

Macrodiscontent Across Countries

Authors

- Haofeng Ma, ORCID: <https://orcid.org/0000-0003-4379-8449>, Postdoctoral Fellow, School of Humanities and Social Science, Chinese University of Hong Kong, Shenzhen, mahaofeng@cuhk.edu.cn
- Jeongho Choi (Corresponding), ORCID: <https://orcid.org/0000-0002-8060-7907>, Postdoctoral Researcher, Institute of Political Science, Leibniz University Hannover, j.choi@ipw.uni-hannover.de
- Yuehong Cassandra Tai, ORCID: <https://orcid.org/0000-0001-7303-7443>, Research Assistant Professor, Center for Social Data Analytics, Pennsylvania State University, yhcassandra@psu.edu
- Yue Hu, ORCID: <https://orcid.org/0000-0002-2829-3971>, Associate Professor, Department of Political Science, Tsinghua University, yuehu@tsinghua.edu.cn
- Frederick Solt, ORCID: <https://orcid.org/0000-0002-3154-6132>, Professor, Department of Political Science, University of Iowa, frederick-solt@uiowa.edu

Data Availability Statement

Replication data is available on the Harvard Dataverse [link tbd], and the work's complete revision history is available at https://github.com/fsolt/dcpo_discontent.

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Abstract

Public discontent with the political system has become an increasingly salient concern in recent years, with the argument that it undermines democratic stability and effective governance. Nevertheless, the understanding of the nature, trends, and drivers of political discontent remains debated, largely reflecting the constraints from available survey data and items in the construction of measurement. This article takes advantage of the state-of-the-art latent-variable modeling to aggregate survey responses and a comprehensive collection of survey data to generate dynamic comparative estimates of public political discontent (PPD) for over a hundred countries and regions over the past four decades. These PPD scores are validated with responses to the individual source-data survey items that were used to generate them as well as the democratic evaluation survey item that was not used in our estimation. Next, a cross-national and longitudinal analysis of PPD in advanced democracies (i.e., OECD countries) highlights that public political discontent has been on a rising trend, rather than merely “trendless fluctuations” as Norris (2011) claimed. Our results reveal that these increased discontents are largely attributable to worsening economic conditions, including low average income, slow growth, and high unemployment rates.

Public discontent with political systems and institutions has become an increasingly salient concern in recent years, particularly as democracies worldwide face mounting challenges to their stability and effectiveness. Widespread political discontent—which undermines public confidence in the political process, erodes the legitimacy of governing institutions, and fuels the rise of populism that threatens liberal democracy (Mudde 2004; Miller 1974; Lipset 1959; Doyle 2011; Mudde and Rovira Kaltwasser 2017; Urbinati 2019)—offers a critical lens for understanding and predicting the erosion of democracy and political conflicts. Nevertheless, the nature, extent, and drivers of political discontent remains debated, with some arguing that the level of political discontent is on a clear increasing trend while others claim that political discontent fluctuates without a clear sign of any trend (Jennings et al. 2017; Norris 2011; Foa and Mounk 2016, 2017).

This debate is largely attributable to differences in how political discontent is conceptualized and measured. For instance, some scholars define it as dissatisfaction with, or a lack of, diffuse support for the political system, while others frame it as perceptions of low responsiveness, democratic deficits, or dissatisfaction with the current government (Easton 1975; Muller and Jukam 1983; Norris 2011; Jennings, Stoker, and Twyman 2016). A more pressing issue concerns the incomparability and sparsity of survey data, which have prevented scholars from consistently measuring political discontent across countries and over time. As discussed by Jennings et al (2017), the fragmented and uneven availability of relevant data has led researchers to rely on different datasets, resulting in conflicting conclusions about the nature, extent, and causes of political discontent.

This paper aims to provide a framework of political discontent with clearer conceptualization and more rigorous measurement using survey data from a wide range of developed countries and regions over several decades. Drawing on David Easton's (1965) classic distinction between diffuse and specific support for political systems, we define political discontent as dissatisfaction with or a lack of diffuse support for the political system as a whole, rather than disapproval of specific authorities or the incumbent government. The explicit distinction between diffuse and specific support is highly necessary because they have different levels of variation and different consequences for individuals' political behavior and, in turn, the sustainability of the political system (Citrin 1974; Miller 1974; Craig and Maggiotto 1981; Muller and Jukam 1983). Our conceptualization of political discontent encompasses key components of system support, including perceptions of system responsiveness (external efficacy), trust in political institutions and processes, and perceptions of political corruption, all of which are interrelated and collectively contribute to the broader concept of political discontent.

To overcome issues of incomparability and sparseness that often plague survey-based measures of political discontent in previous studies, we employ the Dynamic Comparative Public Opinion (DCPO) model developed by Solt (2020) to estimate country-year panels of public political discontent around the globe. This approach allows us to combine information from a multitude of survey questions while accounting for differences in question contents and response options. As a result, we generate estimates of the macro-level public's political discontent in all 3,362 country-years spanned by the source data, which we call Public Political Discontent (PPD) scores. Our PPD scores constitute the

largest and most temporally and spatially comprehensive dataset on the topic to date. Most importantly, with these PPD scores, researchers can meaningfully compare trends, determinants, and consequences of political discontent across 136 countries and regions over 56 years (1968–2023) in a conceptually consistent manner.

We further assess the convergent and construct validity of the PPD scores by examining their strong empirical correlations with three types of indicators: (1) the original individual-level survey items used to construct the scores, (2) independent survey items not included in the source data (e.g., evaluations of democratic performance), and (3) conceptually related variables, such as assessments of recent government policy performance. Across all tests, the PPD scores demonstrate robust validity, confirming their reliability for empirical analysis.

Last, we explore the extent and drivers of political discontent in advanced democracies as a demonstration of the utility of the PPD dataset. Our findings clearly suggest that political discontent has followed an upward trend over time in developed OECD countries, supporting Foa and Mounk’s (2016, 2017) thesis of democratic deconsolidation in developed democracies. Among the key factors theorized to influence political discontent—elections, political institutions, and economic conditions—we find that election years are associated with lower levels of discontent, suggesting that elections can provide an outlet for expressing dissatisfaction and seeking redress. Economic factors emerge as the strongest drivers of discontent, with higher levels of economic development and growth associated with lower discontent, and higher unemployment has the opposite effect. Additionally, increases in income inequality over time reduce discontent, in accordance with the predictions of system justification and relative power theories. However, power-sharing institutions, such as federalism or parliamentarism, appear to have little impact on discontent, yet countries with higher disproportionality do exhibit somewhat more discontent. These results suggest the greater importance of economic conditions in affecting discontent compared to institutional factors.

By offering a conceptually consistent framework of political discontent and a comprehensive dataset with maximum temporal and spatial comparability, this study contributes to ongoing debates about the trajectories of democratic dissatisfaction across countries and over time. More importantly, this study enriches the public opinion literature by providing a framework of political discontent with clearer conceptualization and

a thorough elaboration of its theoretical significance. To understand cross-national and temporal variations in individual political behavior, quality of governance, and state stability, scholars require more than the rich array of political attitude indicators developed in the literature—such as perceptions of incumbent performance, electoral integrity, or external efficacy. Equally critical is paying attention to a general disposition toward the political system that emerges from individuals' attitudes toward its various components—an outlook we conceptualize as macro-level political discontent. As a form of political culture, this macrodiscontent interacts with other systemic conditions—such as economic performance and institutional contexts—to shape citizens' political behaviors and state governance. Therefore, the concept of political discontent and the PPD scores developed in the article can offer a better analytical lens that enriches future discussions of public opinion, political representation, and effective governance and political legitimacy. From a methodological standpoint, this study also highlights the utility of latent variable modeling for harnessing the wealth of underutilized cross-national survey data that are often fragmented and incomparable.

Conceptualizing Political Discontent

Public political discontent is widely recognized as a critical factor affecting the stability of political systems. Lipset (1959) argues that public belief in a system's legitimacy is essential for democratic survival. Similarly, Miller (1974) maintains that a democratic political system cannot endure without majority support, as increasing political discontent among public raises the potential for revolutionary changes to their political and social system. Widespread political discontent also complicates effective governance, which in turn reinforces dissatisfaction and ultimately erodes public perceptions of the system's legitimacy over time (Hetherington 1998). These concerns have driven extensive research on its contents, sources and implications. However, scholars have conceptualized political discontent in various ways, ranging from a lack of diffuse support for the political system to perceptions of low responsiveness, democratic deficits, political distrust, and dissatisfaction with the incumbent government (Easton 1975; Muller and Jukam 1983; Norris 2011; Jennings, Stoker, and Twyman 2016). These differences in conceptualization reflect varying analytical purposes, theoretical motivations, and the available opinion

survey items at the time.

This paper defines political discontent as dissatisfaction with, or the lack of, diffuse support for a political system, primarily drawing on Easton's (1965) influential distinction between diffuse and specific political support. While specific support refers to satisfaction with incumbent performance, diffuse support concerns broader system legitimacy and serves as a 'reservoir of favorable attitudes or goodwill' toward a political system. The theoretical importance of this distinction is well noted in the literature. Scholars have found that low satisfaction with, or trust in, the incumbent government often fluctuates without a systematic pattern and does not necessarily translate into rejection of the regime itself (Citrin 1974; Miller 1974; Craig and Maggiotto 1981). Consequently, specific support is considered variable and less threatening to regime stability, as democratic institutions allow citizens to express dissatisfaction through elections and peacefully change political leadership (Muller and Jukam 1983). On the other hand, the erosion of diffuse support provides the public with a normative incentive to pursue radical change to the political system as a whole. In this regard, Jennings et al. (2017) emphasize that defining discontent in terms of diffuse support enables researchers to distinguish between temporary dissatisfaction and a sustained erosion of system-level legitimacy that could pose a systemic threat.

Diffuse political discontent comprises several related yet distinct components: external efficacy (evaluation of the responsiveness of political authorities in general), evaluation of the trustworthiness and integrity of political authorities, and perceptions of political corruption (Craig and Maggiotto 1981; Muller and Jukam 1983; Park 2011). External efficacy, as one of key driver of political discontent, is the belief that the system is unresponsive to the public and prioritizes its own or special interests, which increases the likelihood of the public participating in or endorsing regime-challenging activities that threaten the social and political order (Craig 1980; Jennings, Stoker, and Twyman 2016). Recent studies of populism also highlight that low external efficacy is a main source of anti-system sentiments among populist supporters (Mudde 2004). Political trust, often used as a measure of political discontent, is conceptually associated with external efficacy but operates on a different dimension. Specifically, while external efficacy concerns whether the political system functions according to public demands, political trust concerns whether political authorities act in the public interest regardless of public inputs

(Craig 1979). Yet, implications of political trust can vary depending on the specific referents of trust (Van der Meer and Hakhverdian 2017). For instance, trust in political institutions as a system, such as the party system, politicians, or parliament in general, differs from trust in the incumbent government, as the latter reflects specific support, fluctuates with political cycles, and does not threaten systemic stability (Norris 1999).

Literature also emphasizes the perception of political corruption as an important factor for political discontent across political regimes and regions (Anderson and Tverdova 2003; Elia and Schwindt-Bayer 2022; Ecker, Glinitzer, and Meyer 2016; Carothers 2023), as people perceive political authorities as working for their own interests over public interests (Park 2011; Busby et al. 2018; Hawkins, Kaltwasser, and Andreadis 2020). Resentment toward corruption fosters broader skepticism toward political institutions and the system, shaping electoral behavior—such as voting for populist elites who weaponize anti-corruption and anti-establishment narratives (Breitenstein and Hernández 2024; Daniele, Aassve, and Le Moglie 2023; Kolberg-Shah and Shin 2024). In authoritarian regimes, public anger over political corruption has often sparked public protests that led to regime collapse (Carothers 2023).

It is also worth discussing what is not considered a component of diffuse political discontent. Specifically, we exclude political trust in the incumbent government or apolitical institutions, as trust in the government is a type of specific support that fluctuates over time and does not pose a serious threat to the political system (Norris 1999). Additionally, unlike previous studies that use support for democracy in the abstract as a predictor for the survival of democratic regimes (Claassen 2020), we do not include it as a component of political discontent. This is because support for democracy in the abstract is too prevalent in every country to be a meaningful or analytically useful measure of political discontent (Dalton, Sin, and Jou 2007; Inglehart 2003). Lastly, we exclude satisfaction with democracy in the abstract because the literature shows that this measure functions more as a type of specific support. People tend to have much higher democratic satisfaction when their preferred politicians or parties win elections, while electoral losers tend to have lower democratic satisfaction (Van Egmond, Johns, and Brandenburg 2020; Singh and Mayne 2023). Moreover, Quaranta and Martini (2016) indicate that various economic indicators, such as the unemployment rate, GDP growth, inflation, or subjective economic evaluation, are strongly associated with the public's satisfaction with

democracy, suggesting that it is a product of the government's economic performance.

The conceptualization of political discontent as a lack of diffuse support for the political system carries important theoretical and empirical implications. By encompassing multiple dimensions of system-level evaluations, such as external political efficacy, trust in core political institutions, and perceptions of corruption, this definition offers a more accurate reflection of growing concerns about declining public confidence in democratic governance. Specifically, our conceptualization underscores the analytical value of political discontent as a comprehensive indicator of how citizens perceive the political system—as illegitimate, untrustworthy, or unresponsive. For these reasons, we argue that political discontent provides a more robust tool for assessing the erosion of confidence in democratic governance. This broader conceptualization also contributes meaningfully to ongoing debates about democratic backsliding. While recent studies offer mixed evidence regarding the role of public opinion in democratic erosion (Claassen 2020; Tai, Hu, and Solt 2024), many rely on measures of abstract support for democracy. However, such measures tend to be uniformly high and thus lack the discriminatory power to capture meaningful variation in citizens' democratic commitment (Dalton, Sin, and Jou 2007; Inglehart 2003). In contrast, political discontent—defined as a multidimensional absence of diffuse system support—serves as a more nuanced and analytically useful indicator of public sentiment toward the political order. Given its close association with regime-challenging attitudes and behaviors, political discontent functions as a more direct signal of potential threats to democratic stability (Craig 1980).

Estimating Public Political Discontent

Questions tapping political discontent as conceived above are common in national and cross-national surveys conducted over the past four decades, but no single question is asked in all countries and years. The result is that the relevant data are incomparable, in that they are generated by many different questions, and sparse, in that for many countries and years no question on discontent is asked at all. We collected 388 different survey datasets with relevant questions, including a total of 111 survey items that were asked in no fewer than five country-years in countries surveyed at least three times (see online Appendix Section A1). These survey items were asked in 136 different countries

over the 56 years from 1968 to 2023 comprising 8,957 country-year-item observations altogether.

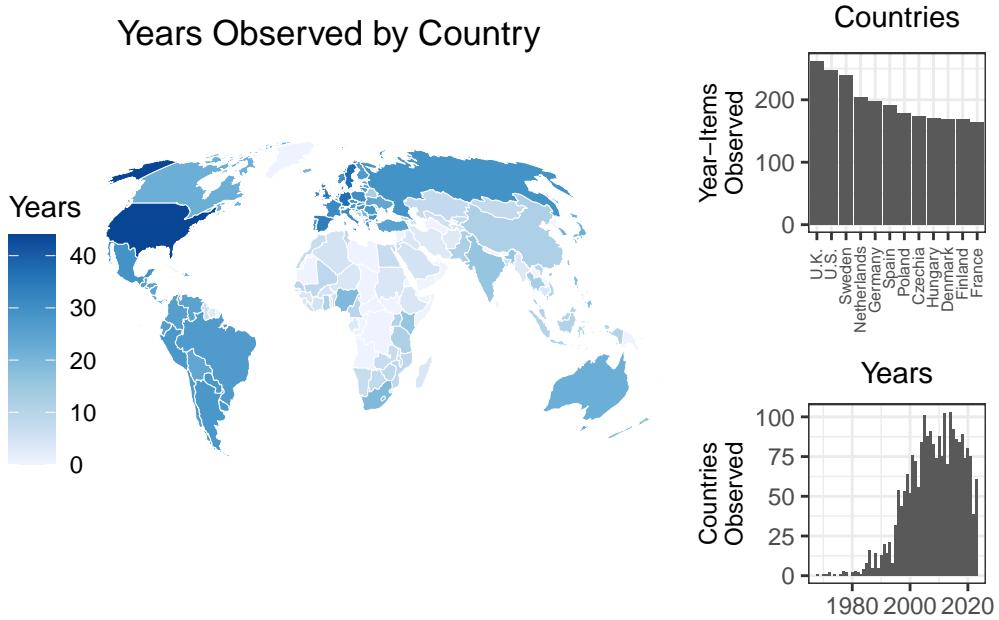


Figure 1: Countries and Years with the Most Observations in the Source Data

To make this multiplicity of different survey items useful, we estimate a latent variable model of the aggregated survey responses using the Dynamic Comparative Public Opinion (DCPO) model. The DCPO model is a state-of-the-art population-level two-parameter ordinal logistic item response theory model with country-specific item-bias terms; it has previously been used to generate comparable estimates across countries and time of such attitudes as gender egalitarianism (Woo, Allemang, and Solt 2023).¹

The underlying logic of the DCPO model is that the probability that an individual responds affirmatively to a survey question is a function of the respondent's score on the latent trait, i.g., political discontent. In this function, specifically, two parameters that characterize each question, along with country-specific bias parameters, are used to address the issue incomparability of different survey questions across different survey projects and rounds.

First, the *difficulty* parameter accounts the level of the latent trait (i.e., how much political discontent) needed for a respondent to endorse a particular response option of a survey question. That each response evinces varying level of political discontent is most easily seen with regard to the ordinal responses to the same survey item. For

¹A comprehensive description of the DCPO model is presented in Appendix Section A2.

example, responding “strongly agree” to the statement “people like me don’t have any say about what the government does” exhibits more political discontent than choosing “agree,” which is a more discontented response than “disagree,” which in turn is more discontented than “strongly disagree.” Moreover, and more importantly, the difficulty parameter varies across different survey items to reflect that a respondent may need to feel greater discontent to endorse a specific response option for one question compared to endorsing the same level of response for another question. For example, strongly agreeing that “there is widespread corruption among those who govern the country” likely expresses even more political discontent than strongly agreeing that “people like me can probably vote, but we cannot do anything else to influence politics.”

Second, the *dispersion* parameter accounts for the noisiness (measurement error) in a survey question with respect to the latent trait. A survey question may confuse some respondents or may not align cleanly with the concept of political discontent, reflecting a larger dispersion. If such a question is nevertheless used as an indicator of political discontent, it will exhibit high dispersion. On the contrary, the lower the dispersion, the better that changes in responses to the question map onto changes in political discontent.

Third, to provide for the possibility that translation issues or cultural differences result in the same question being interpreted differently in different countries, the model estimates *country-specific bias* parameters that shift the difficulty of all responses for a particular question in a particular country. Together, the model’s difficulty, dispersion, and country-specific bias parameters work to generate comparable estimates of the latent variable of political discontent from the available but incomparable source data.

To address sparsity in the source data—unpolled or thinly surveyed years in each country and region—DCPO uses simple local-level dynamic linear models, i.e., random-walk priors, for each country and region. That is, within each country and region, each year’s value of public political discontent is modeled as the previous year’s estimate plus a random shock. These dynamic models smooth the estimates of public political discontent over time and allow estimation even in years for which little or no survey data is available, albeit at the expense of greater measurement uncertainty. Using the `DCP0tools` package for R, we generated estimates of the public’s political discontent in all 3,362 country-years spanned by the source data, which we call Public Political Discontent (PPD) scores.

Validation of novel latent variables, as with any new measure, is crucial. To this end,

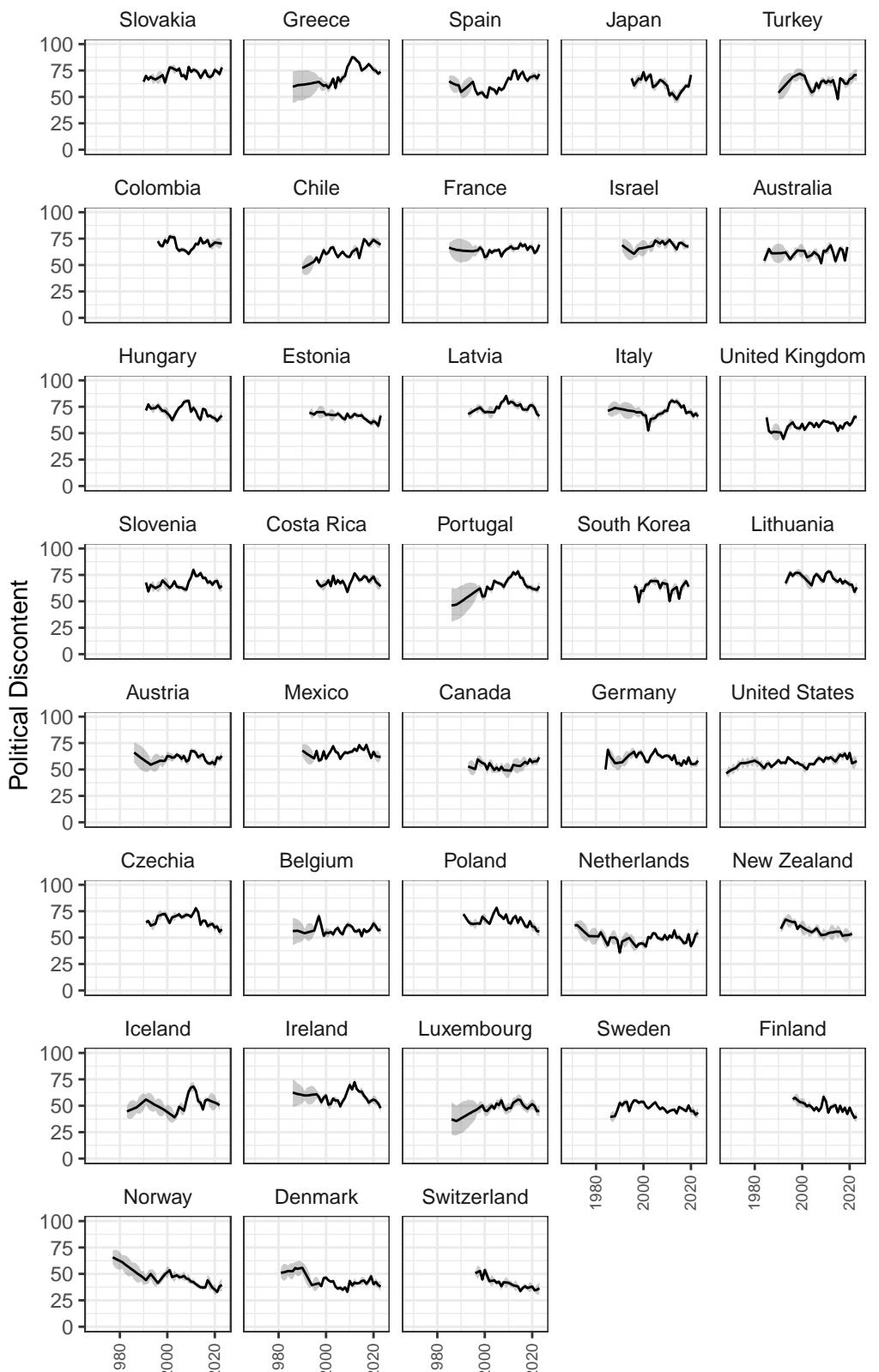
we conduct a series of measurement validity tests to validate our PPD scores. We start with the tests of convergent validation, which refers to whether a measure is empirically associated with alternative indicators of the same concept (Adcock and Collier 2001, 540). Specifically, we first perform tests of *internal convergent validity*, that is, whether the country-year PPD scores align with a few key individual-level survey items used to generate them. Then, we test our measure's *external convergent validity* by comparing the PPD scores with three individual-level survey items that asked respondents to evaluate "democracy" in their countries and regions - these items were not used in constructing our measure but provide good alternate indicators of the extent of political discontent. Last, we turn to *construct validity*, which refers to demonstrating that the tested measure is empirically associated with measures of other concepts believed causally related to the concept the measure seeks to represent (Adcock and Collier 2001, 542). Discontent with the political system should be closely tied to evaluations of recent government policy performance.

The methods and results of these tests are presented in full in online Appendix Section A3. In summary, the PPD scores perform very robustly across all validation tests, providing evidence that they are appropriate estimates of the political discontent concept we theorize and thus suitable to be used in analysis.

Explaining Political Dissatisfaction

In Figure 2, we present the evolution of PPD scores over time for a group of countries where discontent has attracted particular public and scholarly concern: the advanced democracies of the OECD. How to explain these differences in public political discontent across countries? What are the drivers of the changes over years? The literature presents various perspectives on how political and economic contexts may affect public political discontent.

The first argument deals with the role of elections. Elections provide an opportunity for people to turn their dissatisfaction into ballots for candidates or parties that promise changes in the system. Discontented citizens, as a result, gain political fulfillment through voting for a party that voices their discontent (Van der Brug 2003; Rooduijn, Van Der Brug, and De Lange 2016). From this perspective, public political discontent should be



Note: Countries are ordered by their most recent political discontent score; gray shading represents 80% credible intervals.

Figure 2: Political Discontent Scores Over Time Within OECD Democracies

expected to be lower in years of national elections, in which some of the existing discontent could be ameliorated. However, existing studies also suggest that the effect of election time on public political discontent could be the opposite. Campaigns expose citizens to more political messages, a significant proportion of which criticize the elites and the system (Lau, Sigelman, and Rovner 2007; López-García and Pavía 2019). Particularly, many advanced democracies are experiencing increased levels of false information during elections, which has become a clear danger to the integrity of political process (Bennett and Livingston 2018). If so, public political discontent may be expected to be higher at election times.

A second potential source of public political discontent is the distribution of power created by political institutions. According to prominent democratic theories (Norris 2008; Lijphart 1999; Powell 2000), power-sharing systems—parliamentarism, federalism, and proportional electoral rules—aim to generate governments that facilitate broad inclusion and participation, while power-concentrating systems prioritize efficient and accountable majority rule. Kittilson and Schwindt-Bayer (2010a) argues that power-sharing systems not only encourage actual political participation, but also send symbolic signals of inclusiveness to citizens. If so, the publics in countries with parliamentary systems, federalism, and proportional electoral rules should be more likely to perceive themselves as being included and represented in the system and so feel less discontent.

Lastly, economic conditions are argued to be salient sources of political discontent (Quaranta and Martini 2016). For one thing, unfavorable economic conditions fuel social discontent and anxiety about the future among the public, which can easily evolve into anti-establishment sentiment (Kinnvall and Svensson 2022). For another, economic indicators are usually used by people to evaluate the performance of the system or government policies (Becher and Donnelly 2013). Hence, poor economic conditions, such as low average incomes, slow growth, and high unemployment are likely to hurt perceptions of institutional quality and so increase public political discontent. Income inequality may work similarly, but such arguments as system justification theory, which contends that greater inequality triggers in the disadvantaged a psychological need to accept and defend the existing system (see, e.g., Jost 2019), and relative power theory (see, e.g., Solt 2008), which instead sees more inequality as increasing the influence of the rich over the attitudes of the poor, suggest that worsening inequality may actually *reduce* discontent.

The data we use to test these hypotheses are as follows. The Democratic Electoral Systems (DES) dataset updated in Bormann and Golder (2022) provides information about the timing of elections, yielding a dichotomous variable coded one in election years and zero when no election was held. We measure three institutional variables in the same fashion as Kittilson and Schwindt-Bayer (2010b). Parliamentarism is coded dichotomously, coded one in pure parliamentary systems and zero otherwise, and is sourced from the DES. The federalism variable is also dichotomous: countries with strong federal systems (see Lijphart 1999) are coded one and all others coded zero. The Gallagher least-squares index of disproportionality, which measures the disparity between parties' vote shares and their seat shares (Gallagher 1991, 40–41; 2023), provides our measure of the proportionality of the electoral system. We draw data on economic conditions from two sources. GDP per capita, national GDP growth, and unemployment are from OECD.Stat (OECD 2024). The Gini index of disposable income inequality comes from the Standardized World Income Inequality Database.

The resulting dataset comprises all thirty-eight OECD countries and a total of 1217 country-years. The number of country-years observed per country ranges from sixteen (Turkey) to forty-three (the United States) consecutive years (mean: 32 years, median: 31 years). The advantage in data availability over pooling the responses to a single question is clear: even among these relatively data-rich countries, the two richest single items available—the Eurobarometer's questions on trust in national ts and in political parties—each provide only fewer than half as many country-years for analysis, 582 observations, and these Eurobarometer data naturally entirely exclude the nine OECD members outside Europe.

Pooled time series like these, Shor et al. (2007) demonstrates, are most appropriately analysed using Bayesian multilevel models with varying intercepts for countries and years. Varying intercepts for each country account for the heteroskedasticity across our spatial units that is generated by omitted variable bias and other sources while also permitting us to include predictors like parliamentarism and federalism that do not vary over time. Varying intercepts for each year take into account ‘time shocks’ that operate on all of our countries simultaneously (Shor et al. 2007, 171–72).

We also use the ‘within-between random effects’ specification (see Bell and Jones 2015). This specification involves decomposing each of our time-varying predictors into its coun-

try mean and the difference between each country-year value and the country mean. The time-varying difference variables capture the short-term effects of the predictors, while the time-invariant country-mean variables reflect their long-run, “historical” effects (Bell and Jones 2015, 137). As Bell and Jones (2015) shows, this is a better approach for addressing omitted variable bias and endogeneity than fixed effects and other commonly used TSCS specifications.

Finally, we use a Bayesian analysis that allows us to directly incorporate into our model the quantified measurement uncertainty in the data for political discontent and for income inequality, with the estimated values of these two variables treated as random draws from distributions with unknown true means but known standard deviations (McElreath 2016, 425–31; see also Kurz 2023, 15.1.2). We estimate the model using the `brms` R package (Bürkner 2017).

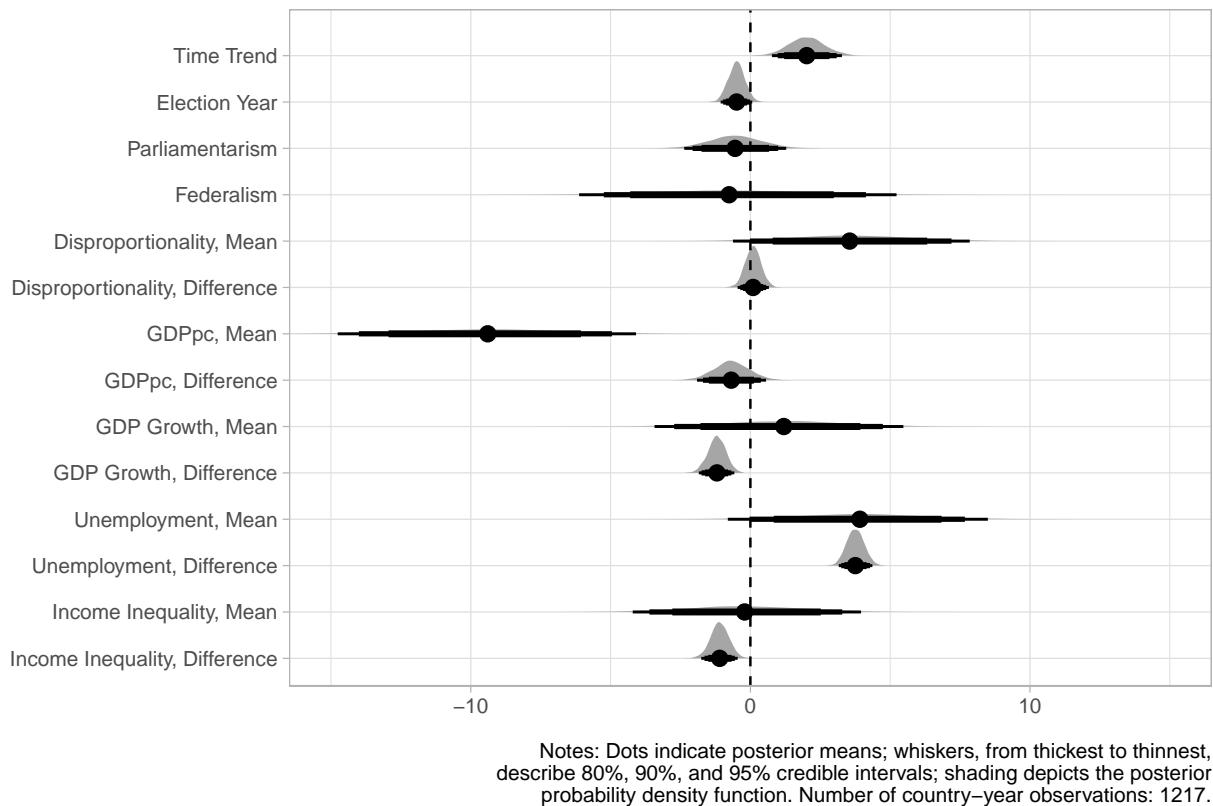


Figure 3: Predicting Public Political Discontent in OECD Countries

The results of this analysis are displayed in Figure 3.² Narratives of increasing political discontent over recent decades find support in these results. The time trend indicates that discontent has been, on average and net of the other included variables, rising over

²Table A3 in online Appendix Section A4, provides a tabular version.

time in the OECD countries by 0.1 points (95% credible interval: 0.04 to 0.16 points) per year. By this evidence, election years appear to diffuse rather than exacerbate discontent: PPD scores are estimated to be 0.5 points lower in years with elections, with 95.6% of the posterior distribution less than zero.

The hypothesis that power-sharing institutions reduce discontent with politics, on the other hand, finds little support. Countries with parliamentary or federal systems do not exhibit less political discontent than those without, and short-run changes in disproportionality do not trigger declines in PPD scores either. Countries with higher mean disproportionality did exhibit more discontent than those with lower mean values: a two-standard-deviation higher mean Gallagher index was associated with 3.5515 points more political discontent; 94.9% of the posterior distribution of this parameter was positive.

The evidence of the importance of economic conditions is, however, strong. Even among these advanced economies, countries with greater mean per capita GDP have lower levels of political discontent: a country one standard deviation above the mean is estimated to have a PPD score 9.4 (95% c.i.: 14.8 to 4.1) points lower than a country one standard deviation below the mean. In the short run, increases in per capita GDP also appear to reduce discontent, with a two-standard-deviation increase associated with 0.7 (95% c.i.: 1.9 to 0.6) points less political discontent (85.6% of the posterior distribution of this parameter was negative). Although mean GDP growth exhibits no evidence of a long-term influence of growth on discontent, in the short run, discontent moves sharply in the opposite direction as growth: a two-standard-deviation increase in growth yields -1.2 (95% c.i.: -1.8 to -0.6) points less political discontent. Unemployment has major effects on discontent in this analysis. The estimate for the long-term, historical effect of unemployment on political discontent as evidenced by differences in mean levels across countries is 3.9 (95% c.i.: -0.8 to 8.5) points. Year-to-year differences in unemployment work similarly: a two-standard-deviation increase in unemployment has an immediate effect of increasing discontent by 3.8 (95% c.i.: 3.2 to 4.4) points. And, although cross-country mean differences show little impact, increases in income inequality over time work to reduce discontent in accordance with the predictions of system justification and relative power theories, with a two-standard-deviation rise prompting a 1.1 (95% c.i.: 1.8 to 0.5) point fall in PPD scores.

Conclusions

The research on public political discontent has witnessed many inconsistent findings regarding its temporal trends, causes, and consequences. This inconsistency largely reflects conceptual inconsistencies and the constraints from available survey data and items in the construction of measurement. To address these limitations, this article offers a clearer conceptualization of political discontent as the lack of Easton's (1965) diffuse support, explicitly defining what is—and is not—considered part of the concept. Moreover, using a state-of-the-art latent-variable model, we construct a dynamic comparative measure of public political discontent in OECD countries. The result shows a clear rising trend of political discontent across OECD countries, challenging Norris (2011)'s claim that the changes in political discontent are merely “trendless fluctuations.” Our analysis clearly reveals the rise of political discontent in the public is driven by worsening economic conditions, including low income, slow growth, and high unemployment. Unlike prior research that relies on single-country evidence (Jennings et al. 2017), our findings are built upon a measure that draws on the most available information across countries/regions and over time. Therefore, it appears that our findings provide sounder conclusions with firmer evidence—at least so far—to the ongoing debates on the trajectories and sources of political discontent.

In addition to our innovative data and empirical findings, this study also contributes to the public opinion literature by offering a clearer conceptualization of political discontent. Although the phenomenon of political discontent has attracted extensive studies, there lacks a concept of political discontent that is distinctive from related concepts—such as (the lack of) political trust and (dis)satisfaction with democracy—and gains widespread use in the research field. As a result, the various conceptualizations of political discontent, despite serving varying analytical purposes and data availability, lead to seemingly conflicting findings and thus impede further research. In this article, we explicitly theorize political discontent as the lack of Easton's (1965) diffuse support and spell out what are and are not considered components of the concept. Our conceptualization provides researchers in the field with references about the possible scope when concerning political discontent.

The time-series cross-national Public Political Discontent (PPD) dataset we have presented in this article, which is available on the Harvard Dataverse, has broad implica-

tions for future study. The growing phenomenon of democratic backsliding across diverse regions has spurred extensive scholarly inquiry into its underlying causes, with public support for democracy often positioned as a central factor. However, findings on the role of public democracy support remain mixed, raising questions about its significance. Public political discontent can offer a better analytical lens to democratic backsliding as rising political discontent has sparked concerns that it fosters public support for populism—frequently a threat to liberal democracy (Mudde 2004; Urbinati 2019)—and undermines effective governance and political legitimacy (Hetherington 1998; Miller 1974; Lipset 1959). With the PPD dataset, researchers can explore how political discontent shapes public political engagement and influences democratic consolidation and backsliding. Moreover, as the dataset encompasses most countries and regions worldwide, including non-democracies, it enables the examination of the potentially varying causes and consequences of political discontent across different regime types.

References

- Adcock, Robert, and David Collier. 2001. “Measurement Validity: A Shared Standard for Qualitative and Quantitative Research.” *American Political Science Review* 95 (3): 529–46.
- Anderson, Christopher J., and Yuliya V Tverdova. 2003. “Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies.” *American Journal of Political Science* 47 (1): 91–109.
- Becher, Michael, and Michael Donnelly. 2013. “Economic Performance, Individual Evaluations, and the Vote: Investigating the Causal Mechanism.” *The Journal of Politics* 75 (4): 968–79.
- Bell, Andrew, and Kelvyn Jones. 2015. “Explaining Fixed Effects: Random Effects Modeling of Time-Series Cross-Sectional and Panel Data.” *Political Science Research and Methods* 3 (1): 133–53.
- Bennett, W Lance, and Steven Livingston. 2018. “The Disinformation Order: Disruptive Communication and the Decline of Democratic Institutions.” *European Journal of Communication* 33 (2): 122–39.
- Bormann, Nils-Christian, and Matt Golder. 2022. “Democratic Electoral Systems Around the World, 1946–2020.” *Electoral Studies* 78: 102487.
- Breitenstein, Sofia, and Enrique Hernández. 2024. “Too Crooked to Be Good? Trade-Offs in the Electoral Punishment of Malfeasance and Corruption.” *European Political Science Review*, 1–19.
- Bürkner, Paul-Christian. 2017. “brms: An r Package for Bayesian Multilevel Models Using Stan.” *Journal of Statistical Software* 80: 1–28.
- Busby, Ethan C, David Doyle, Kirk A Hawkins, and Nina Wiesehomeier. 2018. “Activating Populist Attitudes: The Role of Corruption.” In *The Ideational Approach to Populism*, 374–95. Routledge.
- Carothers, Christopher. 2023. “The Autocrat’s Corruption Dilemma.” *Government and Opposition* 58 (1): 22–38.
- Caughey, Devin, Tom O’Grady, and Christopher Warshaw. 2019. “Policy Ideology in European Mass Publics, 1981–2016.” *American Political Science Review* 113 (3): 674–93.
- Citrin, Jack. 1974. “Comment: The Political Relevance of Trust in Government.” *Amer-*

- ican Political Science Review* 68 (3): 973–88.
- Claassen, Christopher. 2019. “Estimating Smooth Country-Year Panels of Public Opinion.” *Political Analysis* 27 (1): 1–20.
- . 2020. “Does Public Support Help Democracy Survive?” *American Journal of Political Science* 64 (1): 118–34.
- Craig, Stephen C. 1979. “Efficacy, Trust, and Political Behavior: An Attempt to Resolve a Lingering Conceptual Dilemma.” *American Politics Quarterly* 7 (2): 225–39.
- . 1980. “The Mobilization of Political Discontent.” *Political Behavior* 2: 189–209.
- Craig, Stephen C., and Michael A Maggiotto. 1981. “Political Discontent and Political Action.” *The Journal of Politics* 43 (2): 514–22.
- Dalton, Russell J, To-chol Sin, and Willy Jou. 2007. “Understanding Democracy: Data from Unlikely Places.” *Journal of Democracy* 18 (4): 142–56.
- Daniele, Gianmarco, Arnstein Aassve, and Marco Le Moglie. 2023. “Never Forget the First Time: The Persistent Effects of Corruption and the Rise of Populism in Italy.” *The Journal of Politics* 85 (2): 468–83.
- Doyle, David. 2011. “The Legitimacy of Political Institutions: Explaining Contemporary Populism in Latin America.” *Comparative Political Studies* 44 (11): 1447–73.
- Easton, David. 1965. *A Systems Analysis of Political Life*. John Wiley & Sons.
- . 1975. “A Re-Assessment of the Concept of Political Support.” *British Journal of Political Science* 5 (4): 435–57.
- Ecker, Alejandro, Konstantin Glinitzer, and Thomas M Meyer. 2016. “Corruption Performance Voting and the Electoral Context.” *European Political Science Review* 8 (3): 333–54.
- Elia, Emily, and Leslie A Schwindt-Bayer. 2022. “Corruption Perceptions, Opposition Parties, and Reelecting Incumbents in Latin America.” *Electoral Studies* 80: 102545.
- Foa, Roberto Stefan, and Yascha Mounk. 2016. “The Danger of Deconsolidation: The Democratic Disconnect.” *Journal of Democracy* 27 (3): 5–17.
- . 2017. “The Signs of Deconsolidation.” *Journal of Democracy* 28 (1): 5–15.
- Gallagher, Michael. 1991. “Proportionality, Disproportionality and Electoral Systems.” *Electoral Studies* 10 (1): 33–51.
- . 2023. “Election Indices Dataset.”
- Hawkins, Kirk A, Cristóbal Rovira Kaltwasser, and Ioannis Andreadis. 2020. “The

- Activation of Populist Attitudes.” *Government and Opposition* 55 (2): 283–307.
- Hetherington, Marc J. 1998. “The Political Relevance of Political Trust.” *American Political Science Review* 92 (4): 791–808.
- Hu, Yue, Yuehong Cassandra Tai, Hyein Ko, Byung-Deuk Woo, and Frederick Solt. 2023. “Support for Democracy Is Multidimensional: Why Unidimensional Latent Variable Measures of Democratic Support Are Invalid.” SocArXiv.
- Hu, Yue, Yuehong Cassandra Tai, and Frederick Solt. 2022. “On Data ‘Janitor Work’ in Political Science: The Case of Thermostatic Support for Democracy.” SocArXiv. <https://doi.org/10.31235/osf.io/kd7mu>.
- Inglehart, Ronald. 2003. “How Solid Is Mass Support for Democracy—and How Can We Measure It?” *PS: Political Science & Politics* 36 (1): 51–57.
- Jennings, Will, Nick Clarke, Jonathan Moss, and Gerry Stoker. 2017. “The Decline in Diffuse Support for National Politics: The Long View on Political Discontent in Britain.” *Public Opinion Quarterly* 81 (3): 748–58.
- Jennings, Will, Gerry Stoker, and Joe Twyman. 2016. “The Dimensions and Impact of Political Discontent in Britain.” *Parliamentary Affairs* 69 (4): 876–900.
- Jost, John T. 2019. “A Quarter Century of System Justification Theory: Questions, Answers, Criticisms, and Societal Applications.” *British Journal of Social Psychology* 58 (2): 263–314.
- Kinnvall, Catarina, and Ted Svensson. 2022. “Exploring the Populist Mind: Anxiety, Fantasy, and Everyday Populism.” *The British Journal of Politics and International Relations* 24 (3): 526–42.
- Kittilson, Miki Caul, and Leslie Schwint-Bayer. 2010b. “Engaging Citizens: The Role of Power-Sharing Institutions.” *The Journal of Politics* 72 (4): 990–1002. <https://doi.org/10.1017/S0022381610000484>.
- . 2010a. “Engaging Citizens: The Role of Power-Sharing Institutions.” *The Journal of Politics* 72 (4): 990–1002.
- Kolberg-Shah, Deanna, and Hwayong Shin. 2024. “Can Corruption Connect You to Politics? Nepotism, Anxiety, and Government Blame.” *Political Psychology*.
- Kurz, A. Solomon. 2023. *Statistical Rethinking with brms, ggplot2, and the tidyverse: Second Edition*. Version 0.4.0.
- Lau, Richard R, Lee Sigelman, and Ivy Brown Rovner. 2007. “The Effects of Negative

- Political Campaigns: A Meta-Analytic Reassessment.” *The Journal of Politics* 69 (4): 1176–1209.
- Lijphart, Arend. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. Yale University Press.
- Lipset, Seymour Martin. 1959. “Some Social Requisites of Democracy: Economic Development and Political Legitimacy1.” *American Political Science Review* 53 (1): 69–105.
- López-García, Guillermo, and José M Pavía. 2019. “Political Communication in Election Processes: An Overview.” *Contemporary Social Science* 14 (1): 1–13.
- McElreath, Richard. 2016. *Statistical Rethinking: A Bayesian Course with Examples in r and Stan*. Chapman & Hall/CRC Texts in Statistical Science Series.
- Miller, Arthur H. 1974. “Political Issues and Trust in Government: 1964–1970.” *American Political Science Review* 68 (3): 951–72.
- Mudde, Cas. 2004. “The Populist Zeitgeist.” *Government and Opposition* 39 (4): 541–63.
- Mudde, Cas, and Cristóbal Rovira Kaltwasser. 2017. *Populism: A Very Short Introduction*. Oxford University Press.
- Muller, Edward N, and Thomas O Jukam. 1983. “Discontent and Aggressive Political Participation.” *British Journal of Political Science* 13 (2): 159–79.
- Norris, Pippa. 1999. *Critical Citizens: Global Support for Democratic Government*. OUP Oxford.
- . 2008. *Driving Democracy: Do Power-Sharing Institutions Work?* Cambridge University Press.
- . 2011. *Democratic Deficit: Critical Citizens Revisited*. Cambridge University Press.
- OECD. 2024. “OECD.stat.” <https://doi.org/10.1787/data-00285-en>.
- Park, Chong-Min. 2011. “Political Discontent in South Korea.” *International Review of Sociology* 21 (2): 391–412.
- Powell, G. Bingham. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. Yale University Press.
- Quaranta, Mario, and Sergio Martini. 2016. “Does the Economy Really Matter for Satisfaction with Democracy? Longitudinal and Cross-Country Evidence from the European Union.” *Electoral Studies* 42: 164–74.

- Rooduijn, Matthijs, Wouter Van Der Brug, and Sarah L De Lange. 2016. “Expressing or Fuelling Discontent? The Relationship Between Populist Voting and Political Discontent.” *Electoral Studies* 43: 32–40.
- Shor, Boris, Joseph Bafumi, Luke Keele, and David Park. 2007. “A Bayesian Multilevel Modeling Approach to Time-Series Cross-Sectional Data.” *Political Analysis* 15 (2): 165–81.
- Singh, Shane P, and Quinton Mayne. 2023. “Satisfaction with Democracy: A Review of a Major Public Opinion Indicator.” *Public Opinion Quarterly* 87 (1): 187–218.
- Solt, Frederick. 2008. “Economic Inequality and Democratic Political Engagement.” *American Journal of Political Science* 52 (1): 48–60.
- . 2020. “Modeling Dynamic Comparative Public Opinion.” SocArXiv. <https://osf.io/preprints/socarxiv/d5n9p>.
- Tai, Yuehong Cassandra, Yue Hu, and Frederick Solt. 2024. “Democracy, Public Support, and Measurement Uncertainty.” *American Political Science Review* 118 (1): 512–18.
- Urbinati, Nadia. 2019. “Political Theory of Populism.” *Annual Review of Political Science* 22 (1): 111–27.
- Van der Brug, Wouter. 2003. “How the LPF Fuelled Discontent: Empirical Tests of Explanations of LPF Support.” *Acta Politica* 38: 89–106.
- Van der Meer, Tom, and Armen Hakhverdian. 2017. “Political Trust as the Evaluation of Process and Performance: A Cross-National Study of 42 European Countries.” *Political Studies* 65 (1): 81–102.
- Van Egmond, Marcel, Robert Johns, and Heinz Brandenburg. 2020. “When Long-Distance Relationships Don’t Work Out: Representational Distance and Satisfaction with Democracy in Europe.” *Electoral Studies* 66: 102182.
- Woo, Byung-Deuk, Lindsey Allemang, and Frederick Solt. 2023. “Public Gender Egalitarianism: A Dataset of Dynamic Comparative Public Opinion Toward Egalitarian Gender Roles in the Public Sphere.” *British Journal of Political Science* 53 (2): 766–75. <https://doi.org/https://doi.org/10.1017/S0007123422000436>.

Macrodiscontent Across Countries

Online Supplementary Materials

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A1 Survey Items Used to Estimate Public Political Discontent

Following Jennings et al. (2017), we conceptualize political discontent as the lack of diffuse political support among the public. This lack is in turn understood as encompassing low external efficacy, that is, perceptions of government unresponsiveness; a lack of trust in the political system; and perceptions of pervasive corruption. National and cross-national surveys have often included questions tapping such political discontent for over a half century, but the resulting data are both sparse, that is, unavailable for many countries and years, and incomparable, generated by many different survey items. We identified 111 such survey items that were asked in no fewer than five country-years in countries surveyed at least twice; these items were drawn from 388 different survey datasets. These items are listed in Table A1 below, along with the dispersion (α) and difficulty (β) scores estimated for each from the DCPO model. Lower values of dispersion indicate questions that better identify publics with a higher level of trust from those with lower. Items have one less difficulty score than the number of response categories.

In accordance with the advice offered by Hu, Tai, and Solt (2022) to avoid data-entry errors by automating data collection, the `DCPOTools` R package was used to compile the responses to these questions. The current version of this software facilitates the entire practical data generation process: from facilitating the acquisition of original survey datasets and converting them into R standard format for quicker loading; through standardizing country names, identifying survey years, and extracting the desired survey items; to restructuring the resulting data for analysis with the DCPO model. The primary objective is to limit manual interventions, thereby maximizing reproducibility and reducing the error potential inherent in human-operated data preparation tasks. The survey dataset codes listed in Table A1 correspond to those used in that package.

The survey items in these source data were asked in a total of 136 different countries in at least two time points over 56 years, from 1968 to 2023, resulting in 8,957 country-year-item observations. The number of items observed for each country-year in the source data is displayed in Figure A1 and Figure A2 below. The PPD scores of country-years with more observed items are likely to be estimated more precisely. The estimates for country-years with fewer (or no) observed items rely more heavily (or entirely) on the random-walk prior and are therefore less certain.

Table A1: Survey Items Used to Estimate Public Political Discontent

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
trust_parties2	735	How much trust do you have in certain institutions? Political parties	1 tend to trust / 2 tend not to trust	1.06	0.04	eb
trust_parl2	734	How much trust do you have in certain institutions? National parliament	1 tend to trust / 2 tend not to trust	0.70	1.18	eb
trust_parl4	637	How much do you trust each of the following, or haven't you heard enough about them to say: Parliament?	0 not at all / 1 a little / 2 somewhat / 3 a lot	0.25	0.29, 1.34, 2.31	lb, asianb, afrob
trust_parties4	461	How much trust do you have in political parties?	1 none at all / 2 not very much trust / 3 quite a lot of trust / 4 a great deal of trust	0.21	0.28, 1.30, 2.24	lb, asianb, kobar, icenes, sasianb

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
big2	373	Would you say that this country is run by a few big interests looking out for themselves, or that it is run for the benefit of all the people?	1 run by a few big interests / 2 run for all the people	0.29	1.00	wvs, anes, lb, nsss
will2	296	Would you say that your country is governed by the will of the people?	1 yes / 2 no	0.62	1.16	gallup
trust_parl11	270	Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. [Country's] parliament?	0 no trust / 123456789 / 10 complete trust	0.49	-0.76, -0.31, 0.34, 0.83, 1.18, 1.69, 1.98, 2.35, 2.70, 3.01	ess, issp, ress, fsdeletion
trust_pol11	258	Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Politicians?	0 no trust / 123456789 / 10 complete trust	0.51	-1.41, -1.03, -0.39, 0.21, 0.66, 1.22, 1.55, 1.93, 2.33, 2.71	ess, ress, fsdeletion
say5	246	People like me don't have any say about what the government does	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	1.00	-1.31, 0.50, 1.36, 2.99	bes, cnepl, issp, ases, gles, icnl, belgiumes, aes, nzes, caucasusb
trust_parties11	236	Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Political parties?	0 no trust / 123456789 / 10 complete trust	0.50	-1.37, -1.00, -0.37, 0.23, 0.67, 1.24, 1.58, 1.97, 2.37, 2.75	ess, ress, fsdeletion
trust_parl5	217	How much confidence do you have in: Parliament	1 complete confidence / 2 a great deal of confidence / 3 some confidence / 4 very little confidence / 5 no confidence at all	0.42	-0.46, 0.63, 1.55, 2.33	issp, lits, som, pgss
corrupt4	217	There is corruption in national institutions in	1 totally agree / 2 tend to agree / 3 tend to disagree / 4 totally disagree	0.83	-1.51, -0.07, 2.14	eb
care4c	177	The interests of people like you are well taken into account by the political system in	1 totally agree / 2 tend to agree / 3 tend to disagree / 4 totally disagree	1.06	-0.81, 1.45, 3.17	eb, feb
right4	159	How much of the time do you think you can trust the government in Washington to do what is right?	1 none of the time / 2 some of the time / 3 most of the time / 4 just about always	0.55	-0.48, 1.27, 3.00	eb, anes, lb, asianb
corrupt_pol4	135	Now I am going to read you a list of things that may be problems in our country. Please tell me if you think it is a very big problem, a moderately big problem, a small problem or not a problem at all: corrupt political leaders	1 very big problem / 2 moderately big problem / 3 small problem / 4 not a problem at all	0.75	-2.10, -0.67, 0.92	pew

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
corrupt_officials4	126	Taking into account your own experience or what you have heard, corruption among public officials is	1 very common / 2 common / 3 uncommon / 4 very uncommon	1.10	-1.99, -0.04, 1.93	amb
care7	123	Those who govern this country are interested in what people like you think	1 strongly disagree / 2 3 4 5 6 7 strongly agree	0.51	-0.17, 0.37, 0.94, 1.46, 1.90, 2.35	amb
trust_parties5	120	To what extent do you trust the following institutions? Parliament	1 complete distrust / 2 some distrust / 3 neither trust nor distrust / 4 some trust / 5 complete trust	0.40	-0.58, 0.51, 1.42, 2.15	lits, som
rigged2	114	Speaking generally, do you think that the elections in this country are clean or rigged?	1 are clean / 2 are rigged	0.14	1.69	lb
say5a	113	And how much would you say that the political system in [country] allows people like you to have a say in what the government does?	1 not at all / 2 very little / 3 some / 4 a lot / 5 a great deal	0.48	-0.39, 0.57, 1.65, 2.67	ess, wvs
corrupt4a	111	How widespread do you think the problem of corruption is in	1 very widespread / 2 fairly widespread / 3 fairly rare / 4 very rare	0.67	-1.06, 0.47, 2.37	eb
corrupt_party2	111	Do you think that the giving and taking of bribes, and the abuse of positions of power for personal gain, are widespread among any of the following? Political parties	0 not mentioned / 1 mentioned	1.54	1.31	eb
right5	109	Most of the time we can trust people in government to do what is right	1 Strongly agree / 5 Strongly disagree	0.70	-1.40, 0.55, 1.57, 2.91	isspp, usgss
get5	108	Most politicians are in politics only for what they can get out of it personally	1 agree strongly / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 disagree strongly	0.49	-0.78, 0.37, 1.11, 2.15	isspp
corrupt_pol2	106	Do you think that the giving and taking of bribes, and the abuse of positions of power for personal gain, are widespread among any of the following? Politicians at the national level	0 not mentioned / 1 mentioned	1.11	1.47	eb
say4	103	However you look at it, people like me have no influence on what the government does	1 completely agree / 2 tend to agree / 3 tend to disagree / 4 completely disagree	1.14	-1.97, 0.19, 2.24	allbus, uspew, cnep, itanes, jgss, asianb, kobar, cnes, canadians, cdem, pewrel
satis_gov21	99	Here is a scale for ranking how our system of government works. Where on this scale would you put our current system of governing with free elections and many parties?	minus-100 the worst / -90 to 90 / 100 the best	0.43	-0.49, -0.28, 0.13, 0.38, 0.62, 1.13, 1.31, 1.51, 1.74, 1.93, 2.26, 2.37, 2.50, 2.62, 2.72, 3.04, 3.13, 3.25, 3.43, 3.59	neb
trust_mp7	87	How much trust do you have in Members of Parliament in general?	1 no trust / 2 3 4 5 6 7 a great deal of trust	0.45	-0.49, 0.22, 0.87, 1.55, 2.12, 2.64	besip, neb
sat_officials4	87	How satisfied are you with the way the people now in national office are handling the country's affairs?	1 very satisfied / 2 fairly satisfied / 3 fairly dissatisfied / 4 very dissatisfied	0.43	-0.46, 1.24, 2.53	wvs

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
big4a	77	Generally the state/government is run for the benefit of all the people	1 completely agree / 2 mostly agree / 3 mostly disagree / 4 completely disagree	0.33	0.81, 1.75, 2.57	pew
trust_parties7	77	To what extent do you trust each of these political institutions to look after your interests? Political parties	1 no trust / 2 3 4 5 6 7 great trust	0.45	-0.61, -0.06, 0.59, 1.34, 1.97, 2.48	neb
care5a	74	The government does not care much about what people like me think	1 disagree strongly / 2 somewhat disagree / 3 neither agree nor disagree / 4 somewhat agree / 5 agree	0.76	-1.16, 0.35, 1.07, 2.39	issp, canadians
sat_parties4	74	In your opinion, how is the work the political parties are doing	1 very good / 2 good / 3 bad / 4 very bad	0.44	-0.90, 1.05, 2.57	politbarometer, lb
say5b	73	And how much would you say that the political system in [country] allows people like you to have an influence on politics?	1 not at all / 2 very little / 3 some / 4 a lot / 5 a great deal	0.82	-2.39, -0.85, 0.90, 2.44	ess
corrupt_official	70	And in your opinion, about how many public officials in [COUNTRY] are involved in corruption?	1 almost none / 2 a few / 3 some / 4 quite a lot / 5 almost all	0.60	-0.93, 0.53, 1.70, 3.14	issp
corrupt_pol5a	70	In your opinion, about how many politicians in [COUNTRY] are involved in corruption?	1 almost none / 2 a few / 3 some / 4 quite a lot / 5 almost all	0.54	-0.84, 0.44, 1.46, 2.71	issp
care4a	64	In your opinion are politicians concerned with what people like yourself think?	1 a lot / 2 some / 3 a little / 4 not at all	0.57	-0.17, 1.20, 2.33	pew, uspew, fnes
say5e	60	The ordinary person has no influence on politics	1 strongly disagree / 2 disagree / 3 neither agree nor disagree / 4 agree / 5 strongly agree	1.10	-1.85, 0.43, 1.53, 3.69	issp, ines
will2a	59	Which of the following words describes your perception of the government of [this country]? READ OUT. Responds to the will of the people	0 not mentioned / 1 mentioned	0.11	0.59	gallup
care5	55	I don't think public officials care much what people like me think	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	0.65	-1.42, 0.06, 0.94, 2.37	ases, asiab, icnl, aes, caucasusb
corrupt_official	52	How widespread do you think bribe taking and corruption is in this country?	1 almost no public officials engaged in it / 2 a few are / 3 most are / 4 almost all public officials are engaged in it	0.44	-0.49, 1.24, 2.42	wvs
resp_gov4	52	How well do you think the government responds to what people want?	1 very responsive / 2 somewhat responsive / 3 not very responsive / 4 not responsive	1.09	-1.98, 1.15, 4.30	asianb
corrupt_pol5	49	Thinking about politicians of [COUNTRY], how many to you think are involved in corruption?	1 none / 2 less than half / 3 half of the politicians / 4 more than half / 5 all	0.75	-1.67, -0.01, 1.12, 2.66	amb
parties7	48	To what extent do political parties listen to people like you?	1 not at all / 2 3 4 5 6 7 a lot	0.51	-0.86, -0.23, 0.50, 1.15, 1.72, 2.30	amb
rep_parties7	47	Thinking about political parties in general, to what extent do [nationality] political parties represent their voters well?	1 not at all / 2 3 4 5 6 7 a lot	0.44	-0.58, 0.06, 0.81, 1.47, 2.02, 2.54	amb
corrupt_gov4a	43	How widespread corruption in national government	1 almost everyone is corrupt / 2 most officials are corrupt / 3 not a lot of officials are corrupt / 4 hardly anyone is involved	0.39	-0.47, 0.88, 2.21	asianb

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
care5d	41	Some people say that political parties in Australia care what ordinary people think. Others say that political parties in Australia don't care what ordinary people think. Where would you place your view on this scale from 1 to 5?	1 political parties care what ordinary people think / 2 3 / 5 political parties don't care what ordinary people think	1.29	-1.67, 0.22, 2.14, 3.54	cses, aes, nzes
care4	41	Politicians don't care much about what people like me think	1 strongly agree / 2 agree / 4 disagree / 5 strongly disagree	0.56	-0.33, 1.11, 2.34	pew, cnepl, fsdeletion
care5f	37	Politicians don't care much about what people like me think	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	0.73	-1.51, 0.17, 0.96, 2.40	cnepl, nzes
care4f	36	Do you think that the political leaders are concerned about the issues that interest you?	1 a lot / 2 fairly / 3 a little / 4 not at all	0.74	-1.59, -0.31, 1.82	lb
say5c	35	Generally speaking, people like me don't have the power to influence government policy or actions	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	0.92	-2.07, -0.22, 0.94, 2.81	asiab
big5b	34	Do you think that the leaders of political parties in this country are more concerned with serving the interests of the people, or more concerned with advancing their own political ambitions, or haven't you heard enough to say?	1 more to serve their own political ambitions – strongly agree / 2 more to serve their own political ambitions - agree / 3 neither agree nor disagree / 4 more to serve the people – agree / 5 more to serve the people – strongly agree	0.79	-1.33, -0.07, 0.33, 1.66	afrob
corrupt_mp4	33	How many are corrupt? Members of Parliament	1 none / 2 some of them / 3 most of them / 4 all of them	0.08	0.73, 2.05, 2.88	lits
corrupt_officials4	33	How many are corrupt? Government officials	1 none / 2 some of them / 3 most of them / 4 all of them	0.19	0.57, 2.08, 2.97	lits
care2c	33	Which statement comes closer to your own views — even if neither is exactly right. Most government officials care what people like me think [OR] Most government officials DO NOT care what people like me think	1 most government officials care / 2 most government officials do not care			pew
corrupt_gov5	33	There is widespread corruption among those who govern the country	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	0.39	-0.41, 0.41, 1.04, 2.12	asiab
right4e	33	Please indicate to what extent you trust the following institutions to operate in the best interests of society. Parliament	1 trust a lot / 2 trust to a degree / 3 don't really trust / 4 don't trust at all	0.78	-0.38, 1.76, 3.40	asiab
touch5a	33	Generally speaking, the people who are elected to the [NATIONAL PARLIAMENT] stop thinking about the public once they're elected	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	0.48	-0.77, 0.32, 1.06, 2.18	asiab
say4e	32	People like me have too little influence in what the Government does	1 strongly agree / 2 tend to agree / 3 tend to disagree / 4 strongly disagree	1.17	-1.83, -0.30, 1.70	eb
say4f	32	Voting gives people like me some say about how government runs things	1 completely agree / 2 mostly agree / 3 mostly disagree / 4 completely disagree	2.02	-0.10, 3.51, 6.01	pewrel, uspew
vote5	31	Political parties are only interested in my vote and not in my opinions	1 completely agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 completely disagree	0.70	-1.58, 0.19, 0.98, 2.42	bsa, bes, gles, icnl, belgiumes, nores

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
say2	27	People like me don't have any say about what the government does	1 agree / 2 disagree	0.59	1.17	isspp, anes, npes, cnes
corrupt_pol4a	27	Most politicians are corrupt. Does this statement describe	1 very well / 2 somewhat well / 3 not too well / 4 not well at all	0.48	0.48, 1.33, 2.20	pew
right4d	27	Please indicate to what extent you trust the following institutions to operate in the best interests of society. Your central government	1 trust a lot / 2 trust to a degree / 3 don't really trust / 4 don't trust at all	0.78	0.31, 2.33, 4.10	asiab
trust_pol4	26	How much trust do you have in Danish politicians in general	1 great trust / 2 trust / 3 little trust / 4 hardly any trust	0.38	-0.88, 0.69, 1.82	som, dkss
care2a	24	Do you ever feel that the people running the country don't really care what happens to people like you	1 yes / 2 no	2.08	0.05	eb
right4b	22	How much do you trust British governments of any party to place the needs of the nation above the interests of their own political party?	1 almost always / 2 most of time / 3 some of time / 4 almost never	0.41	-0.53, 0.70, 1.83	bsa
care11	21	How much would you say that politicians care what people like you think?	0 not at all / 123456789 / 10 completely	0.60	-1.81, -1.41, -0.70, -0.08, 0.38, 0.88, 1.24, 1.69, 2.14, 2.52	ess
say11a	21	And how much would you say that the political system in [country] allows people like you to have a say in what the government does?	0 not at all / 123456789 / 10 completely	0.75	-1.91, -1.52, -0.78, -0.15, 0.33, 0.91, 1.32, 1.88, 2.41, 2.81	ess
say11b	21	And how much would you say that the political system in [country] allows people like you to have an influence on politics?	0 not at all / 123456789 / 10 completely	0.56	-1.37, -1.02, -0.40, 0.12, 0.50, 0.94, 1.28, 1.72, 2.15, 2.52	ess
touch4	21	Those elected to parliament soon lose touch with the problems of ordinary people	1 strongly agree / 2 somewhat agree / 3 somewhat disagree / 4 strongly disagree	0.78	-1.43, 0.01, 1.72	uspew, fsdelection, itanes
care2b	20	Some people say that the deputies and senators are concerned about what people think. Others say that they aren't. Which statement is closest to your way of thinking?	1 the deputies and senators are concerned about what people think / 2 the deputies and senators aren't concerned about what people think			npes, lb
equal4	19	Under our present system of government do you think people like yourself are treated equally and fairly by government	1 definitely agree / 2 somewhat agree / 3 disagree somewhat / 4 definitely disagree	0.51	-0.11, 1.36, 2.51	neb
corrupt_gov3	19	Do you think that quite a few of the people running the government are crooked, not very many are, or do you think hardly any of them are crooked?	1 quite a few / 2 not many / 3 hardly any	0.59	-0.04, 1.41	anes
vote2	19	Parties are only interested in people's votes, not in their opinions	1 agree / 2 disagree	0.97	0.91	anes, npes
care4b	19	Government officials seriously consider citizens' opinions	1 strongly agree / 2 agree / 3 disagree / 4 strongly disagree	0.53	-0.69, 0.80, 2.21	fsdelection, kobar, arabb

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
touch5	18	Those elected to Parliament soon lose touch with the people	1 agree strongly / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 disagree strongly	0.56	-1.51, 0.05, 0.70, 2.11	bsa, bes, icnl
say4b	18	Under our present system of government how much influence do you think people like yourself can have on government?	1 a lot of influence / 2 some influence / 3 not much influence / 4 no influence	0.86	-1.87, 0.07, 1.71	neb
say4d	18	I can have influence on the national government	1 agree / 2 quite agree / 3 rather disagree / 4 disagree	0.87	-0.97, 0.03, 1.45	eurasiab, fsdelection
right4c	17	And how much do you trust politicians of any party in Britain to tell the truth when they are in a tight corner?	1 just about always / 2 most of the time / 3 only some of the time / 4 almost never	0.62	-1.56, -0.29, 1.29	bsa
big2a	16	In general, would you say the government is run for the benefit of all the people in	1 benefit all / 2 benefit few groups	0.51	1.26	pew
big4b	16	How much of the time do you think elected leaders, like parliamentarians or local councilors, try their best: To look after the interests of people like you?	0 never / 1 some of the time / 2 most of the time / 3 always	0.38	-0.73, 0.25, 1.83	afrob
say4a	16	How much of the time do you think elected leaders, like parliamentarians or local councilors, try their best: To listen to what people like you have to say?	0 never / 1 some of the time / 2 most of the time / 3 always	0.26	-0.61, 0.32, 1.69	afrob
care5b	15	Politicians do not care about what people like me think	1 completely agree / 2 somewhat agree / 3 partly agree-disagree / 4 somewhat disagree / 5 completely disagree	0.43	-0.75, 0.32, 1.02, 1.91	bes, besip, gles, autnes
right2	15	The people who run the country are more concerned with themselves than with the good of the country	1 tend to agree / 2 tend to disagree	0.41	0.70	eb
care4d	14	Politicians don't care much about what people like me think	1 completely agree / 2 tend to agree / 3 tend to disagree / 4 completely disagree	0.93	-1.38, 0.44, 2.07	allbus, belgiumes, cnes, canadienes, cdem
care2	13	I don't think public officials care much what people like me think	1 agree / 2 disagree	0.79	0.47	politbarometer, anes, cispol
care3	13	Public officials don't care much what people like me think	1 agree / 2 disagree / 3 neither agree nor disagree	0.51	0.78, 1.16	anes
say3	13	People like me don't have any say about what the government does	1 agree / 2 disagree / 3 neither agree nor disagree	0.58	1.12, 1.41	anes
care5e	13	If people like me let the politicians know what we think, then they will take our opinions into account	1 completely agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 completely disagree	1.40	-3.25, -1.17, 0.40, 2.67	dkes, belgiumes
care11a	12	How much weight do politicians attach to opinions presented to them by ordinary people	0 none at all / 123456789 / 10 very large	0.58	-1.71, -1.41, -0.85, -0.31, 0.15, 0.72, 1.04, 1.45, 1.89, 2.34	cld
trust_mp4	12	In general, how much confidence do you have in the way the following groups do their job? - Parliamentarians	1 very high trust / 2 quite high trust / 3 quite low trust / 4 very low trust	0.51	-1.14, 0.41, 1.58	som

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
trust_pol5a	12	Do you think that politicians are in general trustworthy, that many of them are trustworthy, some are trustworthy, few, or perhaps none?	1 in general / 2 many / 3 some / 4 few / 5 none	0.80	-1.12, 0.18, 1.94, 3.73	icenes
touch2	10	Generally speaking those we elect to Congress in Washington lose touch with people pretty quickly	1 agree / 2 disagree	1.42	-0.17	anes, npes
right5a	10	You can generally trust that our political leaders make the right decisions for the country	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	1.04	-1.98, 0.51, 1.52, 2.95	dkes
say5d	10	People like me can vote, but we can't do anything else to influence politics	1 completely agree / 2 somewhat agree / 3 yes and no / 4 somewhat disagree / 5 completely disagree	1.28	-0.57, 1.05, 1.33, 2.95	nores
big5	10	Would you say the government is run by a few big interests looking out for themselves, or that it is run for the benefit of all the people?	1 entirely run for the big interests / 2 mostly run for the big interests / 3 about half and half / 4 mostly run for the benefit of all / 5 entirely run for the benefit of all	0.57	-1.06, 0.43, 1.60, 2.82	nsss, aes
right4a	10	In general, do you feel that the people in government are too often interested in looking after themselves, or do you feel that they can be trusted to do the right thing nearly all the time?	1 Usually look after themselves / 2 Sometimes look after themselves / 3 Sometimes can be trusted to do the right thing / 4 Usually can be trusted to do the right thing	0.59	0.12, 1.10, 1.79	aes
big5a	10	The New Zealand government is largely run by a few big interests	1 strongly agree / 2 agree / 3 neither / 4 disagree / 5 strongly disagree	0.57	-0.79, 0.74, 1.33, 2.55	nzes
self_min4	9	Ministers and state secretaries are primarily concerned about their personal interests	1 fully agree / 2 agree / 3 disagree / 4 fully disagree	0.66	-0.79, 1.48, 2.73	npes
trust_pol5	8	Danish politicians in general are trustworthy	1 strongly agree / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 strongly disagree	0.05	0.00, 0.51, 0.90, 1.15	fsdeletion, dkes, formpubop
say7	8	People like me don't have any say about what the government does	1 strongly agree / 2 agree / 3 somewhat agree / 4 neither agree nor disagree / 5 somewhat disagree / 6 disagree / 7 strongly disagree	0.50	-0.62, 0.20, 0.63, 0.92, 1.37, 2.13	norcs, eass, jgss
big4c	8	The nation is run by a powerful few and ordinary citizens cannot do much about it	1 strongly agree / 2 somewhat agree / 3 somewhat disagree / 4 strongly disagree	1.01	-1.23, 1.08, 3.69	asianb
corrupt_gov4	8	Now I am going to read you a list of things that may be problems in our country. Please tell me if you think it is a very big problem, a moderately big problem, a small problem or not a problem at all: government corruption	1 very big problem / 2 moderately big problem / 3 small problem / 4 not a problem at all	0.30	-1.90, -0.90, 0.15	pew
trust_parl7	7	Please tell me for each institution or organisation how much trust you place in it: Bundestag	1 no trust at all / 2 3 4 5 6 / 7 great deal of trust	0.59	-0.85, 0.04, 0.89, 1.69, 2.36, 3.03	allbus
right5b	7	You can trust the government to do what is right most of the time	1 strongly agree / 2 agree / 3 neither / 4 disagree / 5 strongly disagree	0.53	-0.64, 1.20, 1.84, 3.02	nzes
say2a	6	The average person has considerable influence on politics	1 agree / 2 disagree	1.15	0.00	issp

Table A1: Survey Items Used to Estimate Public Political Discontent (*continued*)

Survey Item Code	Country-Years	Question Text	Response Categories	Dispersion	Difficulties	Survey Dataset Codes*
trust_parl3	6	I am going to name some institutions in this country. Would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?	1 a great deal of confidence / 2 only some confidence / 3 hardly any confidence at all	0.40	0.10, 1.72	pgss
vote4	6	Political parties are only interested in people's votes, not their opinions	1 strongly agree / 2 somewhat agree / 3 somewhat disagree / 4 strongly disagree	0.59	-0.79, 0.51, 1.62	fsdelection, itanes
corrupt_pol4b	6	How widespread do you think corruption is among Icelandic politicians?	1 very widespread / 2 quite widespread / 3 not very widespread / 4 hardly happens at all	0.39	-0.32, 0.94, 1.90	icenes
say4h	5	People like me have no influence on what the different governments do	1 strongly agree / 2 agree / 3 disagree / 4 strongly disagree	1.16	-0.43, 0.58, 1.77	formpubop

* Survey dataset codes correspond to those used in the DCPOtools R package.

Table A2: Source Survey Information

Survey Dataset Code*	Citation
aes1993	Jones, Roger; McAllister, Ian; Denemark, David; Gow, David, 2017, "Australian Election Study, 1993", doi:10.4225/87/ZZ3NOB, ADA Dataverse, V1, UNF:6:3C/DZ94Ci0V2mfL02PVpXw==
aes1996	Jones, Roger; McAllister, Ian; Gow, David, 2017, "Australian Election Study, 1996", doi:10.4225/87/NSDHWM, ADA Dataverse, V1, UNF:6:V05mNiOGYLZnBaihME2SIA==
aes1998	Bean, Clive; Gow, David; McAllister, Ian, 2017, "Australian Election Study, 1998", doi:10.4225/87/FFBWUU, ADA Dataverse, V2, UNF:6:pmAXB4lfnfvlseqWTWK0kg==
aes2001	Bean, Clive; Gow, David; McAllister, Ian, 2017, "Australian Election Study, 2001", doi:10.4225/87/CALXMK, ADA Dataverse, V1, UNF:6:8dudxHV83HO/5+itv3DNjA==
aes2004	Bean, Clive; McAllister, Ian; Gibson, Rachel; Gow, David, 2017, "Australian Election Study, 2004", doi:10.4225/87/G9ITIO, ADA Dataverse, V1, UNF:6:Qer+KzJrJC+zIC3Gm6qDmw==
aes2007	Bean, Clive; McAllister, Ian; Gow, David, 2017, "Australian Election Study, 2007", doi:10.4225/87/ZBUOW0, ADA Dataverse, V1, UNF:6:D7a6fhN+szVMSQF9xIh5+A==
aes2010	McAllister, Ian; Bean, Clive; Gibson, Rachel Kay; Pietsch, Juliet, 2017, "Australian Election Study, 2010", doi:10.4225/87/CYJNSM, ADA Dataverse, V2, UNF:6:3iyzr2dBiHOrVkbafFkRZA==
aes2013	Bean, Clive; McAllister, Ian; Pietsch, Juliet; Gibson, Rachel Kay, 2017, "Australian Election Study, 2013", doi:10.4225/87/WDBBAS, ADA Dataverse, V3, UNF:6:6gMySFLvbEH1ccG58om4Sg==
aes2016	McAllister, Ian; Makkai, Toni; Bean, Clive; Gibson, Rachel Kay, 2017, "Australian Election Study, 2016", doi:10.4225/87/7OZCZA, ADA Dataverse, V2, UNF:6:TNmUHDn0ZNSIM94TQphWw==
aes2019	McAllister, Ian; Bean, Clive; Gibson, Rachel; Sheppard, Jill; Cameron, Sarah, 2019, "Australian Election Study, 2019", doi:10.26193/KMAMMW, ADA Dataverse, V2
afrob2	Afrobarometer, 2006, Afrobarometer Merged Round 2 Data (16 countries) (2004) [Dataset]
afrob3	Afrobarometer, 2008, Afrobarometer Merged Round 3 Data (18 countries) (2005) [Dataset]
afrob4	Afrobarometer, 2010, Afrobarometer Merged Round 4 Data (20 countries) (2008) [Dataset]
afrob5	Afrobarometer, 2015, Afrobarometer Merged Round 5 Data (34 countries) (2011-2013) [Dataset]
afrob6	Afrobarometer, 2016, Afrobarometer Merged Round 6 Data (36 countries) (2016) [Dataset]
afrob7	Afrobarometer, 2020, Afrobarometer Merged Round 7 Data (34 countries) (2019) [Dataset]
afrob8	Afrobarometer, 2023, Afrobarometer Merged Round 8 Data (34 countries) (2022) [Dataset]
allbus	GESIS - Leibniz Institute for the Social Sciences (2020): German General Social Survey (ALLBUS) — Cumulation 1980-2018. GESIS Data Archive, Cologne. ZA5276 Data file Version 1.0.0, https://doi.org/10.4232/1.13483
amb_argentina2018	LAPOP (2020) Argentina LAPOP AmericasBarometer 2018 v1.0 [Dataset]
amb_argentina2021	LAPOP (2023) Argentina LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_argentina2023	LAPOP (2023) Argentina LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_belize2023	LAPOP (2023) Belize LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_bolivia2021	LAPOP (2022) Bolivia LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_bolivia2023	LAPOP (2023) Bolivia LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_brazil2021	LAPOP (2022) Brazil LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_brazil2023	LAPOP (2023) Brazil LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_canada2021	LAPOP (2022) Canada LAPOP AmericasBarometer 2021 v1.0 [Dataset]
amb_canada2023	LAPOP (2023) Canada LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_chile2021	LAPOP (2022) Chile LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_chile2023	LAPOP (2023) Chile LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_colombia2021	LAPOP (2022) Colombia LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_colombia2023	LAPOP (2023) Colombia LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_combo	LAPOP (2020) 2004-2018 LAPOP AmericasBarometer Merge, v1.0FREE [Dataset]
amb_costarica2021	LAPOP (2022) Costa Rica LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_costarica2023	LAPOP (2023) Costa Rica LAPOP AmericasBarometer 2023 v1.0 [Dataset]

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
amb_dominicanrepublic2021	LAPOP (2022) Dominican Republic LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_dominicanrepublic20	LAPOP (2023) Dominican Republic LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_ecuador2018	LAPOP (2020) Ecuador LAPOP AmericasBarometer 2018 v1.0 [Dataset]
amb_ecuador2021	LAPOP (2022) Ecuador LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_ecuador2023	LAPOP (2023) Ecuador LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_elsalvador2021	LAPOP (2022) El Salvador LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_elsalvador2023	LAPOP (2023) El Salvador LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_guatemala2021	LAPOP (2022) Guatemala LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_guatemala2023	LAPOP (2023) Guatemala LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_guyana2021	LAPOP (2022) Guyana LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_haiti2021	LAPOP (2022) Haiti LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_haiti2023	LAPOP (2023) Haiti LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_honduras2021	LAPOP (2022) Honduras LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_honduras2023	LAPOP (2023) Honduras LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_jamaica2021	LAPOP (2022) Jamaica LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_jamaica2023	LAPOP (2023) Jamaica LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_mexico2021	LAPOP (2022) Mexico LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_mexico2023	LAPOP (2023) Mexico LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_nicaragua2021	LAPOP (2022) Nicaragua LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_panama2018	LAPOP (2020) Panama LAPOP AmericasBarometer 2018 v1.0 [Dataset]
amb_panama2021	LAPOP (2022) Panama LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_panama2023	LAPOP (2023) Panama LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_paraguay2021	LAPOP (2022) Paraguay LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_paraguay2023	LAPOP (2023) Paraguay LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_peru2021	LAPOP (2022) Peru LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_peru2023	LAPOP (2023) Peru LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_suriname2023	LAPOP (2023) Surinam LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_uruguay2018	LAPOP (2020) Uruguay LAPOP AmericasBarometer 2018 v1.0 [Dataset]
amb_uruguay2021	LAPOP (2022) Uruguay LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_uruguay2023	LAPOP (2023) Uruguay LAPOP AmericasBarometer 2023 v1.0 [Dataset]
amb_us2010	LAPOP (2020) United States LAPOP AmericasBarometer 2010 v1.0 [Dataset]
amb_us2018	LAPOP (2020) United States LAPOP AmericasBarometer 2018 v1.0 [Dataset]
amb_us2021	LAPOP (2022) United States LAPOP AmericasBarometer 2021 v1.2 [Dataset]
amb_us2023	LAPOP (2023) United States LAPOP AmericasBarometer 2023 v1.0 [Dataset]
anes_combo	American National Election Studies. 2018. ANES Time Series Cumulative Data File [dataset and documentation]. December 2018 version. www.electionstudies.org
arabb1	Arab Barometer, 2019, Arab Barometer Wave 1, 2006-2009 [Dataset]
arabb2	Arab Barometer, 2019, Arab Barometer Wave 2, 2010-2012 [Dataset]
ases2000	Inoguchi, Takashi. Asia Europe Survey (ASES): A Multinational Comparative Study in 18 Countries, 2001. ICPSR22324-v1. Ann Arbor, MI: Inter-university Consortium of Political and Social Research [distributor], 2008-06-24. http://doi.org/10.3886/ICPSR22324.v1
asiab2003	University of Tokyo. Institute of Oriental Culture. AsiaBarometer, 2003. Inter-university Consortium for Political and Social Research [distributor], 2007-11-13. https://doi.org/10.3886/ICPSR04300.v2
asiab2005	Inoguchi, Takashi. AsiaBarometer, 2005. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2022-02-24. https://doi.org/10.3886/E149101V5
asiab2006	Inoguchi, Takashi. AsiaBarometer, 2006. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2022-02-24. https://doi.org/10.3886/E163441V1
asiab2007	Inoguchi, Takashi. AsiaBarometer, 2007. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2022-02-25. https://doi.org/10.3886/E163461V2
asiab2008	Inoguchi, Takashi. AsiaBarometer, 2008. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2022-03-03. https://doi.org/10.3886/E163481V2
asianb1	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 1 Merge [Dataset], September 6, 2017
asianb2	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 2 Merge, 3rd Release [Dataset], July 24, 2017
asianb3	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 3 Merge [Dataset], August 18, 2017
asianb4	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 4 Merge, v1.5 [Dataset], December 11, 2018
asianb5_australia	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Australia [Dataset], August 3, 2021
asianb5_india	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 India [Dataset], September 5, 2022
asianb5_indonesia	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Indonesia [Dataset], September 5, 2022
asianb5_japan	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Japan [Dataset], September 5, 2022
asianb5_korea	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 South Korea [Dataset], August 8, 2021
asianb5_malaysia	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Malaysia [Dataset], August 19, 2021
asianb5_mongolia	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Mongolia [Dataset], December 17, 2020
asianb5_myanmar	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Myanmar [Dataset], September 5, 2022
asianb5_philippines	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Philippines [Dataset], December 23, 2020

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
asianb5_taiwan	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Taiwan [Dataset], August 5, 2019
asianb5_thailand	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Thailand [Dataset], August 5, 2021
asianb5_vietnam	Hu Fu Center for East Asian Democratic Studies, Asian Barometer Wave 5 Vietnam [Dataset], December 15, 2020
autnes2017	Wagner, Markus; Aichholzer, Julian; Eberl, Jakob-Moritz; Meyer, Thomas M.; Berk, Nicolai; Büttner, Nico; Boomgaarden, Hajo; Kritzinger, Sylvia; Müller, Wolfgang C., 2018, "AUTNES Online Panel Study 2017 (SUF edition)", https://doi.org/10.11587/I7QIYJ , AUSSDA, V4, UNF:6:qXpb3Rjb7GgLHw7J3wNrEA== [fileUNF]
belgiumes1991	Billiet, J., Swyngedouw, M., Carton, A., Beerten, R., Franckx, M., Frogner, A.P., Aish-Van Vaerenbergh, A.M., Diest, S. van, Rihoux, B., Winter, L. de, Katholieke Universiteit Leuven * Leuven, Belgique, Departement sociologie, ISPO (primary investigator), 2016, "Belgium, General Election Study 1991", https://doi.org/10.17026/dans-2za-cvds , DANS Data Station Social Sciences and Humanities, V3
belgiumes1995	Billiet, J., Swyngedouw, M., Katholieke Universiteit Leuven * Leuven, Belgique (primary investigator), 2016, "Belgium General Election Study 1995", https://doi.org/10.17026/dans-2b9-d6ac , DANS Data Station Social Sciences and Humanities, V3
belgiumes1999	Prof.Dr. Marc Swyngedouw, KU Leuven, Departement Sociologie, J. Billiet, KU Leuven, ISPO, A. Frognier, U.C. Louvain, PIOP (primary investigator), 2016, "Belgium General Election Study 1999", https://doi.org/10.17026/dans-z4z-zagg , DANS Data Station Social Sciences and Humanities, V2
belgiumes2003	Swyngedouw, Prof. dr. M. (Institute of Social and Political Opinion Research ISPO - KU Leuven, 2004, "Belgium General Election Study 2003", https://doi.org/10.17026/dans-z2x-hfdx , DANS Data Station Social Sciences and Humanities, V1, UNF:6:6uuZYZZMgXTjZKpmolY2+A== [fileUNF]
belgiumes2007	M.M.H. Swyngedouw; A.P. Frognier, 2008, "Belgium General Election Study 2007", https://doi.org/10.17026/dans-xyh-cces , DANS Data Station Social Sciences and Humanities, V2, UNF:6:oSydQlfdsX+Y8ynzIM7bMw== [fileUNF]
belgiumes2014	M. Swyngedouw, 2015, "Belgian National Election Study 2014", https://doi.org/10.17026/dans-22u-yvyu , DANS Data Station Social Sciences and Humanities, V1, UNF:6:pCbb5HrF6dlgLxFROcw7UA== [fileUNF]
bes1987	Heath, A., Jowell, R. and Curtice, J.K., British General Election Study, 1987; Cross-Section Survey [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], April 1993.
bes1992	Heath, A. et al. , British General Election Study, 1992; Cross-Section Survey [computer file]. Colchester, Essex: UK Data Archive [distributor], April 1993.
bes1997	Heath, A. et al. , British General Election Study, 1997; Cross-Section Survey [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], May 1999.
bes2001	Clarke, H. et al. , British General Election Study, 2001; Cross-Section Survey [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2003.
bes2005_post	Clarke, H. et al. , British Election Study, 2005: Face-to-Face Survey [computer file]. Colchester, Essex: UK Data Archive [distributor], November 2006.
bes2015	Fieldhouse, E., Green, J., Evans, G., Schmitt, H., van der Eijk, C., Mellon, J., Prosser, C. (2019). British Election Study, 2015: Face-to-Face Post-Election Survey. [data collection]. UK Data Service. SN: 7972, DOI: 10.5255/UKDA-SN-7972-1
bes2017	Fieldhouse, E., Green, J., Evans, G., Schmitt, H., van der Eijk, C., Mellon, J., Prosser, C. (2019). British Election Study, 2017: Face-to-Face Post-Election Survey. [data collection]. UK Data Service. SN: 8418, DOI: 10.5255/UKDA-SN-8418-1
bes2019	Fieldhouse, E., Green, J., Evans, G., Prosser, C., de Geus, R., Bailey, J., Schmitt, H., van der Eijk, C., Mellon, J. (2022). British Election Study, 2019: Post-Election Random Probability Survey. [data collection]. UK Data Service. SN: 8875, DOI: 10.5255/UKDA-SN-8875-1
besip_long	Fieldhouse, E. Green, J. Evans, G. Mellon, J. Prosser, C. Bailey, J. Griffiths, J. and Perrett, S. (2024). Teaching Version of the British Election Study Internet Panel. DOI:10.48420/25460980.v1
bsa1994	Social and Community Planning Research. British Social Attitudes Survey, 1994. ICPSR03097-v2. Colchester, Essex, England: United Kingdom Data Archive/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2005-07-22. http://doi.org/10.3886/ICPSR03097.v2
bsa1996	Social and Community Planning Research. BRITISH SOCIAL ATTITUDES SURVEY, 1996. ICPSR03099-v2. Brentwood, Essex, England: Social and Community Planning Research [producer], 1996. Colchester, Essex, England: UK Data Archive/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2006-07-26. http://doi.org/10.3886/ICPSR03099.v2
bsa1997	Social and Community Planning Research. BRITISH SOCIAL ATTITUDES SURVEY, 1997. ICPSR03100-v2. Brentwood, Essex, England:Social and Community Planning Research [producer], 1997. Colchester, Essex, England: UK Data Archive/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2006-07-26. http://doi.org/10.3886/ICPSR03100.v2
bsa1998	Social and Community Planning Research, British Social Attitudes Survey, 1998 [computer file]. Colchester, Essex: UK Data Archive [distributor], June 2000. SN: 4131, http://dx.doi.org/10.5255/UKDA-SN-4131-1
bsa2000	National Centre for Social Research, British Social Attitudes Survey, 2000 [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2002. SN: 4486, http://dx.doi.org/10.5255/UKDA-SN-4486-1
bsa2001	National Centre for Social Research. British Social Attitudes Survey, 2001. ICPSR03900-v1. Colchester, Essex, England: United Kingdom Data Archive/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2004. http://doi.org/10.3886/ICPSR03900.v1
bsa2002	National Centre for Social Research, British Social Attitudes Survey, 2002 [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2004. SN: 4838, http://dx.doi.org/10.5255/UKDA-SN-4838-1
bsa2003	National Centre for Social Research, British Social Attitudes Survey, 2003 [computer file]. Colchester, Essex: UK Data Archive [distributor], September 2005. SN: 5235, http://dx.doi.org/10.5255/UKDA-SN-5235-1
bsa2005	National Centre for Social Research, British Social Attitudes Survey, 2005 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], October 2007. SN: 5618, http://dx.doi.org/10.5255/UKDA-SN-5618-1
bsa2006	National Centre for Social Research, British Social Attitudes Survey, 2006 [computer file]. Colchester, Essex: UK Data Archive [distributor], April 2008. SN: 5823, http://dx.doi.org/10.5255/UKDA-SN-5823-1

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
bsa2007	National Centre for Social Research, British Social Attitudes Survey, 2007 [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2009. SN: 6240, http://dx.doi.org/10.5255/UKDA-SN-6240-1
bsa2009	National Centre for Social Research, British Social Attitudes Survey, 2009 [computer file]. Colchester, Essex: UK Data Archive [distributor], February 2011. SN: 6695, http://dx.doi.org/10.5255/UKDA-SN-6695-1
bsa2010	National Centre for Social Research, British Social Attitudes Survey, 2010 [computer file]. Colchester, Essex: UK Data Archive [distributor], February 2012. SN: 6969, http://dx.doi.org/10.5255/UKDA-SN-6969-1
bsa2011	NatCen Social Research, British Social Attitudes Survey, 2011 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], January 2014. SN: 7237, http://dx.doi.org/10.5255/UKDA-SN-7237-2
bsa2012	NatCen Social Research, British Social Attitudes Survey, 2012 [computer file]. Colchester, Essex: UK Data Archive [distributor], April 2014. SN: 7476, http://dx.doi.org/10.5255/UKDA-SN-7476-1
bsa2013	NatCen Social Research, British Social Attitudes Survey, 2013 [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2014. SN: 7500, http://dx.doi.org/10.5255/UKDA-SN-7500-1
bsa2016	NatCen Social Research. (2017). British Social Attitudes Survey, 2016. [data collection]. UK Data Service. SN: 8252, http://doi.org/10.5255/UKDA-SN-8252-1
bsa2017	NatCen Social Research. (2019). British Social Attitudes Survey, 2017. [data collection]. UK Data Service. SN: 8450, http://doi.org/10.5255/UKDA-SN-8450-1
bsa2019	NatCen Social Research. (2021). British Social Attitudes Survey, 2019. [data collection]. UK Data Service. SN: 8772, http://doi.org/10.5255/UKDA-SN-8772-1
bsa2020	NatCen Social Research. (2022). British Social Attitudes Survey, 2020. [data collection]. UK Data Service. SN: 9005, DOI: 10.5255/UKDA-SN-9005-1
bsa_combo	Social and Community Planning Research. BRITISH SOCIAL ATTITUDES SURVEY, 1983-1991: [CUMULATIVE FILE]. ICPSR03095-v2. Brentwood, Essex, England: Social and Community Planning Research [producer], 1996. Colchester, Essex, England: UK Data Archive/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2008-01-23. http://doi.org/10.3886/ICPSR03095.v2
canadianes2004	Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2004. The 2004 Canadian Election Study. [dataset]
canadianes2006	Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2006. The 2006 Canadian Election Study. [dataset]
canadianes2008	Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2008. The 2008 Canadian Election Study. [dataset]
canadianes2011	Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2011. The 2011 Canadian Election Study. [dataset]
canadianes2015	Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2015. The 2015 Canadian Election Study. [dataset]
canadianes2019	Stephenson, Laura B; Harell, Allison; Rubenson, Daniel; Loewen, Peter John, 2020, "2019 Canadian Election Study (CES) - Online Survey", https://doi.org/10.7910/DVN/DUS88V , Harvard Dataverse, V3, UNF:6:L0A0hDxh6b2mmK2nmQDoyw== [fileUNF]
canadianes2021	Stephenson, Laura B; Harell, Allison; Rubenson, Daniel; Loewen, Peter John, 2022, "2021 Canadian Election Study (CES)", https://doi.org/10.7910/DVN/XBZHKC , Harvard Dataverse, V3, UNF:6:UImDcX6kd5FnExyB5kM18Q== [fileUNF]
caucasusb2021	Caucasus Research Resource Centers. 2021 "Caucasus Barometer". Retrieved from https://caucasusbarometer.org/downloads/cb2021/CB__2022__Regional__24.06.2022.dta
cdem2022	Harell, Allison; Stephenson, B. Laura; Rubenson, Daniel; Loewen, Peter John, 2023, "Democracy Checkup, 2022 [Canada]", https://doi.org/10.5683/SP3/TEKM3T , Borealis, V1, UNF:6:ufqbMikbXcaHqVhbaEXR3w== [fileUNF]
cid_combo	Andersen, Jørgen Goul, Deth, Jan W. van, Geurts, Peter, Viegas, José Manuel Leite, Badescu, Gabriel, Selle, Per, Teorell, Jan, Iglic, Hajdeja, Montero, José Ramón, Westholm, Anders, and Armingeon, Klaus (2007). Citizenship, Involvement, Democracy. GESIS Data Archive, Cologne. ZA4492 Data file Version 1.0.0, https://doi.org/10.4232/1.4492 .
cispol1989	Centro de Investigaciones Sociologicas. 1989. "Cultura Política (II)." Estudio 1788.
cnepl_combo	Mershon Center for International Security Studies. 2023. "Comparative National Elections Project, Merge 54."
cnes1993	Johnston, Richard, Blais, Andre, Brady, Henry E., Gidengil, Elisabeth, and Nevitte, Neil. Canadian Election Study, 1993: Incorporating the 1992 Referendum Survey on the Charlottetown Accord. Inter-university Consortium for Political and Social Research [distributor], 1995-10-12. https://doi.org/10.3886/ICPSR06571.v1
cnes1997	Blais, Andre, Gidengil, Elisabeth, Nadeau, Richard, and Nevitte, Neil. Canadian Election Survey, 1997. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000-05-09. https://doi.org/10.3886/ICPSR02593.v3
cnes2000	Blais, Andre, Gidengil, Elisabeth, Nadeau, Richard, and Nevitte, Neil. Canadian Election Survey, 2000. Inter-university Consortium for Political and Social Research [distributor], 2004-06-23. https://doi.org/10.3886/ICPSR03969.v1
cses1	The Comparative Study of Electoral Systems (2015). CSES Module 1 Full Release. GESIS Data Archive, Cologne. ZA5179 Data file Version 3.0.0, https://doi.org/10.7804/cses.module1.2015-12-15
dkes1981	Center for Opinion and Analysis, Aalborg University, Danish Election Project 1981 [Dataset]
dkes1984	Center for Opinion and Analysis, Aalborg University, Danish Election Project 1984 [Dataset]
dkes1987	Center for Opinion and Analysis, Aalborg University, Danish Election Project 1987 [Dataset]
dkes1990	Center for Opinion and Analysis, Aalborg University, Danish Election Project 1990 [Dataset]
dkes1994	Center for Opinion and Analysis, Aalborg University, Danish Election Project 1994 [Dataset]
dkes1998	Center for Opinion and Analysis, Aalborg University, Danish Election Project 1998 [Dataset]
dkes2001	Center for Opinion and Analysis, Aalborg University, Danish Election Project 2001 [Dataset]
dkes2005	Center for Opinion and Analysis, Aalborg University, Danish Election Project 2005 [Dataset]

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
dkes2007	Center for Opinion and Analysis, Aalborg University, Danish Election Project 2007 [Dataset]
dkes2011	Center for Opinion and Analysis, Aalborg University, Danish Election Project 2011 [Dataset]
eass2012	Li, Lulu, Kim, Sang-Wook, Iwai, Noriko, and Fu, Yang-Chih. East Asian Social Survey (EASS), Cross-National Survey Data Sets: Network Social Capital in East Asia, 2012. Inter-university Consortium for Political and Social Research [distributor], 2021-10-07. https://doi.org/10.3886/ICPSR36277.v2
eb24	Kommission der Europäischen Gemeinschaften (2012). Eurobarometer 24 (Oct 1985). GESIS Data Archive, Cologne. ZA1542 Data file Version 1.0.1, https://doi.org/10.4232/1.10881 .
eb26	Commission of the European Communities, Brussels: Eurobarometer 26, September-November 1986. Helene Riffault, Faits et Opinions, Paris [Producer]; GESIS, Cologne [Publisher]: ZA1544, dataset version 1.0.1, doi:10.4232/1.10883.
eb30	Commission of the European Communities, Brussels: Eurobarometer 30, October-November 1988. Helene Riffault, Faits et Opinions, Paris [Producer]; GESIS, Cologne [Publisher]: ZA1715, dataset version 1.0.1, doi:10.4232/1.10887.
eb471	European Commission, Brussels: Eurobarometer 47.1, March-April 1997. International Research Associates (INRA), Brussels [Producer]; GESIS, Cologne [Publisher]: ZA2936, dataset version 1.0.1, doi:10.4232/1.10926.
eb48	European Commission, Brussels: Eurobarometer 48, October-November 1997. International Research Associates (INRA), Brussels [Producer]; GESIS, Cologne [Publisher]: ZA2959, dataset version 1.0.1, doi:10.4232/1.10929.
eb51	European Commission, Brussels: Eurobarometer 51.0, March-April 1999. INRA (Europe), Brussels [Producer]; GESIS, Cologne [Publisher]: ZA3171, dataset version 1.0.1, doi:10.4232/1.10931.
eb541	European Commission (2012). Eurobarometer 54.1 (Oct-Nov 2000). GESIS Data Archive, Cologne. ZA3387 Data file Version 1.1.0, https://doi.org/10.4232/1.10937 .
eb551	European Commission (2012). Eurobarometer 55.1 (Apr-May 2001). GESIS Data Archive, Cologne. ZA3507 Data file Version 1.0.1, https://doi.org/10.4232/1.10941 .
eb562	European Commission (2012). Eurobarometer 56.2 (Oct-Nov 2001). GESIS Data Archive, Cologne. ZA3627 Data file Version 1.0.1, https://doi.org/10.4232/1.10946 .
eb571	European Commission (2012). Eurobarometer 57.1 (Mar-May 2002). GESIS Data Archive, Cologne. ZA3639 Data file Version 1.0.1, https://doi.org/10.4232/1.10949 .
eb591	European Commission (2012). Eurobarometer 59.1 (Mar-Apr 2003). GESIS Data Archive, Cologne. ZA3904 Data file Version 1.0.1, https://doi.org/10.4232/1.10955 .
eb601	European Commission, Brussels: Eurobarometer 60.1, October-November 2003. European Opinion Research Group EEIG, Brussels [Producer]; GESIS, Cologne [Publisher]: ZA3938, dataset version 1.0.1, doi:10.4232/1.10958.
eb61	European Commission (2012). Eurobarometer 61 (Feb-Mar 2004). GESIS Data Archive, Cologne. ZA4056 Data file Version 1.0.1, https://doi.org/10.4232/1.10961 .
eb62	European Commission (2012). Eurobarometer 62.0 (Oct-Nov 2004). GESIS Data Archive, Cologne. ZA4229 Data file Version 1.1.0, https://doi.org/10.4232/1.10962 .
eb631	European Commission, Brussels: Eurobarometer 63.1, January-February 2005. TNS OPINION and SOCIAL, Brussels [Producer]; GESIS, Cologne [Publisher]: ZA4233, dataset version 1.1.0, doi:10.4232/1.10965.
eb634	European Commission (2012). Eurobarometer 63.4 (May-Jun 2005). GESIS Data Archive, Cologne. ZA4411 Data file Version 1.1.0, https://doi.org/10.4232/1.10968 .
eb642	European Commission (2012). Eurobarometer 64.2 (Oct-Nov 2005). GESIS Data Archive, Cologne. ZA4414 Data file Version 1.1.0, https://doi.org/10.4232/1.10970 .
eb643	European Commission, Brussels: Eurobarometer 64.3, November-December 2005. TNS OPINION and SOCIAL, Brussels [Producer]; GESIS, Cologne [Publisher]: ZA4415, data set version 1.0.1, doi:10.4232/1.10971.
eb652	European Commission (2012). Eurobarometer 65.2 (Mar-May 2006). GESIS Data Archive, Cologne. ZA4506 Data file Version 1.0.1, https://doi.org/10.4232/1.10974 .
eb661	European Commission, Brussels: Eurobarometer 66.1, September-October 2006. TNS OPINION and SOCIAL, Brussels [Producer]; GESIS, Cologne [Publisher]: ZA4526, dataset version 1.0.1, doi:10.4232/1.10980.
eb663	European Commission (2012). Eurobarometer 66.3 (Nov-Dec 2006). GESIS Data Archive, Cologne. ZA4528 Data file Version 2.0.1, https://doi.org/10.4232/1.10982 .
eb681	European Commission (2012). Eurobarometer 68.1 (Sep-Nov 2007). GESIS Data Archive, Cologne. ZA4565 Data file Version 4.0.1, https://doi.org/10.4232/1.10988 .
eb682	European Commission (2012). Eurobarometer 68.2 (Nov-Dec 2007). GESIS Data Archive, Cologne. ZA4742 Data file Version 4.0.1, https://doi.org/10.4232/1.10986 .
eb692	European Commission (2013). Eurobarometer 69.2 (Mar-May 2008). GESIS Data Archive, Cologne. ZA4744 Data file Version 5.0.0, https://doi.org/10.4232/1.11755 .
eb701	European Commission (2012). Eurobarometer 70.1 (Oct-Nov 2008). GESIS Data Archive, Cologne. ZA4819 Data file Version 3.0.2, https://doi.org/10.4232/1.10989 .
eb713	European Commission, Brussels: Eurobarometer 71.3, June-July 2009. TNS OPINION and SOCIAL, Brussels [Producer]; GESIS, Cologne [Publisher]: ZA4973, dataset version 3.0.0, doi:10.4232/1.11135.
eb722	European Commission (2012). Eurobarometer 72.2 (Sep-Oct 2009). GESIS Data Archive, Cologne. ZA4976 Data file Version 3.0.0, https://doi.org/10.4232/1.11137 .
eb724	European Commission (2012). Eurobarometer 72.4 (Oct-Nov 2009). GESIS Data Archive, Cologne. ZA4994 Data file Version 3.0.0, https://doi.org/10.4232/1.11141 .
eb734	European Commission (2012). Eurobarometer 73.4 (May 2010). GESIS Data Archive, Cologne. ZA5234 Data file Version 2.0.1, https://doi.org/10.4232/1.11479 .
eb742	European Commission (2013). Eurobarometer 74.2 (2010). GESIS Data Archive, Cologne. ZA5449 Data file Version 2.2.0, https://doi.org/10.4232/1.11626 .
eb761	European Commission and European Parliament, Brussels (2014). Eurobarometer 76.1 (2011). GESIS Data Archive, Cologne. ZA5565 Data file Version 4.0.0, https://doi.org/10.4232/1.11847 .

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
eb763	European Commission and European Parliament, Brussels (2014). Eurobarometer 76.3 (2011). GESIS Data Archive, Cologne. ZA5567 Data file Version 2.0.1, https://doi.org/10.4232/1.12007 .
eb773	European Commission (2015). Eurobarometer 77.3 (2012). GESIS Data Archive, Cologne. ZA5612 Data file Version 2.0.0, https://doi.org/10.4232/1.12050 .
eb781	European Commission, Brussels (2015). Eurobarometer 78.1 (2012). GESIS Data Archive, Cologne. ZA5685 Data file Version 2.0.0, https://doi.org/10.4232/1.12061 .
eb791	European Commission, Brussels (2016). Eurobarometer 79.1 (2013). GESIS Data Archive, Cologne. ZA5687 Data file Version 3.0.0, https://doi.org/10.4232/1.12448 .
eb793	European Commission, Brussels (2017). Eurobarometer 79.3 (2013). GESIS Data Archive, Cologne. ZA5689 Data file Version 2.0.0, https://doi.org/10.4232/1.12718 .
eb801	European Commission, Brussels (2017). Eurobarometer 80.1 (2013). GESIS Data Archive, Cologne. ZA5876 Data file Version 2.0.0, https://doi.org/10.4232/1.12768 .
eb812	European Commission, Brussels (2017). Eurobarometer 81.2 (March 2014). GESIS Data Archive, Cologne. ZA5913 Data file Version 2.0.0, https://doi.org/10.4232/1.12884 .
eb814	European Commission, Brussels (2018). Eurobarometer 81.4 (2014). GESIS Data Archive, Cologne. ZA5928 Data file Version 3.0.0, https://doi.org/10.4232/1.12956 .
eb823	European Commission, Brussels (2018). Eurobarometer 82.3 (2014). GESIS Data Archive, Cologne. ZA5932 Data file Version 3.0.0, https://doi.org/10.4232/1.13021 .
eb833	European Commission, Brussels (2018). Eurobarometer 83.3 (2015). GESIS Data Archive, Cologne. ZA5998 Data file Version 2.0.0, https://doi.org/10.4232/1.13133 .
eb843	European Commission, Brussels (2019). Eurobarometer 84.3 (2015). GESIS Data Archive, Cologne. ZA6643 Data file Version 4.0.0, https://doi.org/10.4232/1.13249 .
eb852	European Commission, Brussels (2020). Eurobarometer 85.2 (2016). GESIS Data Archive, Cologne. ZA6694 Data file Version 2.0.0, https://doi.org/10.4232/1.13438 .
eb861	European Commission and European Parliament, Brussels (2020). Eurobarometer 86.1 (2016). GESIS Data Archive, Cologne. ZA6697 Data file Version 2.0.0, https://doi.org/10.4232/1.13542 .
eb862	European Commission, Brussels (2020). Eurobarometer 86.2 (2016). GESIS Data Archive, Cologne. ZA6788 Data file Version 2.0.0, https://doi.org/10.4232/1.13602 .
eb873	European Commission and European Parliament, Brussels (2022). Eurobarometer 97.3 (2022). GESIS, Cologne. ZA7888 Data file Version 1.0.0, https://doi.org/10.4232/1.14055 .
eb881	European Commission and European Parliament, Brussels (2022). Eurobarometer 88.1 (2017). GESIS, Cologne. ZA6925 Data file Version 2.0.0, https://doi.org/10.4232/1.13896 .
eb882	European Commission, Brussels (2022). Eurobarometer 88.2 (2017). GESIS, Cologne. ZA6927 Data file Version 2.0.0, https://doi.org/10.4232/1.13918 .
eb883	European Commission, Brussels (2022). Eurobarometer 88.3 (2017). GESIS, Cologne. ZA6928 Data file Version 2.0.0, https://doi.org/10.4232/1.13938 .
eb891	European Commission, Brussels (2023). Eurobarometer 89.1 (2018). GESIS, Cologne. ZA6963 Data file Version 2.0.0, https://doi.org/10.4232/1.14082 .
eb902	European Commission, Brussels (2019). Eurobarometer 90.2 (2018). GESIS Data Archive, Cologne. ZA7488 Data file Version 1.0.0, https://doi.org/10.4232/1.13289 .
eb903	European Commission, Brussels (2019). Eurobarometer 90.3 (2018). GESIS Data Archive, Cologne. ZA7489 Data file Version 1.0.0, https://doi.org/10.4232/1.13254 .
eb912	European Commission, Brussels (2019). Eurobarometer 91.2 (2019). GESIS Data Archive, Cologne. ZA7562 Data file Version 1.0.0, https://doi.org/10.4232/1.13318 .
eb915	European Commission and European Parliament, Brussels (2019). Eurobarometer 91.5 (2019). GESIS Data Archive, Cologne. ZA7576 Data file Version 1.0.0, https://doi.org/10.4232/1.13393 .
eb923	European Commission, Brussels (2020). Eurobarometer 92.3 (2019). GESIS Data Archive, Cologne. ZA7601 Data file Version 1.0.0, https://doi.org/10.4232/1.13564 .
eb924	European Commission, Brussels (2020). Eurobarometer 92.4 (2019). GESIS Data Archive, Cologne. ZA7602 Data file Version 1.0.0, https://doi.org/10.4232/1.13652 .
eb931	European Commission, Brussels (2022). Eurobarometer 93.1 (2020). GESIS, Cologne. ZA7649 Data file Version 2.0.0, https://doi.org/10.4232/1.13866 .
eb941	European Commission and European Parliament, Brussels (2022). Eurobarometer 94.1 (2020). GESIS, Cologne. ZA7749 Data file Version 1.0.0, https://doi.org/10.4232/1.13927 .
eb943	European Commission, Brussels (2023). Eurobarometer 94.3 (2021). GESIS, Cologne. ZA7780 Data file Version 2.0.0, https://doi.org/10.4232/1.14076 .
eb953	European Commission, Brussels (2022). Eurobarometer 95.3 (2021). GESIS, Cologne. ZA7783 Data file Version 1.0.0, https://doi.org/10.4232/1.13826 .
eb961	European Commission and European Parliament, Brussels (2022). Eurobarometer 96.1 (2021). GESIS, Cologne. ZA7846 Data file Version 1.0.0, https://doi.org/10.4232/1.13882 .
eb963	European Commission, Brussels (2022). Eurobarometer 96.3 (2022). GESIS, Cologne. ZA7848 Data file Version 1.0.0, https://doi.org/10.4232/1.13908 .
eb972	European Commission, Brussels (2022). Eurobarometer 97.2 (2022). GESIS, Cologne. ZA7887 Data file Version 1.0.0, https://doi.org/10.4232/1.14033 .
eb975	European Commission and European Parliament, Brussels (2022). Eurobarometer 97.3 (2022). GESIS, Cologne. ZA7888 Data file Version 1.0.0, https://doi.org/10.4232/1.14055 .
eb982	European Commission, Brussels (2023). Eurobarometer 98.2 (2023). GESIS, Cologne. ZA7953 Data file Version 1.0.0, https://doi.org/10.4232/1.14081 .
eb994	European Commission, Brussels (2024). Eurobarometer 99.4 (2023). GESIS, Cologne. ZA7997 Data file Version 1.0.0, https://doi.org/10.4232/1.14167 .
ess1	European Social Survey European Research Infrastructure (ESS ERIC). (2019). ESS1 - integrated file, edition 6.6 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess1e06__6

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
ess10	European Social Survey European Research Infrastructure (ESS ERIC). (2023). ESS10 integrated file, edition 3.0 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess10e03__0
ess2	European Social Survey European Research Infrastructure (ESS ERIC). (2012). ESS2 - integrated file, edition 3.6 (Italy not included) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ESS2E03__6
ess2_it	European Social Survey European Research Infrastructure (ESS ERIC). (2012). ESS2 - Italy country file from main questionnaire [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess2it
ess3	European Social Survey European Research Infrastructure (ESS ERIC). (2018). ESS3 - integrated file, edition 3.7 (Latvia and Romania not included) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ESS3E03__7
ess4	European Social Survey European Research Infrastructure (ESS ERIC). (2019). ESS4 - integrated file, edition 4.5 (Austria and Lithuania not included) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess4e04__6
ess4_at	European Social Survey European Research Infrastructure (ESS ERIC). (2022). ESS4 - Austria (Fieldwork period 01.11.10 to 28.02.11) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess4at
ess4_lt	European Social Survey European Research Infrastructure (ESS ERIC). (2022). ESS4 - Lithuania (no design weights) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess4lt
ess5	European Social Survey European Research Infrastructure (ESS ERIC). (2019). ESS5 - integrated file, edition 3.4 (Austria not included) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess5e03__5
ess5_at	European Social Survey European Research Infrastructure (ESS ERIC). (2022). ESS5 - Austria (fieldwork period 24.05.13 to 10.10.13) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess5ate1__1
ess6	European Social Survey European Research Infrastructure (ESS ERIC). (2019). ESS6 - integrated file, edition 2.4 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess6e02__6
ess7	European Social Survey European Research Infrastructure (ESS ERIC). (2018). ESS7 - integrated file, edition 2.3 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess7e02__3
ess8	European Social Survey European Research Infrastructure (ESS ERIC). (2019). ESS8 - integrated file, edition 2.1 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess8e02__3
ess9	European Social Survey European Research Infrastructure (ESS ERIC). (2020). ESS9 - integrated file, edition 2.0 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess9e03__2
ess9_ro	European Social Survey European Research Infrastructure (ESS ERIC). (2020). ESS9 - Romania (participating on pilot basis) [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.21338/ess9roe01
eurasiab2001	Eurasia Barometer (2001). Eurasia Barometer 2001.
eurasiab2010	Eurasia Barometer (2010). Eurasia Barometer 2010.
feb450	European Commission, Brussels (2017). Flash Eurobarometer 450 (Future of Europe – Views from Outside the EU). GESIS Data Archive, Cologne. ZA6856 Data file Version 1.0.0, https://doi.org/10.4232/1.12846 .
fnes1995	Lewis-Beck, Michael S., Mayer, Nonna, Boy, Daniel. French National Election Study, 1995. [distributor], 1996-11-21. https://doi.org/10.3886/ICPSR06806.v1
formpubop1999	Togby, Lise. 2014. "Surveys About the Formation of Public Opinion 1999-2003." SFI-The Danish National Centre for Social Research
formpubop2000	Togby, Lise. 2014. "Surveys About the Formation of Public Opinion 1999-2003." SFI-The Danish National Centre for Social Research
formpubop2001	Togby, Lise. 2014. "Surveys About the Formation of Public Opinion 1999-2003." SFI-The Danish National Centre for Social Research
formpubop2002	Togby, Lise. 2014. "Surveys About the Formation of Public Opinion 1999-2003." SFI-The Danish National Centre for Social Research
formpubop2003	Togby, Lise. 2014. "Surveys About the Formation of Public Opinion 1999-2003." SFI-The Danish National Centre for Social Research
fsdelection2019	Grönlund, Kimmo (Åbo Akademi University) and Borg, Sami (Tampere University): Finnish National Election Study 2019 [dataset]. Version 2.0 (2021-09-15). Finnish Social Science Data Archive [distributor]. https://urn.fi/urn:nbn:fi:fsd:T-FSD3467
fsdelection_combo	Electio Study Consortium and Karvonen, Lauri (Åbo Akademi University) and Paloheimo, Heikki (University of Tampere) and Borg, Sami (University of Tampere) and Grönlund, Kimmo (Åbo Akademi University) and Kestilä-Kekkonen, Elina (University of Tampere): Finnish National Election Studies 2003-2019: combined data [dataset]. Version 1.0 (2017-11-03). Finnish Social Science Data Archive [distributor]. https://urn.fi/urn:nbn:fi:fsd:T-FSD2556
gallup_vop2000	Gallup International, Inc. Voice of the People Millennium Survey, 2000. Inter-university Consortium for Political and Social Research [distributor], 2009-08-18. https://doi.org/10.3886/ICPSR24661.v1
gallup_vop2004	Gallup International, Inc. Voice of the People, 2004. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-04-30. https://doi.org/10.3886/ICPSR24681.v1
gallup_vop2005	Gallup International, Inc. Voice of the People, 2005. Inter-university Consortium for Political and Social Research [distributor], 2007-07-16. https://doi.org/10.3886/ICPSR04636.v1
gallup_vop2007	Gallup International, Inc. Voice of the People, 2007. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-03-03. https://doi.org/10.3886/ICPSR21441.v1

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
gallup_vop2012	WIN/Gallup International Association. Voice of the People End of Year Survey, 2012. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-03-09. https://doi.org/10.3886/ICPSR35201.v2
gles1994	Falter, Ju__rgen W.; Gabriel, Oscar W.; Rattlinger, Hans; Schmitt, Karl (2015): Political Attitudes, Political Participation and Voting Behavior in Reunified Germany 1994 GESIS Data Archive, Cologne. ZA3065 Data file Version 3.0.0, doi:10.4232/1.11973
gles1998	Falter, Ju__rgen W.; Gabriel, Oscar W.; Rattlinger, Hans (2015): Political Attitudes, Political Participation and Voting Behavior in Reunified Germany 1998 GESIS Data Archive, Cologne. ZA3066 Data file Version 4.0.0, doi:10.4232/1.11968
gles2002	Falter, Ju__rgen W.; Gabriel, Oscar W.; Rattlinger, Hans (2015): Political Attitudes, Political Participation and Voting Behavior in Reunified Germany 2002. GESIS Data Archive, Cologne. ZA3861 Data file Version 3.0.0, doi:10.4232/1.11967
gles2009	GLES (2015). Short-term Campaign Panel (GLES 2009). GESIS Data Archive, Cologne. ZA5305 Data file Version 5.0.0, https://doi.org/10.4232/1.12198 .
gles2013	Rattinger, Hans; Ro__teutscher, Sigrid; Schmitt-Beck, R__diger; We__bels, Bernhard; Wolf, Christof; Plischke, Thomas; Wiegand, Elena (2016): Short- term Campaign Panel 2013 (GLES). GESIS Data Archive, Cologne. ZA5704 Datafile Version 3.2.0, doi: 10.4232/1.12561.
gles2017	GLES (2019). Short-term Campaign Panel (GLES 2017). GESIS Data Archive, Cologne. ZA6804 Data file Version 7.0.0, https://doi.org/10.4232/1.13323 .
icenes1983	Harðarson, Ólafur Pórdur; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1983”, https://doi.org/10.34881/1.00001 , GAGNÍS (DATICE), V1, UNF:6:krmQ/NST5UWdwJ3OIWJ8A== [fileUNF]
icenes1987	Harðarson, Ólafur Pórdur; Félagsvísindastofnun, 2020, “Íslenska kosningarannsóknin 1987”, https://doi.org/10.34881/1.00002 , GAGNÍS (DATICE), V3, UNF:6:QFUhkaIXJfohv9z5T/HpeA== [fileUNF]
icenes1991	Harðarson, Ólafur Pórdur; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1991”, https://doi.org/10.34881/1.00003 , GAGNÍS (DATICE), V1, UNF:6:CF1aHW7xsn83iJFjIACP5Q== [fileUNF]
icenes1995	Harðarson, Ólafur Pórdur; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1995”, https://doi.org/10.34881/1.00004 , GAGNÍS (DATICE), V1, UNF:6:soAWhg5QnLVM64/ItiByow== [fileUNF]
icenes1999	Harðarson, Ólafur Pórdur; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1999”, https://doi.org/10.34881/1.00005 , GAGNÍS (DATICE), V1, UNF:6:yiZ5815qg7DAqc5e2QPVMQ== [fileUNF]
icenes2003	Harðarson, Ólafur Pórdur; Eva Heiða Önnudóttir; Einar Mar Pórdarson; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 2003”, https://doi.org/10.34881/1.00006 , GAGNÍS (DATICE), V1, UNF:6:2wWd5vKJmBmyz2NzoDiPQQ== [fileUNF]
icenes2007	Harðarson, Ólafur Pórdur; Eva Heiða Önnudóttir; Einar Már Pórdarson; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 2007”, https://doi.org/10.34881/1.00007 , GAGNÍS (DATICE), V1, UNF:6:e2fn43HO5jo1AYE4ttePGw== [fileUNF]
icenes2009	Harðarson, Ólafur Pórdur; Önnudóttir, Eva Heiða; Pórdarsson, Einar Már; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 2009”, https://doi.org/10.34881/1.00008 , GAGNÍS (DATICE), V1, UNF:6:udEf4H4VtzK7Qi4e7mwA== [fileUNF]
icenes2013	Harðarson, Ólafur Pórdur; Hulda Pórísdóttir; Eva Heiða Önnudóttir, 2021, “Íslenska kosningarannsóknin 2013”, https://doi.org/10.34881/1.00009 , GAGNÍS (DATICE), V1, UNF:6:a7ePGbqQoIlklFeypfRa6Q== [fileUNF]
icenes2016	Önnudóttir, Eva Heiða; Harðarson, Ólafur Pórdur; Pórísdóttir, Hulda; Helgason, Agnar Freyr, 2021, “Íslenska kosningarannsóknin 2016”, https://doi.org/10.34881/1.00010 , GAGNÍS (DATICE), V1, UNF:6:dqN69a8RixTJAkvwBO9w== [fileUNF]
icenes2017	Önnudóttir, Eva Heiða; Harðarson, Ólafur Pórdur; Pórísdóttir, Hulda; Helgason, Agnar Freyr, 2021, “Íslenska kosningarannsóknin 2017”, https://doi.org/10.34881/1.00011 , GAGNÍS (DATICE), V1, UNF:6:ypxLPvXbfVrTPNi+DKBjg== [fileUNF]
icenes2021	Önnudóttir, Eva Heiða; Helgason, Agnar Freyr; Pórísdóttir, Hulda; Ólafsson, Jón Gunnar; Harðarson, Ólafur Pórdur, 2023, “Íslenska kosningarannsóknin 2021”, https://doi.org/10.34881/0ERQOZ , GAGNÍS (DATICE), V1, UNF:6:7uXWgb9Md/iOotP7lyrMvA== [fileUNF]
icnl1985	A.J.A. Felling; J. Peters; P.L.H. Scheepers, 2009, “Individual changes in the Netherlands 1985-1990”, https://doi.org/10.17026/dans-xp9-367a , DANS Data Station Social Sciences and Humanities, V3
icnl1990	A.J.A. Felling; J. Peters; P.L.H. Scheepers, 2009, ”Individual changes in the Netherlands 1985-1990”, https://doi.org/10.17026/dans-xp9-367a , DANS Data Station Social Sciences and Humanities, V3
ines_long	INES (2008). Irish National Election Study 2002-2007.
issp1985	ISSP Research Group (1986). International Social Survey Programme: Role of Government I - ISSP 1985. GESIS Data Archive, Cologne. ZA1490 Data file Version 1.0.0, https://doi.org/10.4232/1.1490 .
issp1991	ISSP Research Group (1993). International Social Survey Programme: Religion I - ISSP 1991. GESIS Data Archive, Cologne. ZA2150 Data file Version 1.0.0, https://doi.org/10.4232/1.2150 .
issp1996	ISSP Research Group (1999). International Social Survey Programme: Role of Government III - ISSP 1996. GESIS Data Archive, Cologne. ZA2900 Data file Version 1.0.0, https://doi.org/10.4232/1.2900 .
issp1998	ISSP Research Group (2000). International Social Survey Programme: Religion II - ISSP 1998. GESIS Data Archive, Cologne. ZA3190 Data file Version 1.0.0, https://doi.org/10.4232/1.3190 .
issp2001	ISSP Research Group (2003). International Social Survey Programme: Social Relations and Support Systems - ISSP 2001. GESIS Data Archive, Cologne. ZA3680 Data file Version 1.0.0, https://doi.org/10.4232/1.3680 .
issp2004	ISSP Research Group (2012): International Social Survey Programme 2004: Citizenship I (ISSP 2004). GESIS Data Archive, Cologne. ZA3950 Data file Version 1.3.0, doi: 10.4232/1.11372

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
issp2006	ISSP Research Group (2021). International Social Survey Programme: Role of Government IV - ISSP 2006. GESIS Data Archive, Cologne. ZA4700 Data file Version 2.0.0, https://doi.org/10.4232/1.13707 .
issp2008	ISSP Research Group (2018). International Social Survey Programme: Religion III - ISSP 2008. GESIS Data Archive, Cologne. ZA4950 Data file Version 2.3.0, https://doi.org/10.4232/1.13161 .
issp2010	ISSP Research Group (2019). International Social Survey Programme: Environment III - ISSP 2010. GESIS Data Archive, Cologne. ZA5500 Data file Version 3.0.0, https://doi.org/10.4232/1.13271 .
issp2014	ISSP Research Group (2016). International Social Survey Programme: Citizenship II ISSP 2014. GESIS Data Archive, Cologne. ZA6670 Data file Version 2.0.0, doi: 10.4232/1.12590
issp2016	ISSP Research Group (2018). International Social Survey Programme: Role of Government V ISSP 2016. GESIS Data Archive, Cologne. ZA6900 Data file Version 2.0.0, doi: 10.4232/1.13052
issp2017	ISSP Research Group (2023). International Social Survey Programme: Environment IV - ISSP 2020. GESIS, Cologne. ZA7650 Data file Version 2.0.0, https://doi.org/10.4232/1.14153 .
issp2020	ISSP Research Group (2023). International Social Survey Programme: Environment IV - ISSP 2020. GESIS, Cologne. ZA7650 Data file Version 2.0.0, https://doi.org/10.4232/1.14153 .
itanes2001	Istituto Cattaneo, Italian National Election Studies, 2001 [Dataset]
itanes2013capi	Istituto Cattaneo, Italian National Election Studies, 2013 [Dataset]
jgss	Tanioka, Ichiro, Iwai, Noriko, Nitta, Michio, and Sato, Hiroki. Japanese General Social Surveys (JGSS) Cumulative Data, 2000-2003. Inter-university Consortium for Political and Social Research [distributor], 2008-12-08. https://doi.org/10.3886/ICPSR04472.v1
jgss2008	Osaka University of Commerce, Japan, Institute of Social Sciences, University of Tokyo, Japan, and Minister of Education, Culture, Sports, Science and Technology of Japan (2015). Japanese General Social Survey 2008 (JGSS 2008). GESIS Data Archive, Cologne. ZA5294 Data file Version 3.0.0, https://doi.org/10.4232/1.12361 .
jgss2010	Iwai, Noriko, Tanioka, Ichiro, and Maeda, Yukio (2015). Japanese General Social Survey 2010 (JGSS 2010). GESIS Data Archive, Cologne. ZA5352 Data file Version 3.0.0, https://doi.org/10.4232/1.12362 .
jgss2012	JGSS Research Center, Osaka University of Commerce, Japan (2016). Japanese General Social Survey 2012 (JGSS 2012). GESIS Data Archive, Cologne. ZA6427 Data file Version 2.0.0, https://doi.org/10.4232/1.12604 .
kobar1996	Shin, Doh Chull, 2010, Korea Barometer Survey 1996 [dataset]
kobar1997	Shin, Doh Chull, 2010, Korea Barometer Survey 1997 [dataset]
kobar1998	Shin, Doh Chull, 2010, Korea Barometer Survey 1998 [dataset]
kobar1999	Shin, Doh Chull, 2010, Korea Barometer Survey 1999 [dataset]
kobar2001	Shin, Doh Chull, 2010, Korea Barometer Survey 2001 [dataset]
kobar2004	Shin, Doh Chull, 2010, Korea Barometer Survey 2004 [dataset]
kobar2010	Shin, Doh Chull, 2013, Korea Barometer Survey 2010 [dataset]
lb1995	Corporación Latinobarómetro. Latinobarómetro 1995. June 27, 2014
lb1996	Corporación Latinobarómetro. Latinobarómetro 1996. June 27, 2014
lb1997	Corporación Latinobarómetro. Latinobarómetro 1997. June 27, 2014
lb1998	Corporación Latinobarómetro. Latinobarómetro 1998. June 27, 2014
lb2000	Corporación Latinobarómetro. Latinobarómetro 2000. June 27, 2014
lb2001	Corporación Latinobarómetro. Latinobarómetro 2001. June 27, 2014
lb2002	Corporación Latinobarómetro. Latinobarómetro 2002. June 27, 2014
lb2003	Corporación Latinobarómetro. Latinobarómetro 2003. June 27, 2014
lb2004	Corporación Latinobarómetro. Latinobarómetro 2004. June 27, 2014
lb2005	Corporación Latinobarómetro. Latinobarómetro 2005. June 27, 2014
lb2006	Corporación Latinobarómetro. Latinobarómetro 2006. June 27, 2014
lb2007	Corporación Latinobarómetro. Latinobarómetro 2007. June 27, 2014
lb2008	Corporación Latinobarómetro. Latinobarómetro 2008. June 27, 2014
lb2009	Corporación Latinobarómetro. Latinobarómetro 2009. June 27, 2014
lb2010	Corporación Latinobarómetro. Latinobarómetro 2010. June 27, 2014
lb2011	Corporación Latinobarómetro. Latinobarómetro 2011. February 27, 2017
lb2013	Corporación Latinobarómetro. Latinobarómetro 2013. February 27, 2017
lb2015	Corporación Latinobarómetro. Latinobarómetro 2015. February 27, 2017
lb2016	Corporación Latinobarómetro. Latinobarómetro 2016. February 5, 2017
lb2017	Corporación Latinobarómetro. Latinobarómetro 2017. January 17, 2018
lb2018	Corporación Latinobarómetro. Latinobarómetro 2018. March 3, 2019
lb2020	Corporación Latinobarómetro. Latinobarómetro 2020. September 30, 2021
lb2023	Corporación Latinobarómetro. Latinobarómetro 2023. December 9, 2023
lits_wave1	European Bank for Reconstruction and Development and World Bank (2006). Life in Transition Survey I.
lits_wave2	European Bank for Reconstruction and Development and World Bank (2010). Life in Transition Survey II.
lits_wave3	European Bank for Reconstruction and Development and World Bank (2016). Life in Transition Survey III.
neb_combo	Aarts, Kees, Bojan Todosijevic, and Harry van der Kaap. Dutch Parliamentary Election Study Cumulative Dataset, 1971-2006. ICPSR28221-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-09-13. https://doi.org/10.3886/ICPSR28221.v1
norcs2013_1	Ivarsflaten, Elisabeth et al. (2024). Norwegian Citizen Panel Round 1, 2013 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.18712/NSD-NSD2065-V9
norcs2014_3	Ivarsflaten, Elisabeth et al. (2024). Norwegian Citizen Panel Round 3, 2014 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.18712/NSD-NSD2165-V11
norcs2015_4	Elisabeth Ivarsflaten et al. (2024). Norwegian Citizen Panel Round 4, 2015 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.18712/NSD-NSD2342-V12
norcs2015_5	Ivarsflaten, Elisabeth et al. (2024). Norwegian Citizen Panel Round 5, 2015 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.18712/NSD-NSD2343-V11
norcs2016_6	Ivarsflaten, Elisabeth et al. (2024). Norwegian Citizen Panel Round 6, 2016 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. https://doi.org/10.18712/NSD-NSD2344-V11
nores2013	Institute for Social Research and Statistics Norway. (2022) Norwegian Election Survey 2013. [Data set] Sikt. https://doi.org/10.18712/NSD-NSD2215-V3

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
nores_combo1	Statistics Norway et al. (2022) Norwegian Election Survey time series 1977-1997. [Data set] Sikt. https://doi.org/10.18712/NSD-NSD1760-1-V3
nores_combo2	Statistics Norway and Institute for Social Research. (2022) Norwegian Election Survey time series, 2001-2009. [Data set] Sikt. https://doi.org/10.18712/NSD-NSD1760-2-V7
npes_combo	Aarts, Kees, Bojan Todosijevic, and Harry van der Kaap. Dutch Parliamentary Election Study Cumulative Dataset, 1971-2006. ICPSR28221-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-09-13. http://doi.org/10.3886/ICPSR28221.v1
nsss_combo	Kelley, Jonathan; Bean, Clive; Evans, Mariah D. R., 2019, "National Social Science Survey Integrated Data, 1984-1988", https://doi.org/10.26193/J3CN67 , ADA Dataverse, V2
nzes1993	Vowles, Jack; Aimer, Peter; Catt, Helena; Miller, Raymond; Lamare, Jim, 2019, "1993 New Zealand Election Study", doi: 10.26193/9ODFXU , ADA Dataverse, V6
nzes1996	Vowles, Jack; Banducci, Susan; Karp, Jeffrey; Aimer, Peter; Catt, Helena; Miller, Raymond; Denmark, D., 2019, "1996 New Zealand Election Study", doi: 10.26193/OOLRZZ , ADA Dataverse, V6
nzes1999	Vowles, Jack; Banducci, Susan; Karp, Jeffrey; Aimer, Peter; Miller, Raymond; Sullivan, Ann, 2019, "1999 New Zealand Election Study", doi: 10.26193/UNGIXJ , ADA Dataverse, V6
nzes2002	Vowles, Jack; Banducci, Susan; Karp, Jeffrey; Aimer, Peter; Miller, Raymond, 2019, "2002 New Zealand Election Study", doi: 10.26193/9DE0X4 , ADA Dataverse, V6
nzes2005	Vowles, Jack; Banducci, Susan; Karp, Jeffrey; Miller, Raymond; Sullivan, Ann, 2022, "2005 New Zealand Election Study", doi: 10.26193/WJ8DGC , ADA Dataverse, V3
nzes2008	Vowles, Jack; Banducci, Susan; Karp, Jeffrey; Miller, Raymond; Sullivan, Ann; Curtin, Jennifer, 2022, "2008 New Zealand Election Study", doi: 10.26193/6CVEYM , ADA Dataverse, V3
nzes2011	Vowles, Jack; Cotterell, Gerard; Miller, Raymond; Curtin, Jennifer, 2022, "2011 New Zealand Election Study", doi: 10.26193/YZDMF3 , ADA Dataverse, V3
nzes2014	Vowles, Jack; Coffé, Hilde; Curtin, Jennifer; Cotterell, Gerard, 2022, "2014 New Zealand Election Study", doi: 10.26193/MF9DNL , ADA Dataverse, V3
nzes2017	Vowles, Jack; McMillan, Kate; Barker, Fiona; Curtin, Jennifer; Hayward, Janine; Greaves, Lara; Crothers, Charles, 2022, "2017 New Zealand Election Study", doi: 10.26193/28JJFB , ADA Dataverse, V3
nzes2020	Vowles, Jack; Barker, Fiona; Krewel, Mona; Hayward, Janine; Curtin, Jennifer; Greaves, Lara; Oldfield, Luke, 2022, "2020 New Zealand Election Study", doi: 10.26193/BPAMYJ , ADA Dataverse, V3
pew2002	Pew Research Center (2002). Summer 2002 Survey Data.
pew2007	Pew Research Center (2007). Spring 2007 Survey Data.
pew2009	Pew Research Center (2009). Fall 2009 Survey Data.
pew2010	Pew Research Center (2010). Spring 2010 Survey Data.
pew2011	Pew Research Center (2011). Spring 2011 Survey Data.
pew2012	Pew Research Center (2012). Spring 2012 Survey Data.
pew2013	Pew Research Center (2013). Spring 2013 Survey Data.
pew2014	Pew Research Center (2013). Spring 2013 Survey Data.
pew2015	Pew Research Center (2015). Spring 2015 Survey Data.
pew2016	Pew Research Center (2016). Spring 2016 Survey Data.
pew2017	Pew Research Center (2017). Spring 2017 Survey Data.
pew2018	Pew Research Center (2018). Spring 2018 Survey Data.
pew2019	Pew Research Center (2019). Spring 2019 Survey Data.
pewrel2009_afr	Pew Research Center (2010). Tolerance and Tension: Islam and Christianity in Sub-Saharan Africa.
pewrel2015_ee	Pew Research Center (2017). Eastern European Survey Dataset.
pgss	Institute for Social Studies, University of Warsaw, 2019, Polish General Social Survey, 1991-2010 [dataset]
politbarometer_combo	Forschungsgruppe Wahlen, Mannheim (2017): Politbarometer 1977-2016 (Gesamtkumulation). GESIS Datenarchiv, Köln. ZA5100 Datenfile Version '1.0.0' doi: 10.42232/1.5100
ress2014	European Social Survey European Research Infrastructure (ESS ERIC). (2018). ESS7 - Russia [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research.
sasianb1	Hu Fu Center for East Asian Democratic Studies, South Asian Barometer Wave 1 Merge [Dataset], April 18, 2017
som_combo	University of Gothenburg, SOM Institute. (2024). The National SOM Survey Cumulative Dataset (Version 13) [Data set]. University of Gothenburg. Available at: https://doi.org/10.5878/7k7n-yn39
usgss	Davern, Michael; Bautista, Rene; Freese, Jeremy; Herd, Pamela; and Morgan, Stephen L.; General Social Survey 1972-2022. [Machine-readable data file]. Principal Investigator, Michael Davern; Co-Principal Investigators, Rene Bautista, Jeremy Freese, Pamela Herd, and Stephen L. Morgan. NORC ed. Chicago, producer, 2023. Berkeley, CA: Computer-assisted Survey Methods Program (http://sda.berkeley.edu), University of California/ISA, distributor, 2023.
uspew2006_12val	Pew Research Center for the People and the Press. (2007). Pew Research Center Poll No. 2006-12POL: December 2006 Political Communications Study.
uspew2009_val	Pew Research Center for the People and the Press. (2009). Pew Research Center: April 2009 Values Survey (Version 2) [Dataset]. Cornell University, Ithaca, NY: Roper Center for Public Opinion Research. doi: 10.25940/ROPER-31095980
uspew2011_09wk	Pew Research Center for the People and the Press. Pew Research Center Poll: September 2011 Generations Survey, 2011 [Dataset]. Roper No.31096044, Version 2. Princeton Survey Research Associates International [producer]. Cornell University, Ithaca, NY: Roper Center for Public Opinion Research [distributor]. doi: 10.25940/ROPER-31096044
uspew_valcombo	Pew Research Center for the People and the Press. Pew Research Center Poll: 1987 to 2003 Values Merge File, 1987 [Dataset]. Roper No.31095812, Version 3. Princeton Survey Research Associates International [producer]. Cornell University, Ithaca, NY: Roper Center for Public Opinion Research [distributor]. doi: 10.25940/ROPER-31095812

Table A2: Source Survey Information (*continued*)

Survey Dataset Code*	Citation
wvs_combo	Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin and B. Puranen (eds.). 2022. World Values Survey: All Rounds - Country-Pooled Datafile. Madrid, Spain and Vienna, Austria: JD Systems Institute and WVSA Secretariat. Dataset Version 3.0.0. doi:10.14281/18241.17

* Survey dataset codes correspond to those used in the DCPotools R package.

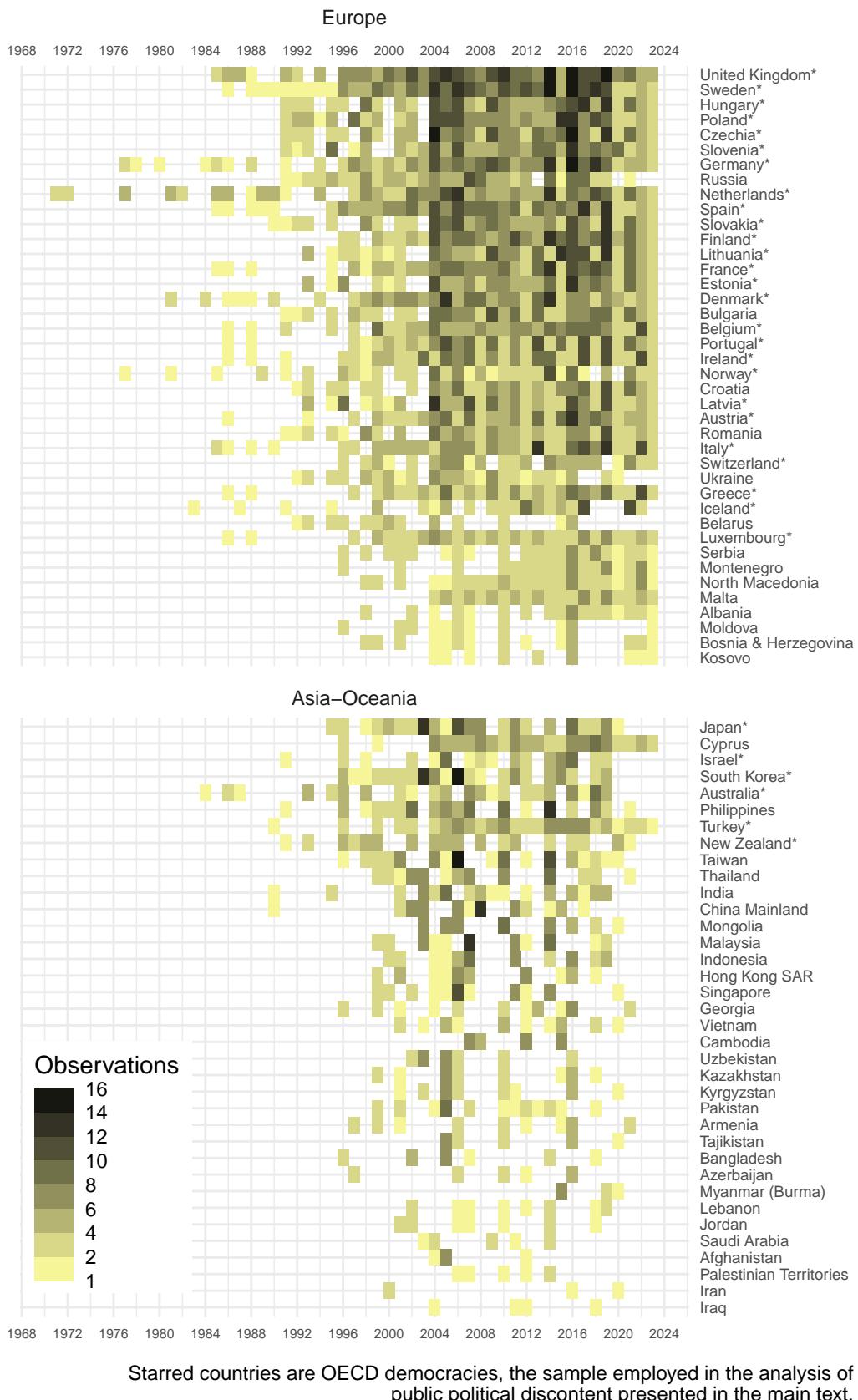


Figure A1: Source Data Observations by Country/Region and Year

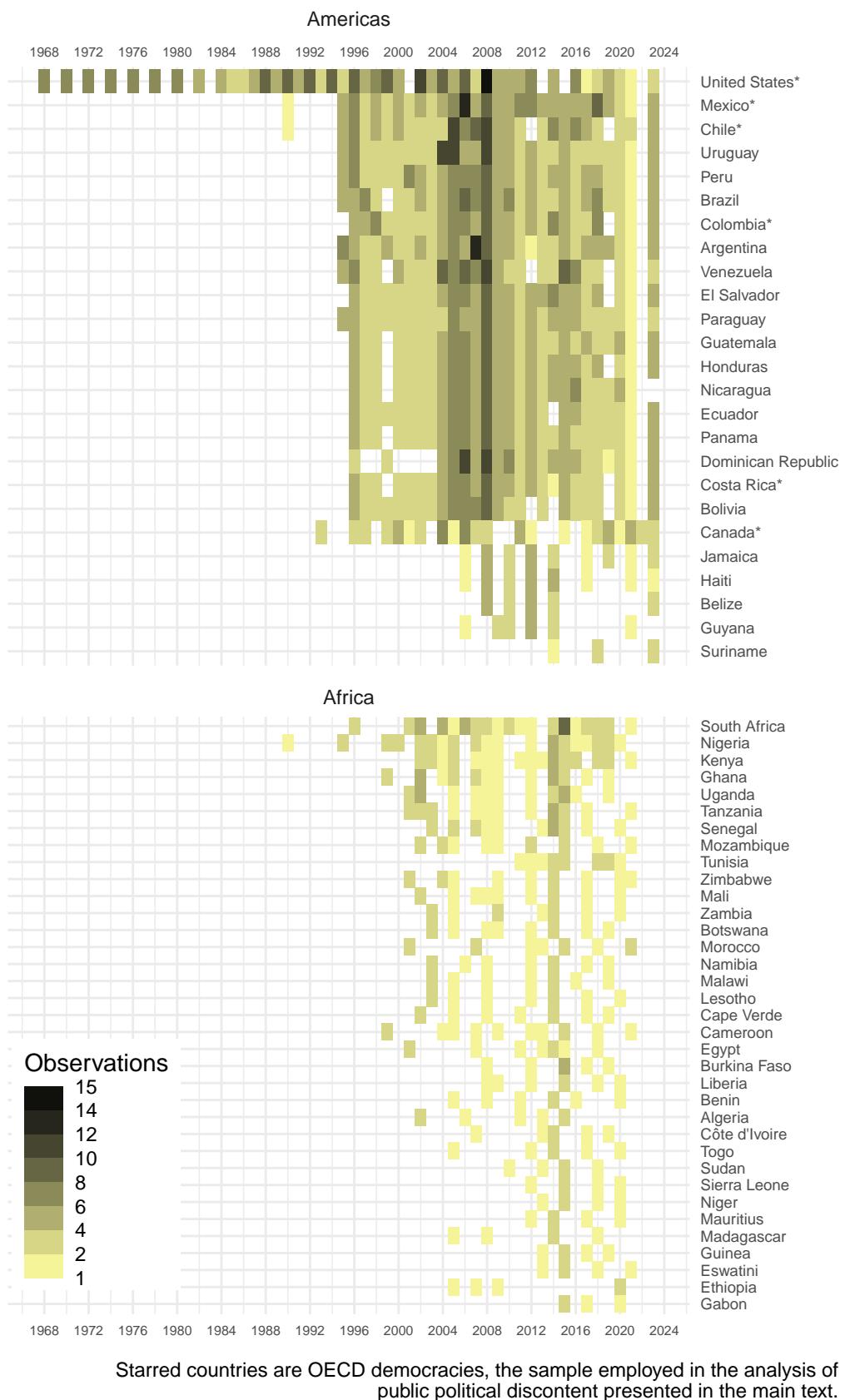


Figure A2: Source Data Observations by Country/Region and Year, cont.

A2 The DCPO Model

A number of recent studies have developed latent variable models of aggregate survey responses based on cross-national survey data (see Claassen 2019; Caughey, O’Grady, and Warshaw 2019; McGann, Dellepiane-Avellaneda, and Bartle 2019; Kołczyńska et al. 2024). To estimate the extent of political discontent in the public across countries and over time, we employ the latest of these methods that is appropriate for data that is not only incomparable but also sparse, the Dynamic Comparative Public Opinion (DCPO) model. The DCPO model is a population-level two-parameter ordinal logistic item response theory (IRT) model with country-specific item-bias terms.

DCPO models the total number of survey responses expressing at least as much discontent as response category r to each question q in country k at time t , y_{ktqr} , out of the total number of respondents surveyed, n_{ktqr} , using the beta-binomial distribution:

$$a_{ktqr} = \phi \eta_{ktqr} \quad (1)$$

$$b_{ktqr} = \phi(1 - \eta_{ktqr}) \quad (2)$$

$$y_{ktqr} \sim \text{BetaBinomial}(n_{ktqr}, a_{ktqr}, b_{ktqr}) \quad (3)$$

where ϕ represents an overall dispersion parameter to account for additional sources of survey error beyond sampling error and η_{ktqr} is the expected probability that a random person in country k at time t answers question q with a response at least as interested as response r .¹

This expected probability, η_{ktqr} , is in turn estimated as follows:

$$\eta_{ktqr} = \text{logit}^{-1}\left(\frac{\bar{\theta}'_{kt} - (\beta_{qr} + \delta_{kq})}{\sqrt{\alpha_q^2 + (1.7 * \sigma_{kt})^2}}\right) \quad (4)$$

In this equation, β_{qr} represents the difficulty of response r to question q , that is, the degree of political discontent the response expresses. The δ_{kq} term represents country-specific item bias: the extent to which all responses to a particular question q may be more (or less) difficult in a given country k due to translation issues, cultural differences in response styles, or other idiosyncrasies that render the same survey item not equivalent across countries.² The dispersion of question q , its noisiness in relation to the latent variable, is α_q . The mean and standard deviation of the unbounded latent trait of public political discontent are $\bar{\theta}'_{kt}$ and σ_{kt} , respectively.

Random-walk priors are used to account for the dynamics in $\bar{\theta}'_{kt}$ and σ_{kt} , and weakly informative priors are placed on the other parameters.³ The dispersion parameters α_q are

¹The ordinal responses to question q are coded to range from 1 (expressing the least political discontent) to R (expressing the most political discontent), and r takes on all values greater than 1 and less than or equal to R .

²Estimating δ_{kq} requires repeated administrations of question q in country k , so when responses to question q are observed in country k in only a single year, the DCPO model sets δ_{kq} to zero by assumption, increasing the error of the model by any country-item bias that is present. Questions that are asked repeatedly over time in only a single country pose no risk of country-specific item bias, so δ_{kq} in such cases are also set to zero.

³The dispersion parameters α_q are drawn from standard half-normal prior distributions, that is, the positive half of $N(0, 1)$. The first difficulty parameters for each question, β_{q1} , are drawn from standard normal prior distributions, and the differences between β s for each r for the same question q are drawn from standard half-normal prior distributions. The item-bias parameters δ_{kq} receive

constrained to be positive and all survey responses are coded with high values indicating more political discontent to fix direction. The difficulty β of “run by a few big interests” to the oft-asked question “would you say that this country is run by a few big interests looking out for themselves, or that it is run for the benefit of all the people?” is set to 1 to identify location, and for each question q the difficulties for increasing response categories r are constrained to be increasing. The sum of δ_{kq} across all countries k is set to zero for each question q :

$$\sum_{k=1}^K \delta_{kq} = 0 \quad (5)$$

Finally, the logistic function is used to transform $\bar{\theta}'_{kt}$ to the unit interval and so give the bounded mean of political discontent, $\bar{\theta}_{kt}$, which is our parameter of interest here.

The DCPO model accounts for the incomparability of different survey questions with two parameters. First, the *difficulty* parameter indicates the level of the latent trait needed for a respondent to endorse a particular response option of a survey item (question). That each response evinces varying level of political discontent is most easily seen with regard to the ordinal responses to the same survey item. For example, responding “strongly agree” to the statement “people like me don’t have any say about what the government does” exhibits more political discontent than choosing “agree,” which is a more discontented response than “disagree,” which in turn is more discontented than “strongly disagree.” Moreover, and more importantly, the difficulty parameter varies across different survey items to reflect that a respondent may need to feel greater discontent to endorse a specific response option for one question compared to endorsing the same level of response for another question. For example, strongly agreeing that “there is widespread corruption among those who govern the country” likely expresses even more political discontent than strongly agreeing that “people like me can probably vote, but we cannot do anything else to influence politics.”

Second, the *dispersion* parameter accounts for the noisiness (measurement error) in a survey question with respect to the latent trait. A question may confuse some respondents or may not align cleanly with the concept of political discontent. If such a question is nevertheless used as an indicator of political discontent, it will exhibit high dispersion. On the contrary, the lower the dispersion, the better that changes in responses to the question map onto changes in political discontent. By incorporating this parameter, we can address concerns that some survey questions selected to construct the discontent measure may not be perfectly associated with it. Together, the model’s difficulty and dispersion estimates work to generate comparable estimates of the latent variable of public political discontent from the available but incomparable source data.

To address the sparsity of the source data—the fact that there are gaps in the time series of each country, and even many observed country-years have only one or few observed items—DCPO uses simple local-level dynamic linear models, i.e., random-walk priors, for each country. That is, within each country, each year’s value of public political discontent is modeled as the previous year’s estimate plus a random shock. These dynamic models

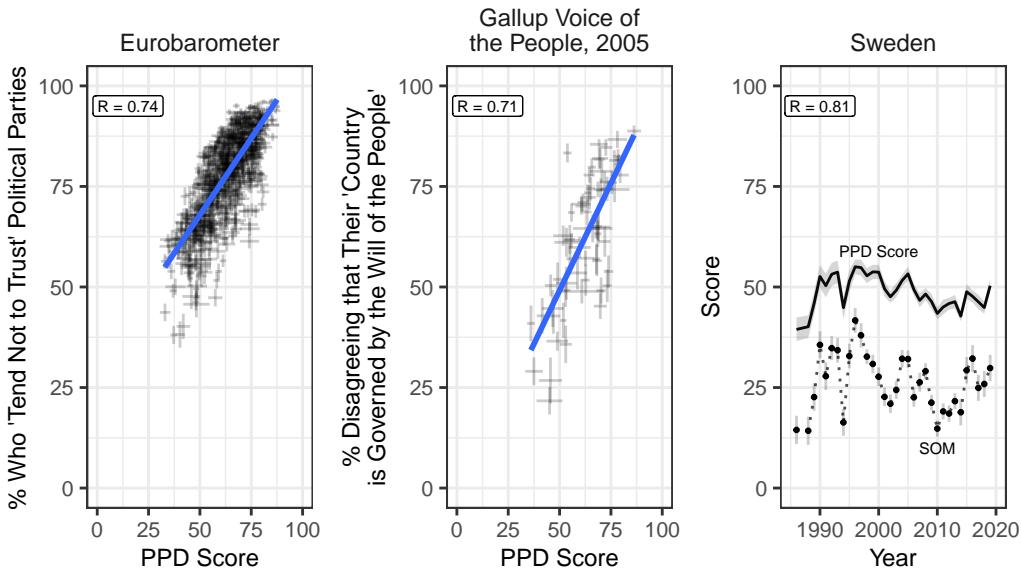
normally-distributed hierarchical priors with mean 0 and standard deviations drawn from standard half-normal prior distributions. The initial value of the mean unbounded latent trait for each country, $\bar{\theta}'_{k1}$, is assigned a standard normal prior, as are the transition variances σ_θ^2 and σ_σ^2 ; the initial value of the standard deviation of the unbounded latent trait for each country, σ_{k1} , is drawn from a standard lognormal prior distribution. The overall dispersion, ϕ , receives a somewhat more informative prior drawn from a gamma(4, 0.1) distribution that yields values that are well scaled for that parameter.

smooth the estimates of discontent over time and allow estimation even in years for which little or no survey data is available, albeit at the expense of greater measurement uncertainty.

It is worth noting that not all sources of incomparability are likely to be fully addressed by the DCPO model. To the extent that survey sample representation issues—such as from variations in population definitions (such as age range, minority inclusion, and territorial exclusions) and sample designs (like probability versus non-probability samples, and older surveys’ reliance on quota or random route samples without enumeration)—vary across years for a single country and item (as is typically the case, as more recent surveys are more likely to be fully representative), the country-specific item bias terms will not remedy this problem. And although survey weights are easily incorporated in the source data (and indeed the `DCP0tools` package does so automatically), not all available weights yield fully representative samples, and some surveys lack weights entirely. Unlike the model employed by Caughey, O’Grady, and Warshaw (2019), the DCPO model does not incorporate poststratification to correct for these issues. While this does increase computational tractability and decrease data demands, the downside is clearly greater measurement uncertainty in the estimates in country-years where the data are relatively rich (via ϕ) and potential bias in the estimates where data are more sparse.

A3 Validating Public Political Discontent

That we can *generate* estimates of political discontent does not automatically mean that they are suitable for analysis. Validation tests of this novel latent variable, like for any new measure, are crucial (see, e.g., Hu et al. 2023). Figure A3, Figure A4, and Figure A5 provide evidence of this measure's validity with tests of convergent validation and construct validation.

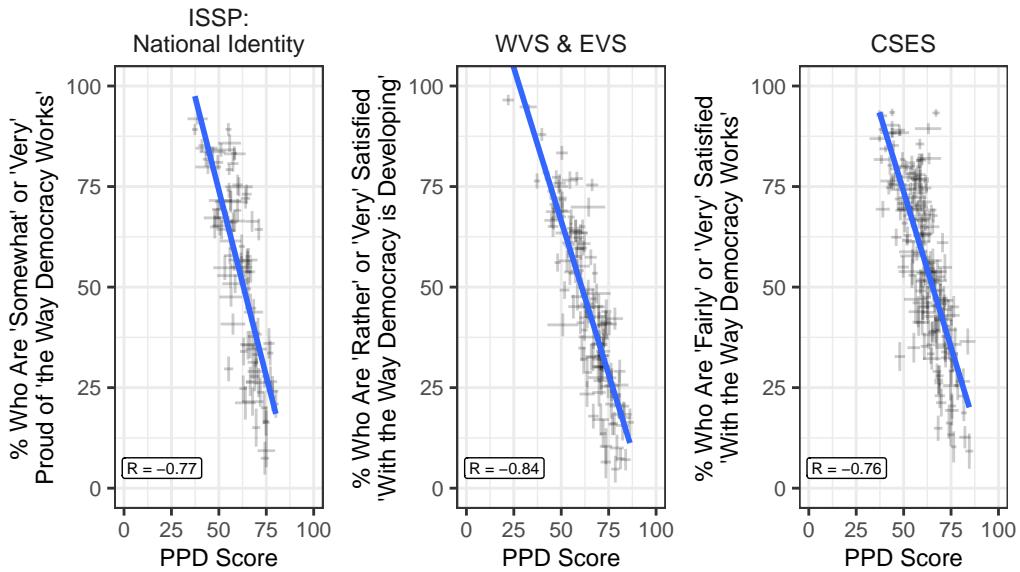


Note: Gray whiskers and shading represent 80% credible intervals.

Figure A3: Internal Convergent Validation: Correlations Between Public Political Discontent and Individual Source-Data Survey Items

Convergent validation refers to tests of whether a measure is empirically associated with alternative indicators of the same concept (Adcock and Collier 2001, 540). Here, Figure A3 offers ‘internal’ convergent validation tests (Caughey, O’Grady, and Warshaw 2019, 686): it compares PPD scores to responses to the individual source-data survey items that were used to generate them. On the left, PPD scores are plotted against the percentage of respondents across all country-years who responded “tend not to trust” rather than “tend to trust” to the Eurobarometer’s dichotomous question, “How much trust do you have in certain institutions: Political parties?” This is the single most-asked item in the source data. The middle panel compares PPD scores to responses to the question with the most data-rich cross-section, “Would you say your country is governed by the will of the people?” in Gallup’s 2005 Voice of the People survey. Finally, the right panel evaluates how well the PPD scores capture change over time by focusing on the item with the largest number of observations for a single country and region in the source data: Sweden’s SOM surveys’ question, “How much confidence do you have in the way the following institutions and groups do their job: The National Parliament?” In all three cases, the correlations, estimated taking into account the uncertainty in the measures, are strong.

In Figure A4, we present three ‘external’ convergent validation tests, comparing PPD scores to responses to survey items that were *not* included in the source data: items that asked respondents to evaluate “democracy” in their countries and regions. Like Jennings et al. (2017), we excluded these questions not least to avoid assuming that respondents



Note: Gray whiskers represent 80% credible intervals.

Figure A4: External Convergent Validation: Correlations Between PPD Scores and Evaluations of Democratic Performance

identify the current political system of their country with democracy. Nevertheless, evaluations of the democracy of respondents' countries provide good alternate indicators of the extent of political discontent. The left panel shows data from three rounds of the International Social Survey Program's National Identity module, which asked respondents how proud they were of how democracy works in their country. In the center, we plot how much satisfaction respondents reported with "the way democracy is developing" in their countries in the World Values Surveys and European Values Surveys. The right draws on data from the Comparative Study of Electoral Systems about how many respondents were at least fairly satisfied "with the way democracy works" in their country. Across countries and years and all three of these survey items, our latent-variable measure of political discontent is strongly negatively correlated with aggregate positive evaluations of democracy.

With the success of these tests of convergent validation, we turn to construct validation. Construct validation refers to demonstrating that the tested measure is empirically associated with measures of *other* concepts believed causally related to the concept the measure seeks to represent (Adcock and Collier 2001, 542). Discontent with the political system should be closely tied to evaluations of recent government policy performance.

Figure A5 depicts the relationships between PPD scores and three survey items from the International Social Survey Program module on the Role of Government on the extent of the government's success in providing health care, providing for the elderly, and in protecting the environment. All of these relationships are negative as expected and are moderate to strong in magnitude. The PPD scores perform very well in validation tests.

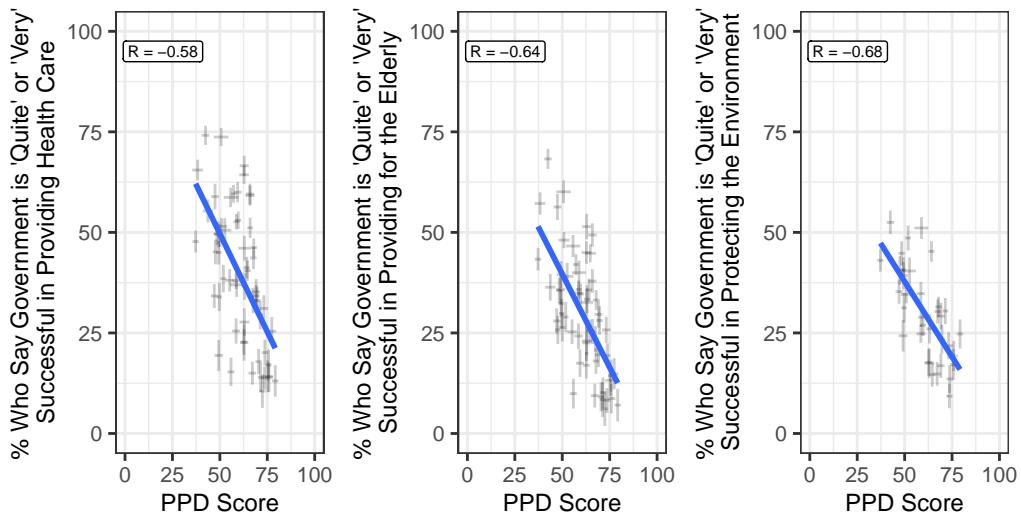


Figure A5: Construct Validation: Correlations Between PPD Scores and Views of Government Success

A4 Numeric Results

A4.1 Tabular Version of Results Presented in Figure 3

Table A3

	(1)
Time Trend	0.099 [0.038, 0.162]
Election Year	-0.491 [-1.062, 0.066]
Parliamentarism	-0.547 [-2.366, 1.282]
Federalism	-0.761 [-6.124, 5.228]
Disproportionality, Mean	0.444 [-0.078, 0.980]
Disproportionality, Difference	0.021 [-0.099, 0.143]
GDPpc, Mean	-0.319 [-0.502, -0.139]
GDPpc, Difference	-0.044 [-0.123, 0.036]
GDP Growth, Mean	0.532 [-1.525, 2.436]
GDP Growth, Difference	-0.196 [-0.301, -0.094]
Unemployment, Mean	0.627 [-0.129, 1.361]
Unemployment, Difference	0.688 [0.579, 0.800]
Income Inequality, Mean	-0.016 [-0.329, 0.309]
Income Inequality, Difference	-0.386 [-0.618, -0.160]
Num.Obs.	1217
R2	0.784
RMSE	4.65

Unstandardized coefficients with associated 95-percent credible intervals in brackets below.

References

- Caughey, Devin, Tom O’Grady, and Christopher Warshaw. 2019. “Policy Ideology in European Mass Publics, 1981–2016.” *American Political Science Review* 113 (3): 674–93.
- Claassen, Christopher. 2019. “Estimating Smooth Country–Year Panels of Public Opinion.” *Political Analysis* 27 (1): 1–20.
- Hu, Yue, Yuehong Cassandra Tai, and Frederick Solt. 2022. “On Data ‘Janitor Work’ in Political Science: The Case of Thermostatic Support for Democracy.” June 21, 2022.
- Jennings, Will, Nick Clarke, Jonathan Moss, and Gerry Stoker. 2017. “The Decline in Diffuse Support for National Politics: The Long View on Political Discontent in Britain.” *Public Opinion Quarterly* 81 (3): 748–58.
- Kołczyńska, Marta, Paul-Christian Bürkner, Lauren Kennedy, and Aki Vehtari. 2024. “Modeling Public Opinion over Time and Space: Trust in State Institutions in Europe, 1989–2019.” *Survey Research Methods* 18 (1): 1–19.
- McGann, Anthony, Sebastian Dellepiane-Avellaneda, and John Bartle. 2019. “Parallel Lines? Policy Mood in a Plurinational Democracy.” *Electoral Studies* 58: 48–57.
- Solt, Frederick. 2020. “Modeling Dynamic Comparative Public Opinion.” SocArXiv. <https://osf.io/preprints/socarxiv/d5n9p>.