An Incomplete Recipe: One-Dimensional Latent Variables Do Not Capture the Full Flavor of Democratic Support

Authors

- Yue Hu, ORCID: https://orcid.org/0000-0002-2829-3971, Associate Professor, Department of Political Science, Tsinghua University, yuehu@tsinghua.edu.cn
- Yuehong Cassandra Tai, ORCID: https://orcid.org/0000-0001-7303-7443, Postdoctoral Fellow, Center for Social Data Analytics, Pennsylvania State University, yhcasstai@psu.edu
- Hyein Ko, ORCID: https://orcid.org/0000-0002-9497-9656, Postdoctoral Research Associate, Department of Political Science, University of Illinois Urbana-Champaign, hyeink@illinois.edu
- Byung-Deuk Woo, ORCID: https://orcid.org/0000-0001-6902-7576, Assistant Professor, Department of Political Science and International Studies, Incheon National University, byungdeukwoo@inu.ac.kr
- Frederick Solt, corresponding author, ORCID: https://orcid.org/0000-0002-3154-6132, Professor, Department of Political Science, University of Iowa, frederick-solt@uiowa.edu

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Abstract

Prominent recent works have measured democratic support using a single latent variable that purports to span a single dimension from steadfast opposition to wholehearted support. This ignores ample evidence that support for democracy is complex and multidimensional. Here we provide a series of validation tests of the sort of cross-national time-series latent variable measures employed in recent research by reference to questions on support for liberal democracy and opposition to its erosion from multiwave surveys conducted around the world. These tests show that, across countries and years, this latent variable is nearly orthogonal to measures of support for contestation and participation; civil liberties; institutional constraints on executive power; and prioritizing democracy over the economy, economic equality, or order. We conclude that support for democracy in any robust sense is simply not well captured by one-dimensional latent variable. Such measures are powerful but researchers must be mindful of their limitations.

keywords: democratic support, public opinion, liberal democracy, latent variables, measurement validation

Recent threats to liberal democracy have manifested as the slow erosion of institutions and norms rather than the sudden and violent takeover of power, the acts of politicians and elected officials rather than admirals and generals. Considering that the ostensible backing for these antidemocratic office holders is some substantial share of the electorate, understanding the breadth and depth of citizen support for democracy is as important as ever. On one hand, the breadth of that support for democracy remains truly impressive: Anderson, Bol, and Ananda (2021, 971–72), for example, estimates that some 90% of humanity agrees that democracy is the best form of government (see also, e.g., Kirsch and Welzel 2019; Wuttke, Gavras, and Schoen 2022). But on the other, a great deal of evidence indicates that these expressions of support for democracy do not run very deep, that such claims to favor democracy in the abstract do not consistently represent either commitments to *liberal* democracy or opposition to actions that undermine it (see, e.g., Bratton 2002; Schedler and Sarsfield 2007; Carlin and Singer 2011; Kiewiet de Jonge 2016; Bryan 2023). As a systematic review of this literature emphasizes, "it is important to know not just how strongly citizens support democracy, but also *what kind of democracy it is that they support*" (König, Siewert, and Ackermann 2022).

These cautions notwithstanding, a number of prominent recent works have sought to better investigate democratic support by taking advantage of new latent-variable models of public opinion to estimate support for democracy across many countries and over long spans of time. In this approach, responses to many different survey questions tapping support for democracy in the abstract are combined to overcome the sparse and scattered collection of data available on any single question; the differences among the various questions used as indicators are accounted for with careful modeling (see, e.g., Claassen 2019; Solt 2020). The resulting measure is then uncritically employed to explore the trends, determinants, and consequences of democratic support (Claassen 2020a, 2020b; Claassen and Magalhães 2022; Tai, Hu, and Solt 2024; Jacob 2024).

Several narrow critiques of this line of research have already been raised (see Tannenberg 2022; Hu, Tai, and Solt 2024), but we offer here a more fundamental criticism foreshadowed

by the many works reviewed in König, Siewert, and Ackermann (2022): democratic support is multidimensional and therefore cannot be captured by any single measure. In other words, although the latent variables employed in this research adequately summarize the survey questions on which they are based—which ask the extent of support for democracy in the abstract or for some similarly-abstract non-democratic regime—these questions do not account for the complexity of public attitudes to democracy. As Schedler and Sarsfield (2007, 637) noted nearly two decades ago, there exists a substantial number of people "who are sympathetic to democracy in the abstract, while hostile to core principles of liberal democracy in particular." That piece listed four problems with questions about democracy in the abstract that could cause this pattern: the desire to give interviewers the socially acceptable answer, empty conceptions of democracy, competing conceptions of democracy, and other values that conflict with support for democracy (Schedler and Sarsfield 2007, 638–40; see also, e.g., Carlin and Singer 2011; Kiewiet de Jonge 2016; Bryan 2023). Regardless of the pattern's sources, we contend that compiling many questions about democracy in the abstract into a single one-dimensional latent variable should not be expected to change the fact that such questions do not accurately assess this attitudinal complexity.

We therefore test the validity of the sort of one-dimensional measure used in the recent line of latent-variable-driven research by comparing it to responses to questions drawn from many surveys used in the broader literature to map the dimensions of support for liberal democracy and opposition to its erosion. The results of these validation tests are striking. Across countries and years, the latent variable of democratic support is essentially orthogonal to these measures of supporting contestation and participation; civil liberties; and institutional constraints on executive power; as well as of prioritizing democracy and political freedom over the economy, economic equality, and order. Support for democracy in any sort of robust sense is simply not well captured by a single latent variable.

We draw two conclusions. First, researchers who construct latent variables must be attentive to issues of multidimensionality and provide ample validation for their measures. The still novel approach to estimating latent variables across countries and over time is a

powerful tool, but it does not alone solve all the difficulties of measuring public attitudes. Second, any research employing a single latent variable of democratic support—such as Claassen (2020a), which at the time of writing has already been cited nearly 300 times—should be viewed with profound skepticism.

The One-Dimensional Latent Variable of Democratic Support

To provide the strongest test of the validity of the one-dimensional latent variable of democratic support, we create the best version of such a variable currently possible. Following the practice of previous research employing these latent variables, we start by identifying survey questions that asked respondents to choose between democracy and an undemocratic alternative or to evaluate either democracy or one of these undemocratic alternatives; the most frequently fielded of these survey questions asks respondents whether they strongly disagree, disagree, agree, or strongly agree with the statement, "Democracy may have its problems but it is still the best form of government," the so-called Churchill item. Our collection of these questions of support for democracy in the abstract is similar to but expands on the data presented in Claassen (2020a, 2020b) and the larger set collected by Tai, Hu, and Solt (2024). In all, we identified 41 survey items on support for democracy in the abstract that were asked in no fewer than five country-years in countries surveyed at least three times; these items were drawn from 221 different survey datasets. In accordance with the advice offered by Hu, Tai, and Solt (2022) to avoid data-entry errors by automating data collection, we then used the `DCPOtools` R package (Solt, Hu, and Tai 2019) to compile the responses to these questions. Finally, we estimated a one-dimensional latent variable of democratic support from these responses using the population-level two-parameter ordinal-logistic item-response theory (IRT) model with country-specific item-bias terms presented in Solt (2020); that work shows that this model provides a better fit to survey questions on support for democracy in the abstract than the one-parameter logistic IRT model principally employed in the existing research on this topic, Claassen's (2019) Model 5. The resulting set of one-dimensional latent variable estimates comprises 2,937 country-year observations

in 136 countries. Full details on our collection of survey-question indicators of democratic support and on the resulting latent variable estimates can be found in Appendix A. The very similar results to the tests below that are obtained when using the estimates generated by Model 5 from the smaller dataset of indicator questions employed in Claassen (2020a, 2020b) and Tai, Hu, and Solt (2024) are presented in Appendix C.

Testing the Validity of Democratic Support as a One-dimensional Latent Variable

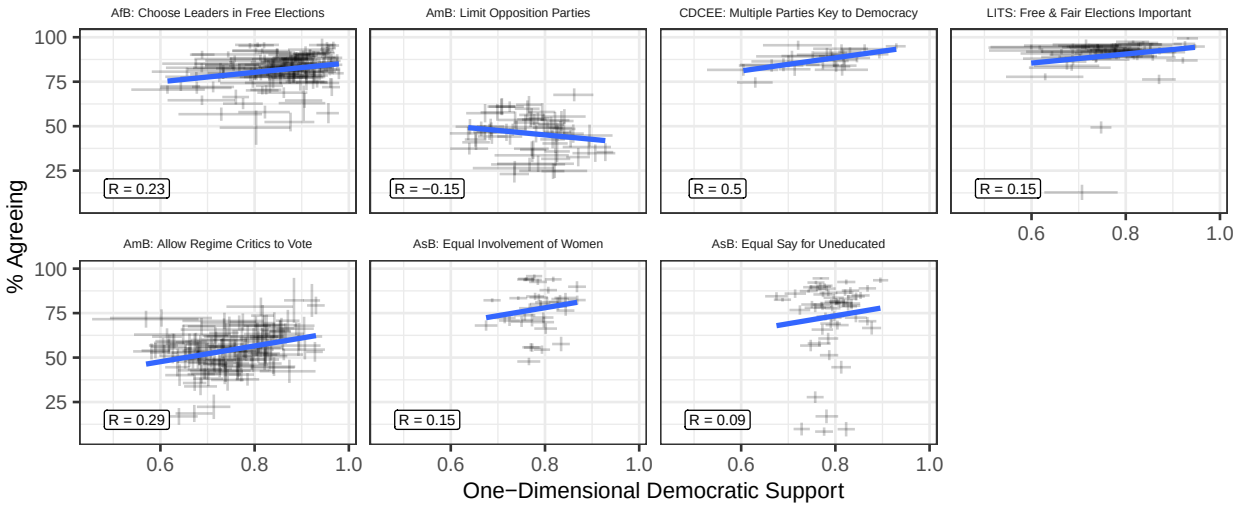

Figure 1: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Polyarchy Survey Items

To test the validity of the one-dimensional latent variable measure of democratic support, we compare it to a range of questions from multi-wave cross-national surveys that also address various aspects of support for democracy; that is, we provide a series of tests of convergent validation (see Adcock and Collier 2001, 540). Because these survey questions were not used to estimate the latent variable—again, those indicators ask respondents to evaluate 'democracy' or a specific undemocratic alternative in the abstract—they constitute "external" validation tests (see Caughey, O'Grady, and Warshaw 2019, 684–85). We use questions that reference Dahl's (1971, 3–4) two "theoretical dimensions of democratization," public contestation and inclusive participation, and the institutionally guaranteed civil rights

and liberties they comprise. These criteria of liberal democracy not only comprise "the central construct in the literature on citizen preference for democracy" (König, Siewert, and Ackermann 2022, 2026) but are also directly implicated in the recent apprehensions regarding democratic backsliding (e.g., Gora and Wilde 2022; Ananda and Dawson 2023; Meyerrose 2024). In light of recent concerns that citizens do not always prioritize the preferences for democracy they express in the abstract, we also draw on questions that assess democracy's relative importance.

We start with survey questions that most directly address public constestation and inclusive participation. For example, the AmericasBarometer asks whether chief executives should "limit the voice and vote of opposition parties," the Asian Barometer questions whether "people with little or no education should have as much say in politics as highly-educated people," and at the two dimensions' point of greatest overlap, the Afrobarometer asks whether "we should choose our leaders in this country through regular, open and honest elections." Scatter plots of the aggregate responses to these questions and other similar items against the one-dimensional latent variable of support for democracy in the abstract are presented in Figure 1. It is evident from a glance that all of these relationships are extremely weak, essentially null. Support for democracy in the abstract as measured by a one-dimensional latent variable has very little do with attitudes toward these core features of liberal democracy.

Next, we consider the survey questions that examine the level of support for civil liberties. We compiled four items regarding free speech, three on freedom of the press, three more on freedom of assembly, and two that deal with freedom of association. Scatter plots of the aggregate responses to these questions against the one-dimensional latent variable of democratic support are presented in Figure 2. All of these correlations are weak to very weak, and several are in the opposite of the expected direction. For example, across five waves of the Asian Barometer, the one-dimensional latent variable of democratic support has a *positive* relationship ($R = 0.14$) with aggregate agreement with the statement, "The government should decide whether certain ideas should be allowed to be discussed in society." Support for democracy in the abstract appears not to conflict with favoring government censorship in

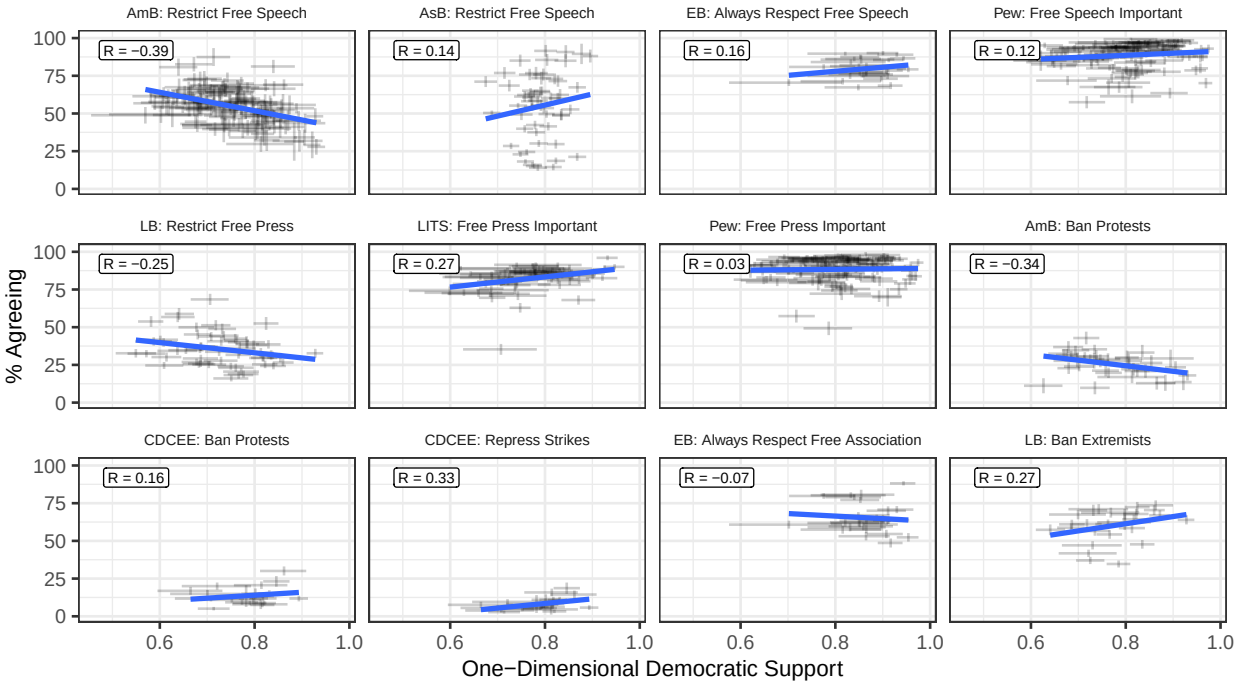

Figure 2: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Civil Liberties Survey Items

those countries and years. The strongest relationship with democratic support so measured is found with an item on free speech from the surveys from the AmericasBarometer, which asked respondents the extent of their approval of "people who only say bad things about" the country's form of government "appearing on television to make speeches." That correlation reaches only $R = -0.39$, and even then, it stands out as an exception rather than the rule. The one-dimensional latent variable of democratic support does not capture much of the variation across countries and over time of public demand that civil liberties are respected.

Figure 3 turns to the institutions that guarantee citizens' rights and liberties from government abuse, i.e., courts and the rule of law, and those that make government policies depend on citizen preferences, that is, legislatures. The one-dimensional latent variable relates only at best weakly with aggregated rule of law items like the Asian Barometer question, "It is ok for the government to disregard the law in order to deal with the situation, when the country is facing a difficult situation." Its correlations with items specifically on legislative checks,

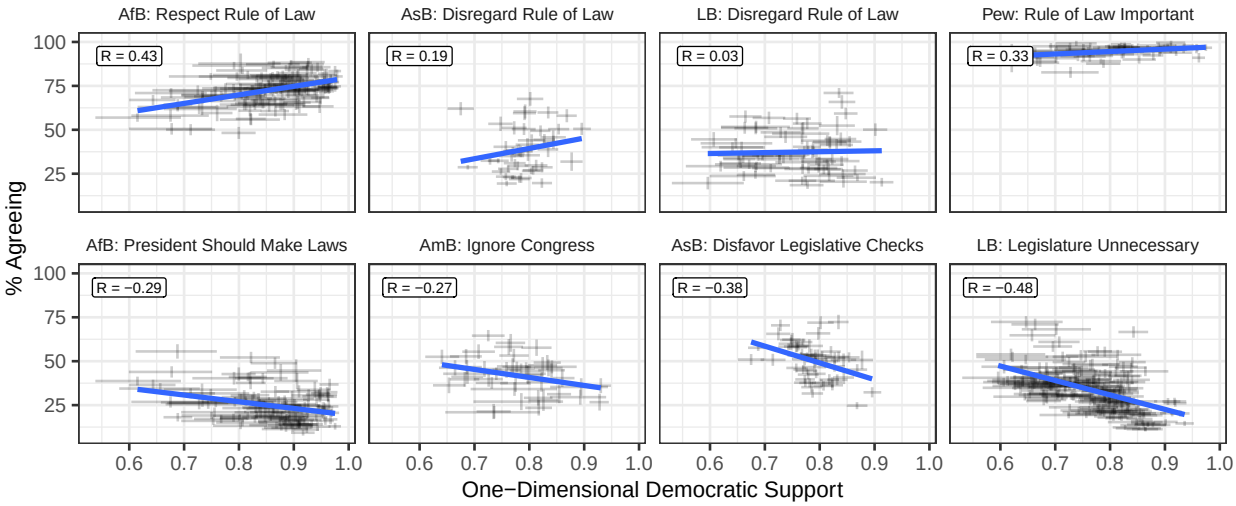

Figure 3: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Democratic Institutions Survey Items

like the AmericasBarometer's "when the Congress hinders the work of our government, our presidents should govern without the Congress," are perhaps more consistent, but remain unimpressive. Support for democracy in the abstract, even in the form of a latent variable, has little relationship with support for the checks and balances of horizontal accountability.

As mentioned above, recent research has documented that many who proclaim support for democracy in the abstract nevertheless have other preferences—such as those regarding policy or partisanship—that they may consider to be more important priorities (e.g., Graham and Svolik 2020; Simonovits, McCoy, and Littvay 2022; see also Krishnarajan 2022). Survey questions on the public's prioritization of democracy are relatively rare, but we found seven relevant items. Most straightforwardly asked respondents to choose between democracy or political freedom on the one hand and maintaining order, reducing economic inequality, or spurring economic development on the other, though the AmericasBarometer asked, "would a military coup be justified under the following circumstances: when social protest is high." Figure 4 shows that the one-dimensional latent variable of democratic support bears almost no relationship at all to the aggregated responses to these questions.

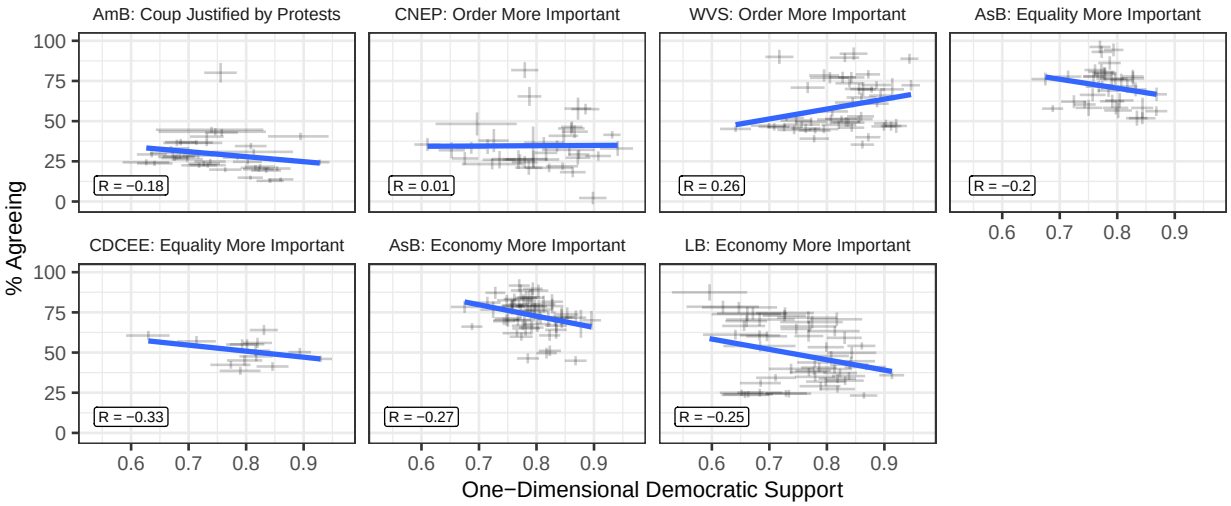

Figure 4: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Prioritization Survey Items

Conclusions

We draw two straightforward conclusions, the first methodological and the second substantive. From a methodological standpoint, we note that advances in computer hardware and Bayesian software have made estimating latent variables a powerful tool for studying public opinion. But latent variables of public opinion, no matter how sophisticated, are not guaranteed to be good measures of the concepts that are important to us. That the latent variable of public opinion we examine here bears little relationship to survey items more directly tapping the concept this variable was meant to describe underscores that, as with any newly proposed measure, validation tests of such latent variables are crucially important (exemplars include Caughey, O'Grady, and Warshaw 2019, 686–91; Woo, Allemang, and Solt 2023, 772–73). Measures that fall short in—or are not even subjected to—validation tests cannot serve as solid foundations for research.

To better capture the multidimensionality of democratic support, two potential approaches can be considered. The first is a confirmatory method, where separate one-dimensional models are fitted to distinct subsets of items, as illustrated by Caughey and Warshaw (2018a) in its study of the multidimensional nature of public ideology. The

second option is an exploratory approach, such as that employed by Pan and Xu (2018), to reveal the underlying dimensions. A more recent advancement in this field is presented in Berwick and Caughey (Forthcoming), which utilizes an exploratory group-level Bayesian IRT model to map the dynamic multidimensionality of public opinion within and across country contexts.

Substantively, our findings reinforce the extensive literature on democratic support. Support for democracy is a complex, multidimensional concept, and many who profess to support democracy in the abstract nevertheless also endorse a variety of illiberal and undemocratic actions. Therefore, one-dimensional measures—including those used in Claassen (2020a, 2020b), Claassen and Magalhães (2022), Tai, Hu, and Solt (2024), and Jacob (2024)—are inappropriate both as a general matter and in particular with regard to research on the erosion of liberal democracies: support for democracy in any robust sense is simply not well captured by a one-dimensional latent variable. Future research on the relationship between public opinion and democratic backsliding will need to take the multidimensionality of democratic support into account.

Moreover, at the individual level, there has been a sustained effort to identify the determinants of democratic support by comparing societies with different socioeconomic and political conditions.[1] These studies contribute to understanding the psychological and sociological mechanisms behind the formation of democratic support, though many still treat democratic support as a one-dimensional scale—whether framed as support/opposition or support for procedural/outcome aspects of democracy. Given the country-level findings in this paper, it would be valuable for future research to explore whether similar issues arise with respondent-level indicators of democratic support. Such within-country discoveries could offer new insights into the formation and evolution of democratic support and help explain the inconsistencies in existing studies.

[1] Lu and Chu (2022) provides a summary of these established efforts and introduces a new approach using global barometer surveys. The latent-variable-driven approach is also recently applied to levels lower than countries. See more methodological details in Caughey and Warshaw (2015) and demonstrations in Caughey and Warshaw (2018a); Caughey and Warshaw (2018b).

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Appendices

Appendix A: The One-Dimensional Latent Variable of Democratic Support

We created the one-dimensional latent variable of democratic support used here by first collecting survey questions that asked respondents to choose between democracy and an undemocratic alternative or to evaluate either democracy or one of these undemocratic alternatives. Our collection of such questions is similar to but expands on the data presented in Claassen (2020a) and the larger set collected by Tai, Hu, and Solt (2024). In all, we identified 41 survey items on support for democracy in the abstract that were asked in no fewer than five country-years in countries surveyed at least three times; these items were drawn from 221 different survey datasets.

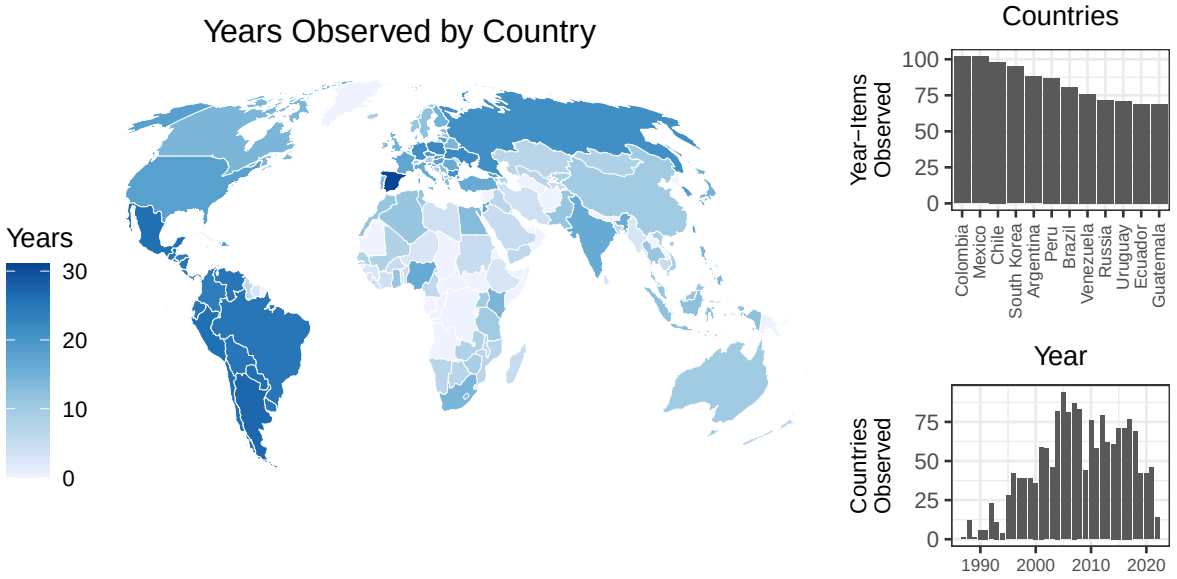

Figure A1: Countries and Years with the Most Observations in the Source Data

Together, the survey items in the source data were asked in 137 countries in three or more time points over the 35 years from from 1987 to 2022, giving us a total of 5,213 country-year-item observations.

The most frequently-asked item in the data we collected appears in 47 different survey datasets, covering a total of 737 different country-years. It asks respondents whether they strongly disagree, disagree, agree, or strongly agree with the statement, "Democracy may have its problems but it is still the best form of government," a four-point version of the so-called Churchill item.

The left panel of Figure A1 presents a choropleth map indicating the number of years observed in the source data for each country. Spain leads in this regard; it was observed in 31 different years. Thanks in part to sustained interest in democratic support in the Latinobarómetro and the Americas Barometer, most Latin America countries were surveyed in at least 25 years. Germany, Poland, Ukraine, and Russia were all surveyed in more than 20 years. At the other end of the spectrum, nine countries have only the minimum three survey years required to be included in the source dataset at all.

The upper right panel of this figure shows the twelve countries with the most year-items in the source data. It reveals that Colombia enjoys the richest collection of data on support for democracy. In addition to countries already mentioned, South Korea was also surveyed often and with multiple different items. The lower right panel counts the countries observed in each year and reveals that relatively few countries were surveyed before the mid-1990s. Country coverage reached its peak in 2005, when respondents in 94 countries were asked items about support for democracy in the abstract. Figure A2 provides additional detail on the source data, presenting the number of items observed in each country-year; countries are listed on the right in order of the number of years observed.

In accordance with the advice offered by Hu, Tai, and Solt (2022) to avoid data-entry errors by automating data collection, we used the `DCPOtools` R package (Solt, Hu, and Tai 2019) to compile the responses to these questions. We then estimated a one-dimensional latent variable of democratic support from these responses using the DCPO model presented in Solt (2020), running four chains for 1,000 iterations each and discarding the first half as warmup, which left us with 2,000 samples. The $\widehat{R}$ diagnostic had a maximum value of 1.02, indicating that the model converged. The dispersion parameters of the survey items indicate that all of them load well on the latent variable (see Table A1).

The result is one-dimensional estimates of support for democracy in the abstract in the 2,942 country-years spanned by the source data. Figure A3 displays the most recent available score for each of the 137 countries and territories in the dataset. The latest scores for Botswana, Uganda, Albania, Iceland, and Senegal have them as the places where the public expresses the greatest support for democracy in the abstract on this one-dimensional scale; Guatemala, Colombia, Peru, Jamaica, and Honduras are the places where the public expresses the least support for democracy by this measure.

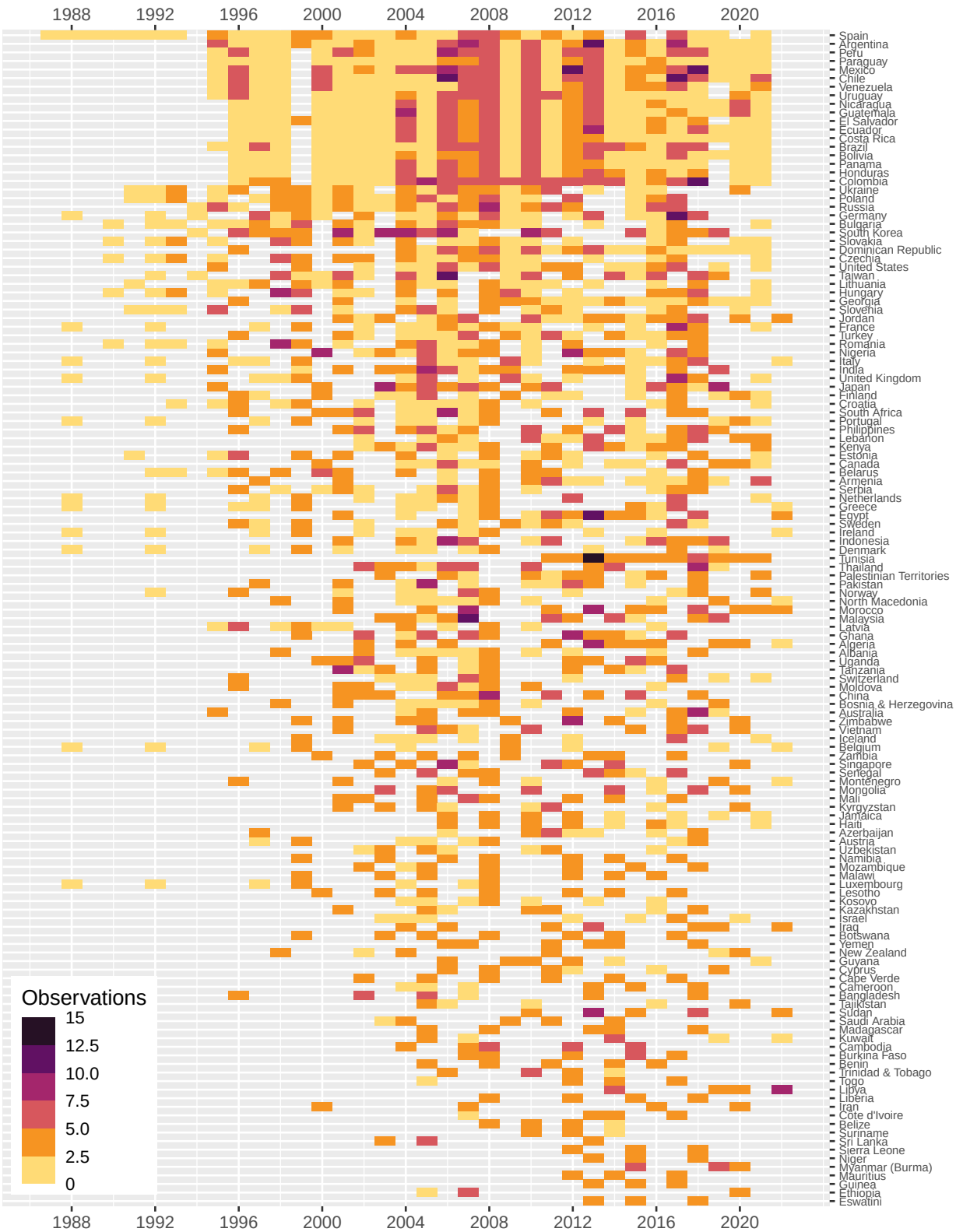

Figure A2: Source Data Observations by Country and Year

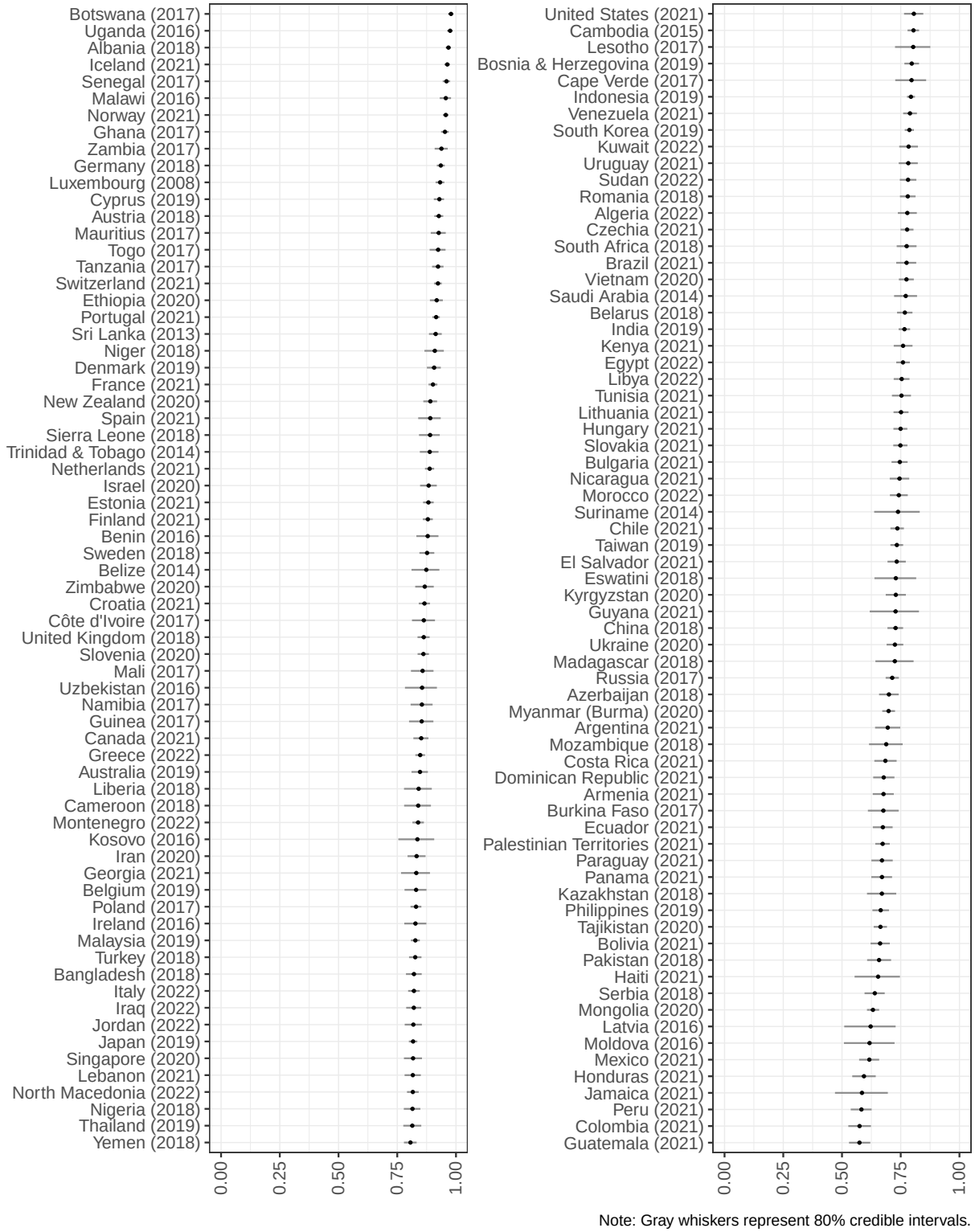

Figure A3: The One-Dimensional Latent Variable of Democratic Support, Most Recent Available Year

Table A1: Indicators Used in the One-Dimensional Latent Variable Model of Democratic Support

Following the previous research using one-dimensional latent variable models of democratic support (e.g., Claassen 2019; Solt 2020; Claassen 2020a, 2020b; Claassen and Magalhães 2022; Tai, Hu, and Solt 2024; Jacob 2024), we identified the following survey questions that asked respondents to choose between democracy and an undemocratic alternative or to evaluate either democracy or one of these undemocratic alternatives.

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes
threestate_-231	792	which of these three statements is closest to your own opinion	3 democracy is preferable to any other kind of government / 2 in some circumstances a non-democratic government can be preferable / 1 for someone like me it doesn't matter what kind of government we have (presented in this order)	1.40	-0.42, 1.32	kobar, asianb, lb, pew, twscs, neb, lits, arabb, cisbar, eb, cispol, afrob, polpan, sasianb
church4	737	A democratic system may have problems, yet it is better than other systems	1 I strongly agree / 2 I agree / 3 I disagree / 4 I strongly Disagree	0.57	-0.44, 1.00, 3.06	wvs, cses, gallup, asianb, lb, evs, eurasiab, tcmeg, arabb, bsa, fsdelection
strong4b	417	strong leader who doesn't bother with parliament	1 very good / 2 fairly good / 3 fairly bad / 4 very bad	0.47	0.85, 2.11, 3.25	wvs, pew, evs, tcmeg, arabb, aes
army4	388	Having the army rule the country	1 very good / 2 fairly good / 3 fairly bad / 4 very bad	0.49	0.14, 1.39, 2.70	wvs, pew, evs, tcmeg
dem_good4a	366	Having a democratic political system	1 very good / 2 fairly good / 3 fairly bad / 4 very bad	1.12	-2.20, -0.51, 2.55	wvs, evs, tcmeg, fsdeva
army4a	205	The army	1 strongly approve / 2 approve / 3 disapprove / 4 strongly disapprove	0.31	0.09, 1.02, 2.15	kobar, asianb, lb, cnep, neb, eurasiab, sasianb, fsdeva, aes
imp10	194	importance of democracy	1 not at all important / 10 absolutely important	1.06	-2.58, -2.28, -1.86, -1.41, -0.31, 0.31, 0.96, 1.81, 2.52	wvs, evs
church7	194	Democracy may have problems but it is better than any other form of government	1 strongly disagree / 7 strongly agree	0.86	-0.91, -0.29, 0.50, 1.42, 2.31, 3.15	amb
strong4a	189	We should get rid of parliament and elections and have a strong leader decide things.	1 strongly approve / 2 approve / 3 disapprove / 4 strongly disapprove	0.09	0.79, 1.59, 2.45	kobar, asianb, lb, cnep, neb, sasianb
threestate_-312	177	which of the following statements do you agree with most	1 for people like me it doesn't matter whether a government is democratic or nondemocratic / 2 democracy is preferable to any other form of government / 3 under some circumstances an authoritarian government may be preferable to a democratic one	1.51	-0.69, 0.63	amb, cnep
army5	163	The army comes in to govern the country	1 strongly disapprove / 2 disapprove / 3 neither approve nor disapprove / 4 approve / 5 strongly approve	0.86	-1.02, 0.74, 1.26, 3.03	afrob

(continued)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes
oneparty4a	163	only one political party is allowed to stand for election and hold office	1 strongly disapprove / 2 disapprove / 3 neither approve nor disapprove / 4 approve / 5 strongly approve	0.84	-0.70, 0.86, 1.24	afrob
strong5	160	elections and parliament are abolished so that the president can decide everything	1 strongly disapprove / 2 disapprove / 3 neither approve nor disapprove / 4 approve / 5 strongly approve	1.14	-2.23, -0.40, 0.36, 2.79	afrob
imp4	122	How important is it to you to live in a country where honest elections are held regularly with a choice of at least two political parties?	1 very important / 2 somewhat important / 3 not too important / 4 not important at all	1.16	-2.43, -0.71, 1.68	pew
strong2c	119	some feel that we should rely on a democratic form of government to solve our country's problems. Others feel that we should rely on a leader with a strong hand to solve our country's problems.	1 Democratic form of government / 2 strong leader	1.11	1.67	pew, pewrel
strong2a	108	There are people who say that we need a strong leader who does not have to be elected by the vote of the people. Others say that although things may not work electoral democracy or the popular vote is always best. What do you think	1 we need a strong leader who does not have to be elected / 2 electoral democracy is the best	1.57	-0.86	amb
oneparty4	97	Only one political party should be allowed to stand for election and hold office.	1 strongly approve / 2 approve / 3 disapprove / 4 strongly disapprove	0.08	0.82, 1.61, 2.59	asianb, lb, cnep
suitable10	86	the extent to which democracy is suitable for your country	1 complete unsuitable / 10 complete suitable	0.25	0.54, 0.79, 1.10, 1.41, 1.94, 2.29, 2.64, 3.09, 3.46	kobar, asianb, lb, arabb
imp11	51	How important is it for you to live in a country that is governed democratically?	0 not at all important / 10 extremely important	0.79	-1.63, -1.40, -1.08, -0.73, -0.37, 0.45, 0.84, 1.37, 2.10, 2.71	ess
threestate__-213	44	which of these three statements is closest to your own opinion	1 for people like me it doesn't matter what kind of government we have / 2 under some circumstances a non-democratic government can be preferable / 3 democracy is always preferable to any other kind of government	0.25	1.43, 2.28	asianb, asiab, arabb
army3	41	Military government	1 very good / 2 fairly good / 3 bad	0.61	-0.15, 1.38	asiab
evdem3	41	A democratic political system	1 very good / 2 fairly good / bad	0.76	-0.08, 2.41	asiab
strong3	41	Governance by a powerful leader without the restriction of parliament or elections	1 very good / 2 fairly good / 3 bad	0.50	0.50, 1.79	asiab
dem__good4b	38	a democratic system where representatives elected by citizens decide what becomes law	1 very good / somewhat good / somewhat bad / very bad	0.83	-0.37, 1.02, 3.37	pew

(continued)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes
strong5a	37	having a strong leader in government is good for your country even if the leader bends the rules to get things done	1 strongely agree / 2 somewhat agree / 3 neither agree nor disagree / 4 somewhat disagree / 5 strongly disagree	1.45	-0.47, 1.93, 3.13, 5.05	kobar, cses, norcs
suitable11	30	the extent to which democracy is suitable for your country	0 absolutely inappropriate / 10 completely appropriate	0.26	0.16, 0.47, 0.84, 1.21, 1.55, 2.16, 2.52, 2.97, 3.50, 3.89	arabb
evdem4	29	Having a democratic political system	1 very good / 2 fairly good / 3 fairly bad / 4 very bad	0.59	-0.98, 0.18, 2.28	arabb, aes
elections2	24	elections best way to choose government	1 yes the best way / 2 no not the best way	1.56	-1.02	cdcee
strong11	22	How acceptable for you would it be for [country] to have a strong leader who is above the law?	0 not at all acceptable / 10 completely acceptable	0.65	0.00, 0.33, 0.87, 1.32, 1.66, 2.13, 2.37, 2.63, 2.95, 3.23	ess
strong4e	18	Support for strong leader	-2 fully disagree / -1 partially disagree / 1 partially agree / 2 fully agree	0.51	0.54, 1.48, 2.27	eurasiab, fsdeva
threestate_-231a	18	which of the following statements do you agree with most	1 democracy is always preferable to any other kind of government / 2 under certain situations a dictatorship is preferable / 3 for people like me it does not matter whether we have a democratic government or nondemocratic government			caucasusb
strong4d	15	as long as the government can maintain order and stability in the country it does not matter whether it is democratic or undemocratic	1 strongly agree / 2 somewhat agree / 3 somewhat disagree / 4 strongly disagree	0.74	0.42, 1.44, 3.05	arabb
church3	14	Do you believe that democracy is the best form of government or is there another form of government which is better	1 best / 2 undecided / 3 other better	0.60	1.14, 1.93	cdcee
strong4c	14	this country needs a leader who can bend the rules if necessary to get things done	1 strongly agree / 2 somewhat agree / 3 somewhat disagree / 4 strongly disagree	0.35	0.57, 1.35, 2.72	arabb
threestate_-321	12	which of these three statements is closest to your own opinion	1 democracy is preferable to any other kind of government / 2 for someone like me it doesn't matter what kind of government we have / 2 in some circumstances a non-democratic government can be preferable	1.23	-0.36, 1.15	afrob
suitable4a	11	The citizens in our country are not prepared for a democratic system	1 Strongly agree / 2 Somewhat agree / 3 Somewhat agree / 4 Strongly disagree	0.16	1.06, 2.17, 3.24	asianb
strong2b	10	a few strong-handed leaders would be more useful to the state than the many democrats who are constantly holding meetings and consultations	1 agree / 2 disagree	0.79	2.83	cdcee
dictatorship5	8	dictatorship sometimes better government	1 do not agree at all / 2 tend not to agree / 3 neither / 4 tend to agree / 5 completely agree	0.88	-0.77, 0.52, 1.79, 2.74	gles, allbus

(continued)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes
threestate_-123	7	Which comes closest to your own opinion?	1 Authoritarian government can be preferable / 2 Does not matter whether we have non or democratic regime / 3 democracy is preferable to any other kind of government	0.19	1.55, 2.01	asianb
suitable4	6	How suitable is democracy for our country- very suitable, suitabl, not suitable or not at all suitable?	1 very suitable / 2 suitable / 3 not suitable / 4 not at all suitable	0.61	-1.02, 0.26, 2.94	twscs, sasianb
imp5	5	How important is the following to you: democracy?	0 not important at all / 123 / 4 very important	0.71	-0.64, 0.26, 1.28, 2.42	twscs

Appendix B: Validation Survey Items

Table A2: Survey Items Used in Validation Tests

The items used in prior research to estimate one-dimensional latent variables of democratic support listed in Table A1 ask respondents to choose between democracy in the abstract and an undemocratic alternative or to evaluate either democracy in the abstract or one of these undemocratic alternatives. In contrast, the items we use in validation tests here probe commitments to liberal democracy or opposition to actions that undermine it. These questions ask respondents the extent of their support for contestation and participation; civil liberties; and institutional constraints on executive power; as well as the extent they prioritize democracy and political freedom over the economy, economic equality, and order.

Title	Country-Years	Question Text
AfB: Choose Leaders in Free Elections	156	Which of the following statements is closest to your view? Choose Statement 1 or Statement 2. Statement 1: We should choose our leaders in this country through regular, open and honest elections. Statement2: Since elections sometimes produce bad results, we should adopt other methods for choosing this country's leaders
AfB: President Should Make Laws	124	Which of the following statements is closest to your view? Statement 1: Members of Parliament represent the people; therefore they should make laws for this country, even if the President does not agree. Statement 2: Since the President represents all of us, he should pass laws without worrying about what Parliament thinks.
AfB: Respect Rule of Law	140	Which of the following statements is closest to your view? 1: Since the President/Prime Minister was elected to lead the country, he should not be bound by laws or court decisions that he thinks are wrong. 2: The President/Prime Minister must always obey the laws and the courts, even if he thinks they are wrong.
AmB: Allow Regime Critics to Vote	135	There are people who only say bad things about the (country) form of government, not just the incumbent government but the system of government. How strongly do you approve or disapprove of such people's right to vote?
AmB: Ban Protests	35	To what degree do you approve or disapprove of a law prohibiting public protests
AmB: Coup Justified by Protests	38	Some people say that under some circumstances it would be justified for the military of this country to take power by a coup d'état (military coup). In your opinion would a military coup be justified under the following circumstances: when social protest is high
AmB: Ignore Congress	43	When the Congress hinders the work of our government, our presidents should govern without the Congress
AmB: Limit Opposition Parties	61	It is necessary for the progress of this country that our presidents/prime ministers limit the voice and vote of opposition parties
AmB: Restrict Free Speech	135	How strongly do you approve or disapprove of such people [people who only say bad things about the (country) form of government] appearing on television to make speeches?
AsB: Disfavor Legislative Checks	59	If the government is constantly checked [i.e. monitored and supervised] by the legislature, it cannot possibly accomplish great things.
AsB: Disregard Rule of Law	47	It is ok for the government to disregard the law in order to deal with the situation, when the country is facing a difficult situation
AsB: Economy More Important	59	If you had to choose between democracy and economic development, which would you say is more important?
AsB: Equal Involvement of Women	38	Women should not be involved in politics as much as men.
AsB: Equal Say for Uneducated	59	People with little or no education should have as much say in politics as highly-educated people.
AsB: Equality More Important	38	If you had to choose between reducing economic inequality and protecting political freedom, which would you say is more important?
AsB: Restrict Free Speech	59	The government should decide whether certain ideas should be allowed to be discussed in society.
CDCEE: Ban Protests	21	Now I'd like you to consider some kinds of action that the government and the authorities sometimes take. For each one, I would like you to tell me whether you approve strongly, approve, disapprove, or disapprove strongly. The government passing a law to forbid all public protest demonstrations.

(continued)

Title	Country-Years	Question Text
CDCEE: Equality More Important	14	Which of these two statements comes closest to your own opinion? 1 - I find that both freedom and equality are important. But if I were to choose one or the other, I would consider personal freedom more important, that is, everyone can live in freedom and develop without hinderance. 2 - Certainly both freedom and equality are important. But if I were to choose one or the other, I would consider equality more important, that is, that nobody is underprivileged and that social class differences are not so strong.
CDCEE: Multiple Parties Key to Democracy	25	People associate democracy with diverse meanings such as those on this card. For each of them, please tell me whether, for you, it has a lot, something, not much, or nothing to do with democracy. Multi-party system
CDCEE: Repress Strikes	21	Now I'd like you to consider some kinds of action that the government and the authorities sometimes take. For each one, I would like you to tell me whether you approve strongly, approve, disapprove, or disapprove strongly. The government using troops to break strikes
CNEP: Order More Important	39	I am now going to provide a series of alternative statements. Could you please tell me to what extent you agree with one or the other statement. A score of 1 represents complete agreement with the first statement and rejection of the second statement. Conversely, a 10 indicates that you prefer and completely agree with the second statement and reject the first statement. And scores between 2 and 9 represent intermediate opinions. Maintain law and order vs defend civil liberties
EB: Always Respect Free Association	27	For each of the following rights and freedoms, could you please tell me whether you think they should be respected under all circumstances, or whether this depends on the circumstances? Freedom of association
EB: Always Respect Free Speech	27	For each of the following rights and freedoms, could you please tell me whether you think they should be respected under all circumstances, or whether this depends on the circumstances? Freedom of speech
LB: Ban Extremists	26	Some people say that extremist parties should be banned. Other people say that all parties should be allowed. Which statement is closest to your way of thinking?
LB: Disregard Rule of Law	70	It is ok for the government to disregard the law, parliament and/or institutions in order to deal with a difficult situation
LB: Economy More Important	54	If you had to choose between democracy and economic development, which would you say is more important?
LB: Legislature Unnecessary	197	Some people say that without a National Congress there can be no democracy, while others say that democracy can work without a National Congress. Which is closer to your view?
LB: Restrict Free Press	54	If the country experiences serious difficulties, the president should: control the media
LITS: Free and Fair Elections Important	63	To what extent to you agree that the following are important for your country? Free and fair elections
LITS: Free Press Important	63	To what extent to you agree that the following are important for your country? A press that is independent from the government
Pew: Free Press Important	130	How important is it to you to live in a country where: the media can report the news without (state or government) censorship
Pew: Free Speech Important	130	How important is it to you to live in a country where: you can openly say what you think and can criticize the (state or government)
Pew: Rule of Law Important	57	How important is it to you to live in a country where: there is a judicial system that treats everyone in the same way
WVS: Order More Important	50	If you had to choose, which would you say is the most important responsibility of government?

Appendix C: Results with an Alternate Latent Variable and Restricted Set of Indicator Data

To provide the best test of the one-dimensional latent variable approach for measuring democratic support, in the main text the latent variable is estimated using the largest indicator dataset currently available and the DCPO model, which Solt (2020) demonstrates fits these data better than the alternatives. However, the existing scholarship taking this approach uses a considerably smaller dataset of responses to these indicators and Claassen's (2019) Model 5 (see Claassen 2020a, 2020b; Claassen and Magalhães 2022; Tai, Hu, and Solt 2024; Jacob 2024). To verify our findings, we replicate the figures of the text while instead using this latter latent variable of democratic support with corrections for the data-entry errors identified in Hu, Tai, and Solt (2022).

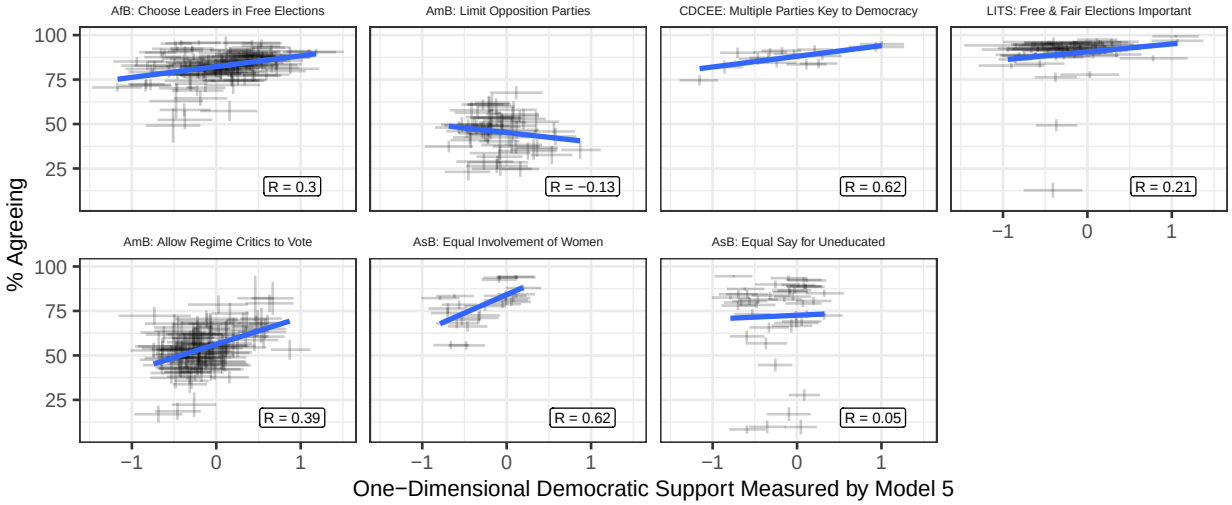

Figure A4: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Polyarchy Survey Items

Figure A4 shows that, when estimated in this smaller dataset with Claassen's (2019) Model 5, the one-dimensional latent variable of democratic support exhibits moderate correlations in the expected direction with two of the validation items: the CDCEE's question on associating democracy with a multi-party system (third panel from the left in the top row) and the AmericasBarometer question on agreement that women should be as involved in politics as men (second panel from the left on the bottom row). In both cases, the number of country-years observed is less than 25, which cautions against placing very much weight on these two comparisons. Still, even in light of these two moderate relationships, the overall picture remains the same as that presented in the text: the one-dimensional latent variable does not capture much of the public's attitudes toward contestation or participation.

Figure A5 turns to the validation questions on the civil liberties of freedom of speech, freedom of assembly, and freedom of association. Here, the only moderate and strong correlations are actually in the opposite of the expected direction: greater support for democracy

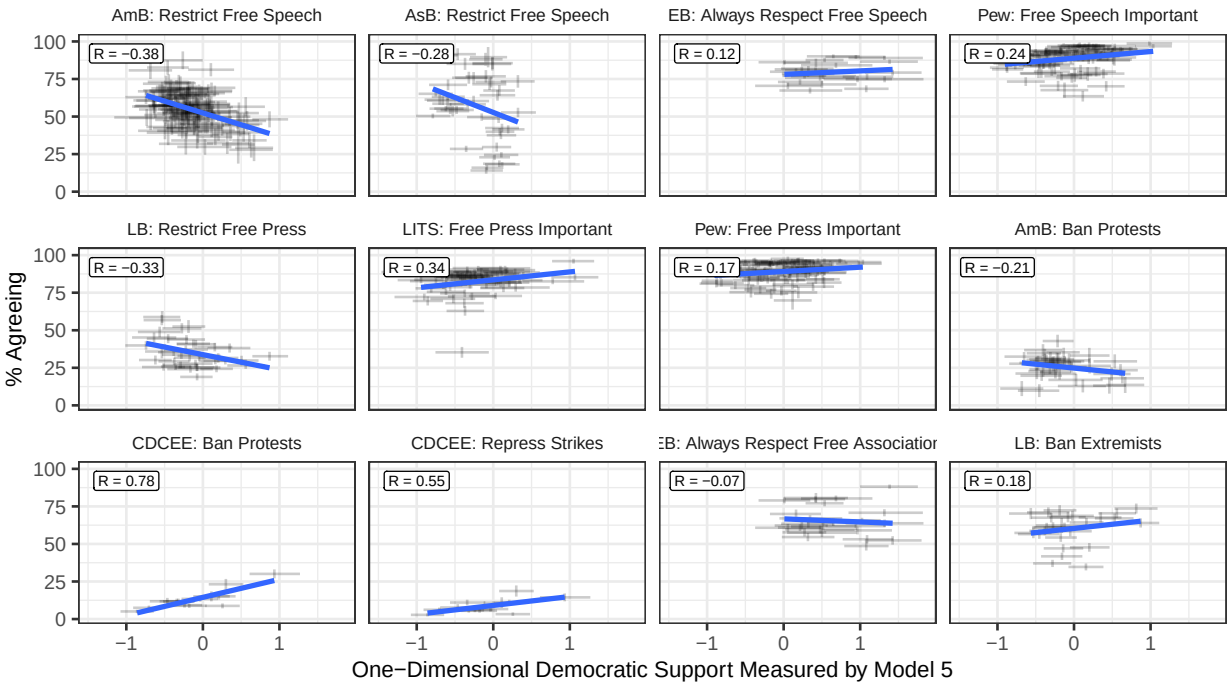

Figure A5: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Civil Liberties Survey Items

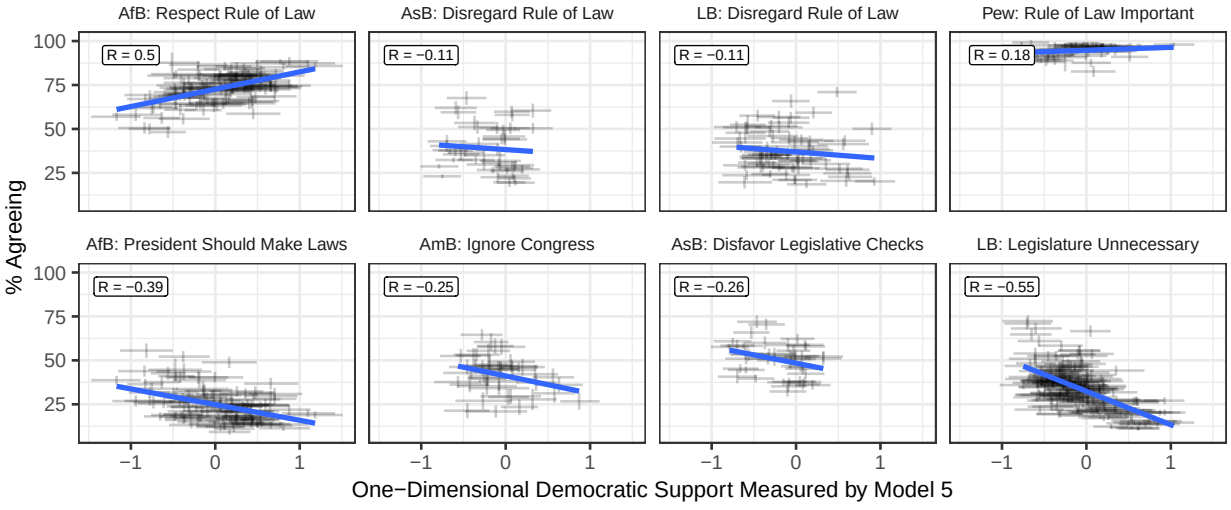

Figure A6: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Democratic Institutions Survey Items

is associated with a stronger approval to ban protests and to use the military to repress strikes. Again, however, these relationships are found only where data are particularly scant. There are only thirteen country-years for which we have these validation questions from the CDCEE and the latent variable of democratic support when estimated as in prior research. The other relationships with responses to the civil liberties validation items, while mostly in the expected direction, are only weak.

In Figure A6, just two of the eight survey questions asking about institutions that constrain the power of the executive exhibit even moderate correlations with the one-dimensional latent variable used in previous research. Support for the rule of law relates appreciably to this measure of democratic support in only the Afrobarometer; in the Asian Barometer, Latinobarómetro, and Pew Global Attitudes surveys, the correlations are very weak. Democratic support so measured is similarly weakly related to data from questions tapping support for the legislative branch in the Afrobarometer, AmericasBarometer, and Asian Barometer, with only the Latinobarómetro question on whether national legislatures are necessary at all for democracy showing even a moderate relationship.

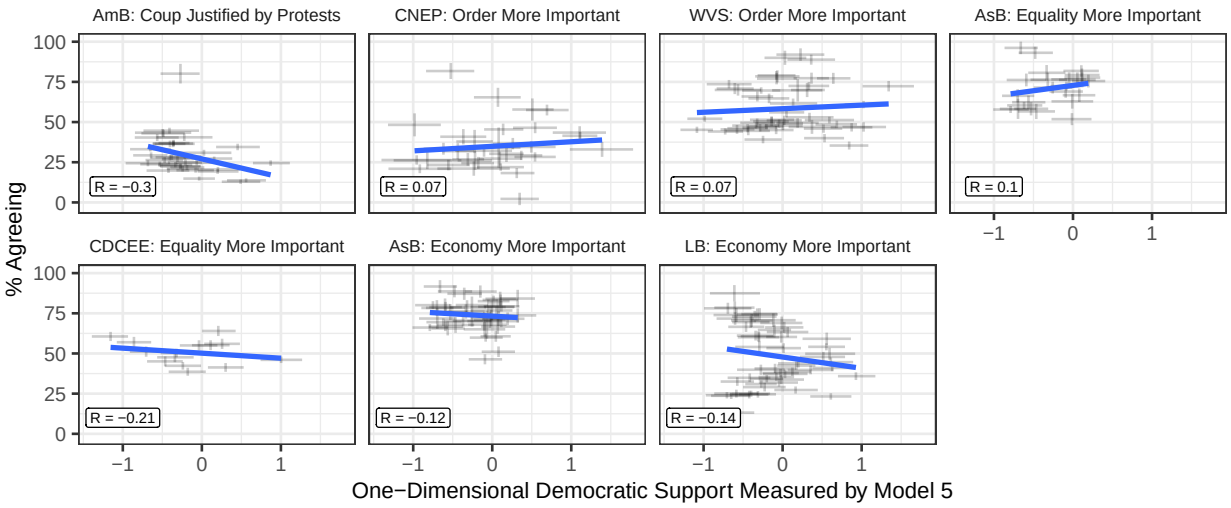

Figure A7: Correlations Between Democratic Support as a One-Dimensional Latent Variable and Conditionality Survey Items

The relationships between the more limited one-dimensional latent variable of democratic support employed here in this Appendix and the survey questions that ask respondents to choose between order, economic equality, or economic growth, on the one hand, and democracy or political freedom, on the other are shown in Figure A7. As when the one-dimensional latent variable is estimated with more data and the superior DCPO model, these relationships are only very weak.

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