

The Rich Have a Slight Edge

Evidence from Comparative Data on Income Based Inequality in Policy Congruence*

Mikael Persson
University of Gothenburg
mikael.persson.3@gu.se

Anders Sundell
University of Gothenburg
anders.sundell@pol.gu.se

December 19, 2022

Abstract

Several recent studies have found unequal policy responsiveness, meaning that the policy preferences of high-income citizens are better reflected in implemented policies than the policy preferences of low-income citizens. This has been found mainly in a few studies from the US and a small number of single-country studies from Western Europe. However, there is a lack of comparative studies that stake out the terrain across a broader group of countries. We analyze survey data on policy preferences of about 3,000 policy proposals from 30 European countries over a period of nearly 40 years, combined with information on whether each policy proposal was implemented or not. The results from the cross-country data confirm the general pattern from previous studies that policies supported by the rich are more likely to be implemented than those supported by the poor. We also test four explanations commonly found in the literature: whether unequal responsiveness is exacerbated by (a) high economic inequality, (b) the absence of campaign finance regulations, (c) low union density, and (d) low voter turnout. We find no systematic evidence that these factors are related to unequal responsiveness. Instead, the preferences of high-income citizens generally appear to be better reflected in implemented policies than the preferences of low-income citizens across different country contexts. The middle-class is in general better represented than low-income citizens, but worse than high-income citizens.

*Draft version December 2022, accepted for publication in *British Journal of Political Science*. We thank Larry Bartels and Josh Jansa for helpful comments. This study was supported by grant 2017:00873 from The Swedish Research Council for Health, Working Life and Welfare (FORTE). The authors would like to thank Christoffer Larsson, Simon Lundin, Laura Lungu, Natalia Natsika and Ramin Shirali for research assistance.

Introduction

Unequal policy responsiveness in the United States is one of the most widely reported research findings in the social sciences over the past decade — policies supported by the rich are more common than those supported by the poor (Bartels 2009; Gilens 2005, 2012; Gilens and Page 2014). While there is now some evidence from single-country studies showing that responsiveness is also biased in favor of high-income citizens in Europe (i.e. Elsässer, Hense and Schäfer 2020; Mathisen Forthcoming; Mathisen et al. 2021; Lupu and Tirado Castro Forthcoming; Persson 2023; Schakel 2021; ?), we lack more comprehensive comparative studies. We attempt to fill this gap by analyzing survey data on opinion support for about 3,000 policy proposals from 30 countries over a period of almost 40 years, combined with information on whether the policy proposals were implemented in different time periods. This makes the study the most comprehensive comparative study of policy issue congruence to date, in the respect that it includes both many countries and many issues as well as measures of support in different income groups.

While other studies have looked at comparative data, such as the recent papers by (Lupu and Warner 2021*a,b*), they look at representation in terms of left-right ideology. Studies of ideological congruence are important but they need to be complemented with other types of analyses. Other studies have looked at responsiveness to specific issues in several countries, such as (Rasmussen, Reher and Toshkov 2019), but they do not take inequality between socio-economic groups into account. Studies which have taken inequality between socio-economic groups into account are usually single country-studies (Schakel 2021; Elsässer, Hense and Schäfer 2020; Gilens 2012). We combine the approach of looking at congruence over many (1) countries, (2) years and (3) issues with studying inequality between socio-economic groups in a way that has not been done before.

The results from the comparative data confirm the general pattern of previous studies showing unequal responsiveness — policies supported by the rich are more common than those supported by the poor (whereas the middle-class receives levels of responsiveness in

between the poor and the rich). In addition, we test the influence of four explanations commonly found in the literature, e.g., whether unequal responsiveness is exacerbated by (a) high economic inequality, (b) the absence of campaign finance regulations, (c) low union density, or (d) low voter turnout. We find no systematic evidence that these factors are related to unequal congruence. The gap is relatively small, but still substantially important.

The state of the research field

Research on political representation has traditionally assumed that there is a relatively strong relationship between citizens' opinions and the opinions and legislative behavior of their elected representatives (Erikson, MacKuen and Stimson 2002; Holmberg 1997; Miller and Stokes 1963; Monroe 1979, 1998; Page and Shapiro 1983; Stimson, MacKuen and Erikson 1995). In addition, studies have shown that opinions both *affect* policies and that public opinion *reacts* to policy changes (Wlezien 1995; Wlezien and Soroka 2007; Soroka and Wlezien 2005, 2010). While much of the literature focuses on the US, several studies from Europe also show that political representatives are (at least) fairly responsive to the public (Hakhverdian 2010; Binzer Hobolt and Klemmensen 2005; Binzer Hobolt and Klemmensen 2008; Rasmussen, Reher and Toshkov 2019). These early studies focused on responsiveness to the public in general, often with a theoretical focus on the median voter. The focus on the middle does of course make sense from a theoretical point of view — if politicians want to win elections they better appeal to the median voter, so to what extent do they actually do so? Given the importance of the median voter to win elections, one could theoretically expect politicians to be even more responsive to the middle-income citizens than the high- and low-income citizens.

In the last decade, however, a new strand of research has emerged that focuses in particular on how well the preferences of different subgroups are reflected in either the behavior of political representatives and in actual policies. Bartels (2009), for example, has shown

that the votes of U.S. senators better reflect the views of high-income citizens. Moreover, Gilens (2005, 2012) and Gilens and Page (2014) have shown that policies have a stronger relationship with the preferences of high-income citizens than with the preferences of low- and middle-income citizens. Gilens and Page conclude that "that economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while average citizens and mass-based interest groups have little or no independent influence" (Gilens and Page 2014, p. 564). Other researchers have offered alternative interpretations, suggesting that group differences in preferences are generally small and that the response gap is not that substantial (Bashir 2015; Branham, Soroka and Wlezien 2017; Enns and Wlezien 2011; Enns 2015; Soroka and Wlezien 2008; Ura and Ellis 2008).¹

In an attempt to settle the debate in the literature, Bowman (2020) evaluates a variety of model specifications and definitions of disagreement and policy change used in these studies and finds that the preferences of the wealthy significantly affect the likelihood of implementation. In contrast, the preferences of the middle class and the poor do not have the same impact. The fact that there is substantial disagreement about the extent of unequal responsiveness in the U.S., comparative studies like this can help us to put these findings in perspective.

From a comparative perspective, and especially in comparison with west European countries, the U.S. is a special case with relatively high levels of income inequality and presumably strong ties between economic and political elites. So do we find unequal responsiveness elsewhere? Individual country studies from Germany (Elsässer, Hense and Schäfer 2020), Denmark (Elkjær 2020), Netherlands (Schakel 2021; Schakel and van der Pas 2020), Norway (Mathisen Forthcoming), Sweden (Persson 2021, 2023; Guntermann and Persson 2021), Spain (Lupu and Tirado Castro Forthcoming) and EU-level institutions (Lefkofridi and Giger 2020) point to similar patterns of unequal responsiveness. But as said earlier this research area lacks cross-country studies that map the terrain in many countries across a range of

¹See also Gilens' responses (Gilens 2016, 2015).

issues.

There are (at least) four common but rarely tested hypotheses in the literature that aim to explain the extent of unequal responsiveness, i.e. economic inequality, campaign finance regulations, union density, and voter turnout.

First, the literature often points to economic inequality as a possible cause of unequal policy responsiveness. There are several reasons why this might be the case. In economically unequal societies, low-income citizens may be more politically marginalized and lack the means to voice their opinions in politics. Similarly, high-income citizens are likely to have a stronger position to influence policy because of their stronger relative power position in society. On the other hand, elites in societies with greater economic equality do not have the same advantage of using their economic power to exert their influence over low-income citizens. Therefore, the first hypothesis we test is whether higher income inequality is associated with higher levels of unequal responsiveness.

Second, and related, Gilens suggests that unequal responsiveness in the U.S. may be due to high-income citizens making large campaign contributions. This could create a link between economic and political elites that forces politicians to grant more influence to high-income citizens. Therefore, regulating campaign contributions could be a way to weaken the undue influence of economic elites. The second hypothesis we test, therefore, is whether the absence of campaign finance regulations is associated with higher levels of unequal responsiveness.

A third factor that often comes up in the discussion is union density (Becher, Stegmueller and Käppner 2018). The assumption is that a well-organized labor movement with high union density is advantageous in enforcing the preferences of low-income citizens. At the very least, when left-wing parties are in power, high union density might be expected to put pressure on those governments to implement policies that matter to the working class (Kwon and Pontusson 2010). The direct influence of union density on policy under right-wing governments may be less direct, but nevertheless a well-organized labor movement

could help to put their preferred issues on the agenda. The fourth hypothesis we test is therefore whether the level of union density is related to unequal levels of responsiveness.

Fourth, since research shows that political representatives are more responsive to active citizens than to inactive citizens (Griffin and Newman 2005; Peters and Ensink 2015), it is reasonable to assume that low political participation by the least affluent citizens could lead to lower consideration of low-income citizens' preferences in the political decision-making process. If low-income citizens participate less compared to high-income citizens, this is likely to translate into unequal influence in the policymaking process. We also know that economic inequality lowers both voter turnout and non-voter participation and causes a greater income bias in participation (Solt 2010, 2008). While there are many ways in which citizens might try to influence politicians, we focus here on one particular form of political participation, namely voter turnout. We do so because turnout is central to the distribution of power in society and of direct importance to policymakers, but also because it is the form of political participation for which it is feasible and possible to use comparative country data. While it is difficult to obtain data on the relative turnout of different social groups, much research shows that lower turnout is likely to be associated with a more unequal distribution of turnout between different social groups (Tingsten 1963; Persson, Solevid and Öhrvall 2013). The fourth hypothesis we test is therefore whether the level of turnout is related to unequal levels of responsiveness.²

There are, of course, many other factors that might influence the extent of unequal responsiveness, but there is no clear consensus in the literature about which factors might facilitate equal representation of citizens' preferences. The role of interest groups remains contested, and studies point in different directions about whether they strengthen the link between opinion and policy (Klüver and Pickup 2019; Bevan and Rasmussen 2020). Factors that appear to have a significant ex-ante impact on how well different income groups are

²It is important to note that we test the aggregate level relationship between voter turnout and congruence, i.e. whether country-years with higher turnout are associated with higher issue congruence. However, it could still be the case that the individual citizens who vote receive more congruence, but since we do not have data on voter turnout for the individuals in the original datasets this is not possible to test using this data.

represented, such as a proportional voting system, have not been shown to be effective in empirical studies of ideological congruence (Guntermann 2020). Similarly, Rasmussen, Reher and Toshkov (2019) show that the effects of electoral systems and power distribution have a minimal impact on political responsiveness, Rasmussen, Reher and Toshkov (2019) show that the number of coalition partners is not associated with lower responsiveness (Toshkov, Mäder and Rasmussen 2020). And Lupu and Warner (2021*a,b*), in two papers mainly concerned with ideological congruence, find that while there is clear evidence that the wealthy are more often better represented than the poor, there is no evidence that factors such as political institutions, globalization, or citizens’ political behavior moderate this relationship.

This paper brings two main contributions to the field. First, it moves beyond single country studies and evaluate responsiveness to specific issues using comparative data. While other studies have also used comparative data, such as the recent papers by Lupu and Warner (2021*a,b*), they look at representation in terms of left-right ideology. Studies of ideological congruence are important, but they need to be complemented with other kinds of analyses. As Broockman (2016) has showed, ideological scores “say little about citizens’ views within domains, on issues themselves” (p. 8). Moreover, when using ideological scores it is, for example, not possible to distinguish between legislators who are ideologically ‘mixed’ from those who are ‘moderate’. Moreover, a number of studies have convincingly showed that people have opinions on distinct issues beyond their ideological dispositions (Ansolabehere, Rodden and Snyder 2008; Tausanovitch and Warshaw 2013).³ This paper takes a country comparative approach to study unequal policy responsiveness using issue-by-issue data. Secondly, it adds an empirical evaluation of the impact of four of the most commonly occurring mechanisms in the field. These mechanisms have been largely ignored in empirical studies.

As the reader may have noticed, there is a lack of conceptual clarity in this research area. Researchers often use terms like “representation”, “responsiveness”, and “congruence”

³See Broockman (2016) for an extended discussion on this issue.

interchangeably. In general, scholars refer to congruence to study whether there is a match between what kind of policy people want and what kind of policy is in place (note that this is a different approach to the many studies focusing on ideological congruence (cf. Golder and Stramski 2010)). Responsiveness, on the other hand, is sometimes thought to imply an temporal dimension where some scholars define policy responsiveness as a causal reaction to opinion, while others define it more loosely as a correlation between opinion and policy, as Wlezien (2017) puts it “when most people want a lot of policy [...] they would get a lot of policy” (p. 562). Others refer to the same relationship as ‘influence’, or simply policy representation (see Bartels (2021) and Wlezien (2017) for conceptual overviews). Using our data we can merely study the correlations between opinions and policy, not whether there is a causal relationship. Still, in our dataset policy outcomes are measured years after measurement of opinion, which mitigates the risk for reverse causality. Further methodological considerations are discussed in the next section.

To make clear what we are empirically investigating in this paper, we focus on ‘congruence’ and by that term we refer to the extent to which actual policy changes match public support for those policy proposals. We do this by looking at how large the share of citizens is that hold preferences matching the policies that are in place. Empirically, we calculate congruence by examining the extent to which political support in different income groups is congruent with policy changes. In the Appendix we examine responsiveness in a more traditional way with regression analyzes of the influence of political support in different groups on policy changes.

Data

The unit of analysis in the dataset is policy proposals in specific country-years. The main independent variables are the level of support in different income groups, while the dependent variables measure whether policy proposals were implemented at different points in time.

To collect information on preferences in support for policy proposals in different income groups, we use data from the following cross-country surveys: The Comparative Study of Electoral Systems (CSES), The Eurobarometer (EB), The European Social Survey (ESS), The European Values Study (EVS), The International Social Survey Programme (ISSP) and The World Values Survey (WVS).

We searched these datasets for questions about specific policy proposals. For a question to be selected, it had to be possible to investigate, in an appropriate way, whether it had been implemented or not. Questions should ask about a preference for particular policy proposals that translate into a single, specific, measurable, and easily identifiable policy. Thus, we look at questions that ask about citizens preferences for specific policy proposals, such as nuclear energy development, allowing same-sex marriage, tax increases/tax cuts, and public spending in different domains. The questions should be specific enough so that coders know what information to look for to examine implementation. We did not include questions that ask respondents about priorities, importance, or conditionalities. However, questions may ask about absolute changes (such as joining NATO or closing all nuclear power plants) or relative changes (increasing or decreasing spending in various areas). The questions can be about new proposals or about policies that have already been implemented (the status quo). As is common in this field, we changed the direction of the opinion variables for the status quo questions in the empirical analyses so that all opinion variables indicate support for policy changes.

A team of research assistants coded the policy outcomes. For each question in each survey, we code whether the policy was implemented at three points in time after the survey (we code the exact month and year of the survey question): 1) by the end of the incumbent government's term, 2) by the end of the successor government's term, and 3) five years after the question was asked. The implementation variables are dichotomous and take the value 1 if a policy is changed and 0 if it is not changed (or if a decision is made in the opposite direction). Thus, the implementation variables are coded 1 if an official government decision

was made or an outcome occurred (depending on whether the survey question referred to a decision or an outcome). If no information can be found after exhaustive research, we classify the proposal as not implemented. In cases where the de jure implementation of the policy differs from the de facto implementation, we focus on the official factual data (de jure). We always compare between the three points in time and the time of the survey (e.g., if a decision is made three years after the survey but reversed the following year, it is coded as not implemented after five years). For statements about relative change, we look at the differences between the level in the survey year and each of the three time points. If there has been a relative change in the direction of the policy proposal, the implementation variable is coded 1; otherwise, it is coded 0.

The instructions to coders were straightforward: code whether or not the policy proposal was implemented at the specified time points. To assess whether a particular policy proposal was implemented, coders had to refer to different sources depending on the type of policy. For example, some survey questions ask specifically about policy decisions, and for these questions we looked at the minutes of the national parliament. Other questions focus on the implementation of proposals. For these questions we have looked at the relevant sources for the topic in question. For example, these may be budgets, administrative files, or documentation on the closure of nuclear power plants or the construction of an infrastructure project. Also, for some issues that were not implemented, there is simply no source or documentation (as these policy changes were not events).

As with the opinion data, the original response options were coded in different ways. Therefore, following the standard practice in the field (Gilens 2005, 2012; Schakel 2021; Elsässer, Hense and Schäfer 2020) we have standardized each survey item so that it captures the percentage of respondents that indicated support for policy change, from 0 to 100. Because income was measured in different ways in the different surveys, we also harmonized the income scales by assigning respondents income values that correspond to the middle percentile of their respective income categories, taking into account the distribution of income

groups in each survey. This is also the standard way of dealing with this issue in this field (Gilens 2005, 2012; Schakel 2021; Elsässer, Hense and Schäfer 2020). To estimate support for change across income groups, we calculated the average support for each proposal in each country among respondents with a percentile rank in the bottom twenty percent, the middle sixty, and the top twenty of the income distribution. This is our measure of support for the policy proposals among the poor, middle class, and wealthy.

In total, we use data on the policy preferences of about two million individuals. Overall, we cover 30 countries and 38 years from 1978 to 2017 (516 country-years in total). The countries included are European countries; all EU countries (except Malta) plus Iceland, Norway, Switzerland and the UK. For a full list of countries and years see the Appendix.⁴

The policy proposals cover a wide range of issues such as economic issues that mainly concern welfare spending and redistribution, but also state-market regulations and fiscal policies, but also non-economic issues cover foreign policy, immigration/multiculturalism, liberties and rights, environment policies, and law and order. See the Appendix for further information on the number of issues in the different areas.

To test the impact of income inequality, we use data from 'The Standardized World Income Inequality Database' (SWIID) (Solt 2020). We use SWIID because it is the database on inequality that covers most countries and years. The Luxembourg Income Study (LIS) is considered the standard measure of inequality in comparative research, and the SWIID "estimates the relationships between Gini indices based on the LIS and all of the other Ginis available for the same country-years, and uses these relationships to estimate what the LIS Gini would be in country-years not included in the LIS but available from other sources" (p. 1183).

As for campaign regulations, we use data from the V-Dem Institute (Coppedge et al. 2021). These data are based on expert interviews with country experts that provide information on individual years and countries. We use the question "Are there disclosure

⁴We use different weights in the robustness checks in the Appendix to account for the fact that different countries, years, and topics are disproportionately represented.

requirements for donations to national election campaigns?” with responses on the following scale: 0 (No), 1 (Not really), 2 (Ambiguous), 3 (Mostly), 4 (Yes).

As for the turnout data, we use the information on turnout in the last general election from the Comparative Political Data Set, 1960-2016 (Armingeon, Engler and Leeman 2020). From the same dataset we use data on union density defined as the ‘net union membership as a proportion of wage and salary earners in employment’.⁵

Results

We begin by examining how well the opinions of different groups of citizens are reflected in policy changes. To do this, we use a congruence measure recently proposed by (Bartels 2021): “If a policy change was adopted, the extent of congruence for any given subgroup is measured by the proportion of that subgroup that favored the policy change, regardless of whether it is more or less than half; if policy remained unchanged, the extent of congruence is simply the proportion that opposed the policy change.”⁶ This measure has the advantage of directly illustrating the extent to which groups of citizens agree with the policy changes that have been made. The measure clearly illustrates to what extent public policies are congruent with support for the same issues.

An alternative would be to look at the proportion of policies supported by a *majority* across groups, and study the ‘win rates’ of different groups. But estimating reliable point estimates of majorities is difficult because the estimated levels of support depend, for example, on the wording of the questions, the treatment of missing values, and “do not know” responses. When testing a large number of model specifications, Bowman (2020) shows that “win rates are highly inconsistent across definitions of disagreement” and that different definitions generate contradictory findings (p. 1019).⁷ The congruence measure used here can

⁵Compiled from the OECD/AIAS ICTWSS Database

⁶This measure has been previously used in a study of responsiveness in Sweden (Persson 2021).

⁷If we look at to what extent a majority of the citizens in each respective income groups was congruent with policy changes for years later we find that the rate is 40 percent for the low-income citizens, 51 percent

use more information from the data, does not rely on arbitrary cut-off points, and capture the extent to which different groups are satisfied with policy changes. The public support variables are coded to theoretically range from 0 (no support) to 100 (100 percent support), while the policy change variable is dichotomous. Thus, the resulting measure reflects the percentage in each group whose preferences are congruent with a policy change (or policy remaining unchanged).

Table 1: Support for change and congruence in different income groups. Means and standard errors in parentheses.

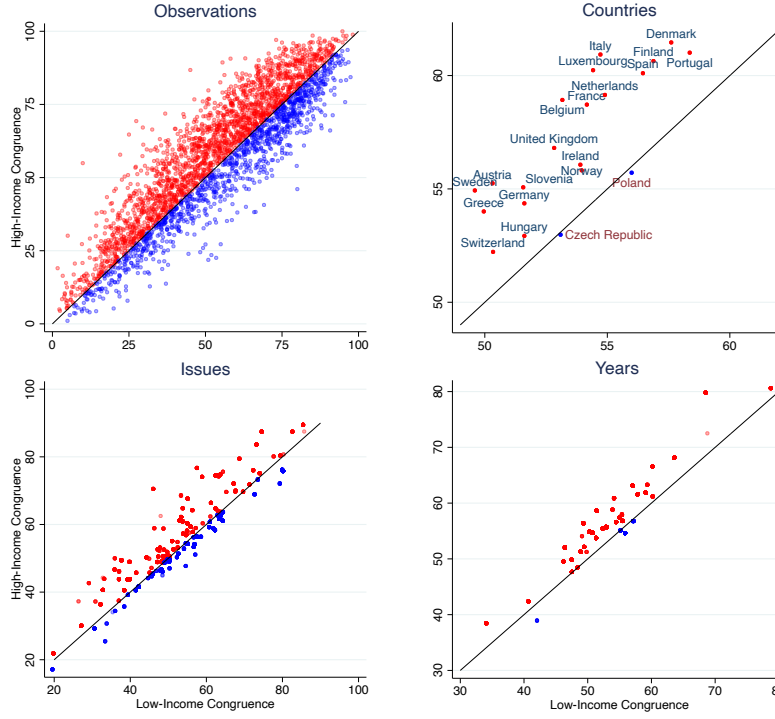
	Low income	Middle income	High Income
Support for change	51.30 (0.40)	49.81 (0.41)	48.02 (0.42)
Policy congruence	53.66 (0.40)	55.12 (0.40)	57.06 (0.40)

We use the five-year window between the time of the survey and the policy change for our main specifications presented in this paper. Thus, we first computed the congruence levels issue-by-issue and then calculated the levels for each income group.

Table 1 provides the main results for congruence across all countries. The average congruence among low-income citizens is 53.7 percent, for middle-income citizens it is 55.1 percent, and that of high-income citizens is 57.1 percent. Thus, there is an income-based congruence difference of more than 3 percentage points — policy changes are more congruent with the preferences of high-income citizens than with the preferences of low-income citizens. The table also shows the support for policy change. Low-income citizens are somewhat more positive to policy change than high-income citizens. This implies that high-income citizens do likely benefit from status quo bias (Persson 2023).

for the middle-income citizens and 48 percent for the high income. Again, the estimate is substantially lower for the low income citizens, while the middle-income citizens even receive higher levels than the high-income citizens.

Figure 1: Issue Congruence for Low- and High-Income Citizens



Note: For all four graphs the y-axis illustrate the congruence levels for the high-income citizens while the x-axis illustrate the congruence levels for the high-income citizens. The upper left bar is showing estimates for all issues while the other four show averages for countries, years and issues. Red dots are estimates where the high-income citizens have higher congruence than low-income citizens and blue dots are estimates where the low-income citizens have higher congruence than high-income citizens.

For both variables the estimates for the middle-class is in between the poor and the rich. In the Appendix we provide regression analyses where the preferences in the income groups are regressed on policy change, which is the standard procedure in the field used by e.g. Gilens (2012), Schakel (2021) and Elsässer, Hense and Schäfer (2020). These results in the appendix confirm the general pattern showed in the results provided below.

One could object that a three percent difference might not appear to be that large. And indeed it is not the case that the high-income citizens always get what they want while the low-income citizens never do it. But the difference is large enough to matter and, in particular, the finding is consistent in different countries and different years. Hence, it is

Table 2: The relationship between congruence and income inequality, campaign finance regulations and voter turnout.

Income Inequality	-6.448 (14.472)			
Campaign regulations		0.272 (0.509)		
Voter turnout			-4.497 (3.615)	
Union density				-1.068 (3.764)
N	2930	2927	2930	2704

Note: * denote statistical significance at the 5% level. The models include fixed effects at the country and year level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

not the size of the gap, but the consistency with which it occurs that is the most striking finding.

In Figure 1, we plot the congruence level of low-income and high-income citizens for a) all observations, b) averaged across countries (we restrict this plot to countries with at least 50 observations), c) averaged across years, and d) across topics. To distinguish between issues on which high-income citizens are more likely to be congruent than low-income citizens and vice versa, the issues on which high-income citizens are more likely to be congruent with policy than low-income citizens are in above the line (red) and the issues on which low-income citizens are more likely to be congruent are below the line (blue). While we can see that there is a high degree of correlation between congruence in income groups, the blue dots dominate the graphs — it is more common for high-income citizens to be more congruent with policy change than low-income citizens. In 64 percent of the observations, high-income citizens are more congruent with policy changes than low-income citizens.

In the upper right part of the same figure we look at countries. In almost all countries, there is a larger share of issues on which high-income citizens are more congruent with policy than low-income citizens. However, we also find large differences between countries, from Switzerland with a mean of just over 50 percent for low-income citizens to countries like Denmark and Portugal, where the mean is over 60 for high-income citizens and about 58 for

low-income citizens. Thus, the differences are more considerable between *countries* than the income-related differences *within* countries. In most countries, the differences in congruence between low-income citizens and high-income citizens are between 2 and 5 percentage points. Thus, while countries differ in their absolute levels of congruence, the difference between low- and high-income citizens is relatively similar in many countries. The Appendix provides further illustrations of differences in congruence across countries. In the bottom two graphs, we look at the average of years (high-income citizens are more congruent in 92 percent of years) and issues (66 percent). Whether we look at the observations — or the average across years, countries, or issues — high-income citizens are more likely to agree with policy changes than low-income citizens.

We will now look at the four hypotheses on the factors potentially driving unequal responsiveness using a regression approach. For each explanation, we estimate models where we use the difference in congruence between P90 and P10 as the dependent variable. This dependent variable directly captures whether the independent variable is associated with greater inequality in congruence. Table 2 shows the results from the models.

First, much of the previous scholarship on this matter suggests that economic inequality is driving the relationship. According to this argument, the larger the economic inequality, the harder it is for the low-income citizens to make their voices heard, and the stronger are the bonds between economic and political elites supposed to be. We estimate regressions using the data from the SWIID where the Gini measure is imputed from 50 variables, thereby taking each observation's uncertainty into account. We find no significant relationship with the difference in congruence between the income groups and economic inequality. Second, we look at a similar model with campaign finance regulations as the independent variable. Are countries with more strict campaign finance regulations showing more similar patterns of congruence? The results from table 2 do not show any evidence that it is the case; again, the estimates are not significantly different from zero. Thirdly, does the level of voter turnout affect congruence; are policy changes better aligned with citizens' preferences when they make

their voices heard in elections? Again, we do not find any significant relationship between the independent variable and the difference in congruence. The level of voter turnout does furthermore not appear to be related to the difference in congruence, and the same goes for the fourth explanation, union density, which also does not have any significant relationship with congruence. The Appendix supplies additional graphical illustrations of the relationship and analyses of whether the variables affect the absolute levels of the congruence for the low- and high-income citizens respectively.

In summary, income-related differences in congruence and responsiveness are present in most of the countries we study. However, these differences are not easily explained by the factors most commonly cited in the literature, such as levels of economic inequality, campaign finance regulations, union density, or voter turnout.

Conclusion

We provide cross-country results showing that the preferences of high-income citizens are somewhat better reflected in policy changes than the preferences of low-income citizens. The gap is relatively small, but still substantially important. It should be noted, of course, that the gap is ‘only’ a few percentage points. Indeed it is not the case that high-income citizens always get what they want while the low-income citizens never do. Nevertheless, since the preferences of low- and high-income citizens are highly correlated in our data (and in similar studies), such an outcome would not be possible to observe. This is an important finding in itself.

Since about half of both high-income and low-income respondents tend to see their preferred policy realized, one might get the impression that policy outcomes resemble a coin toss, essentially random. But there remains an imbalance — for some reason, the coin tends to fall down more often on the side of the affluent. Moreover, this pattern is observed again and again across issues, countries and years, to a degree that defies random probability. The

rich have a slight edge. If these relatively small changes in congruence repeatedly appear they can add up to have a strong impact on the development of policies over time.

Moreover, we find no evidence that the differences in unequal congruence are correlated to economic inequality, campaign finance regulations, voter turnout or union density. As they have been extensively discussed in the literature, but never tested in a comparative setting such as this before, the null findings are striking.

As research on unequal responsiveness began with studies of the United States, the proposed explanations naturally have focused on factors that separate the U.S. from other advanced democracies. Our research, together with findings from single-country studies, convincingly show that the United States hardly is unique in terms of outcomes. This in turn suggests that the explanations for unequal responsiveness also are more general than initially thought, and that the responsiveness literature have searched for explanations in the wrong places. Given that we find unequal congruence in quite different contexts, it should be emphasized that explanatory factors of unequal congruence may be more likely to be found at the issue or individual level rather than at the system level. Further exploring how the variation can be explained is an important task for future research.

Future studies should focus more on the dynamics between voters and political representatives that lead to unequal congruence and responsiveness. One possible explanation pointed out by Rosset and Kurella is that party supply and the ability of citizens to choose representatives who match their preferences drive unequal responsiveness (Rosset and Kurella 2021). Others have pointed to the descriptive over-representation of economically advantaged candidates in parliaments as a driver of this type of inequality (Carnes 2012; Persson 2021).

Finally, our results are important for assessing how democratic systems work. If democracies deviate from the ideal of giving everyone equal influence, the social contract on which democracies are based could be called into question. Indeed, research has shown that how well citizens are represented matters for how satisfied they are with democracy (Ferland

2020). In a time where democracies around the world face both external threats from authoritarian regimes and internal threats from populist demagogues, it is of vital importance that representatives strive to deliver on the promise of a government of, for, and by, all people.

References

- Ansolabehere, Stephen, Jonathan Rodden and James M Snyder. 2008. "The strength of issues: Using multiple measures to gauge preference stability, ideological constraint, and issue voting." *American Political Science Review* 102(2):215–232.
- Armingeon, Klaus, Sarah Engler and Lucas Leeman. 2020. "Comparative Political Dataset 1960–2018."
- Bartels, Larry M. 2009. *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton University Press.
- Bartels, Larry M. 2021. "Measuring Political Inequality." *Unpublished paper*.
- Bashir, Omar S. 2015. "Testing Inferences about American Politics: A Review of the "Oligarchy" Result." *Research & Politics* 2(4).
- Becher, Michael, Daniel Stegmueller and Konstantin Käppner. 2018. "Local union organization and law making in the US congress." *The Journal of Politics* 80(2):539–554.
- Bevan, Shaun and Anne Rasmussen. 2020. "When does government listen to the public? Voluntary associations and dynamic agenda representation in the United States." *Policy Studies Journal* 48(1):111–132.
- Binzer Hobolt, Sara and Robert Klemmensen. 2005. "Responsive Government? Public Opinion and Government Policy Preferences in Britain and Denmark." *Political Studies* 53(2):379–402.
- Binzer Hobolt, Sara and Robert Klemmensen. 2008. "Government Responsiveness and Political Competition in Comparative Perspective." *Comparative Political Studies* 41(3):309–337.
- Bowman, Jarron. 2020. "Do the Affluent Override Average Americans? Measuring Policy Disagreement and Unequal Influence." *Social Science Quarterly* 101(3):1018–1037.
- Branham, J Alexander, Stuart N Soroka and Christopher Wlezien. 2017. "When Do the Rich Win?" *Political Science Quarterly* 132(1):43–62.
- Broockman, David E. 2016. "Approaches to studying policy representation." *Legislative Studies Quarterly* 41(1):181–215.
- Carnes, Nicholas. 2012. "Does the Numerical Underrepresentation of the Working Class in Congress Matter?" *Legislative Studies Quarterly* 37(1):5–34.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Nazifa Alizada, David Altman, Michael Bernhard, Agnes Cornell, M. Steven Fish, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Allen Hicken, Garry Hindle, Nina Ilchenko, Joshua Krusell, Anna Lührmann, Seraphine F. Maerz, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Pamela Paxton, Daniel Pemstein, Josefine Pernes,

- Johannes von Römer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Aksel Sundström, Eitan Tzelgov, Yi-ting Wang, Tore Wig, Steven Wilson and Daniel Ziblatt. 2021. “V-Dem Country-Year Dataset v11.1.”
- Elkjær, Mads Andreas. 2020. “What Drives Unequal Policy Responsiveness? Assessing the Role of Informational Asymmetries in Economic Policy-Making.” *Comparative Political Studies* p. 0010414020912282.
- Elsässer, Lea, Svenja Hense and Armin Schäfer. 2020. “Not just money: unequal responsiveness in egalitarian democracies.” *Journal of European Public Policy* pp. 1–19.
- Enns, Peter K. 2015. “Reconsidering the Middle: A Reply to Martin Gilens.” *Perspectives on Politics* 13(04):1072–1074.
- Enns, Peter K and Christopher Wlezien. 2011. *Who gets represented?* Russell Sage Foundation.
- Erikson, Robert S, Michael B MacKuen and James A Stimson. 2002. *The Macro Polity*. Cambridge University Press.
- Ferland, Benjamin. 2020. “Policy congruence and its impact on satisfaction with democracy.” *Electoral Studies* p. 102204.
- Gilens, Martin. 2005. “Inequality and Democratic Responsiveness.” *Public Opinion Quarterly* 69(5):778–796.
- Gilens, Martin. 2012. *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton University Press.
- Gilens, Martin. 2015. “The Insufficiency of “Democracy by Coincidence”: A Response to Peter K. Enns.” *Perspectives on Politics* 13(4):1065.
- Gilens, Martin. 2016. “Simulating Representation: The Devil’s in the Detail.” *Research and Politics* .
- Gilens, Martin and Benjamin I. Page. 2014. “Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens.” *Perspectives on politics* 12(03):564–581.
- Golder, Matt and Jacek Stramski. 2010. “Ideological congruence and electoral institutions.” *American Journal of Political Science* 54(1):90–106.
- Griffin, John D and Brian Newman. 2005. “Are voters better represented?” *The Journal of Politics* 67(4):1206–1227.
- Guntermann, Eric. 2020. “Does economic inequality undermine political equality? Testing two common assumptions.” *Electoral Studies* .
- Guntermann, Eric and Mikael Persson. 2021. “Issue voting and government responsiveness to policy preferences.” *Political Behavior* pp. 1–24.

- Hakhverdian, Armen. 2010. "Political Representation and its Mechanisms: A Dynamic Left–Right Approach for the United Kingdom, 1976–2006." *British Journal of Political Science* 40(4):835–856.
- Holmberg, Sören. 1997. "Dynamic Opinion Representation." *Scandinavian Political Studies* 20(3):265–283.
- Klüver, Heike and Mark Pickup. 2019. "Are they listening? Public opinion, interest groups and government responsiveness." *West European Politics* 42(1):91–112.
- Kwon, Hyeok Yong and Jonas Pontusson. 2010. "Globalization, labour power and partisan politics revisited." *Socio-Economic Review* 8(2):251–281.
- Lefkofridi, Zoe and Nathalie Giger. 2020. "Democracy or Oligarchy? Unequal Representation of Income Groups in European Institutions." *Politics and Governance* 8(1):19–27.
- Lupu, Noam and Alejandro Tirado Castro. Forthcoming. "Unequal policy responsiveness in Spain." *Socio-Economic Review* .
- Lupu, Noam and Zach Warner. 2021a. "Affluence and congruence: unequal representation around the world." *Journal of Politics* .
- Lupu, Noam and Zach Warner. 2021b. "Why are the affluent better represented around the world?" *European Journal of Political Research* .
- Mathisen, Ruben B. Forthcoming. "Affluence and influence in a social democracy." *American Political Science Review* .
- Mathisen, Ruben, Wouter Schakel, Svenja Hense, Lea Elsässer, Mikael Persson and Harry Jonas Pontusson. 2021. "Unequal responsiveness and government partisanship in northwest Europe." .
- Miller, Warren E and Donald E Stokes. 1963. "Constituency Influence in Congress." *American Political Science Review* 57(1):45–56.
- Monroe, Alan D. 1979. "Consistency Between Public Preferences and National Policy Decisions." *American Politics Quarterly* 7(1):3–19.
- Monroe, Alan D. 1998. "Public Opinion and Public Policy, 1980–1993." *Public Opinion Quarterly* pp. 6–28.
- Page, Benjamin I and Robert Y Shapiro. 1983. "Effects of Public Opinion on Policy." *American political science review* 77(1):175–190.
- Persson, Mikael. 2021. "From Opinions to Policies: Examining Links Between Citizens, Representatives, and Policy Change." *Electoral Studies* .
- Persson, Mikael. 2023. "Who Got What They Wanted? Investigating the Role of Institutional Agenda Setting, Costly Policies, and Status Quo Bias as Explanations to Income Based Unequal Responsiveness." *Paper under review* .

- Persson, Mikael, Maria Solevid and Richard Öhrvall. 2013. "Voter Turnout and Political Equality: Testing the "Law of Dispersion" in a Swedish Natural Experiment." *Politics* 33(3):172–184.
- Peters, Yvette and Sander J Ensink. 2015. "Differential responsiveness in Europe: The effects of preference difference and electoral participation." *West European Politics* 38(3):577–600.
- Rasmussen, Anne, Stefanie Reher and Dimitar Toshkov. 2019. "The opinion-policy nexus in Europe and the role of political institutions." *European Journal of Political Research* 58(2):412–434.
- Rosset, Jan and Anna-Spohie Kurella. 2021. "The electoral roots of unequal representation. A spatial modelling approach to party systems and voting in Western Europe." *European Journal of Political Research* .
- Schakel, Wouter. 2021. "Unequal policy responsiveness in the Netherlands." *Socio-Economic Review* 19(1):37–57.
- Schakel, Wouter and Daphne van der Pas. 2020. "Degrees of influence: Educational inequality in policy representation." (*European Journal of Political Research* .
- Solt, Frederick. 2008. "Economic inequality and democratic political engagement." *American Journal of Political Science* 52(1):48–60.
- Solt, Frederick. 2010. "Does economic inequality depress electoral participation? Testing the Schattschneider hypothesis." *Political behavior* 32(2):285–301.
- Solt, Frederick. 2020. "Measuring income inequality across countries and over time: The standardized world income inequality database." *Social Science Quarterly* 101(3):1183–1199.
- Soroka, Stuart N and Christopher Wlezien. 2005. "Opinion-policy dynamics: Public preferences and public expenditure in the United Kingdom." *British Journal of Political Science* pp. 665–689.
- Soroka, Stuart N and Christopher Wlezien. 2008. "On the Limits to Inequality in Representation." *PS: Political Science & Politics* 41(02):319–327.
- Soroka, Stuart N and Christopher Wlezien. 2010. *Degrees of Democracy: Politics, Public Opinion, and Policy*. Cambridge University Press.
- Stimson, James A, Michael B MacKuen and Robert S Erikson. 1995. "Dynamic Representation." *American Political Science Review* 89(3):543–565.
- Tausanovitch, Chris and Christopher Warshaw. 2013. "Measuring constituent policy preferences in congress, state legislatures, and cities." *The Journal of Politics* 75(2):330–342.
- Tingsten, Herbert. 1963. *Political behavior: Studies in election statistics*. Number 7 Bedminster Press.

- Toshkov, Dimitar, Lars Mäder and Anne Rasmussen. 2020. "Party government and policy responsiveness. Evidence from three parliamentary democracies." *Journal of public policy* 40(2):329–347.
- Ura, Joseph Daniel and Christopher R Ellis. 2008. "Income, Preferences, and the Dynamics of Policy Responsiveness." *PS: Political Science & Politics* 41(4):785–794.
- Wlezien, Christopher. 1995. "The Public as Thermostat: Dynamics of Preferences for Spending." *American journal of political science* 39:981–1000.
- Wlezien, Christopher. 2017. "Public opinion and policy representation: on conceptualization, measurement, and interpretation." *Policy Studies Journal* 45(4):561–582.
- Wlezien, Christopher and Stuart N Soroka. 2007. The Relationship Between Public Opinion and Policy. In *The Oxford Handbook of Political Behavior*, ed. Russell J. Dalton and Hans-Dieter Klingemann. Oxford University Press pp. 799–817.

Online Appendix for:
The Rich Have a Slight Edge: Evidence from
Comparative Data on Income Based Inequality in Policy
Congruence

December 13, 2022

1 Additional information about the data

Table 1 provides information on the countries and years included in the dataset.

Table 2 provides information on the issues included in the dataset.

Table 1: Countries and years in the data

Austria	1990, 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2007, 2008, 2011
Belgium	1984, 1985, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2012, 2014,
Bulgaria	1995, 1997, 1999, 2003, 2005, 2008, 2009, 2011,
Croatia	2006, 2008, 2009, 2011, 2014,
Cyprus	1996, 2004, 2006, 2008, 2009, 2011,
Czech R.	1995, 1996, 1999, 2003, 2004, 2006, 2008, 2009, 2011, 2012, 2014,
Denmark	1981, 1983, 1984, 1987, 1989, 1991, 1992, 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2008, 2009, 2010, 2013
Estonia	1999, 2005, 2007, 2008, 2009, 2010, 2011, 2013, 2014
Finland	1990, 1995, 1996, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2009, 2010, 2013, 2014
France	1979, 1980, 1981, 1982, 1983, 1984, 1985, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2013, 2017
Germany	1979, 1980, 1981, 1982, 1983, 1984, 1985, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2008, 2009, 2010, 2012, 2013, 2014
Greece	1982, 1983, 1984, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2008, 2009, 2010, 2012
Hungary	1985, 1996, 1999, 2002, 2003, 2004, 2006, 2008, 2009, 2010, 2013, 2014, 2015
Iceland	1999, 2005, 2010, 2013, 2014
Ireland	1978, 1981, 1982, 1983, 1984, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2010, 2011, 2012, 2013
Italy	1979, 1980, 1981, 1982, 1983, 1984, 1985, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2012, 2013
Latvia	1999, 2003, 2004, 2007, 2008, 2009, 2013
Lithuania	1997, 1999, 2008, 2010, 2011, 2013
Luxembourg	1990, 1991, 1992, 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2008
Netherlands	1982, 1983, 1984, 1985, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2014
Norway	1982, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2014
Poland	1996, 1997, 1999, 2002, 2004, 2005, 2006, 2008, 2010, 2011, 2012, 2013, 2014
Portugal	1987, 1988, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2006, 2007, 2008, 2009, 2011, 2013
Romania	2006, 2008, 2012, 2013
Slovakia	1996, 1998, 1999, 2004, 2005, 2007, 2008, 2009, 2011, 2012, 2014
Slovenia	1995, 1999, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2017
Spain	1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2007, 2008, 2009, 2011, 2012, 2014, 2015
Sweden	1982, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013, 2014
Switzerland	1996, 1998, 2003, 2005, 2007, 2008, 2009, 2011, 2013
UK	1979, 1980, 1981, 1982, 1983, 1984, 1985, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2008, 2009, 2010, 2011, 2013

Table 2: Observations and questions by policy area

Policy area	N	Q	Example question/statement
Foreign policy / International relations	449	15	Are you for or against helping third world countries?
Immigration / Multiculturalism	812	34	Legal immigrants should have equal access to public education
Liberties and Rights	517	24	Fascists should be allowed to hold public meetings
Welfare / redistribution / Labor market	641	32	Reducing the working week to create more jobs.
State-Market/Economic affairs	170	9	Public ownership of industry should be expanded.
Environment	199	23	Increase taxes on energy consumption.
Law and order	183	8	More severe penalties should be introduced for acts of terrorism.
Notes: N = country-year-issues; Q = unique questions in policy area. Some example questions are slightly truncated to preserve space.			

2 Additional information on the data collection

For each question in each survey, we code whether the policy was implemented at three points in time after the survey (we code the exact month and year of the survey question): 1) by the end of the incumbent government’s term, 2) by the end of the successor government’s term, and 3) five years after the question was asked. The implementation variables are dichotomous and take the value 1 if a policy is changed and 0 if it is not changed (or if a decision is made in the opposite direction). Thus, the implementation variables are coded 1 if an official government decision was made or an outcome occurred (depending on whether the survey question referred to a decision or an outcome). If no information can be found after exhaustive research, we classify the proposal as not implemented. In cases where the de jure implementation of the policy differs from the de facto implementation, we focus on the official factual data (de jure). We always compare between the three points in time and the time of the survey (e.g., if a decision is made three years after the survey but reversed the following year, it is coded as not implemented after five years). For statements about relative change, we look at the differences between the level in the survey year and each of the three time points. If there has been a relative change in the direction of the policy proposal, the implementation variable is coded 1; otherwise, it is coded 0.

The instructions to coders were straightforward: code whether or not the policy proposal was implemented at the above time points. To assess whether a particular policy proposal was implemented, coders had to refer to different sources depending on the type of policy. For example, some survey questions ask specifically about policy decisions, and for these questions we looked at the minutes of the national parliament. Other questions focus on the implementation of proposals. For these questions we have looked at the relevant sources for the topic in question. For example, these may be budgets, administrative files, or documentation on the closure of nuclear power plants or the construction of an infrastructure project. Also, for some issues that were not implemented, there is simply no source or documentation (as these policy changes were not events).

As with the opinion data, the original response options were coded in different ways. Therefore, following the standard practice in the field (Gilens, 2005, 2012; Schakel, 2021; Elsässer, Hense and Schäfer, 2020) we have harmonized them to vary between 0 (least support) and 100 (most support). We take the average within each group as a measure of support for policy change. Because income was measured in different ways in the different surveys, we also harmonized the income scales by assigning respondents income values that correspond to the middle percentile of their respective income categories, taking into account the distribution of income groups in each survey. This is also the standard way of dealing with this issue in this field (Gilens, 2005, 2012; Schakel, 2021; Elsässer, Hense and Schäfer, 2020). To estimate support for change across income groups, we calculated the average support for each proposal in each country among respondents with a percentile rank in the bottom twenty percent, the middle sixty, and the top twenty of the income distribution. This is our measure of support for the policy proposals among the poor, middle class, and wealthy.

The policy proposals cover a wide range of issues. *Economic* issues mainly concern welfare spending and redistribution, but also state-market regulations and fiscal policies. *Non-economic* issues cover foreign policy, immigration/multiculturalism, liberties and rights, environment policies, and law and order.

3 Further information on congruence in countries

In Figure 1 we plot the congruence level of low- and high-income citizens for each issue respectively in each country (we restrict this illustration to countries with more than 50 observations). To distinguish between issues where high-income citizens are more congruent than low-income citizens, and vice versa, the issues where high-income citizens are more congruent with policy than low-income citizens are blue, and the issues where low-income citizens are more congruent are red. While we can see that there is a high degree of correlation between congruence in income groups, blue dots dominate the graphs — it is more common that high-income citizens are more congruent with policy changes than low-income citizens. In almost all of the countries, there is a larger share of issues where high-income citizens are more congruent with policy than are low-income citizens, the only exception of the countries in the figure where there is more congruence among low-income citizens than high-income citizens is the Czech Republic.

To further illustrate the levels of congruence in the different countries Figure 2 shows bars illustrating the difference in congruence between low- and high-income citizens by country (blue bars=more congruence for high-income citizens, red bars=more congruence for low-income citizens). Again, we only show these graphs for countries with at least 50 observations. The bars illustrate how much one income group ‘dominate’ the other in terms of policy congruence. In all of the countries in the graph, except again the Czech Republic, there is a large amount of policies where the high-income citizens have more congruence than vice versa. Moreover, the high-income citizens are not only better represented when it comes to the number of policies for which they received higher congruence, but they also receive higher levels of congruence in all countries except for Poland. Figure 3 shows kernel density plots where we illustrate the distribution of the income groups over levels of congruence. In most countries the policies are tilted to the right for the high-income citizens, which means that they receive higher levels of congruence.

Figure 1: Issue Congruence for Low- and High-Income Citizens in Different Countries

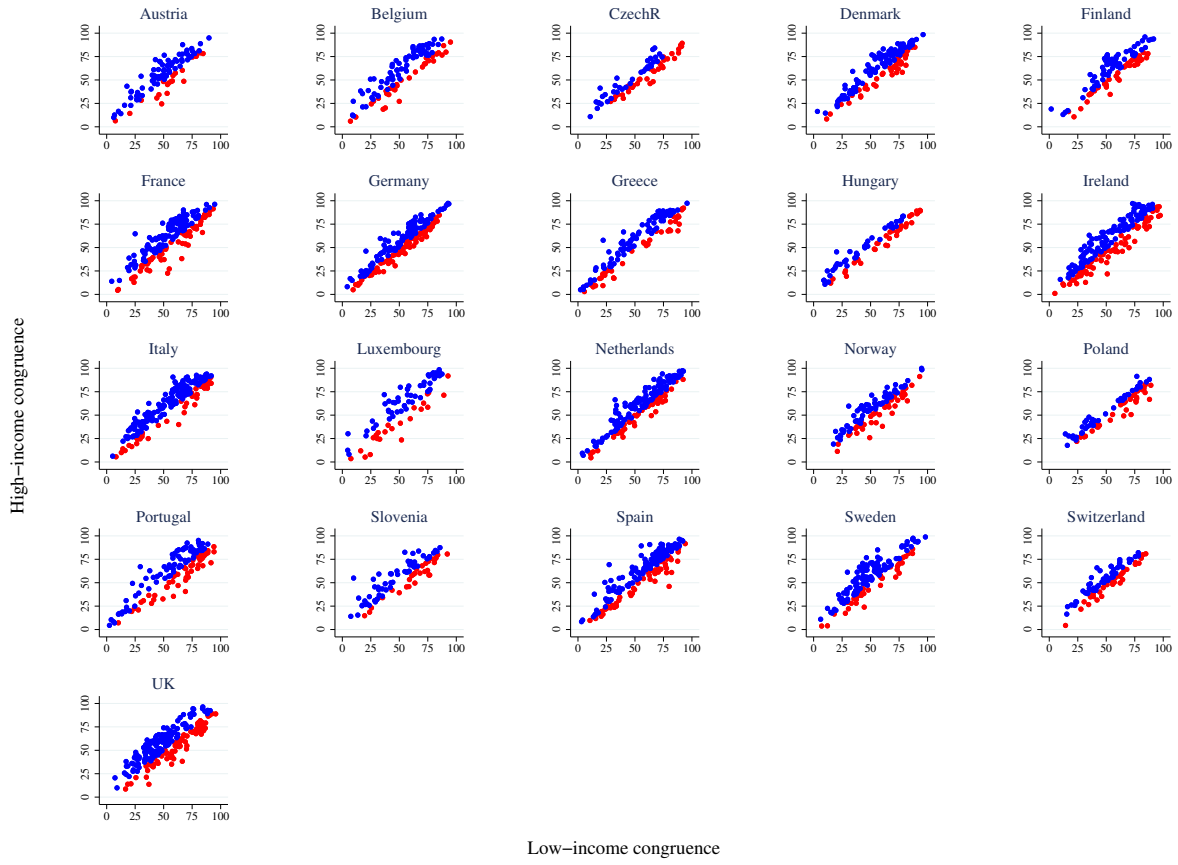


Figure 2: The difference in congruence between low- and high-income citizens by country (blue bars=more congruence for high-income citizens, red bars=more congruence for low-income citizens).

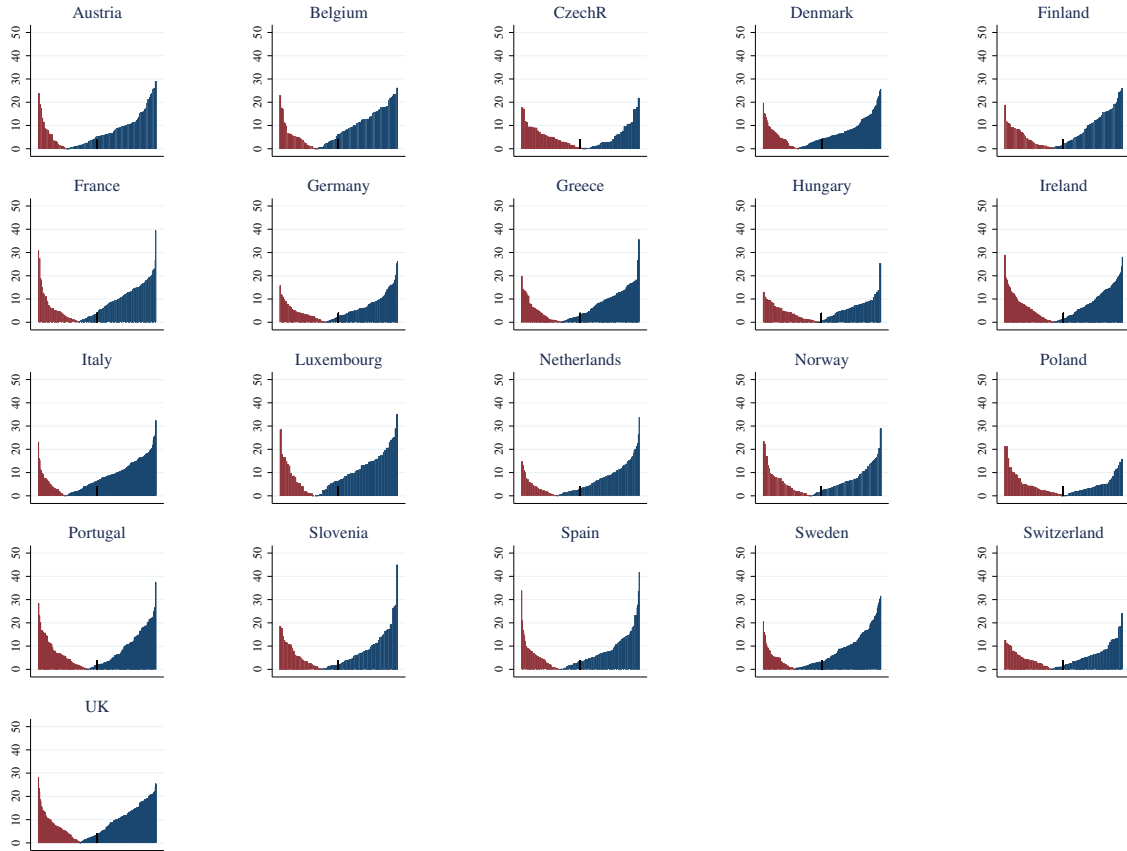
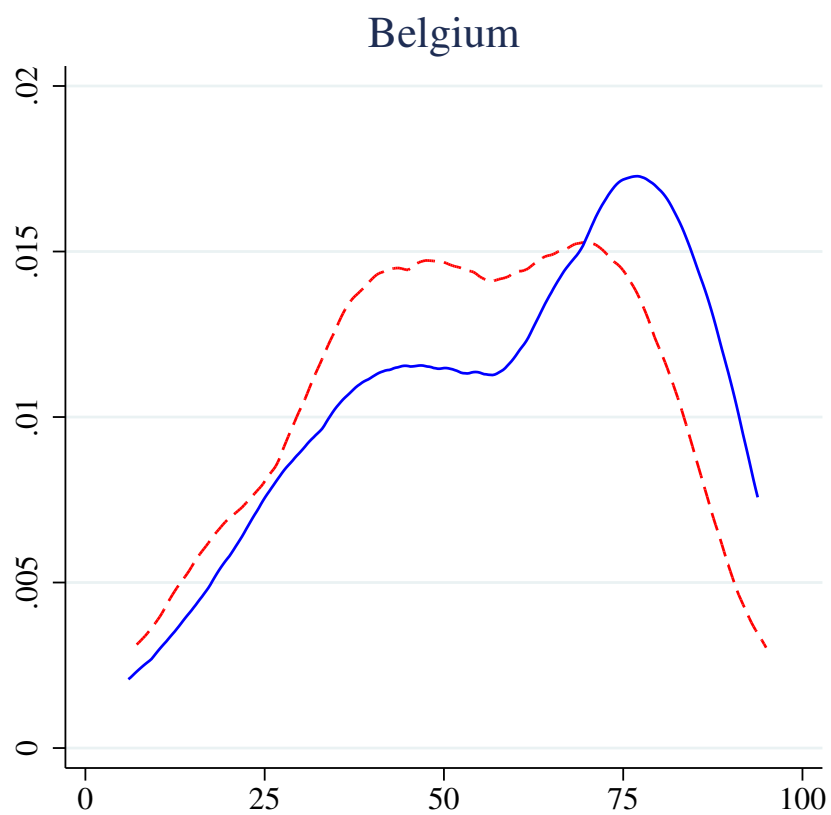


Figure 3: Kernel density plots for congruence by country (blue bars=high-income citizens, red bars=low-income citizens)



4 Alternative analyses

In the main paper we answer the question “Who got what they wanted?”, but it is equally important to study responsiveness and the question “Whose opinions mattered?” To do the latter, we analyze the relationship between policy support in the different income groups and policy change with OLS regression models with fixed effects for survey year and country, with heteroscedastic-consistent standard errors. We regress the dichotomous dependent variable ‘policy change’ on variables measuring support among the low-, middle- and high-income citizens. Models also include a dummy variable indicating whether the question was about the status quo (as previously described, in those cases, the direction of the variables have been changed to indicate support for policy change). As for the dependent variable, we use the five-year window between the time the survey was fielded and policy change for our main specifications presented in the paper.

Table 3 shows results on the relationship between support in the different income groups and policy change. Since the correlations between the preferences in the different income groups are high (the correlation between support in the lowest and highest income groups is .91), we first present separate models including the preferences of each income group, and then we present results from models with all three income groups. In addition, we present a model including the difference in policy support between the highest and the lowest income group under control for the level of support among the middle-income citizens as the independent variables.

The support in the income groups is coded to theoretically vary between 0 and 10, which means that the coefficients illustrate the effect of a 10 percent change in policy support. In the models including the preferences in the income groups separately, the results show that a 10 percent increase in support among the low-income citizens is associated with a significant increase in the probability of policy change of 2.1 percentage points. The corresponding numbers for middle-income citizens are 2.5 and 3.1 for high-income citizens. Hence, the preferences of the high-income citizens are better reflected in implemented policies than the

preferences of the low-income citizens, although the differences are not very large.

In the fourth model in the table, we include the variables measuring the amount of support in all three income groups simultaneously, and we find a substantially larger coefficient for the high-income citizens, a 10 percent increase in support is associated with an 8 percent increase in the likelihood of policy change. In contrast, the coefficient for the low-income citizens is small and negative. In the last model in the table, we look at the coefficient indicating the difference in support between the high- and low-income citizens under control for the support among the middle-income citizens. The results show that larger support for policy proposals among the high-income citizens than the low-income citizens is associated with a higher likelihood of policy change. When income groups disagree, the high-income citizens' preferences are better reflected in policy changes.

We also provide a series of robustness checks. Table 4 shows results where the time frame window is changed to reflect the end of the governments term, instead of a four year window used in the main analyses. Table 5 shows results where the time frame window is changed to reflect the end of the second term after the question was asked. While the results show somewhat different point estimates, the general patterns in the results are the same — high income citizens appear to have more influence than low-income citizens. In Table 6 we return to the five year window but employ country level weights (so that each country has the same weight) and in Table 7 we use question level weights. And again the overall patterns in the results are very similar to the results from the specifications in the main paper.

Table 3: The relationship between policy support in different income groups and policy implementation

Low income	0.021*			-0.022	
	(0.003)			(0.013)	
Middle income		0.025*		-0.029	0.025*
		(0.003)		(0.019)	(0.003)
High income			0.031*	0.078*	
			(0.003)	(0.011)	
High-Low Diff					0.005*
					(0.001)
Constant	0.054	0.031	-0.011	0.016	0.037
	(0.161)	(0.162)	(0.166)	(0.172)	(0.170)
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
R2	0.239	0.244	0.254	0.262	0.260
N	2930	2930	2930	2930	2930

Notes: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

Table 4: Robustness check 1: end of the incumbent government's term

Low income	0.016*			-0.005	
	(0.003)			(0.012)	
Middle income		0.018*		-0.028	0.018*
		(0.003)		(0.018)	(0.003)
High income			0.022*	0.053*	
			(0.003)	(0.011)	
High-Low Diff					0.003*
					(0.001)
Constant	0.033	0.020	-0.006	0.007	0.024
	(0.159)	(0.160)	(0.163)	(0.167)	(0.165)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R2	0.181	0.184	0.189	0.192	0.190
N	2923	2923	2923	2923	2923

Notes: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

Table 5: Robustness check 2: The end of the government term following the incumbent government term

Low income	0.023*			-0.013	
	(0.003)			(0.013)	
Middle income		0.027*		-0.040*	0.027*
		(0.003)		(0.020)	(0.003)
High income			0.033*	0.082*	
			(0.003)	(0.011)	
High-Low Diff					0.005*
					(0.001)
Constant	0.025	0.004	-0.038	-0.015	0.011
	(0.161)	(0.162)	(0.166)	(0.172)	(0.170)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R2	0.217	0.222	0.233	0.240	0.237
N	2907	2907	2907	2907	2907

Notes: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

Table 6: Robustness check 3: country weights

Low income	0.017*			-0.010	
	(0.004)			(0.014)	
Middle income		0.021*		-0.037	0.022*
		(0.004)		(0.021)	(0.004)
High income			0.026*	0.070*	
			(0.004)	(0.013)	
High-Low Diff					0.004*
					(0.001)
Constant	0.078	0.060	0.022	0.035	0.056
	(0.162)	(0.162)	(0.165)	(0.171)	(0.169)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R2	0.258	0.261	0.267	0.272	0.270
N	2907	2907	2907	2907	2907

Notes: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

Table 7: Robustness check 4: question level weights

Low income	0.019*			-0.027	
	(0.004)			(0.017)	
Middle income		0.024*		-0.037	0.024*
		(0.004)		(0.026)	(0.004)
High income			0.031*	0.090*	
			(0.004)	(0.014)	
High-Low Diff					0.006*
					(0.001)
Constant	-0.049	-0.077	-0.116	-0.085	-0.071
	(0.080)	(0.080)	(0.080)	(0.080)	(0.081)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
R2	0.214	0.219	0.230	0.243	0.241
N	2930	2930	2930	2930	2930

Notes: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

Table 8: Majoritarian congruence rates.

	Low income	Middle income	High Income
Majoritarian congruence rates	40	51	48

5 Responsiveness and the impact of economic inequality, voter turnout and finance regulations

We will now look at the four hypotheses on the factors potentially driving unequal responsiveness in more detail. In Figure 4 we illustrate the relationship between inequality in congruence (high-income congruence minus low-income congruence) and the four variables: voter turnout, income inequality, union density, and campaign regulations. For each of the variables, we show scatter plots overlaid with quadratic prediction lines that takes non-linearity into account.

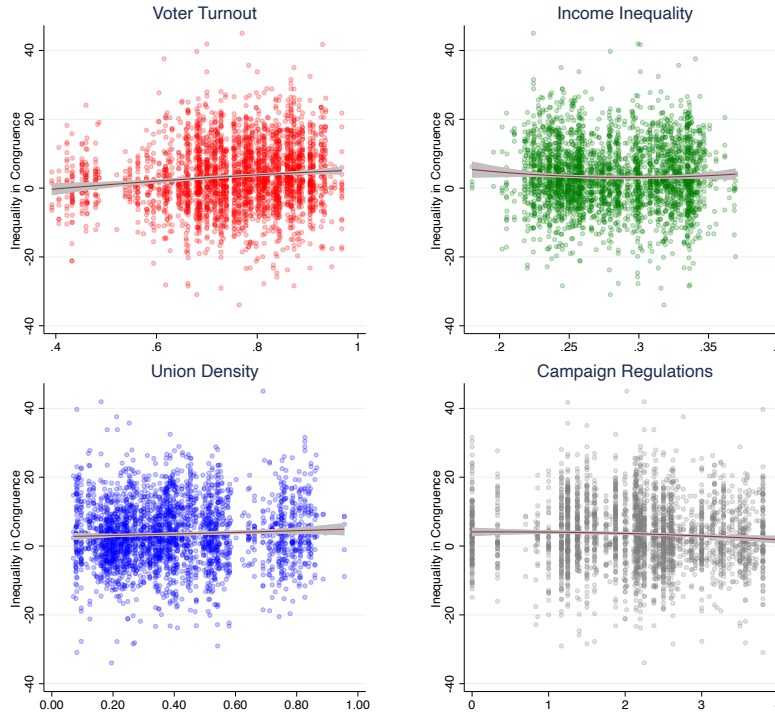
In the top left graph in Figure 4, we examine whether the level of voter turnout affects inequality in congruence. We find no strong relationship between turnout and the level of congruence. In the top right graph, we also look at whether economic inequality drives the relationship. Accordingly, the greater the economic inequality, the more difficult it is for low-income citizens to make their voices heard, and the stronger the ties between economic and political elites. Again, we estimate income inequality using data from SWIID, and for this analysis we are taking the average of the country ginis. Strikingly, we find no strong relationship between inequality in policy congruence and income inequality. In the bottom left graph, we look at the relationship with union density, but again find no relationship. Finally, in the bottom right graph we look at analyses with campaign finance regulations and again the results show no strong relationship.

Table 9: The relationship between congruence and income inequality, campaign finance regulations and voter turnout.

	P10	P90	P10	P90	P10	P90	P10	P90
	Congr.	Congr.	Congr.	Congr.	Congr.	Congr.	Congr.	Congr.
Income Inequality	1.590 (32.984)	-4.859 (31.415)						
Campaign regulations			-1.392 (1.061)	-1.120 (1.062)				
Voter turnout					5.818 (9.444)	1.321 (8.765)		
Union density							0.300 (9.550)	-0.768 (8.857)
N	2930	2930	2927	2927	2930	2930	2704	2704

Notes: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

Figure 4: Mean levels of Issue Congruence for Low- and High-Income Citizens in Different Countries



We also models where we examine whether the four factors affect not only *inequality* in congruence but also *levels* of congruence between low- and high-income citizens. For

each explanation, we estimate two models where we use A) the level of congruence for P10, and B) the congruence for P90 as our respective dependent variables. The two dependent variables indicate whether the *level* of congruence for the low- and high-income citizens, respectively, are affected by the independent variables. Table 9 shows the results from the models. The four variables do not appear to be related to the levels of congruence in the respective groups. The estimates are largely insignificant. Hence, both for the differences in congruence, and the absolute levels, we find no strong relationships with the four explanations discussed in this paper. We have also estimated models with the difference between p90 and p10 as dependent variable and all the four main independent variables included at the same time together with country and year level dummies, all the coefficients in such a model are large and insignificant except for campaign contributions for which we find a significant and negative estimate.

6 Taking clustering by issues into account

An issue with the dataset is that the data is clustered within different issues. In the main paper we do not take this into account in the analyses. To see how it affects the results we present the results from the two main tables in the paper after having taken the this into account. Table 10 presents the levels of congruence after first having calculated averages by country-issues. The trends and general patterns are the same as in the main paper but the differences are somewhat smaller. In table 11 we present results regarding the impact of the four explanatory factors but here we include issue fixed effects in addition to country- and year-fixed effects. As in the main paper we find no evidence of any significant associations.

Table 10: Support for change and congruence in different income groups. Means averaged over issues (and standard errors in parentheses).

	Low income	Middle income	High Income
Support for change	51.53 (0.50)	50.46 (0.50)	49.26 (0.51)
Policy congruence	53.58 (0.49)	54.74 (0.48)	56.14 (0.48)

Table 11: The relationship between congruence and income inequality, campaign finance regulations and voter turnout with issue-, year- and country-fixed effects

	P90-P10 Congr.	P90-P10 Congr.	P90-P10 Congr.	P90-P10 Congr.
Income Inequality	-4.498 (13.169)			
Campaign regulations		0.117 (0.443)		
Voter turnout			-3.798 (3.309)	
Union density				-3.711 (3.427)
N	2930	2927	2930	2704

Note: * denote statistical significance at the 5% level. Entries are for OLS regressions with heteroscedastic-consistent standard errors in parentheses.

References

- Elsässer, Lea, Svenja Hense and Armin Schäfer. 2020. “Not just money: unequal responsiveness in egalitarian democracies.” *Journal of European Public Policy* pp. 1–19.
- Gilens, Martin. 2005. “Inequality and Democratic Responsiveness.” *Public Opinion Quarterly* 69(5):778–796.
- Gilens, Martin. 2012. *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton University Press.
- Schakel, Wouter. 2021. “Unequal policy responsiveness in the Netherlands.” *Socio-Economic Review* 19(1):37–57.