

# Public Political Discontent

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 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.

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## **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](https://github.com/fsolt/dcpo_discontent).

# Public Political Discontent

abstract

Public discontent with political systems and institutions has become an increasingly salient concern in recent years, with implications for democratic stability and effective governance. Widespread political discontent can undermine public confidence in the political process, erode the legitimacy of governing institutions, and create fertile ground for populist and anti-system movements (Mudde 2004; Miller 1974; Lipset 1959). Understanding political discontent is therefore crucial for identifying potential threats to democracy and developing strategies to bolster system support. Nevertheless, the understanding of the nature, extent, and drivers of political discontent remains debated, with some arguing that the level of political discontent is on a clear declining trend while others claim that political discontent fluctuates without a clear sign of a declining trend (Jennings et al. 2017; Norris 2011; Foa and Mounk 2016, 2017).

This paper aims to provide a clearer conceptualization and more rigorous measurement of political discontent using survey data from a wide range of developed countries 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 (Jennings et al. 2017). 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 construct of diffuse political discontent.

To overcome issues of incomparability and sparseness that often plague survey-based measures of political discontent in the previous studies, we employ the Dynamic Comparative Public Opinion (DCPO) model developed by Solt (2020b) to estimate country-year panels of public political discontent in developed OECD countries. This approach allows us to combine information from a multitude of survey questions while accounting for differences in question content and response options. The resulting estimates cover a wide scope - thirty-eight countries and a total of 1217 country-years - enabling both cross-national comparison and over-time analysis. We validate our measure by demonstrating its strong correlation between individual survey items, the democratic evaluation survey item not included in our estimation, and the construct believed causally related to political discontent (evaluations of recent government policy performance).

Following, we explore the drivers of political discontent, focusing on election, political institutions, and economic factors. Our findings clearly suggest that political discontent has been on an increasing trend over time in developed OECD countries, supporting Foa and Mounk's (2016, 2017) thesis of democratic deconsolidation in developed democracies. We also find that election years are associated with lower levels of discontent, suggesting that elections may 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, while 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. Power-sharing institutions, such as federalism or parliamentarism, appear to have little impact on discontent, although countries with higher disproportionality do exhibit somewhat more discontent. This suggests the greater importance of economic conditions in affecting discontent compared to institutional factors.

By providing a broader examination of political discontent and its determinants, this study contributes to ongoing debates about the trajectories of political discontent across countries and over time. A valid and comparable measure of political discontent can enrich future discussions of public opinion, representation, and democratic backsliding. From a methodological standpoint, the paper demonstrates 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**

The significance of public political discontent for the sustainability of a political system is frequently highlighted in the literature. Lipset (1959) argues that the public's belief in the suitability of the existing political system is a key requisite for the survival of a democratic regime. Similarly, Miller (1974) maintains that a democratic political system cannot endure without majority public support, as growing political discontent increases the potential for revolutionary changes to the political and social system. Additionally, widespread political discontent can complicate effective governance (Hetherington 1998). These theoretical perspectives have prompted numerous analyses of the content, sources, and implications of political discontent. However, scholars have proposed various conceptualizations or dimensions of political discontent, ranging from the lack of diffuse support for the political system to perceptions of low responsiveness, democratic deficit, low political trust, and dissatisfaction with the current 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 specifically defines political discontent as dissatisfaction with, or the lack of, diffuse support for the political system (Jennings et al. 2017). The primary theoretical motivation for this approach lies in Easton's (1965) well-known distinction between diffuse and specific political support. Specific support, being object-specific, refers to individuals' satisfaction with the perceived outputs or performance of the incumbent political authorities. In contrast, diffuse support is a generalized attachment or support for the political system, serving as a "reservoir of favorable attitudes or goodwill" toward the political system and is not object-specific in nature. The theoretical and analytical importance of this distinction is frequently noted in previous research, which found that people with low political trust or negative attitudes toward the government often do not reject the political system and prefer the existing political system to remain unchanged (Citrin 1974; Miller 1974). Furthermore, the literature shows that specific support is

variable and less likely to pose a systemic threat to the regime’s survival (Craig and Maggiotto 1981; Muller and Jukam 1983). Democracy allows people to express their political dissatisfaction at the ballot box and change politicians in power without fundamentally altering the system. On the other hand, Muller and Jukam (1983) point out that diffuse political discontent provides the public with a normative incentive to participate in radical changes to the political system as a whole. In this regard, Jennings et al. (2017) points out that conceptualizing political discontent as a lack of diffuse support enables researchers to examine whether there is a sustained decline in diffuse support that could pose a threat to the political system, or if there is merely a decline in specific support that is unremarkable and arguably fluctuates “normally.”

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). These components are interrelated and collectively contribute to the broader construct of diffuse political discontent. One of the main sources of this discontent is the perception that the political 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 have also highlighted that the feeling of being unheard by the political system is a significant source of support for anti-system populist messages (Mudde 2004). Political trust, often used as a measure of political discontent, is conceptually associated with external efficacy but operates on a different dimension. While external efficacy focuses on whether the political system functions according to public demands, political trust concerns whether political authorities work for the public good (Craig 1979). Additionally, the 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 in general, such as the political party system or politicians or the parliament in general, differs from trust in the incumbent government, which is a measure of specific support, or trust in apolitical institutions such as the judiciary or the police. In this context, we consider only distrust in general political institutions as a component of political discontent. Similarly, dissatisfaction with

political parties or national officeholders in general is also used as a component of political discontent. Lastly, recent literature emphasizes the perception of political corruption as a primary source of political discontent, as people perceive political authorities working for their own interests without addressing public demands (Park 2011; Busby et al. 2018; Hawkins, Kaltwasser, and Andreadis 2020).

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 has important implications. First, by focusing on the systemic dimension of political discontent and excluding types of specific support or abstract support for democracy, this conceptualization aligns closely with discussions about the erosion of public confidence in the political system as a whole, beyond mere dissatisfaction with specific authorities or policies. This understanding is crucial for identifying the underlying causes of political disaffection and developing targeted interventions to address them. Moreover, this conceptualization of political discontent can contribute to recent discussions about democratic backsliding. The literature on democratic backsliding has yielded mixed findings regarding whether public opinion can influence the possibility of backslid-

ing (Tai, Hu, and Solt 2024). However, previous studies often use abstract public support for democracy as a measurement, which is less satisfying because abstract support for democracy is notoriously affirming. In this context, political discontent, defined as a lack of diffuse support for the system (Claassen 2020), can serve as a better conceptual tool for discussing how public opinion relates to democratic backsliding. Additionally, previous studies have shown that diffuse political discontent is strongly associated with citizens participating in or endorsing regime-challenging activities, which ultimately pose a threat to the social and political order (Craig 1980). A clearer understanding of the nature and consequences of diffuse political discontent can thus inform efforts to strengthen democratic resilience and responsiveness in the face of growing public disaffection with political systems worldwide. For this, this paper measures political discontent cross-nationally and further examines various sources of political discontent.

## **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 @sec-surveys). 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.



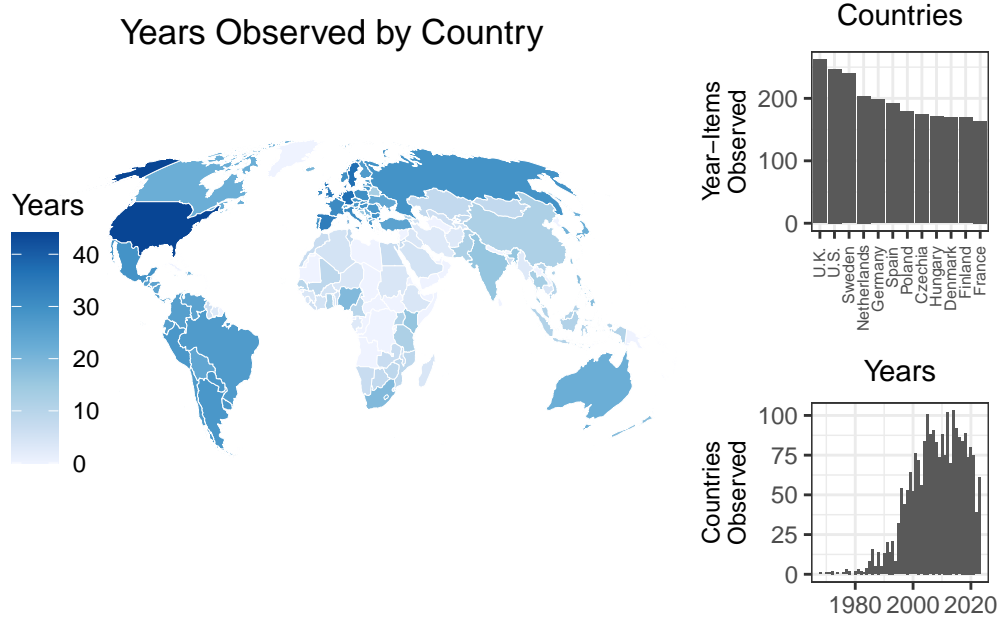


Figure 1: Countries and Years with the Most Observations in the Source Data

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 elaborated in Solt (2020b). The DCPO model is a 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) and political interest (Hu and Solt Forthcoming).<sup>1</sup>

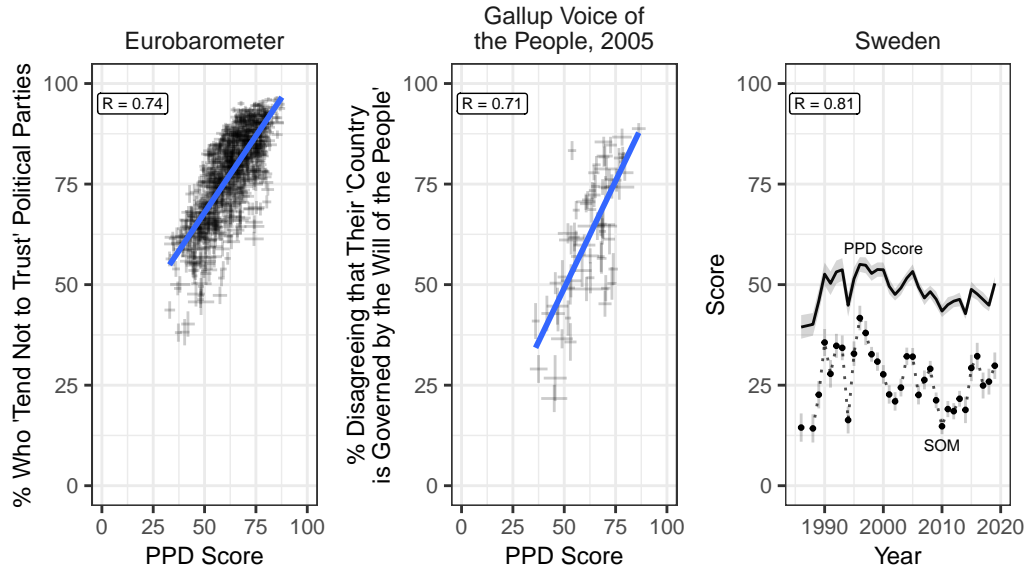
Using the `DCPOtools` package for R (Solt, Hu, and Tai 2019), we generated estimates of the public’s political discontent in all 3,362 country-years spanned by the source data, which we call Public Political Discontent (PPD) scores.

## 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 2, Figure 3, and Figure 4 provide evidence of this measure’s validity with tests of convergent validation and construct

<sup>1</sup>A comprehensive description of the DCPO model is presented in Appendix @ref(dcpo) and Solt (2020b, 3–8).

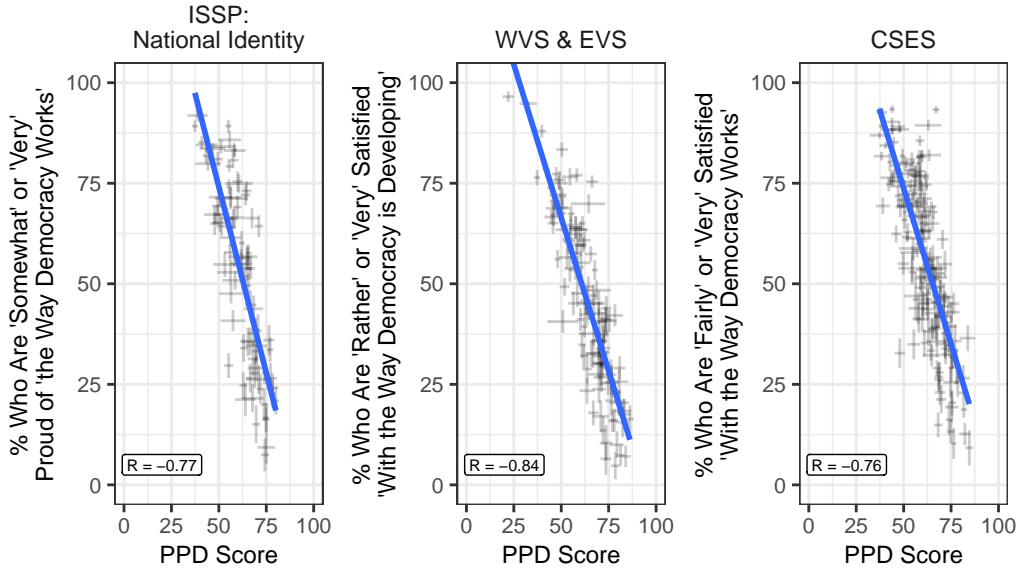
validation.



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

Figure 2: 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 2 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 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.

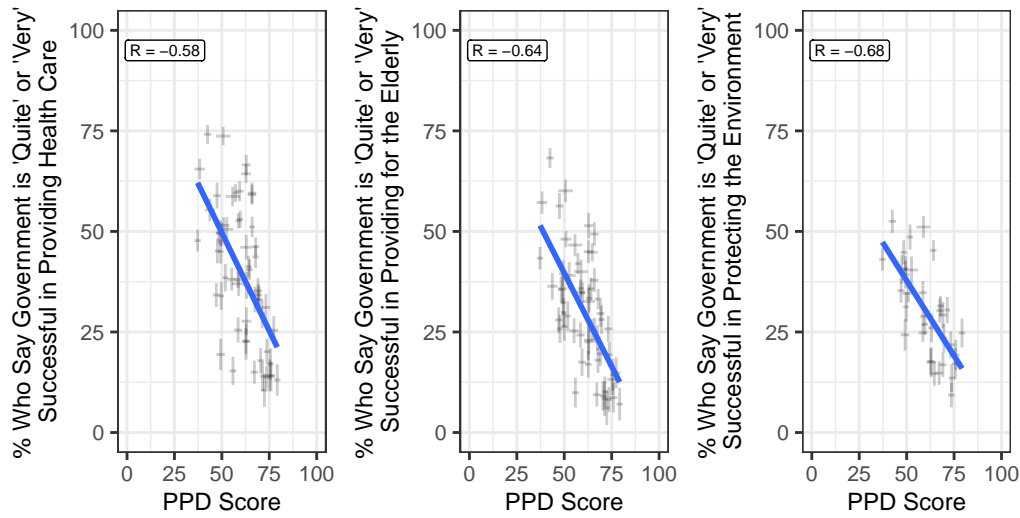


Note: Gray whiskers represent 80% credible intervals.

Figure 3: External Convergent Validation: Correlations Between PPD Scores and Evaluations of Democratic Performance

In Figure 3, 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. Like Jennings et al. (2017), we excluded these questions not least to avoid assuming that respondents 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



Note: Gray whiskers represent 80% credible intervals. Data from ISSP Role of Government surveys, 2006 and 2016.

Figure 4: Construct Validation: Correlations Between PPD Scores and Views of Government Success

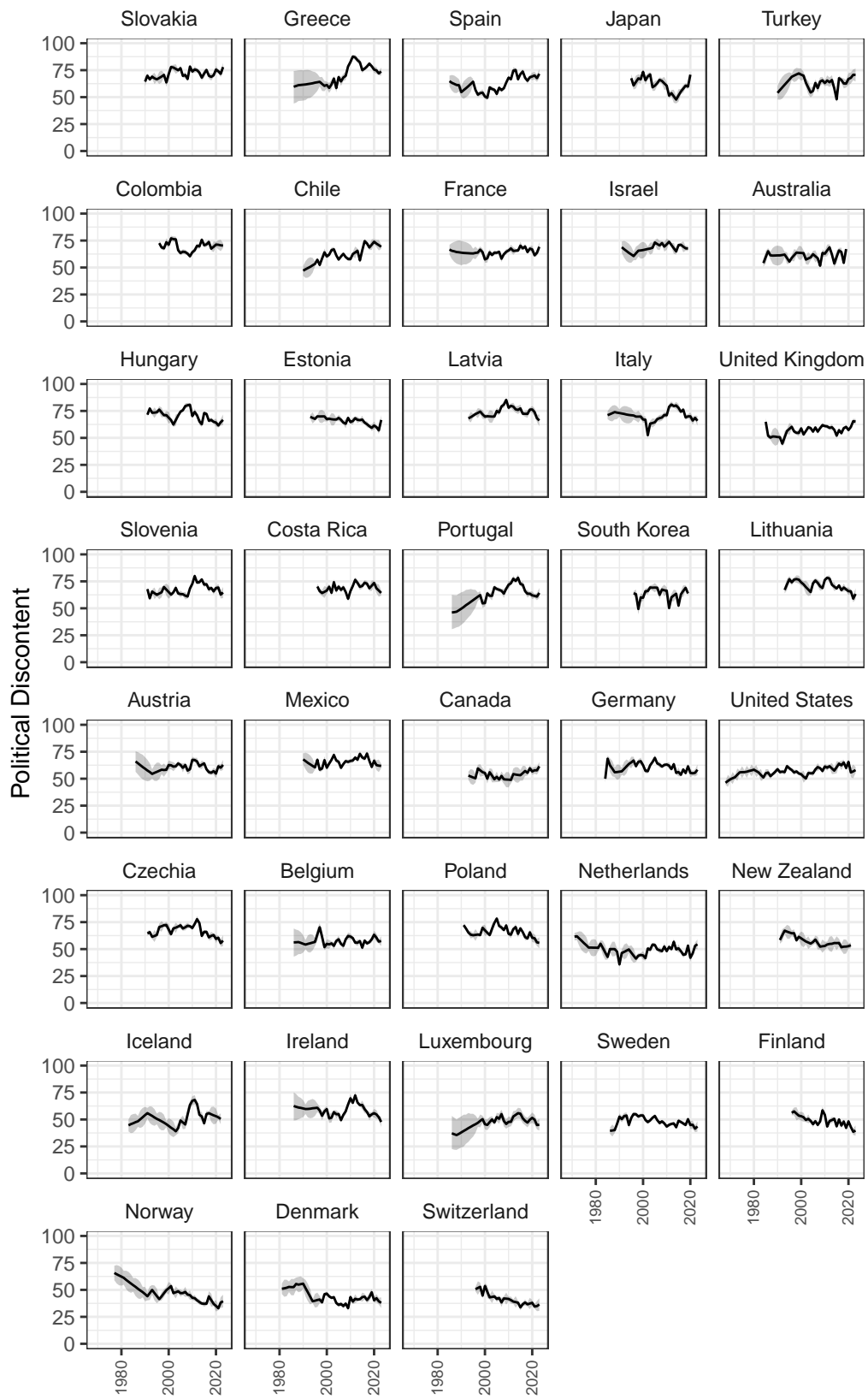
associated with measures of *other* concepts believed causally related to the concept the measure seeks to represent (Adcock and Collier 2001, 542). Discontent with the political system should be closely tied to evaluations of recent government policy performance.

Figure 4 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.

## Explaining Political Dissatisfaction

In Figure 5, 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



ed by their most recent political discontent score; gray shading represents 80% credible intervals.

Figure 5: Political Discontent Scores Over Time Within OECD Democracies

people to turning 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 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 (2010) 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 (?). 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 ?) 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 (Solt 2020a).

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 parliaments 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 country 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).

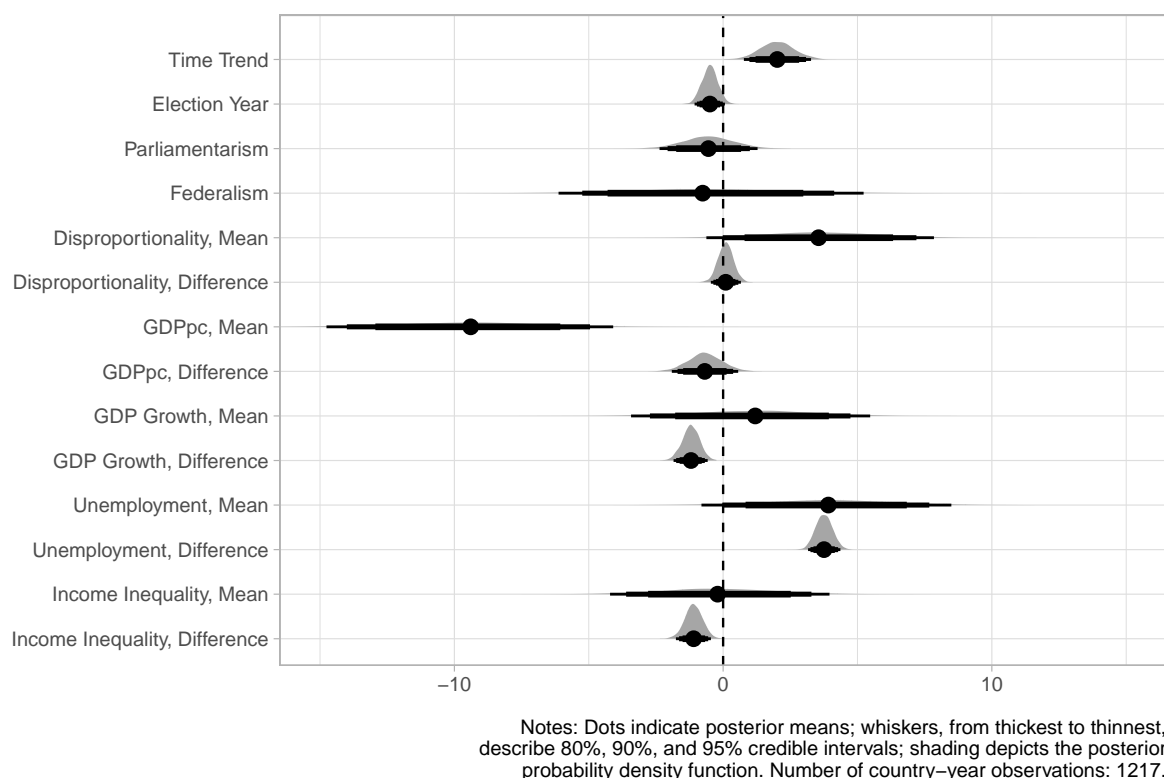


Figure 6: Predicting Public Political Discontent in OECD Countries

The results of this analysis are displayed in Figure 6. <sup>^</sup> A3 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 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 the constraints from available survey data and items in the construction of measurement. Taking advantage of the state-of-the-art latent-variable model [Solt2020c], we construct a dynamic comparative measure that clearly reveals the longitudinal trends of public political discontent in democracies are not merely “trendless fluctuations” claimed by Norris (2011). As highlighted by our analysis, public political discontent has been on a rising trend in OECD countries. These increased discontents are largely attributable to worsening economic conditions, including low average income, slow growth, and high unemployment rates. Unlike prior research that relies on single-country (Jennings et al. 2017) evidence, our findings are built upon a measure that draws on the most available information across countries 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 implications

for future study. There is a prevailing concern that rising political discontent potentially nurtures anti-establishment movements (Mudde 2004) and undermines effective governance (Hetherington 1998). Therefore, with the PPD dataset, future research can be conducted to examine how political discontent impacts public political engagement and democratic consolidation and backsliding. Further, as the PPD dataset includes most countries in the globe, not just democracies, it also allows future investigation into the potentially varying causes and effects of political discontent in different regime types.

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# Public Political Discontent

## Online Supplementary Materials

### Table of contents

|   |            |
|---|------------|
| <b>A1 Survey Items Used to Estimate Public Political Discontent</b> | <b>A2</b>  |
| <b>A2 The DCPO Model</b>  | <b>A21</b> |
| <b>A3 Numeric Results</b>   | <b>A24</b> |
| A3.1 Tabular Version of Results Presented in Figure 6 . . . . .     | A24        |

# 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 ( $\alpha$ ) and difficulty ( $\beta$ ) 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 (Solt, Hu, and Tai 2019) 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, fsdelection                                       |
| 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, fsdelection   |
| 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, cnep, 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, fsdelection   |
| 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_officials4126 |               | 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 / 23456 / 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 / 2 agree / 3 neither agree nor disagree / 4 disagree / 5 Strongly disagree           | 0.70       | -1.40, 0.55, 1.57, 2.91  | issp, 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  | issp   |
| 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, canadanes, cdem, pewrel, neb |
| 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 / 23456 / 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 / 23456 / 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, canadianes                  |
| 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 / 23456 / 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 / 23456 / 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 / 234 / 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, cnep, fsdelection                 |
| 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  | cnep, 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_officials4b | 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   | issp, 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, dkes                  |
| 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 / 4 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, canadanes, 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 | cid                                      |
| 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              | fsdelection, 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_par17      | 7             | Please tell me for each institution or organisation how much trust you place in it: Bundestag   | 1 no trust at all / 23456 / 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 (Solt, Hu, and Tai 2019).

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:pmAXB4lfmfvlsqWTWKOkg==   |
| 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:TNnUHDn0ZNSIIM94TQphWw==  |
| aes2019              | McAllister, Ian; Bean, Clive; Gibson, Rachel; Makkai, Toni; 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, <a href="https://doi.org/10.4232/1.13483">https://doi.org/10.4232/1.13483</a> |
| amb_argentina2018    | LAPOP (2020) Argentina LAPOP AmericasBarometer 2018 v1.0 [Dataset]   |
| amb_argentina2021    |  |
| amb_argentina2023    | LAPOP (2023) Argentina LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_belize2023       | LAPOP (2023) Belize LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_bolivia2021      |  |
| amb_bolivia2023      | LAPOP (2023) Bolivia LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_brazil2021       |  |
| amb_brazil2023       | LAPOP (2023) Brazil LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_canada2021       |  |
| amb_canada2023       | LAPOP (2023) Canada LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_chile2021        |  |
| amb_chile2023        | LAPOP (2023) Chile LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_colombia2021     |  |
| 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    |  |
| amb_costarica2023    | LAPOP (2023) Costa Rica LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |

Table A2: Source Survey Information (*continued*)

| Survey Dataset Code*      | Citation   |
|---------------------------|--|
| amb_dominicanrepublic2021 |  |
| amb_dominicanrepublic2021 | LAPOP (2023) Dominican Republic LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_ecuador2018           | LAPOP (2020) Ecuador LAPOP AmericasBarometer 2018 v1.0 [Dataset]   |
| amb_ecuador2021           |  |
| amb_ecuador2023           | LAPOP (2023) Ecuador LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_elsalvador2021        |  |
| amb_elsalvador2023        | LAPOP (2023) El Salvador LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_guatemala2021         |  |
| amb_guatemala2023         | LAPOP (2023) Guatemala LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_guyana2021            |  |
| amb_haiti2021             |  |
| amb_haiti2023             | LAPOP (2023) Haiti LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_honduras2021          | LAPOP (2023) Honduras LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_honduras2023          | LAPOP (2023) Honduras LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_jamaica2021           |  |
| amb_jamaica2023           | LAPOP (2023) Jamaica LAPOP AmericasBarometer 2023 v1.0 [Dataset]   |
| amb_mexico2021            |  |
| amb_mexico2023            | LAPOP (2023) Mexico LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_nicaragua2021         |  |
| amb_panama2018            | LAPOP (2020) Panama LAPOP AmericasBarometer 2018 v1.0 [Dataset]  |
| amb_panama2021            |  |
| amb_panama2023            | LAPOP (2023) Panama LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_paraguay2021          |  |
| amb_paraguay2023          | LAPOP (2023) Paraguay LAPOP AmericasBarometer 2023 v1.0 [Dataset]  |
| amb_peru2021              |  |
| 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           |  |
| 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. <a href="http://www.electionstudies.org">www.electionstudies.org</a>   |
| 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. <a href="http://doi.org/10.3886/ICPSR22324.v1">http://doi.org/10.3886/ICPSR22324.v1</a> |
| asiab2003                 |  |
| asiab2005                 |  |
| asiab2006                 |  |
| asiab2007                 |  |
| asiab2008                 |  |
| 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  |
| 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  |

Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation   |
|----------------------|--|
| autnes2017           | Wagner, Markus; Aichholzer, Julian; Eberl, Jakob-Moritz; Meyer, Thomas M.; Berk, Nicolai; Büttner, Nico; Boomgaarden, Hajo; Kritzing, Sylvia; Müller, Wolfgang C., 2018, "AUTNES Online Panel Study 2017 (SUF edition)", <a href="https://doi.org/10.11587/I7QIYJ">https://doi.org/10.11587/I7QIYJ</a> , AUSSDA, V4, UNF:6:qXpb3Rjb7GgLHw7J3wNrEA== [fileUNF]  |
| belgiumes1991        |  |
| belgiumes1995        |  |
| belgiumes1999        | Prof.Dr. Marc Swyngedouw, KU Leuven, Departement Sociologie, J. Billiet, KU Leuven, ISPO, A. Frogner, U.C. Louvain, PIOP (primary investigator), 2016, "Belgium General Election Study 1999", <a href="https://doi.org/10.17026/dans-z4z-zagc">https://doi.org/10.17026/dans-z4z-zagc</a> , 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", <a href="https://doi.org/10.17026/dans-z2x-hfdx">https://doi.org/10.17026/dans-z2x-hfdx</a> , DANS Data Station Social Sciences and Humanities, V1, UNF:6:6uuZYzZMgXTjZKpmolY2+A== [fileUNF]   |
| belgiumes2007        | M.M.H. Swyngedouw; A.P. Frogner, 2008, "Belgium General Election Study 2007", <a href="https://doi.org/10.17026/dans-xyh-cces">https://doi.org/10.17026/dans-xyh-cces</a> , DANS Data Station Social Sciences and Humanities, V2, UNF:6:oSydQlfdX+Y8ynzIM7bMw== [fileUNF]  |
| belgiumes2014        | M. Swyngedouw, 2015, "Belgian National Election Study 2014", <a href="https://doi.org/10.17026/dans-22u-yvyu">https://doi.org/10.17026/dans-22u-yvyu</a> , DANS Data Station Social Sciences and Humanities, V1, UNF:6:pCbb5HrF6dlgLxFR0cw7UA== [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. <a href="http://doi.org/10.3886/ICPSR03097.v2">http://doi.org/10.3886/ICPSR03097.v2</a>   |
| 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. <a href="http://doi.org/10.3886/ICPSR03099.v2">http://doi.org/10.3886/ICPSR03099.v2</a> |
| 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. <a href="http://doi.org/10.3886/ICPSR03100.v2">http://doi.org/10.3886/ICPSR03100.v2</a> |
| bsa1998              | Social and Community Planning Research, British Social Attitudes Survey, 1998 [computer file]. Colchester, Essex: UK Data Archive [distributor], June 2000. SN: 4131, <a href="http://dx.doi.org/10.5255/UKDA-SN-4131-1">http://dx.doi.org/10.5255/UKDA-SN-4131-1</a>  |
| bsa2000              | National Centre for Social Research, British Social Attitudes Survey, 2000 [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2002. SN: 4486, <a href="http://dx.doi.org/10.5255/UKDA-SN-4486-1">http://dx.doi.org/10.5255/UKDA-SN-4486-1</a>  |
| 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. <a href="http://doi.org/10.3886/ICPSR03900.v1">http://doi.org/10.3886/ICPSR03900.v1</a>  |
| bsa2002              | National Centre for Social Research, British Social Attitudes Survey, 2002 [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2004. SN: 4838, <a href="http://dx.doi.org/10.5255/UKDA-SN-4838-1">http://dx.doi.org/10.5255/UKDA-SN-4838-1</a>  |
| bsa2003              | National Centre for Social Research, British Social Attitudes Survey, 2003 [computer file]. Colchester, Essex: UK Data Archive [distributor], September 2005. SN: 5235, <a href="http://dx.doi.org/10.5255/UKDA-SN-5235-1">http://dx.doi.org/10.5255/UKDA-SN-5235-1</a>  |
| 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, <a href="http://dx.doi.org/10.5255/UKDA-SN-5618-1">http://dx.doi.org/10.5255/UKDA-SN-5618-1</a>   |
| bsa2006              | National Centre for Social Research, British Social Attitudes Survey, 2006 [computer file]. Colchester, Essex: UK Data Archive [distributor], April 2008. SN: 5823, <a href="http://dx.doi.org/10.5255/UKDA-SN-5823-1">http://dx.doi.org/10.5255/UKDA-SN-5823-1</a>  |
| bsa2007              | National Centre for Social Research, British Social Attitudes Survey, 2007 [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2009. SN: 6240, <a href="http://dx.doi.org/10.5255/UKDA-SN-6240-1">http://dx.doi.org/10.5255/UKDA-SN-6240-1</a>   |
| bsa2009              | National Centre for Social Research, British Social Attitudes Survey, 2009 [computer file]. Colchester, Essex: UK Data Archive [distributor], February 2011. SN: 6695, <a href="http://dx.doi.org/10.5255/UKDA-SN-6695-1">http://dx.doi.org/10.5255/UKDA-SN-6695-1</a>   |
| bsa2010              | National Centre for Social Research, British Social Attitudes Survey, 2010 [computer file]. Colchester, Essex: UK Data Archive [distributor], February 2012. SN: 6969, <a href="http://dx.doi.org/10.5255/UKDA-SN-6969-1">http://dx.doi.org/10.5255/UKDA-SN-6969-1</a>   |
| bsa2011              | NatCen Social Research, British Social Attitudes Survey, 2011 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], January 2014. SN: 7237, <a href="http://dx.doi.org/10.5255/UKDA-SN-7237-2">http://dx.doi.org/10.5255/UKDA-SN-7237-2</a>  |

Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation   |
|----------------------|--|
| bsa2012              | NatCen Social Research, British Social Attitudes Survey, 2012 [computer file]. Colchester, Essex: UK Data Archive [distributor], April 2014. SN: 7476, <a href="http://dx.doi.org/10.5255/UKDA-SN-7476-1">http://dx.doi.org/10.5255/UKDA-SN-7476-1</a>   |
| bsa2013              | NatCen Social Research, British Social Attitudes Survey, 2013 [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2014. SN: 7500, <a href="http://dx.doi.org/10.5255/UKDA-SN-7500-1">http://dx.doi.org/10.5255/UKDA-SN-7500-1</a>  |
| bsa2016              | NatCen Social Research. (2017). British Social Attitudes Survey, 2016. [data collection]. UK Data Service. SN: 8252, <a href="http://doi.org/10.5255/UKDA-SN-8252-1">http://doi.org/10.5255/UKDA-SN-8252-1</a>   |
| bsa2017              | NatCen Social Research. (2019). British Social Attitudes Survey, 2017. [data collection]. UK Data Service. SN: 8450, <a href="http://doi.org/10.5255/UKDA-SN-8450-1">http://doi.org/10.5255/UKDA-SN-8450-1</a>   |
| bsa2019              | NatCen Social Research. (2021). British Social Attitudes Survey, 2019. [data collection]. UK Data Service. SN: 8772, <a href="http://doi.org/10.5255/UKDA-SN-8772-1">http://doi.org/10.5255/UKDA-SN-8772-1</a>   |
| 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. <a href="http://doi.org/10.3886/ICPSR03095.v2">http://doi.org/10.3886/ICPSR03095.v2</a> |
| canadians2004        | Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2004. The 2004 Canadian Election Study. [dataset]   |
| canadians2006        | Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2006. The 2006 Canadian Election Study. [dataset]   |
| canadians2008        | Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2008. The 2008 Canadian Election Study. [dataset]   |
| canadians2011        | Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2011. The 2011 Canadian Election Study. [dataset]   |
| canadians2015        | Fournier, Patrick, Fred Cutler, Stuart Soroka and Dietlind Stolle. 2015. The 2015 Canadian Election Study. [dataset]   |
| canadians2019        | Stephenson, Laura B; Harell, Allison; Rubenson, Daniel; Loewen, Peter John, 2020, “2019 Canadian Election Study (CES) - Online Survey”, <a href="https://doi.org/10.7910/DVN/DUS88V">https://doi.org/10.7910/DVN/DUS88V</a> , Harvard Dataverse, V3, UNF:6:L0A0hDxh6b2mmK2nmQDoyw== [fileUNF]  |
| canadians2021        | Stephenson, Laura B; Harell, Allison; Rubenson, Daniel; Loewen, Peter John, 2022, “2021 Canadian Election Study (CES)”, <a href="https://doi.org/10.7910/DVN/XBZHKC">https://doi.org/10.7910/DVN/XBZHKC</a> , Harvard Dataverse, V3, UNF:6:UImDcX6kd5FnExyB5kM18Q== [fileUNF]  |
| caucasusb2021        |  |
| cdem2022             |  |
| 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, <a href="https://doi.org/10.4232/1.4492">https://doi.org/10.4232/1.4492</a> .   |
| cispol1989           | Centro de Investigaciones Sociologicas. 1989. “Cultura Política (II).” Estudio 1788.   |
| cnep_combo           | Mershon Center for International Security Studies. 2023. “Comparative National Elections Project, Merge 54.”   |
| cnes1993             |  |
| 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. <a href="https://doi.org/10.3886/ICPSR02593.v3">https://doi.org/10.3886/ICPSR02593.v3</a>   |
| cnes2000             |  |
| cses1                |  |
| 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]  |
| 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. <a href="https://doi.org/10.3886/ICPSR36277.v2">https://doi.org/10.3886/ICPSR36277.v2</a>   |
| eb24                 |  |
| 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.   |

Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation   |
|----------------------|--|
| 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                |  |
| eb551                |  |
| eb562                |  |
| eb571                |  |
| eb591                | 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.     |
| eb601                |  |
| eb61                 |  |
| eb62                 |  |
| eb631                |  |
| eb634                | 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.                   |
| eb642                |  |
| eb643                |  |
| eb652                |  |
| eb661                |  |
| eb663                | 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.                 |
| eb681                |  |
| eb682                |  |
| eb692                |  |
| eb701                |  |
| 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                |  |
| eb724                |  |
| eb734                |  |
| eb742                |  |
| eb761                |  |
| eb763                |  |
| eb773                |  |
| eb781                |  |
| eb791                |  |
| eb793                |  |
| eb801                |  |
| eb812                |  |
| eb814                |  |
| eb823                |  |
| eb833                |  |
| eb843                |  |
| eb852                |  |
| eb861                |  |
| eb862                |  |
| eb873                | European Commission and European Parliament, Brussels (2022). Eurobarometer 97.3 (2022). GESIS, Cologne. ZA7888 Data file Version 1.0.0, <a href="https://doi.org/10.4232/1.14055">https://doi.org/10.4232/1.14055</a> . |
| eb881                |  |
| eb882                |  |
| eb883                |  |
| eb891                |  |
| eb902                |  |
| eb903                |  |
| eb912                |  |
| eb915                |  |
| eb923                |  |
| eb924                |  |
| eb931                |  |
| eb941                |  |
| eb943                |  |
| eb953                |  |
| eb961                |  |
| eb963                |  |
| eb972                |  |
| eb975                |  |
| eb982                |  |
| eb994                | European Commission and European Parliament, Brussels (2022). Eurobarometer 97.3 (2022). GESIS, Cologne. ZA7888 Data file Version 1.0.0, <a href="https://doi.org/10.4232/1.14055">https://doi.org/10.4232/1.14055</a> . |
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|                      |  |
|                      |  |
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Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation  |
|----------------------|---|
| 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. <a href="https://doi.org/10.21338/ess1e06\_6">https://doi.org/10.21338/ess1e06\_6</a>                                      |
| 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. <a href="https://doi.org/10.21338/ess10e03\_0">https://doi.org/10.21338/ess10e03\_0</a>                                     |
| 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. <a href="https://doi.org/10.21338/ESS2E03\_6">https://doi.org/10.21338/ESS2E03\_6</a>                 |
| 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. <a href="https://doi.org/10.21338/ess2it">https://doi.org/10.21338/ess2it</a>                                |
| 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. <a href="https://doi.org/10.21338/ESS3E03\_7">https://doi.org/10.21338/ESS3E03\_7</a>    |
| 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. <a href="https://doi.org/10.21338/ess4e04\_6">https://doi.org/10.21338/ess4e04\_6</a> |
| 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. <a href="https://doi.org/10.21338/ess4at">https://doi.org/10.21338/ess4at</a>                           |
| 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. <a href="https://doi.org/10.21338/ess4lt">https://doi.org/10.21338/ess4lt</a>   |
| 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. <a href="https://doi.org/10.21338/ess5e03\_5">https://doi.org/10.21338/ess5e03\_5</a>               |
| 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. <a href="https://doi.org/10.21338/ess5ate1\_1">https://doi.org/10.21338/ess5ate1\_1</a>                 |
| 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. <a href="https://doi.org/10.21338/ess6e02\_6">https://doi.org/10.21338/ess6e02\_6</a>                                      |
| 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. <a href="https://doi.org/10.21338/ess7e02\_3">https://doi.org/10.21338/ess7e02\_3</a>                                      |
| 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. <a href="https://doi.org/10.21338/ess8e02\_3">https://doi.org/10.21338/ess8e02\_3</a>                                      |
| 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. <a href="https://doi.org/10.21338/ess9e03\_2">https://doi.org/10.21338/ess9e03\_2</a>                                      |
| 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. <a href="https://doi.org/10.21338/ess9roe01">https://doi.org/10.21338/ess9roe01</a>                              |
| eurasiab2001         |   |
| eurasiab2010         |   |
| feb450               |   |
| fnes1995             |   |
| formpubop1999        |   |
| formpubop2000        |   |
| formpubop2001        |   |
| formpubop2002        |   |
| formpubop2003        |   |
| fsdelection2019      |   |
| fsdelection_combo    |   |
| gallup_vop2000       |   |
| gallup_vop2004       |   |
| gallup_vop2005       |   |
| gallup_vop2007       |   |
| gallup_vop2012       |   |
| gles1994             | Falter, Ju\_rgen W.; Gabriel, Oscar W.; Rattinger, 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.; Rattinger, 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.; Rattinger, 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             | GLÉS (2015). Short-term Campaign Panel (GLÉS 2009). GESIS Data Archive, Cologne. ZA5305 Data file Version 5.0.0, <a href="https://doi.org/10.4232/1.12198">https://doi.org/10.4232/1.12198</a> .  |

Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation  |
|----------------------|---|
| gles2013             | Rattinger, Hans; Roßteutscher, Sigrid; Schmitt-Beck, Rüdiger; Weßels, 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, <a href="https://doi.org/10.4232/1.13323">https://doi.org/10.4232/1.13323</a> .  |
| icenes1983           | Harðarson, Ólafur Þórður; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1983”, <a href="https://doi.org/10.34881/1.00001">https://doi.org/10.34881/1.00001</a> , GAGNÍS (DATICE), V1, UNF:6:krmQ/NST5UWdwJ3OIWJ8A== [fileUNF]  |
| icenes1987           | Harðarson, Ólafur Þórður; Félagsvísindastofnun, 2020, “Íslenska kosningarannsóknin 1987”, <a href="https://doi.org/10.34881/1.00002">https://doi.org/10.34881/1.00002</a> , GAGNÍS (DATICE), V3, UNF:6:QFUhkaIXJfohv9z5T/HpeA== [fileUNF]   |
| icenes1991           | Harðarson, Ólafur Þórður; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1991”, <a href="https://doi.org/10.34881/1.00003">https://doi.org/10.34881/1.00003</a> , GAGNÍS (DATICE), V1, UNF:6:CF1aHW7xsn83iJFjIACP5Q== [fileUNF]   |
| icenes1995           | Harðarson, Ólafur Þórður; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1995”, <a href="https://doi.org/10.34881/1.00004">https://doi.org/10.34881/1.00004</a> , GAGNÍS (DATICE), V1, UNF:6:soAWhg5QnLVM64/ItiByow== [fileUNF]   |
| icenes1999           | Harðarson, Ólafur Þórður; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 1999”, <a href="https://doi.org/10.34881/1.00005">https://doi.org/10.34881/1.00005</a> , GAGNÍS (DATICE), V1, UNF:6:yiZ5815qg7DAqc5e2QPVMQ== [fileUNF]   |
| icenes2003           | Harðarson, Ólafur Þórður; Eva Heiða Önnudóttir; Einar Már Þórðarson; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 2003”, <a href="https://doi.org/10.34881/1.00006">https://doi.org/10.34881/1.00006</a> , GAGNÍS (DATICE), V1, UNF:6:2wWd5vKJmBmyz2NzoDiPQQ== [fileUNF]                      |
| icenes2007           | Harðarson, Ólafur Þórður; Eva Heiða Önnudóttir; Einar Már Þórðarson; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 2007”, <a href="https://doi.org/10.34881/1.00007">https://doi.org/10.34881/1.00007</a> , GAGNÍS (DATICE), V1, UNF:6:e2fn43HO5Jo1AYE4ttePGw== [fileUNF]                      |
| icenes2009           | Harðarson, Ólafur Þórður; Önnudóttir, Eva Heiða; Þórðarsson, Einar Már; Félagsvísindastofnun, 2021, “Íslenska kosningarannsóknin 2009”, <a href="https://doi.org/10.34881/1.00008">https://doi.org/10.34881/1.00008</a> , GAGNÍS (DATICE), V1, UNF:6:/udEf4H4VtlzK7Q4e7mwA== [fileUNF]                    |
| icenes2013           | Harðarson, Ólafur Þórður; Hulda Þórisdóttir; Eva Heiða Önnudóttir, 2021, “Íslenska kosningarannsóknin 2013”, <a href="https://doi.org/10.34881/1.00009">https://doi.org/10.34881/1.00009</a> , GAGNÍS (DATICE), V1, UNF:6:a7ePGbqQoIlklFeypfRa6Q== [fileUNF]  |
| icenes2016           | Önnudóttir, Eva Heiða; Harðarson, Ólafur Þórður; Þórisdóttir, Hulda; Helgason, Agnar Freyr, 2021, “Íslenska kosningarannsóknin 2016”, <a href="https://doi.org/10.34881/1.00010">https://doi.org/10.34881/1.00010</a> , GAGNÍS (DATICE), V1, UNF:6:dqN69a8RixTJARKwphBO9w== [fileUNF]                     |
| icenes2017           | Önnudóttir, Eva Heiða; Harðarson, Ólafur Þórður; Þórisdóttir, Hulda; Helgason, Agnar Freyr, 2021, “Íslenska kosningarannsóknin 2017”, <a href="https://doi.org/10.34881/1.00011">https://doi.org/10.34881/1.00011</a> , GAGNÍS (DATICE), V1, UNF:6:ypxLPvXbfVrTPNiu+DKBJg== [fileUNF]                     |
| icenes2021           | Önnudóttir, Eva Heiða; Helgason, Agnar Freyr; Þórisdóttir, Hulda; Ólafsson, Jón Gunnar; Harðarson, Ólafur Þórður, 2023, “Íslenska kosningarannsóknin 2021”, <a href="https://doi.org/10.34881/0ERQOZ">https://doi.org/10.34881/0ERQOZ</a> , GAGNÍS (DATICE), V1, UNF:6:7uXWgb9Md/iOotP7lyrMvA== [fileUNF] |
| icnl1985             |   |
| icnl1990             |   |
| ines_long            |   |
| issp1985             |   |
| issp1991             |   |
| 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, <a href="https://doi.org/10.4232/1.2900">https://doi.org/10.4232/1.2900</a> .   |
| issp1998             |   |
| issp2001             |   |
| 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  |
| 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, <a href="https://doi.org/10.4232/1.13707">https://doi.org/10.4232/1.13707</a> .  |
| issp2008             |   |
| issp2010             |   |
| 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             |   |
| issp2020             |   |
| itanes2001           | Istituto Cattaneo, Italian National Election Studies, 2001 [Dataset]  |
| itanes2013capi       | Istituto Cattaneo, Italian National Election Studies, 2013 [Dataset]  |
| jgss                 |   |
| jgss2008             |   |
| jgss2010             |   |
| jgss2012             |   |
| 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]  |



Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation   |
|----------------------|--|
| 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           |  |
| lits_wave2           |  |
| lits_wave3           |  |
| 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. <a href="http://doi.org/10.3886/ICPSR28221.v1">http://doi.org/10.3886/ICPSR28221.v1</a> |
| norcs2013_1          |  |
| norcs2014_3          |  |
| norcs2015_4          |  |
| norcs2015_5          |  |
| norcs2016_6          |  |
| nores2013            | Institute for Social Research and Statistics Norway. (2022) Norwegian Election Survey 2013. [Data set] Sikt. <a href="https://doi.org/10.18712/NSD-NSD2215-V3">https://doi.org/10.18712/NSD-NSD2215-V3</a>   |
| nores_combo1         | Statistics Norway et al. (2022) Norwegian Election Survey time series 1977-1997. [Data set] Sikt. <a href="https://doi.org/10.18712/NSD-NSD1760-1-V3">https://doi.org/10.18712/NSD-NSD1760-1-V3</a>  |
| nores_combo2         | Statistics Norway and Institute for Social Research. (2022) Norwegian Election Survey time series, 2001-2009. [Data set] Sikt. <a href="https://doi.org/10.18712/NSD-NSD1760-2-V7">https://doi.org/10.18712/NSD-NSD1760-2-V7</a>   |
| 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. <a href="http://doi.org/10.3886/ICPSR28221.v1">http://doi.org/10.3886/ICPSR28221.v1</a> |
| nsss_combo           |  |
| 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/O0LRZZ, 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              |  |
| pew2007              |  |
| pew2009              |  |
| pew2010              |  |
| pew2011              |  |
| pew2012              |  |
| pew2013              |  |

Table A2: Source Survey Information (*continued*)

| Survey Dataset Code* | Citation  |
|----------------------|---|
| pew2014              |   |
| pew2015              |   |
| pew2016              |   |
| pew2017              |   |
| pew2018              |   |
| pew2019              |   |
| pewrel2009_afr       |   |
| pewrel2015_ee        |   |
| 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            |   |
| usgss                |   |
| uspew2006_12val      |   |
| uspew2009_val        |   |
| 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    |
| 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 (Solt, Hu, and Tai 2019).



Starred countries are OECD democracies, the sample employed in the analysis of public political discontent presented in the main text.

Figure A1: Source Data Observations by Country and Year



Starred countries are OECD democracies, the sample employed in the analysis of public political discontent presented in the main text.

Figure A2: Source Data Observations by Country 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 elaborated in Solt (2020b). 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  $\phi$  represents an overall dispersion parameter to account for additional sources of survey error beyond sampling error and  $\eta_{ktqr}$  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  $r$ .<sup>1</sup>

This expected probability,  $\eta_{ktqr}$ , 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,  $\beta_{qr}$  represents the difficulty of response  $r$  to question  $q$ , that is, the degree of political the response expresses. The  $\delta_{kq}$  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.<sup>2</sup> The dispersion of question  $q$ , its noisiness in relation to the latent variable, is  $\alpha_q$ . The mean and standard deviation of the unbounded latent trait of public political discontent are  $\bar{\theta}'_{kt}$  and  $\sigma_{kt}$ , respectively.

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

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<sup>1</sup>The 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  $R$ .

<sup>2</sup>Estimating  $\delta_{kq}$  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  $\delta_{kq}$  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  $\delta_{kq}$  in such cases are also set to zero.

<sup>3</sup>The dispersion parameters  $\alpha_q$  are drawn from standard half-normal prior distributions, that is, the positive half of  $N(0, 1)$ . The first difficulty parameters for each question,  $\beta_{q1}$ , are drawn from standard normal prior distributions, and the differences between  $\beta$ s for each  $r$  for the same question  $q$  are drawn from standard half-normal prior distributions. The item-bias parameters  $\delta_{kq}$  receive

constrained to be positive and all survey responses are coded with high values indicating more political discontent to fix direction. The difficulty  $\beta$  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  $\delta_{kq}$  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 (see Solt 2020b, 3–8).

The DCPO model accounts for the incomparability of different survey questions with two parameters. First, it incorporates the *difficulty* of each question’s responses, that is, how much political discontent is indicated by a given response. That each response evinces more or less of our latent trait is most easily seen with regard to the ordinal responses to the same question: 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.” But this is also true across questions. For example, strongly agreeing that “there is widespread corruption among those who govern the country” likely expresses even more discontent than strongly agreeing that “people like me can probably vote, but we cannot do anything else to influence politics.” Second, the DCPO model accounts for each question’s *dispersion*, its noisiness with regard to our latent trait. The lower a question’s dispersion, the better that changes in responses to the question map onto changes in public political discontent. 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 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)—

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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  $\sigma_{\theta'}^2$  and  $\sigma_{\sigma}^2$ ; the initial value of the standard deviation of the unbounded latent trait for each country,  $\sigma_{k1}$ , is drawn from a standard lognormal prior distribution. The overall dispersion,  $\phi$ , receives a somewhat more informative prior drawn from a gamma(4, 0.1) distribution that yields values that are well scaled for that parameter.

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 `DCPOtools` 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  $\phi$ ) and potential bias in the estimates where data are more sparse.

Table A3

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

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

## A3 Numeric Results

### A3.1 Tabular Version of Results Presented in Figure 6



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