

Appendix A

Measurement Models

The purpose of this Appendix is to present my operationalizations of the political regime type (Section A.1) and state repression (Section A.2), and discuss the empirical results that justify the validity of the resulting measures. Some general comments apply. I develop two measures of the political regime type. The first draws upon a global sample of country-years (Section A.1.1), whereas the second stems from a sample of Latin American country-years (Section A.1.2). In order to construct the variables of interest, I draw upon multiple indicators from the Varieties of Democracy (V-Dem) (Version 7) (Coppedge et al. (2017b)) and Mainwaring and Pérez-Liñán (2013c) datasets, as well as the political regime type datasets associated with and Smith and Sells (2017). But rather than adding up indicators or taking their average, and in order to account for the varying degrees of variability and error across the different indicators, I use scaling techniques that are grounded in probability theory.¹ Because the raw data are measured at the categorical level, latent class analysis (LCA) offers the appropriate scaling method.² Most notably, LCA insulates me from the need to impose arbitrary thresholds at indicator-specific levels of democracy and state repression, impose any rank-ordering among these indicators in the first place, or exclude observations with missing values on one or more indicators (as the missing value can be treated as a separate response category). Instead, this measurement technique informs the researcher how strongly each response category of each indicator is empirically associated with the indirectly observed, latent classes of the concept of interest, which can then be interpreted accordingly. As such, and perhaps most importantly, LCA allows me to determine whether the proposed conceptual dimensions of democracy and state repression are empirically distinguishable in the first place. Among other things, the purpose of the sections below is to explore whether this is indeed the case for democracy (Section A.1) and state repression (Section A.2). Finally, all models are estimated using Stata (Version 15) and the LCA Stata Plugin developed by Lanza et al. (2015).

¹Treier and Jackman, 2008; Pemstein et al., 2010; Fariss, 2014.

²Collins and Lanza, 2010; Lanza et al., 2015.

A.1 Latent Class Analysis of Democracy

A.1.1 Global Sample (1900-2016)

In Chapter 3 I defined democracy in terms of its two institutional manifestations: competitive elections and executive constraints. I operationalize democracy accordingly by exploring the empirical associations among fourteen indicators of competitive elections and executive constraints included in the V-Dem dataset. The categorical indicators among these all have the same number of response categories (six, including one for missing values), which is convenient for estimating LCA models. For the exact content of the response categories, I refer the reader to the relevant V-Dem codebook.³ Five of the fourteen indicators serve as indicators of competitive elections, as they measure the extent of (1) political party bans (*v2psparban_ord*), (2) barriers to political parties (*v2psbars_ord*), (3) political autonomy of opposition political parties (*v2psoppaut_ord*), (4) universal suffrage (*v2elsuffrage*, a continuous (percentage) variable that I recode into six categories), and (5) the selection of the chief executive and legislature on the basis of popular elections (*v2x_elecoff*, a continuous variable that I recode into six categories). These indicators encompass most aspects of competitive elections outlined in Chapter 3.⁴

The remaining nine indicators reflect the strength or weakness of executive constraints. Most of these measures involve executive constraints delimited by the constitution or imposed by the judicial branch of government, as they measure the extent of the executive's compliance with (1) the constitution (*v2exrescon_ord*), (2) the judiciary (*v2jucomp_ord*), and (3) the high court in particular (*v2juhccomp_ord*); as well as the extent of political independence of (1) the high court (*v2juhcind_ord*) and (2) the lower courts (*v2juncind_ord*). Two measures indicate the extent of investigative executive oversight conducted by (1) the legislature (*v2lginvstp_ord*) and (2) bureaucratic agencies (*v2lgotovst_ord*). Finally, to incorporate the notion that executive constraints also operate within the realm of electoral politics by determining the fairness of elections (irrespective of the degree of electoral competitiveness), I include indicators that measure (1) the political autonomy (*v2elembaut_ord*) and (2) the professional and organizational capacity (*v2elembcap_ord*) of each country's Election Management Body (EMB).

The theoretical claims presented in Chapter 3 rest upon a three-type or four-type political regime typology that distinguishes between unique combinations of competitive elections and executive constraints (democracy, dictatorship, and (two types of) hybrid regimes). The inferential task at hand is to determine whether at least three political regime types can be discerned in the data, and whether each of these discernible categories can be uniquely linked to one of the three or four preconceived political regime types. To that effect, I estimate eight LCA models. All models draw upon the entire V-Dem sample, which encompasses both independent countries and colonial/occupied polities, and covers the 1900-2016 period.⁵ *Ex*

³Coppedge et al., 2017a.

⁴An important exception concerns the delegation of all significant decision-making powers to public officials selected on the basis of competitive elections. The relevant V-Dem indicators for this particular aspect of competitive elections (*v2exrmhgnp* and *v2exctlhg*) were available for less than half of the entire V-Dem sample, and were therefore excluded from my measurement model.

⁵As such, the scope of this descriptive analysis extends beyond the samples used to draw causal inferences (discussed in Chapter 4), which are limited to independent countries and do not reach

ante, the models differ in their specification of the number of latent classes (i.e., the number of hidden political regime types that I want each model to uncover in the indicator data), which range from two to ten classes.

beyond 2006. This broad empirical scope is necessary if not useful for the purpose of producing the regime stock variables, which are in part a function of regime-induced political experiences undergone during the periods of foreign rule referred to here.

Table A.1 Model Diagnostics of Latent Class Analysis of Democracy (Governing Units, 1900-2016)

Model	Number of Classes	Group									
		AIC	BIC	Adj. BIC	Adj. CAIC	Entropy Score	Raw Entropy	G ² Deviance	N	Title	
Model 1	2	352682	353779	353330	353920	0.965	432	352400	17.604		
Model 2	3	316927	318575	317902	318787	0.947	1030	316503	17.604		
Model 3	4	303597	305798	304898	306081	0.937	1534	303031	17.604		
Model 4	5	286948	289700	288575	290054	0.953	1323	286240	17.604		
Model 5	6	279603	282907	281557	283332	0.949	1618	278753	17.604		
Model 6	7	278992	282849	281273	283345	0.946	1858	278000	17.604		
Model 7	8	271966	276375	274573	276942	0.939	2231	270832	17.604		
Model 8	9	263630	268591	266563	269229	0.937	2429	262354	17.604		

Source: wkastart-DR-Global-06-01-Measurement-Democracy-LCA-v01.do

Note: Some note here.

Selecting the appropriate LCA model for further use in the analysis involves striking an acceptable balance in several connected trade-offs. The model diagnostics presented in Table A.1 reveal one such trade-off: that between, on the one hand, fit to the data, and, on the other hand, parsimony and minimizing measurement error. That is, sacrificing parsimony by specifying a higher number of latent classes corresponds to a better fit to the data (as indicated by lower AIC and BIC scores), but also a generally higher rate of misclassifying observations to one of the ‘wrong’ latent classes through the modal class assignment method (as indicated by lower scaled entropy scores).

Second, and related to this, the more parsimonious models better align with my conceptual distinctions. To be sure, this is in part by design, since by default a three-class model offers a better match to a three-type regime classification than higher-class models. Yet *post hoc*, the conditional probabilities of the three-class model (i.e., the probabilities that a particular observation would be characterized by a particular item-specific response category if it would truly belong to a given latent class) presented in Table A.2 suggest that the three latent classes can be interpreted in line with the proposed regime typology. The first latent class concerns democracy, as it displays the strongest empirical associations with the indicator values that reflect the most democratic levels for competitive elections, and the two most democratic levels for executive constraints. The second class best corresponds to hybrid regimes, since belonging to this class maximizes the probabilities of being characterized by almost all second and third most democratic levels of electoral competitiveness, as well as by most intermediate and several intermediate-weak levels of executive constraints. In addition, this class can best be interpreted as the competitive authoritarian hybrid regime type, since it indicates hybrid regimes that conduct elections that are almost as competitive as they are in democracies, whereas the strength of their executive constraints is somewhat more intermediate than it is (weakly) authoritarian. The remaining latent class corresponds to dictatorship, because of the three classes it is associated the strongest with most of the least democratic indicator values of competitive elections and executive constraints.

The conditional probabilities of the four-class LCA model (not displayed) reflect a similar pattern.⁶ Two of its latent classes clearly indicate democracy and dictatorship. The two remaining classes correspond to the two electoral authoritarian regime types identified earlier (competitive authoritarian and hegemonic party regimes). Whereas both these classes are relatively more democratic with respect to competitive elections than with respect to executive constraints, one class is more similar to democracy and more dissimilar from dictatorship (competitive authoritarianism) than the other class (hegemonic party regime). It is important to note that, by implication, the combination of reasonably strong executive constraints in the absence of competitive elections is not among the two empirically distinguishable hybrid regime types.

Taken together, these results suggest that democracy is indeed a two-dimensional phenomenon, with competitive elections and executive constraints as its two interdependent dimensions. That is, observations ‘move’ along these two dimensions in the same direction, yet at different ‘speeds’, in that elections become more existent or competitive than executive constraints become stronger as the political regime type changes from dictatorship, via hybrid regimes, to democracy.

⁶See wkastart-DR-Global-07-02-Measurement-Democracy-LCA-04-Class-Model-v01.do

Table A.2 Latent Class Analysis of Democracy of Preferred Model (Governing Units, 1900-2016)

	3-Class Model		
	Democracy	Competitive Elections Hybrid Regime	Dictatorship
Class Membership Probabilities	0.234	0.327	0.439
<i>Democracy Low</i>			
Political Party Bans	0.000	0.007	0.417
Barriers to Political Parties	0.000	0.008	0.413
Opposition Political Party Autonomy	0.000	0.016	0.373
Electoral Suffrage	0.000	0.023	0.405
Selection through Popular Elections	0.025	0.374	0.761
<i>Democracy Intermediate-Low</i>			
Political Party Bans	0.000	0.017	0.164
Barriers to Political Parties	0.000	0.038	0.337
Opposition Political Party Autonomy	0.000	0.038	0.250
Electoral Suffrage	0.036	0.258	0.099
Selection through Popular Elections	0.000	0.001	0.001
<i>Democracy Intermediate</i>			
Political Party Bans	0.000	0.040	0.202
Barriers to Political Parties	0.000	0.127	0.200
Opposition Political Party Autonomy	0.000	0.249	0.181
Electoral Suffrage	0.050	0.126	0.058
Selection through Popular Elections	0.011	0.047	0.018
<i>Democracy Intermediate-High</i>			
Political Party Bans	0.023	0.333	0.173
Barriers to Political Parties	0.016	0.468	0.044
Opposition Political Party Autonomy	0.068	0.497	0.092
Electoral Suffrage	0.050	0.032	0.030
Selection through Popular Elections	0.056	0.060	0.026
<i>Democracy High</i>			
Political Party Bans	0.977	0.604	0.037
Barriers to Political Parties	0.984	0.360	0.000
Opposition Political Party Autonomy	0.932	0.200	0.002
Electoral Suffrage	0.864	0.550	0.377
Selection through Popular Elections	0.907	0.517	0.192
<i>Missing Data</i>			
Political Party Bans	0.000	0.000	0.006
Barriers to Political Parties	0.000	0.000	0.006
Opposition Political Party Autonomy	0.000	0.000	0.101
Electoral Suffrage	0.000	0.012	0.029
Selection through Popular Elections	0.000	0.000	0.002
Observations			

Source: wkastart-DR-Global-07-01-Measurement-Democracy-LCA-03-Class-Model-v01.do

Note: Some note here.

Table A.2 (Continued)

Class Membership Probabilities	3-Class Model		
	Executive Constraints		
	Democracy	Hybrid Regime	Dictatorship
<i>Democracy Low</i>	0.234	0.327	0.439
Respect for Constitution	0.000	0.019	0.236
Compliance with Judiciary	0.000	0.008	0.135
Compliance with High Court	0.000	0.009	0.131
Independence of High Court	0.000	0.062	0.273
Independence of Lower Courts	0.000	0.015	0.178
Executive Oversight by Bureaucracy	0.002	0.176	0.283
Legislative Investigatory Oversight	0.000	0.119	0.325
Election Management Body Autonomy	0.001	0.283	0.866
Election Management Body Capacity	0.000	0.149	0.547
<i>Democracy Intermediate-Low</i>	0.000	0.173	0.302
Respect for Constitution	0.001	0.236	0.384
Compliance with Judiciary	0.000	0.167	0.332
Compliance with High Court	0.033	0.434	0.440
Independence of High Court	0.020	0.399	0.489
Independence of Lower Courts	0.020	0.311	0.110
Executive Oversight by Bureaucracy	0.013	0.314	0.112
Legislative Investigatory Oversight	0.014	0.287	0.071
Election Management Body Autonomy	0.000	0.217	0.147
<i>Democracy Intermediate</i>	0.087	0.500	0.290
Respect for Constitution	0.024	0.267	0.201
Compliance with Judiciary	0.001	0.156	0.169
Compliance with High Court	0.056	0.219	0.149
Independence of High Court	0.050	0.252	0.152
Independence of Lower Courts	0.139	0.234	0.064
Executive Oversight by Bureaucracy	0.166	0.278	0.027
Legislative Investigatory Oversight	0.056	0.250	0.033
Election Management Body Autonomy	0.065	0.287	0.087
<i>Democracy Intermediate-High</i>	0.660	0.297	0.147
Respect for Constitution	0.717	0.477	0.266
Compliance with Judiciary	0.582	0.617	0.337
Compliance with High Court	0.633	0.272	0.134
Independence of High Court	0.714	0.321	0.173
Independence of Lower Courts	0.675	0.170	0.016
Executive Oversight by Bureaucracy	0.617	0.180	0.009
Legislative Investigatory Oversight	0.466	0.174	0.009
Election Management Body Autonomy	0.335	0.295	0.163
<i>Democracy High</i>	0.253	0.011	0.010
Respect for Constitution	0.258	0.001	0.000
Compliance with Judiciary	0.417	0.040	0.017
Compliance with High Court	0.279	0.002	0.003
Independence of High Court	0.217	0.002	0.007
Independence of Lower Courts	0.161	0.000	0.000
Executive Oversight by Bureaucracy	0.200	0.002	0.000
Legislative Investigatory Oversight	0.463	0.005	0.000
Election Management Body Autonomy	0.600	0.052	0.041
<i>Missing Data</i>	0.000	0.000	0.014
Respect for Constitution	0.000	0.010	0.013
Compliance with Judiciary	0.000	0.010	0.013
Compliance with High Court	0.000	0.010	0.001
Independence of High Court	0.000	0.010	0.001
Independence of Lower Courts	0.003	0.108	0.527
Executive Oversight by Bureaucracy	0.003	0.108	0.527
Legislative Investigatory Oversight	0.000	0.000	0.022
Election Management Body Autonomy	0.000	0.001	0.015
Election Management Body Capacity			
Observations			

Source: wkastart-DR-Global-07-01-Measurement-Democracy-LCA-03-Class-Model-v01.do
 Note: Some note here.

Since the three-class LCA model substantively best fits the three-type regime typology incorporated by my theory and hypotheses both *ex ante* and *post-hoc*, and since it involves one of the lower misclassification rates among the eight estimated measurement models it serves as this study’s model of choice for the purpose of drawing descriptive inferences about the political regime type. In order to assign a political regime type to each country-year observation, for each combination of latent class and country-year, I estimate the (posterior) probability that each observation belongs to the latent class under consideration. Each observation is then assigned to the latent class with the highest such observation-specific posterior probability (modal class assignment).

A.1.2 Latin American Sample (1900-2016)

I include five indicators of democracy in the Latin America-specific LCA models of the political regime type, which together cover a sample of twenty countries in the region.⁷ Each of these indicators encompasses three response categories (excluding a category for missing data) that denote the degree of democracy (which I label “low”, “intermediate” and “high”). The first concerns the measure of the political regime type presented in Section A.1.1, which I refer to as the “V-Dem” indicator of democracy. This measure spans the years 1900-2016.

The second concerns a re-coding of the Latin America-specific political regime type data associated with Smith and Sells (2017). Its original regime typology, which covers the years 1900-2015 and excludes Cuba, distinguishes between (1) “democracy” (observed “when national leaders acquired or held office as a result of free and fair elections – that is, when there was open competition for support among a substantial portion of the adult population”), (2) “semi-democracy” (operating “under leaders who came to power through elections that were free but not fair – when only one candidate had any reasonable prospect of winning, or when elected leaders were obliged to share effective power with or cede it to nonelected groups (such as landowners or the military)”), (3) “oligarchy” (observed “when electoral competition was essentially fair but not free – with candidates from dominant elites and suffrage restricted to a very small percentage of the adult population”), and (4) “non-democracy” (indicating “at all other times, or during years of military coups”).⁸ For the purpose of estimating the LCA models, I collapse the semi-democratic and oligarchic regime categories, so as to limit the number of response categories to three, i.e., the same number as with the remaining indicators. The decision to collapse these two particular categories is substantively the most valid option, because both political regime types exhibit a mix of democratic and authoritarian institutions, thereby approximating the proposed hybrid regime type.

The remaining three indicators come from the Mainwaring and Pérez-Liñán (2013b) dataset, which covers the years 1900-2010 and the twenty Latin American countries of interest. Each of these items involve three response categories that measure whether the aspect of democracy under consideration is subject to “no violations”, “partial violations” or “major violations.” The three measured aspects

⁷The sample includes the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

⁸Smith and Sells, 2017, pp. 8, 350.

of democracy are the extent of (1) free and fair elections (e), (2) inclusive voter franchise (f), and (3) civilian governing power (p).⁹ The inclusion of the latter indicator offers a particular advantage to this study, because the real governing power of public officials selected on the basis of free and fair elections is the only explicated institutional manifestation of democracy that I did not incorporate in the V-Dem measure presented in the previous section.¹⁰ In the original dataset, the values for the items f and p are coded as missing whenever free and fair elections suffer from major violations, which reflects the assumption that the complete absence of free and fair elections entirely strips the political regime from its democratic character.¹¹ To minimize missing data, I recode these missing values to the value of the least democratic response category.

I estimate eight LCA models specified with up to nine latent classes. Unlike in the previous LCA models, I do not treat missing values as a separate response category, because the bulk of missing values is the result of samples that do not entirely overlap in spatial and temporal terms. As a result, incorporating missing values as a substantive response category will in effect ‘taint’ the substantive interpretation of the latent classes with researcher-induced sample coverage decisions. Instead, I let the statistical software package treat the missing values as “system missing.” By default, any such missing item(s) are excluded from the estimation of the corresponding observation’s contribution to the likelihood.

The model diagnostics are presented in Table A.3. As was the case previously, the results reflect a trade-off between parsimony and measurement error, and model fit. Whereas the six-class LCA model offers the best fit to the data, the least complex, two-class specification involves the highest entropy score. In this instance, I opt for the three-class measure, because it closely matches the proposed three-type regime typology. In addition, the high entropy score of the three-class LCA model indicates that the modal assignment of the latent classes to actual observations is fraught with minimum measurement error. Finally, the three-class operationalization of the political regime type facilitates comparisons with models estimated with the earlier, V-Dem measure of democracy. Indeed, as I discuss below, important differences with the previous measure remain.

⁹Mainwaring and Pérez-Liñán, 2013c, pp. 298-9.

¹⁰See fn. 4 above.

¹¹Mainwaring et al., 2008, p. 26.

Table A.3 Model Diagnostics of Latent Class Analysis of Democracy (Latin America, 1900-2016)

Model	Number of Classes	Group									
		AIC	BIC	Adj. BIC	Adj. CAIC	Entropy Score	Raw Entropy	G ²	Deviance	N	Title
Model 1	2	2182	2303	2236	2324	0.989	18	2140	2140	2340	
Model 2	3	781	965	863	997	0.954	119	717	717	2340	
Model 3	4	716	964	827	1007	0.946	177	630	630	2340	
Model 4	5	428	739	568	793	0.914	324	320	320	2340	
Model 5	6	315	689	482	754	0.911	375	185	185	2340	
Model 6	7	320	758	516	834	0.893	487	168	168	2340	
Model 7	8	311	812	535	899	0.874	614	137	137	2340	
Model 8	9	314	879	567	977	0.895	542	118	118	2340	

Source: wkstart-DR-LA-10-10-Measurement-Democracy-LCA-v01.do

Note: Some note here.

Table A.4 Latent Class Analysis of Democracy of Preferred Model (Latin America, 1900-2016)

	3-Class Model		
	Democracy	Hybrid Regime	Dictatorship
Class Membership Probabilities	0.306	0.182	0.513
<i>Democracy Low</i>			
V-Dem	0.000	0.150	0.615
S&S	0.000	0.164	0.759
M&P: Free and Fair Elections	0.000	0.000	1.000
M&P: Electoral Suffrage	0.000	0.044	1.000
M&P: Governing Power	0.001	0.041	1.000
<i>Democracy Intermediate</i>			
V-Dem	0.338	0.809	0.383
S&S	0.026	0.703	0.227
M&P: Free and Fair Elections	0.023	0.784	0.000
M&P: Electoral Suffrage	0.000	0.196	0.000
M&P: Governing Power	0.008	0.354	0.000
<i>Democracy High</i>			
V-Dem	0.661	0.042	0.002
S&S	0.974	0.133	0.013
M&P: Free and Fair Elections	0.976	0.216	0.000
M&P: Electoral Suffrage	1.000	0.760	0.000
M&P: Governing Power	0.991	0.605	0.000
Observations			

Source: wkastart-DR-LA-11-10-Measurement-Democracy-LCA-03-Class-Model-v01.do
Note: Key: V-Dem: Varieties of Democracy Project (Version 7) (Coppedge et al. (2017b)); S&S: Smith and Sells (2017); M&P: Mainwaring and Pérez-Liñán (2013b).

The conditional probabilities presented in Table A.4 indicate that, relatively speaking, the three latent classes each correspond to one of the three political regime types, as the classes can be straightforwardly ranked along the democratic-authoritarian spectrum. This also holds in absolute terms, albeit with some reservations. For all but one indicator (the V-Dem measure), the conditional probabilities of the highest category of democracy approximate 1 (and, by implication, 0 in the case of the “low” and “intermediate” categories). In a similar vein, conditional upon membership of the dictatorial latent class, the probabilities of the least democratic category approximate 1. The latent class associated with the hybrid regime type, however, does not (always) involve conditional probabilities that are close to 1 or even the highest for the intermediate-level categories of democracies. Instead, with respect to electoral suffrage and civilian governing power, the conditional probabilities indicate that the hybrid regime category is rather democratic in absolute terms. On the one hand, this finding echoes the substantive profile of the hybrid regime category of the V-Dem measure presented in Section A.1.1, in that both are more democratic than authoritarian. On the other hand, the way in which the hybrid regime types of these two classifications accord to this trait is different. In the case of the previous measure, hybrid regimes are observed when reasonably, almost democratically competitive (free) elections co-exist with weak executive constraints. Under the current classification, the freedom and fairness of elections in hybrid regimes hover around intermediate levels of democracy (other than in terms of electoral suffrage and civilian governing power, which I conceptually link to free/competitive elections). In part, this is so by design. First, in the case of the V-Dem indicator, the “intermediate” category corresponds to the hybrid regime type of the previous measure of democracy, thereby ‘downplaying’ its level of democracy. Second, in the case of the indicator drawn from the Smith and Sells (2017) dataset, it corresponds to the combined categories of semi-democracy and oligarchy, i.e., regimes that govern through free and unfree elections, respectively, thereby ‘canceling out’ the extent of each other’s electoral freedom and fairness.

The classificatory implications of these coding decisions and other specification differences extend beyond the substantive interpretation of the hybrid regime latent class. A comparison of the class membership probabilities of Table A.2 with those of Table A.4 reveals a considerable difference in the distributions of regime types. Most notably, in the case of the V-Dem measure (which involves a global sample of country-years), the hybrid regime type amounts to about 33% of observations (i.e., if the latent classes would have been observed). This percentage shrinks to about 18% under the current classification (which is limited to the Latin American sample). Following modal class assignment, and restricting the comparison to the sample of Latin American countries, the difference is even larger (45% vs. 19%) (**not displayed**).¹² The more limited differences in the class membership probabilities in the case of democracy (23% vs. 31%) and dictatorship (44% vs. 51%) suggest that the hybrid regime category of the V-Dem measure ‘owes’ its broad size to the inclusion of observations that belong to the democratic or authoritarian classes (i.e., rather than from predominantly one of these) under the Latin America-specific classification. This is borne out by the regime type distributions after model class assignment, where almost two-thirds of hybrid regime observations under the V-Dem measure are assigned to the democratic (22%) and authoritarian (44%) latent classes as measured under the Latin America-specific specification.

In other words, the bar for ‘entry’ into the democratic and authoritarian classes is considerably lower under the current specification than is the case with the V-Dem measure presented in Section A.1.1. This is also evident from the conditional probabilities of the V-Dem indicator displayed in Table A.4. For countries to be considered democratic under the region-specific operationalization of the political regime type, they should display elections that, in terms of the V-Dem measure, are at least as competitive and fair as in hybrid regimes. Likewise, the authoritarian latent class encompasses observations that are considered hybrid regimes as measured by the V-Dem measure (and semi-democratic/ oligarchic as measured in the Smith and Sells (2017) dataset). In sum, the democracies (dictatorships) of the V-Dem measure are overall more democratic (authoritarian) than those of the Latin America-specific measure. This has important implications for the interpretation of the regime stock variables (the stock of democracy and the stock of dictatorship) and hence for the empirical testing of my argument. The regime stock measures that are computed using the V-Dem measure of the political regime type tap into the most democratic and authoritarian regime histories. When using the region-specific measure, the measured regime histories carry less such ‘intensity’, in that they also encompass ‘mild’ experiences with democracy and dictatorship. When testing my hypotheses, this distinction may inform the interpretation of differences in the estimated effects between model specifications that employ different regime stock variables. In addition, and related to this, it may assist in determining how democratic or authoritarian regime experiences should be in order to yield particular legacy effects.

¹²See wkastart-DR-LA-Sample-Estimation-01-10-Campaign-Onset-v01.dta.

A.2 Latent Class Analysis of State Repression

In Chapter 3 I defined state repression as state-imposed costs upon collective action. Its two relevant conceptual dimensions are its scope and pacification. I estimate several LCA models to empirically explore this multidimensionality among fifteen indicators of state repression included in the V-Dem dataset. Several of the indicators used in my operationalization of democracy presented in Section A.1 involve state-imposed costs upon collective action necessary for conducting competitive elections and implementing executive constraints, such as bans placed upon political parties. Whereas these democracy indicators thus also measure manifestations of state repression, I exclude them from my LCA models of state repression, so as to minimize any predetermined empirical overlap between the state repression and democracy measures.

The definitional overlap between democracy and lethal state violence creates an additional, related inferential challenge. Any form of lethal violence necessarily reduces the level of democracy, but not vice versa, since democracy can also be abolished by nonviolent acts (e.g., the suspensions of elections). Any valid measure for the pacification of state repression therefore necessarily reflects the level of democracy. Yet as long as that measure does not indicate considerable transgressions of competitive elections and executive constraints, any such link between the measure for (violent) state repression and the concept of democracy remains limited, which invalidates tautological interpretations of the ensuing empirical association between these two variables. That is, it is only when state violence prevents collective actors from participating in competitive elections, and prevents institutional veto players such as the legislature and the judiciary from checking excessive executive authority that democracy is seriously at stake. Thus, whereas killing even only a handful politicians and judges involves a serious blow to democracy, i.e., one that a valid measure of democracy with a limited set of regime categories should reflect in a change towards less democratic values, the physical elimination of as many ordinary citizens only marginally shifts the political regime type away from democracy.

To that effect, my operationalization of the pacification of state repression only incorporates instances of state violence that do not necessarily hamper any of these two institutional manifestations of democracy. To be sure, this measurement decision does not rule out a considerable empirical overlap between my operationalizations of democracy and violent state repression, because the included indicators of state violence may still involve the violent removal of judges, members of parliament and leading political party activists. However, for the purpose of drawing descriptive inferences that are most useful for testing my theoretical argument this is not a limitation and is in fact useful. Among the variables under consideration here, the pacification of state repression is the ultimate outcome of interest, while the political regime types serves as a control variable. As mention above, the level of democracy does not necessarily imply particular levels of violent state repression. Insofar as democracy is limited or completely absent as a direct result of excessive state violence, the substantively relevant question at hand is why democracy is not kept in check through nonviolent state interventions instead. Existing theoretical specifications of the domestic democratic peace do not address this causal question. By contrast, one contribution of my theory comes in the form of causal claims that account for this issue by treating the pacification of state repression as a function of

the stock of democracy and dictatorship. Whether democracy is absent as a direct result of state violence or not, my theory still offers predictions of state violence. Thus, these operationalizations yield useful dependent and control variables to test my theoretical argument.

The V-Dem indicators included in my LCA models of state repression are all measured on a six-point scale (including a category for missing values), which is suitable for estimating LCA models. For the specific content of each item's response categories, I refer the reader to the relevant V-Dem codebook.¹³ Four of these indicators measure violent state repression, as they reflect the extent of state-sponsored (1) torture (*v2cltort_ord*), (2) political killings (*v2clkill_ord*), (3) violent repression of civil society organizations (*v2csreprss_ord*, where only the three most extreme categories involve violence), and (4) violent harassment of journalists (*v2meharjrn_ord*).

The remaining state repression indicators concern nonviolent restrictions of personal autonomy. Most of these constrain the personal autonomy of individuals directly, as measured by the extent of freedom of (1) academic and cultural expression (*v2clacfree_ord*), (2) religion (*v2clrelig_ord*), (3) foreign movement (*v2clfmov_ord*), (4) domestic movement for men (*v2cldmovem_ord*), (5) domestic movement for women (*v2cldmovew_ord*), (6) discussion for men (*v2cldiscm_ord*), and (7) discussion for women (*v2cldiscw_ord*). The remaining restrictions of personal autonomy incorporated in my LCA models directly constrain organizations, and reflect the extent of (1) government control over the political activities of civil society organizations (*v2cseeorgs_ord*), (2) barriers to women's participation in civil society organizations (*v2csgender_ord*, which may also involve barriers imposed by non-state actors), (3) state repression of religious organizations (*v2csrlgrop_ord*, where only the most repressive response category involves state violence), and (4) government censorship of the media (*v2mecenefm_ord*).

¹³Coppedge et al., 2017a.

Table A.5 Model Diagnostics of Latent Class Analysis of State Repression (Governing Units, 1900-2016)

Model	Number of Classes	Group									
		AIC	BIC	Adj. BIC	Adj. CAIC	Entropy Score	Raw Entropy	G ² Deviance	N		
Model 1	2	377331	378505	378025	378656	0.970	365	377029	17.604		
Model 2	3	324823	326588	325867	326815	0.953	908	324369	17.604		
Model 3	4	305115	307471	306508	307774	0.942	1410	304509	17.604		
Model 4	5	294570	297517	296312	297896	0.924	2147	293812	17.604		
Model 5	6	288851	292389	290943	292844	0.923	2444	287941	17.604		
Model 6	7	285492	289621	287933	290152	0.931	2363	284430	17.604		
Model 7	8	281639	286359	284430	286966	0.932	2492	280425	17.604		

Source: wkastart-DR-Global-20-02-Measurement-Repression-Onset-Scope-LCA-v01.do

Note: Some note here.

The steps in my measurement strategy for developing measures of the scope and pacification of state repression follow a somewhat different sequence than is the case for democracy. I estimate seven LCA models to empirically explore the hypothesized multidimensionality among the fifteen repression indicators. Unlike the descriptive inferences about democracy, the conceptual categories of state repression are for the most part not defined in terms of both proposed dimensions of state repression. That is, for the pacification of state repression to be low or high, there must be a modicum scope of state repression in the first place, but beyond this minimum scope, its pacification is conceptually possible at all levels of its scope. For this reason, I expect to observe both dimensions of state repression only in relatively high-class LCA models, which allow for sufficient combinations of different degrees of state repression scope and pacification. Parsimony may therefore limit the validity of the resulting measure. This adds an additional consideration beyond parsimony (for its own sake), misclassification and fit in adjudicating between different LCA models.

The model diagnostics displayed in Table A.5 indicate that one trade-off in the model selection is between, on the one hand, parsimony, and, on the other hand, the misclassification rate and model fit to the data, as higher-class LCA models roughly correspond to lower AIC and BIC scores, but also lower scaled entropy scores. However, a comparison between the conditional probabilities of the LCA model with the highest number (8) of classes (not displayed) and those of the 3-class LCA model (presented in Table A.6) reveals that there is no trade-off between model parsimony and measurement validity. In the 3-class model, the latent classes indicate the scope of state repression, as they distinguish between low, intermediate and high levels of state repression scope. With respect to the pacification of state repression, the indicators for restrictions and state violence ‘behave’ similarly. The only difference concerns the items that denote the second least repressive categories. Generally speaking, for the indicators of restrictions, these categories correspond most strongly with the intermediate class of state repression scope, whereas for the indicators of state violence, they correspond the most to the latent class reflecting the most limited scope of state repression (in other words, a limited scope of state repression is characterized somewhat more by state violence than by restrictions).

Expanding the number of specified classes to eight does not alter this general pattern. In the 8-class LCA model, too, the ‘behaviour’ of the indicators for state violence and restrictions is decidedly similar. Generally speaking, latent classes that indicate a greater degree of restrictions also indicate a greater degree of state violence. In addition, and related to this, restrictions and state violence ‘move’ at roughly the same ‘speed’ along the dimension of state repression scope. As the scope of state repression expands, the scope of restrictions increases about as much as the scope of state violence. This pattern is similar in lower-class LCA models (not displayed). In other words, unlike the scope of state repression, its pacification is, at least in the V-Dem dataset, empirically indistinguishable. As governments expand the scope of their repressive activities, they do not prioritize violent over nonviolent methods of coercion. Instead, they use restrictions and state violence in roughly equal measure.

For the purpose of measuring the scope of state repression, I utilize the 3-class LCA model for several reasons. Its parsimony does not diminish its validity. In addition, it allows me to distinguish an “intermediate” scope of state repression. Finally, its misclassification rate is the second lowest among the nine estimated LCA models.

Table A.6 Latent Class Analysis of State Repression of Preferred Model (Governing Units, 1900-2016)

	3-Class Model		
	Limited	Intermediate	Broad
Class Membership Probabilities	0.274	0.360	0.365
<i>Scope Broad</i>			
Torture	0.000	0.068	0.459
Political Killings	0.000	0.032	0.300
CSO Repression	0.000	0.001	0.229
Harassment of Journalists	0.004	0.069	0.494
<i>Scope Intermediate-Broad</i>			
Torture	0.014	0.351	0.413
Political Killings	0.003	0.200	0.387
CSO Repression	0.001	0.163	0.549
Harassment of Journalists	0.005	0.348	0.413
<i>Scope Intermediate</i>			
Torture	0.086	0.309	0.091
Political Killings	0.037	0.284	0.186
CSO Repression	0.004	0.469	0.186
Harassment of Journalists	0.296	0.521	0.053
<i>Scope Intermediate-Limited</i>			
Torture	0.555	0.252	0.037
Political Killings	0.248	0.387	0.122
CSO Repression	0.244	0.323	0.036
Harassment of Journalists	0.531	0.058	0.023
<i>Scope Limited</i>			
Torture	0.345	0.019	0.000
Political Killings	0.712	0.097	0.006
CSO Repression	0.750	0.035	0.000
Harassment of Journalists	0.163	0.003	0.000
<i>Missing Data</i>			
Torture	0.000	0.001	0.000
Political Killings	0.000	0.001	0.000
CSO Repression	0.001	0.011	0.000
Harassment of Journalists	0.001	0.001	0.016
Observations			

Source: wkastart-DR-Global-21-05-Measurement-Repression-Onset-
Scope-LCA-03-Class-Model-v01.do

Note: CSO = Civil Society Organization(s).

wkastart-DT-Appendix-Measurement-v03.tex

Table A.6 (*Continued*)

	3-Class Model		
	The Scope of Restrictions		
	Limited	Intermediate	Broad
Class Membership Probabilities	0.274	0.360	0.365
<i>Scope Broad</i>			
Academic and Cultural Expression	0.000	0.036	0.524
Religion	0.001	0.002	0.063
Foreign Movement	0.000	0.001	0.168
Domestic Movement (Men)	0.000	0.000	0.035
Domestic Movement (Women)	0.000	0.000	0.041
Discussion (Men)	0.000	0.007	0.388
Discussion (Women)	0.000	0.022	0.373
CSO Entry and Exit	0.000	0.057	0.652
CSO Women's Participation	0.000	0.052	0.181
Religious Organizations	0.000	0.000	0.067
Media Censorship	0.001	0.238	0.767
<i>Scope Intermediate-Broad</i>			
Academic and Cultural Expression	0.000	0.261	0.358
Religion	0.002	0.035	0.318
Foreign Movement	0.001	0.026	0.408
Domestic Movement (Men)	0.000	0.002	0.189
Domestic Movement (Women)	0.000	0.057	0.341
Discussion (Men)	0.000	0.219	0.529
Discussion (Women)	0.006	0.193	0.527
CSO Entry and Exit	0.001	0.369	0.303
CSO Women's Participation	0.010	0.135	0.314
Religious Organizations	0.001	0.047	0.259
Media Censorship	0.071	0.350	0.060
<i>Scope Intermediate</i>			
Academic and Cultural Expression	0.034	0.454	0.100
Religion	0.006	0.168	0.342
Foreign Movement	0.000	0.229	0.256
Domestic Movement (Men)	0.007	0.147	0.360
Domestic Movement (Women)	0.008	0.208	0.359
Discussion (Men)	0.004	0.466	0.082
Discussion (Women)	0.006	0.519	0.096
CSO Entry and Exit	0.037	0.408	0.039
CSO Women's Participation	0.031	0.191	0.163
Religious Organizations	0.001	0.144	0.341
Media Censorship	0.524	0.193	0.025
<i>Scope Intermediate-Limited</i>			
Academic and Cultural Expression	0.549	0.243	0.017
Religion	0.155	0.508	0.245
Foreign Movement	0.081	0.412	0.123
Domestic Movement (Men)	0.031	0.292	0.298
Domestic Movement (Women)	0.115	0.359	0.211
Discussion (Men)	0.290	0.289	0.001
Discussion (Women)	0.410	0.256	0.005
CSO Entry and Exit	0.367	0.148	0.005
CSO Women's Participation	0.237	0.376	0.221
Religious Organizations	0.038	0.422	0.301
Media Censorship	0.392	0.003	0.000
<i>Scope Limited</i>			
Academic and Cultural Expression	0.416	0.005	0.000
Religion	0.837	0.286	0.032
Foreign Movement	0.917	0.331	0.046
Domestic Movement (Men)	0.962	0.558	0.119
Domestic Movement (Women)	0.876	0.375	0.048
Discussion (Men)	0.706	0.018	0.000
Discussion (Women)	0.577	0.010	0.000
CSO Entry and Exit	0.595	0.007	0.000
CSO Women's Participation	0.722	0.235	0.121
Religious Organizations	0.959	0.386	0.033
Media Censorship	0.001	0.001	0.014
<i>Missing Data</i>			
Academic and Cultural Expression	0.000	0.001	0.000
Religion	0.000	0.001	0.000
Foreign Movement	0.000	0.001	0.000
Domestic Movement (Men)	0.000	0.001	0.000
Domestic Movement (Women)	0.000	0.001	0.000
Discussion (Men)	0.000	0.001	0.000
Discussion (Women)	0.000	0.001	0.000
CSO Entry and Exit	0.000	0.011	0.000
CSO Women's Participation	0.001	0.011	0.000
Religious Organizations	0.001	0.001	0.000
Media Censorship	0.011	0.215	0.133
Observations			

Source: wkastart-DR-Global-21-05-Measurement-Repression-Onset-Scope-LCA-03-Class-Model-v01.do

Note: CSO = Civil Society Organization(s).