possible: for example, are enclaves that are less democratic or more democratic than their national regimes more common? Research has tended to focus on less democratic enclaves, driven in part by the logic that a national regime would not let a more democratic enclave exist.[44] Preliminary research with the V-Dem measures suggests that enclaves exist in both countries with democratic national governments and those with non-democratic national

governments; approximately 38% of countries with civil liberties or election unevenness in 2012 had authoritarian national regimes.

Beyond questions of regimes, regime change, and subnational democracy, the V-Dem subnational indicators can help scholars study a wide variety of different issues. Increasingly scholars have been studying central questions of social science at the subnational level because of methodological advantages.[45] However, this approach has been limited because of the paucity of global, time series data. V-Dem measures will facilitate the study of democracy's impact on development and on conflict, for example. There are also subnational-related questions that scholars will be able to investigate with global, time series subnational data, such as decentralization's and federalism's impact on democracy, subnational politics' impact on distribution and national reform, and subnational institutions' effect on party politics, clientelism, and political participation.

Conclusion

Greater attention to subnational institutions and practices can help social scientists refine regime typologies, improve theories of democratization and regime change, better understand subnational democracy, and illuminate issues of development, conflict, and governance. Findings from this research and basic subnational information itself can enable democracy advocates to design better programmes and foreign officials to make better policies. The V-Dem measures can facilitate achievement of these objectives.

The measures suffer from weaknesses, but they also have significant strengths. The measures are weaker in capturing multiple meanings of government authority and constraints and providing highly valid data about which offices are elected. They do, however, capture all subnational levels for most countries, different elements of subnational elections, and various dimensions of elections and civil liberties well. The measures also offer excellent global and temporal coverage. As global time series measures, the V-Dem subnational indicators overcome a significant data void and consequently hold considerable promise for new research.

Notes

1. Gervasoni, "A Rentier Theory"; Gibson, *Boundary Control*; Giraudy, *Democrats and Autocrats*; McMann, *Economic Autonomy*.
2. This article uses version 6.2 of the dataset, available at https://www.v-dem.net/en/data/data-version-6-2/. Updating to the current year and collecting microstate data are in progress.
3. See, for example, The Fiscal Austerity and Urban Innovation Project, http://faui.uchicago.edu/; Political Decentralization and Corruption: Evidence from Around the World (accessed December 21, 2016). http://www.sscnet.ucla.edu/polisci/faculty/treisman/Pages/publishedpapers.html; and Hooghe et al., *Measuring Regional Authority*.
4. The Council of Europe, "Structure and Operation of Local and Regional Democracy".
5. Global Observatory on Local Democracy and Decentralisation, "Decentralization and Local Government".
6. Gervasoni, "A Rentier Theory"; Giraudy, *Democrats and Autocrats*; McMann and Petrov, "A Survey of Democracy".
7. Herrmann, "Neo-patrimonialism", and McMann, *Economic Autonomy* are examples, respectively.
8. See Table 1 for the distribution of studies across countries.
9. Sisk, *Democracy at Local Level*, 1.

10. For example, Pateman, *Participation and Democratic Theory*. Note that the conceptualizations of "democracy" that are cited in this section have been primarily developed to describe countries, but they also apply to subnational political units.

11. For example, Schumpeter, *Capitalism, Socialism, and Democracy*.

12. Dahl, *Polyarchy: Participation and Opposition*, 2.

13. Held, *Models of Democracy*, ch. 3.

14. In keeping with the V-Dem philosophy that there are varieties of democracy, the conceptualization of the subnational democracy indicators does not privilege one principle of democracy over another.

15. Where only one level exists, data for only one level are collected. Note that the indicators of democracy at these subnational levels do not include any measure of democracy at the national level. V-Dem provides separate measures of democracy at the national level.

16. Global Observatory on Local Democracy and Decentralisation, "Decentralization and Local Government". These estimates about number of levels are based on a sample of 82 countries from this source.

17. Ibid.

18. For each average or distribution measure, experts are instructed to consider one or both levels they have identified, depending on the question, so units that are asymmetric to the others, such as a capital city or an indigenous territory, would not be considered. The outlier questions do allow experts to identify these special units as outliers. See online appendix for details.

19. For details see Coppedge et al., "V-Dem Codebook V6".

20. V-Dem indicators about political parties and the judiciary also consider subnational practices and institutions, although not as directly. Ibid.

    The dataset does not aggregate these indicators into a single measure of subnational democracy, in keeping with the overall project philosophies that there are varieties of democracy and scholars benefit from having disaggregated data to use in ways most helpful to testing their hypotheses.

21. Trochim, Donnelly, and Arora, *Research Methods*, 57.

22. Pilot countries included two dissimilar countries from each world region.

23. For example, the following clarification was added to *Regional Offices Relative Power* so that the indicator would capture relative power at the regional level, rather than also between the regional and national levels: "We are concerned with the relative power of regional offices *to each other*, not the power of regional offices relative to higher or lower levels of government."

24. Global Observatory on Local Democracy and Decentralisation, "Decentralization and Local Government".

25. On examining the data generation process, see McMann et al., "Strategies of Validation".

26. Gervasoni, "A Rentier Theory". Considering the global and temporal scope of V-Dem, it would not have been possible to recruit experts from each subnational unit within a country, as, for example, Gervasoni did in his study of Argentina for a 20-year period.

27. The data suggest that the country experts were able to code historical periods effectively. One way to assess the relative ease or difficulty of coding is to examine country-expert disagreement. Disagreement is not higher during historical periods, suggesting that it is not more difficult for experts to code. One reason is probably that over time details about political institutions and processes emerge, whereas for contemporary periods all the information is not yet available. For this calculation, see the online appendix.

28. Coppedge et al., "Methodology".

29. The data demonstrate that experts are not simply coding subnational politics as identical to national politics. For example, this is evident by comparing the indicators *Subnational Elections Freeness and Fairness* and *Election Free and Fair*, which are identical except the latter asks about national, not subnational, elections. In countries with national hybrid regimes — those that exhibit democratic and authoritarian elements — more so than in countries with authoritarian or democratic regimes, we would expect to see less consistency in political institutions and processes between and within levels of government. For hybrid regimes, the correlation between the subnational and national election indicators was 0.75, demonstrating that experts are not coding national and subnational identically. Moreover, for all regime types, the correlation is 0.89. For calculation details, see the online appendix.

     Regarding another issue, the number of subnational-democracy experts who conducted face validity tests of the subnational indicators is so small relative to the number of V-Dem coders that any overlap is likely to be inconsequential. The amount of overlap is unknown to the author because the identity of experts is kept confidential.

30. Because the measurement model uses a consistent approach to incorporate information about coder reliability in generating the V-Dem indicators, including the subnational ones, reliability is not the focus of this article. Moreover, confidence intervals for each indicator can be generated from the V-Dem data so that users can be aware of how precise the data are for a subnational indicator for a particular country-year. Finally, reliable data are not useful if they are not also valid. For more on reliability of V-Dem data, see Coppedge, et al., "Methodology", 31–3; Pemstein et al., "The V-Dem Measurement Model".

31. The site statoids.com provides information about subdivisions of countries. For this and the adjudication processes described below, the assistants used the data from the experts whose responses matched the sources, so the aggregate scores in the V-Dem dataset reflect these data.

32. Possibilities include combining (a) 1 through 5; (b) 0 through 4; (c) 0, 1, and 3 as one value and the remainder as another; (d) 0, 2, and 4 as one value and the remainder as another. Combining 1 through 4 did not reduce disagreement.

     The data generation process can also be evaluated by the extent of missing data. The percentage of missing measures is in the single digits, or in one case just reaching 10%, for most of the subnational indicators, and the missing data are attributable to administrative oversights that are now being corrected. (Note that missingness for *Subnational Elections Free And Fair* should be calculated excluding country-years with no subnational elections.) Five variables (*Subnational Election Area Less Free And Fair Pop*, *Subnational Election Area More Free And Fair Population*, *Subnational Election Area Less Free And Fair Characteristics*, *Stronger Respect For Civil Liberties Characteristics*, *Weaker Civil Liberties Characteristics*) are missing 14 to 20% of their data, and *Subnational Election Area More Free And Fair Characteristics* is missing 45%. They are all measures of outliers. We suspected these questions would be difficult for experts to answer, and the surveys instructed them to not answer what they did not know. These variables should be used cautiously because of the missingness. For the other 16 indicators, this is not a complication.

33. Existing sources do not provide data to enable convergent validity testing for the indicators for outlier population estimates, subnational election freeness and fairness, and the power of elected offices.

34. Scholars have not researched when democratic institutions and practices are consistent within countries, so we are not able to conduct such convergent validity tests.

35. Summaries of each source compared to a V-Dem variable appear in the online appendix.

36. Gervasoni, "A Rentier Theory"; Giraudy, *Democrats and Autocrats*.

37. Figure 1 can be calculated an alternative way because experts are asked in prior questions "generally" whether offices are elected. As a result of this, experts can indicate that offices are generally not elected but then respond about the exceptionally elected offices for the questions on relative power. When country-years in which no elected offices existed (both *Regional Government Elected* and *Local Government Elected* equal zero) are excluded, the increase in Figure 1 is still visible, and the lines shift upward.

38. Bellin, "Reconsidering Robustness of Authoritarianism", 127–49.

39. The difference in subnational election quality is evident from a comparison of the interval data.

40. Diamond, "Thinking About Hybrid Regimes", 23.

41. For details about these calculations, see the online appendix.

42. McMann et al., "Governing Countries".

43. Ibid.

44. Linz and Stepan, *Problems of Democratic Transition*.

45. Giraudy, Moncada, and Snyder, "Subnational Research in Comparative Politics".

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Bibliography

Beer, Caroline. *Electoral Competition and Institutional Change in Mexico*. Notre Dame, IN: University of Notre Dame Press, 2003.

Beer, Caroline, and Neil J. Mitchell. "Democracy and Human Rights in the Mexican States." *International Studies Quarterly* 48, no. 2 (2004): 293–312.

Beer, Caroline, and Neil J. Mitchell. "Comparing Nations and States." *Comparative Political Studies* 39, no. 1 (2006): 996–1018.

Behrend, Jacqueline. "The Unevenness of Democracy at the Subnational Level." *Latin American Research Review* 46, no. 1 (2011): 150–176.

Bellin, Eva. "Reconsidering the Robustness of Authoritarianism in the Middle East." *Comparative Politics* 44, no. 2 (2012): 127–149.

Benton, Allyson Lucinda. "Bottom-Up Challenges to National Democracy." *Comparative Politics* 44, no. 3 (2012): 253–271.

Borges, André. "The Political Consequences of Center-Led Redistribution in Brazilian Federalism." *Latin American Research Review* 46, no. 3 (2011): 21–45.

Coppedge, Michael, and John Gerring with David Altman, Michael Bernhard, Steven Fish, Allen Hicken, Matthew Kroenig, et al. "Conceptualizing and Measuring Democracy." *Perspectives on Politics* 9, no. 3 (2011): 247–267.

Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Frida Andersson, et al. "V-Dem Codebook V6." Varieties of Democracy Project, 2015.

Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, Frida Andersson, Kyle L. Marquardt, et al. "Methodology." Varieties of Democracy Project, 2016.

Dahl, Robert. *Polyarchy*. New Haven: Yale University Press, 1971.

Danielson, Michael S., Todd A. Eisenstadt, and Jennifer Yelle. "Ethnic Identity, Informal Institutions, and the Failure to Elect Women in Indigenous Southern Mexico." *Journal of Politics in Latin America* 3, no. 1 (2013): 3–33.

Diamond, Larry. "Thinking About Hybrid Regimes." *Journal of Democracy*, 13, no. 2 (2002): 21–35.

Eisenstadt, Todd A. *Politics, Identity, and Mexico's Indigenous Rights Movements*. New York: Cambridge University Press, 2011.

Eisenstadt, Todd A., and Viridiana Rios. "Multicultural Institutions, Distributional Politics, and Postelectoral Mobilization in Indigenous Mexico." *Latin American Politics and Society* 56, no. 2 (2014): 70–92.

Gel'man, Vladimir, and Tomila Lankina. "Authoritarian Versus Democratic Diffusions." *Post Soviet Affairs* 24, no. 1 (2008): 40–62.

Gervasoni, Carlos. "A Rentier Theory of Subnational Regimes." *World Politics* 62, no. 2, (2010a): 302–340.

Gervasoni, Carlos. "Measuring Variance in Subnational Regimes." *Journal of Politics in Latin America* 2, no. 2, (2010b): 13–52.

Gibson, Edward L. "Boundary Control." *World Politics* 58, no. 1 (2005): 101–132.

Gibson, Edward L. *Boundary Control*. New York: Cambridge University Press, 2013.

Gilley, Bruce. "Democratic Enclaves in Authoritarian Regimes." *Democratization* 17, no. 3 (2010): 389–415.

Giraudy, Agustina. "The Politics of Subnational Undemocratic Regime Reproduction in Argentina and Mexico." *Journal of Politics in Latin America* 2, no. 2 (2010): 53–84.

Giraudy, Agustina. "Varieties of Subnational Undemocratic Regimes." *Studies in International Comparative Development* 48, no. 1 (2013): 51–80.

Giraudy, Agustina. *Democrats and Autocrats*. Oxford: Oxford University Press, 2015.

Giraudy, Agustina, Eduardo Moncada, and Richard Snyder. "Subnational Research in Comparative Politics." Paper presented at the APSA Annual Meeting, Washington, D.C, 2014.

Global Observatory on Local Democracy and Decentralisation (GOLD). "Decentralization and Local Government in the World." Global Observatory on Local Democracy and Decentralisation, 2014. http://www.cities-localgovernments.org/gold/country_profile.asp.

Hale, Henry E. "Correlates of Clientelism." In *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition*, edited by Herbert Kitschelt and Steven I. Wilkinson, 227–250. Cambridge: Cambridge University Press, 2007.

Held, David. *Models of Democracy*. 3rd ed. Cambridge: Polity Press, 2006.

Herrmann, Julian Durazo. "Neo-Patrimonialism and Subnational Authoritarianism in Mexico." *Journal of Politics in Latin America* 2, no. 2 (2010): 85–112.

Herrmann, Julian Durazo. "Reflections on Regime Change and Democracy in Bahia, Brazil." *Latin American Research Review* 49, no. 3 (2014): 23–44.

Hill, Kim Quaile. *Democracy in the Fifty States*. Lincoln: University of Nebraska Press, 1994.

Hooghe, Liesbet, Gary Marks, Arjan H. Schakel, Sandra Chapman Osterkatz, Sara Niedzwiecki, and Sarah Shair-Rosenfield. *Vol. 1 of Measuring Regional Authority, A Postfunctinalist Theory of Governance*. Oxford: Oxford University Press, 2016.

Lankina, Tomila, and Lullit Getachew. "A Geographic Incremental Theory of Democratization." *World Politics* 58, no. 4 (2006): 536–582.

Lankina, Tomila, and Lullit Getachew. "Mission or Empire, Word or Sword?" *American Journal of Political Science* 56, no. 2 (2012): 465–483.

Lawson, Chappell. "Mexico's Unfinished Transition." *Mexican Studies* 16, no. 2 (2000): 267–287.

Linz, Juan J., and Alfred C. Stepan. *Problems of Democratic Transition and Consolidation*. Baltimore: Johns Hopkins University Press, 1996.

Magaloni, Beatriz, Alberto Diaz-Cayeros, and Federico Estévez. "Clientelism and Portfolio Diversification." In *Patrons, Clients, and Policies*, edited by Herbert Kitschelt & Steven Wilkinson, 182–205. New York: Cambridge University Press, 2007.

McMann, Kelly, Dan Pemstein, Brigitte Seim, Jan Teorell, and Staffan I. Lindberg. "Strategies of Validation: Assessing the Varieties of Democracy Corruption Data" Working Paper No. 23. Varieties of Democracy Institute, 2016.

McMann, Kelly. M. *Economic Autonomy and Democracy*. Cambridge: Cambridge University Press, 2006.

McMann, Kelly M., and Nikolai V. Petrov. "A Survey of Democracy in Russia's Regions." *Post-Soviet Geography and Economics* 41, no. 3 (2000): 155–182.

McMann, Kelly. M., and John Gerring, Matthew Maguire, Michael Coppedge, and Staffan I. Lindberg. "Governing Countries: A Theory of Subnational Regime Variation." Working Paper No. 28. Varieties of Democracy Institute, 2016.

Mickey, Robert W. "The Beginning of the End for Authoritarian Rule in America." *Studies in American Political Development*, 22, no. 1 (2008): 143–182.

Mickey, Robert. *Paths out of Dixie*. Princeton: Princeton University Press, 2015.

Montero, Alfred P. "No Country for Leftists?" *Journal of Politics in Latin America* 2, no. 2 (2010): 113–153.

Moraski, Bryon J. "Electoral System Design in Russian *Oblasti* and Republics." *Europe-Asia Studies* 55, no. 3 (2003): 437–468.

Moraski, Bryon J., and William M. Reisinger. "Explaining Electoral Competition across Russia's Regions." *Slavic Review* 62, no. 2 (2003): 278–301.

Moraski, Bryon J., and William M. Reisinger. *The Diffusion of Deference*. Forthcoming.

Munro, William A. "The Political Consequences of Local Electoral Systems." *Comparative Politics* 33, no. 3 (2001): 295–313.

Pateman, Carole. *Participation and Democratic Theory*. Cambridge: Cambridge University Press, 1976.

Pemstein, Daniel, Kyle L. Marquardt, Eitan Tzelgov, Yi-ting Wang and Farhad Miri. "The V-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data." Working paper No. 21. Varieties of Democracy Insitute, 2015.

Petrov, Nikolai. "Regional Models of Democratic Development." In *Between Dictatorship and Democracy*, edited by Michael McFaul, Nikolai Petrov and Andrei Ryabov, 239–267. Washington, DC: Carnegie Endowment for International Peace, 2004.

Political Decentralization and Corruption: Evidence from Around the World. Accessed December 21, 2016. http://www.sscnet.ucla.edu/polisci/faculty/treisman/Pages/publishedpapers.html.

Rebolledo Marquez Padilla, Juan. "Voting with the Enemy." PhD diss., Yale University, 2012.

Saikkonen, Inga Anna-Liisa. "Sub-National Variation in Democratisation and Electoral Authoritarianism in the Russian Federation." Paper presented at the IPSA World Congress, Madrid, 2012.

Schumpeter, Joseph. *Capitalism, Socialism, and Democracy*. New York: Harper & Brothers, 1942.

Sidel, John T. *Capital, Coercion, and Crime*. Stanford: Stanford University Press, 1999.

Sidel, John T. "Economic Foundations of Subnational Authoritarianism." *Democratization* 21, no. 1 (2014): 161–184.

Sisk, Timothy D. with Julie Ballington, Scott A. Bollens, Pran Chopra, Julia Demichelis, Carlos E. Juárez, Arno Loessner, et al. *Democracy at the Local Level*. Stockholm: International IDEA, 2001.

The Council of Europe. "Structure and Operation of Local and Regional Democracy." The Council of Europe. http://www.coe.int/t/dgap/localdemocracy/WCD/Structure_Operation_Complete_Series_en.asp#.

Trochim, William M. K., James P. Donnelly, and Kanika Arora. *Research Methods*. Boston: Cengage Learning, 2016.

Tudor, Maya, and Adam Ziegfeld. *Subnational Democratization in India*. Forthcoming.

Ziblatt, Daniel. "Shaping Democratic Practice and the Causes of Electoral Fraud." *American Political Science Review* 103, no. 1 (2009): 1–21.