

# Economic Inequality and Political Responsiveness: A Systematic Review

Mads Andreas Elkjær\*      Michael Baggesen Klitgaard†

April 12, 2021

## Abstract

Do policy makers respond more strongly to the preferences of the rich? In an age of rising inequality, this question has been increasingly salient. Yet, while an influential literature has emerged, no systematic account exists of either the severity of differentials in political responsiveness, the potential drivers, or the variation across democracies. This article fills that gap: We analyze 1,163 estimates of responsiveness from 25 studies and find that although this research collectively suggests that political outcomes better reflect the preferences of the rich, results vary considerably across models and studies. The divergence in results is partly driven by partisanship and the model specification, while there is no significant variation across either policy domains or general/specific measures of political outcomes. Finally, and against theoretical expectations, published research suggests that differentials in responsiveness are weaker in the United States compared to other developed democracies. The article contributes to our understanding of differential responsiveness by clarifying the main debates and findings in the literature, identifying issues and gaps, and pointing to fruitful avenues for future research.

---

\*Postdoctoral Research Fellow at Nuffield College and the Department of Politics and International Relations, University of Oxford. Contact: [mads.elkjaer@politics.ox.ac.uk](mailto:mads.elkjaer@politics.ox.ac.uk)

†Professor of Political Science and Head of Department at the Department of Politics and Society, Aalborg University. Contact: [michaelklitgaard@dps.aau.dk](mailto:michaelklitgaard@dps.aau.dk)

## Introduction

Rising inequality has caused the emergence of a literature that investigates how equally policy makers respond to the preferences of individuals in different income groups (APSA 2004). Influential studies of the United States find a clear income bias in political responsiveness. Gilens (2012, 1), for instance, argues that “responsiveness is strongly tilted toward the most affluent citizens” (see also Bartels 2008; Gilens & Page 2014). Comparative scholars, extending the U.S.-based analyses to European democracies, echo this conclusion (Elsässer, Hense, & Schäfer 2018; Schakel 2019).

These findings have vast theoretical and normative implications, challenging literatures on democratic policy-making and political representation and contradicting the democratic virtue of political equality. Perhaps not surprisingly then, the findings have, in addition to academic attention, attracted considerable public attention. Following the publication of Gilens and Page (2014), news media asked whether the United States should be classified as an oligarchy rather than a democracy – a question the authors received the opportunity to discuss with Jon Stewart on The Daily Show.<sup>1</sup> And in 2008, Larry Bartels’s book *Unequal Democracy* was referenced by the then presidential candidate Barack Obama (Enns 2015, 1053), which is so well-known that it recently formed into a Jeopardy question.<sup>2</sup> By now, it has become a stylized fact that “rich people rule!”<sup>3</sup>

Yet while these influential studies point to a strong income bias in political representation, important nuances come to light when considering the literature as a whole. Often, the preferences of income groups overlap in a way that yields roughly equal representation, and even when income groups have opposing preferences, representational disparities are limited, and better explained by partisanship than affluence (Branham, Soroka, & Wlezien 2017; Brunner, Ross, & Washington 2013; Enns 2015; Lax, Phillips, & Zelizer 2019; Soroka &

---

<sup>1</sup>[www.newyorker.com/news/john-cassidy/is-america-an-oligarchy](http://www.newyorker.com/news/john-cassidy/is-america-an-oligarchy).

<sup>2</sup><https://twitter.com/VandyPoliSci/status/1255339837193846784?s=20>.

<sup>3</sup>Larry Bartels in: [www.washingtonpost.com/news/monkey-cage/wp/2014/04/08/rich-people-rule](http://www.washingtonpost.com/news/monkey-cage/wp/2014/04/08/rich-people-rule)

Wlezien 2008). More recent work suggests that the standard methodological setup used in the literature is biased toward the preferences of the rich and finds middle-class dominance using an alternative, comparative framework (Elkjær & Iversen 2020). Thus, the degree and extent of unequal democracy, and what may be driving it, remain disputed.

In the latest (narrative) review of the literature, Erikson (2015, 27) suggested that representational inequalities may be driven by lower levels of political participation and information among the poor and encouraged future research to “continue to focus on whether politicians actually ignore the preferences of less affluent voters, and if so, why”. Empirical research has continued along these lines since then, resulting in a doubling of the number of published studies and the emergence of a comparative literature. But despite the important democratic and theoretical implications of the literature, and the massive scholarly and public attention, we still have no systematic account of either the severity of differentials in political responsiveness or the potential drivers. How the comparative findings compare to those from the United States, also, has yet to be systematically assessed.

Because the debates in this literature are so important for our understanding of democracy, it is critical to have a nuanced understanding of what the literature actually tells us. Given the recent development of the literature – with studies raising questions about the validity of the original conclusions, and the emergence of a comparative literature – we believe the time is ripe for taking a systematic look at published research to help advance informed scholarly and public debates.

In this paper, we therefore present the first systematic review of the literature on unequal political responsiveness with the aim of synthesizing our collective knowledge of (1) the degree of inequality in political responsiveness, (2) the potential drivers, and (3) the variation across democracies. First, we provide a narrative overview of these debates. We then use a new dataset that contains 1,163 estimates of political responsiveness by income group from 25 studies to analyze the key findings of published research. We find that although the literature collectively points to a positive income gradient in political responsiveness, there

is considerable divergence in results across models and studies. The divergence in results is partly explained by partisanship, but more importantly by the model specification: Differentials in responsiveness are much starker when assessed in a statistical model that includes the preferences of several income groups, rather than in separate models for each income group. There is no significant variation in results across either policy domains or general/specific measures of political outcomes. Finally, we show that contrary to conjectures that severe differentials in responsiveness may be unique to the U.S. political system, comparative studies actually observe starker differentials than those of the U.S.

After presenting these results, we discuss their implications for our understanding of political responsiveness and future research, emphasizing that published research points to the presence of a generic driver that affects responsiveness similarly across contexts.

## **A Narrative Review of Three Key Debates**

This section provides a narrative review of three key debates related to the *degree* of differential political responsiveness, the *potential drivers* of published results, and the *extent* of differential responsiveness across democracies.

### **The Degree: How (Un)Equal Is Political Responsiveness?**

The overarching research question in the literature can be phrased as follows: how equally do policy makers respond to the preferences of individuals in different income classes?

Bartels (2008) and Gilens (2005; 2012) were among the first to empirically probe the question. Bartels (2008) studies the roll-call voting of U.S. senators in the 101st-103rd congresses and finds that senators respond most strongly to the preferences of the affluent, to a lesser extent to those of the middle class, and not at all to those of the poor. As opposed to studying roll-call voting and general ideology, Gilens (2005; 2012) examines the association between support for changes in specific policies and whether these policies changed in subsequent years. Across all policies, Gilens finds just a slight income gradient in

political responsiveness, but when preferences differ by more than a few percentage points, changes in policies reflect only the preferences of the affluent.

Since the publication of these influential studies, scholars have extended and tested Bartels’s approach in other time periods with mixed results (Bhatti & Erikson 2011; Flavin 2012a; Hayes 2012; Tausanovitch 2016). Gilens’s approach has been extended to tests of major theories of democracy and differential responsiveness in Germany and the Netherlands with very similar results (Elsässer et al. 2018; Gilens & Page 2014; Schakel 2019). Also studies examining variation in political outcomes across U.S. states and affluent democracies have been added to the literature (Bartels 2017; Flavin 2012b; Peters & Ensink 2015; Rigby & Wright 2011; 2013; Schakel, Burgoon, & Hakhverdian 2020). The general impression is that the preferences of the rich receive more consideration in the policy-making process than those of the lower and middle classes – and often a lot more.

These findings, however, have not gone unchallenged. An important critique, which comes in two separate forms, is that income groups often have similar and highly correlated preferences. The first form emphasizes that the high similarity of preferences creates a natural limit to unequal representation. Because even if the rich drive public policies, the preferences of lower income groups will still be represented, albeit coincidentally (Soroka and Wlezien 2008; but see Gilens 2009). Enns (2015) argues that also when preferences differ considerable ‘coincidental representation’ of lower income groups can occur, since all groups tend to rank policies similarly in terms of popularity. Studies that use bivariate models to show that political outcomes align about equally with the preferences of all income groups provide evidence in favor of this argument (Ura and Ellis 2008; Soroka and Wlezien 2010; see also Wlezien and Soroka 2011).

Yet, not everyone is equally optimistic about the implications of these results. Gilens (2015b, 1070) argues that coincidental representation is a “pale, counterfeit, simulacrum of democracy” that cannot take the place for real democratic responsiveness, and Bartels (2017, 23) would still attach “considerable theoretical and moral significance to the class bias” even

if all groups receive the policies they prefer (see also Gilens & Page 2014). Thus, even though there tends to be little difference in how well political outcomes align with the preferences of income groups, the democratic implications of this result remain contested.

The second form of the critique is methodological and highlights how the high similarity of preferences can complicate statistical analyses. Bhatti and Erikson (2011) – besides correcting a weighing issue – cannot replicate the findings of Bartels (2008) on new data due to high levels of multicollinearity. And in an extension of Gilens and Page (2014), Bashir (2015) uses simulations to argue that the middle class may actually be as influential as the affluent but that statistical models have difficulties separating the influence of the two groups because their preferences are highly correlated (but see Gilens 2016). Stimson (2011) further points out that differential measurement error in estimates of income-group preferences, caused by disparities in information, may induce a systematic underestimation of the impact of lower-income preferences, which in combination with high levels of multicollinearity can produce the finding that only the preferences of the rich matter in multivariate models.

In an effort to circumvent these issues, Branham et al. (2017) examine who wins when groups disagree instead of political responsiveness, using the data from Gilens (2012). They show that it is rare that one income group prefers one outcome while another prefers a different outcome. This happens in only about one of ten cases when comparing the affluent to the middle class, and since survey companies mainly ask about contentious issues, even this low number probably overstates the degree of disagreement between income groups on the full sample of policies. Disregarding potential issues of sample selection, Branham et al. (2017) find that on the small subset of policies, where middle and high-income groups have opposing preferences, the rich get their way just marginally more often than the middle class (53 vs. 47 percent).

Building on these insights, Lax et al. (2019) use several different measures of political representation (responsiveness, congruence, and a “taking-sides approach”) to examine the roll-call voting of U.S. senators. Their findings indicate that senators respond more strongly

to the preferences of the rich than to those of the poor, but the authors note that the responsiveness regressions are “messy to interpret” and that “given problems of multicollinearity, we need to be careful not to place too much faith in these regressions” (Lax et al. 2019, 928). Indeed, when using alternative measures of representation, Lax et al. (2019) find considerably smaller inequalities in representation. All in all, recent studies raise questions about the validity of the original conclusions, suggesting that parts of the literature overestimate inequalities in political responsiveness.

The debates about model estimation and whether it is differences in relative influence or in the alignment between political outcomes and preferences that matter suggest that the divergence of published results may partly reflect differences in model specification; specifically, whether inequalities in political responsiveness are assessed using one model for *each* income group or one model for *all* groups. But while it seems fairly well-established that the latter approach tends to produce greater differentials than the former, we have no estimates of how dependent the results are, and we are far from reaching general agreement on the implications (does the model dependence reflect statistical issues or theoretically meaningful differences in results?). To help improve clarity about the divergence of published results and contribute to a better understanding of the model dependence, we examine the consequences of different model specifications in the quantitative part of the review.

### **The Potential Drivers: Does Partisanship Condition Who Is Represented?**

Standard theories of democracy predict that left parties respond to the preferences of lower-income individuals and right parties to those of higher-income individuals. Because the middle class occupies a favorable position in the middle, it is often decisive for who is elected for office and its preferences are almost always represented. Accordingly, policies reflect the preferences of the majority (those of the middle plus those of either the lower or upper class) and differentials in responsiveness depend solely on who is in office. By contrast, if some groups are systematically overrepresented, regardless of who is in office, it would be a

distortion of the democratic principle of ‘one person, one vote’. Since the democratic implications of differential responsiveness depend (at least in part) on the patterns observed under different types of governments, partisanship is an important potential driver of differential responsiveness that has been closely scrutinized in the literature.

In the U.S. Senate, Bartels (2008) finds patterns partly consistent with both the partisan and distorted view of democracy: Partisanship does matter, as Democrats attach relatively more weight to middle-class preferences than Republicans, but both parties respond most strongly to the preferences of the affluent and completely ignore those of the poor. In the House of Representatives, Rhodes and Schaffner (2017) find patterns most consistent with partisan democracy: Republicans respond to the preferences of the rich and Democrats to those of the poor. Lax et al. (2019) provide an important qualification to these results. They show that while it is descriptively true that Republicans vote with the rich and Democrats with the poor, this is because the two parties respond to the preferences of their co-partisans, and that Republicans, on average, are more affluent than Democrats (see also Brunner et al. 2013). Maks-Solomon and Rigby (2020), however, find that both parties respond more strongly to their rich co-partisans, suggesting that although partisanship matters more than income, U.S. senators may have incentives to cater to the preferences of their more affluent voters.

While these results are, at least partly, consistent with partisan democracy and the received wisdom that Democrats represent lower income classes better than Republicans, other studies reach more ambiguous conclusions. Gilens (2012) finds that both parties overrepresent the affluent on most issues and that Republicans overall are more responsive to public opinion. Across U.S. states, Rigby and Wright (2013) find that while Republican state party platforms respond roughly equally to middle and high-income preferences, Democratic platforms respond most strongly to the preferences of high-income groups, especially in states with high levels of inequality. Within state parties, Republicans appear most responsive to their rich co-partisans on economic issues and their middle-class voters on social issues.

Democrats, by contrast, appear more responsive to their rich co-partisans on both economic and (especially) social issues (Wright & Rigby 2020). These findings suggest that in some cases Republicans may actually produce less representational inequality than Democrats (see also Hayes 2012).

Overall then, the U.S. literature presents somewhat contradictory evidence about whether and how partisanship matters for political responsiveness. Below, we combine the findings of published responsiveness studies to examine the effects of partisanship in more detail.<sup>4</sup>

### **The Potential Drivers: Heterogeneity in Results across Policy Domains or Levels of Aggregation?**

Examining variation in results across policy domains and political outcomes may help us understand the underlying mechanisms of differential responsiveness.

Bartels (2008) and Gilens (2012) consider several potential mechanisms and appear to agree that their results are most consistent with the role of money in politics. The view that money in politics undermines equal representation follows from what some perceive as a clash between democracy and capitalism according to which the unequal distributions of income and wealth generated by capitalism distort political equality.

If unfettered crony capitalism creates incentives for rich to invest in politics in order to further bias market outcomes, we would expect to observe the starkest differentials in responsiveness on economic domains, since economic policies directly affect the distribution of income and wealth. Economic policies are also what the rich care the most about (Page, Bartels, & Seawright 2013).

Similarly, if money in politics is an important driver, we should expect to observe starker differentials on highly specific, technical policies. This is because visibility is lower on more specific policies, which gives the rich and organized interests more leeway to exert political influence (Hacker & Pierson 2010).

---

<sup>4</sup>Because comparative studies have devoted little attention to partisanship, we cannot examine its impact outside the U.S.

In contrast to the implications of money in politics, we should see no systematic variation in results across domains or outcomes if the differentials are driven by something generic. For example, if the differentials are caused by politicians responding to voters (as opposed to citizens), or if lower levels of information cause more measurement error in estimates of low-income preferences, there should be little-to-no variation across domains and outcomes.

To help us understand the underlying mechanisms of unequal representation, we examine the variation of published results across policy domains and political outcomes below.

### **The Extent: American Exceptionalism or Worldwide Unequal Representation?**

Since the United States is unique among advanced democracies in terms of the degree of economic inequality and its system of private campaign finance, we would expect to observe weaker differentials in political responsiveness in other developed democracies.

Yet Peters and Ensink (2015) and Bartels (2017) find in broader set of affluent, mainly European, democracies that the rich exert an outsize influence on social spending to the extent that spending (often) moves against the preferences of the poor. Schakel et al. (2020) corroborate these results, arguing that rich people decide the generosity of welfare policies in advanced democracies.

There is generally little evidence that differentials in responsiveness vary across political-economic contexts (Bartels 2017). Peters and Ensink (2015) argue that lower turnout rates beget more representational inequality, but their results suggest that responsiveness is unequal only when the turnout rate is below 40 percent, which is lower than any country in their sample experienced during the study. The main contribution of these cross-national studies therefore, is to document differentials in responsiveness outside the U.S.; they provide less information about the potential drivers.

A similar conclusion holds for single-country studies. In Germany and the Netherlands, Elsässer et al. (2018) and Schakel (2019) closely reproduce the results of Gilens (2005). And studying referenda voting in Switzerland, Stadelmann, Portmann, and Eichenberger (2015)

find that only the rich appear to exert independent influence. Elsässer et al. (2018) and Schakel (2019) suggest that their results may be driven by disparities in political participation, descriptive representation, or interest-group mobilization, but only Schakel (2019) conducts empirical tests and finds inconclusive evidence.

Considering the pronounced economic, political, and institutional differences between the U.S. and Europe, the similarity of the comparative and U.S. findings is puzzling. How can we account for it?

Elkjær and Iversen (2020) question whether findings of differential responsiveness reflect inequalities in substantive political representation. Using simulations, they show that if political information differs across groups one can get biased results when studying preferences for change and changes in policies, which is what most studies examine. Their simulations show that even if the middle class is politically pivotal and decides the long-run level of a policy, statistical models can produce the result that only the preferences of the rich matter if the rich are better informed than the lower and middle classes.<sup>5</sup> To avoid bias, they propose studying long-run levels of policies instead short-term changes.

Empirically, Elkjær and Iversen (2020) test their argument using data on preferences for redistribution and social spending from 21 advanced democracies. The results are corroborative, showing that while short-term changes in spending, during a period in which spending increased significantly, appear to have been driven by the preferences of the rich, the preferences of the middle class seem to have decided the long-run levels. Using Danish data, Elkjær (2020) finds further corroborative evidence: The pattern of differential responsiveness observed in Denmark is remarkably similar to those observed in the U.S. and elsewhere in Europe but appears to be driven by better information among affluent Danes, who express preferences that are more in line with standard macroeconomic policies.<sup>6</sup> These

---

<sup>5</sup>In their simulations, Elkjær and Iversen (2020) illustrate the issue in the context of standard counter-cyclical fiscal policies. They show that even if spending perfectly matches the long-run interests of the middle class, it seems that only the rich influence spending. The reason is that the rich are better informed about the need for counter-cyclical spending and therefore express more counter-cyclical preferences.

<sup>6</sup>Elkjær (2020) tests the example of counter-cyclical spending used in the simulations of Elkjær and Iversen

results suggest that differentials in political responsiveness may (partly) reflect differences in information across groups, rather than inequalities in substantive political representation.

In sum, comparative studies have investigated the extent of differential responsiveness across democracies, explored differences in results across contexts, and most recently, questioned the interpretation of the main finding of the literature. The comparative branch of the literature can help place the U.S. findings in a broader context, providing benchmarks from other countries, and to the extent that there is inequality in responsiveness, highlight some of the potential drivers. Below, we provide a quantitative analysis of similarities and differences in results across contexts.

## Study Eligibility Criteria for Inclusion in the Quantitative Review

We focus the quantitative review on English journal articles, books, book chapters, and working papers from working-paper series, published between 2004 and 2020.<sup>7</sup> To be eligible for inclusion in the quantitative review, a study from this universe of studies must satisfy two criteria. First, the study must in the main text present the results from at least one statistical model that analyzes political responsiveness following the definition of Achen (1978). Consequently, political responsiveness must be measured as the slope coefficient on preferences in a regression that regresses some political outcome on related political preferences.<sup>8</sup> The political outcome can be either a specific policy (as in Gilens 2012) or some aggregated measure (such as NOMINATE-scores, as in Bartels 2008). Second, the study must explicitly compare the responsiveness of political outcomes to the preferences of at least two income groups. This can be done in either bivariate or multivariate models.

---

(2020) and find that the poor express stronger pro-cyclical preferences than the rich. When spending adjusts counter-cyclically to the business cycle, these short-term changes will therefore better reflect the preferences of the rich, even though they are also in the interests of the poor.

<sup>7</sup>Since the literature emerged after the APSA Task Force on Inequality and American Democracy concluded its work (APSA 2004), we consider 2004 to be the starting year of the literature.

<sup>8</sup>Although Achen (1978) also considers the intercept as part of responsiveness, empirical researchers focus on the slope coefficient, since preferences and outcomes are rarely measured on the same scale, complicating the use of the intercept to assess how closely preferences match outcomes (Wlezien 2017, 563).

Focusing on political *responsiveness* has the consequence of excluding a branch of literature that examines disparities in ideological and policy *congruence* (e.g. Ellis 2013). Studies of congruence have similar objectives as those of responsiveness, but the estimation strategies differ in important ways, which complicates direct comparisons (see Achen 1978; Wlezien 2017). We focus on political responsiveness because that is what the most influential studies investigate (Bartels 2008; Gilens 2005; 2012; Gilens & Page 2014). Needless to say, it is not an indication that studies of congruence are unimportant parts of the literature. But systematically reviewing those studies is better left for future research.

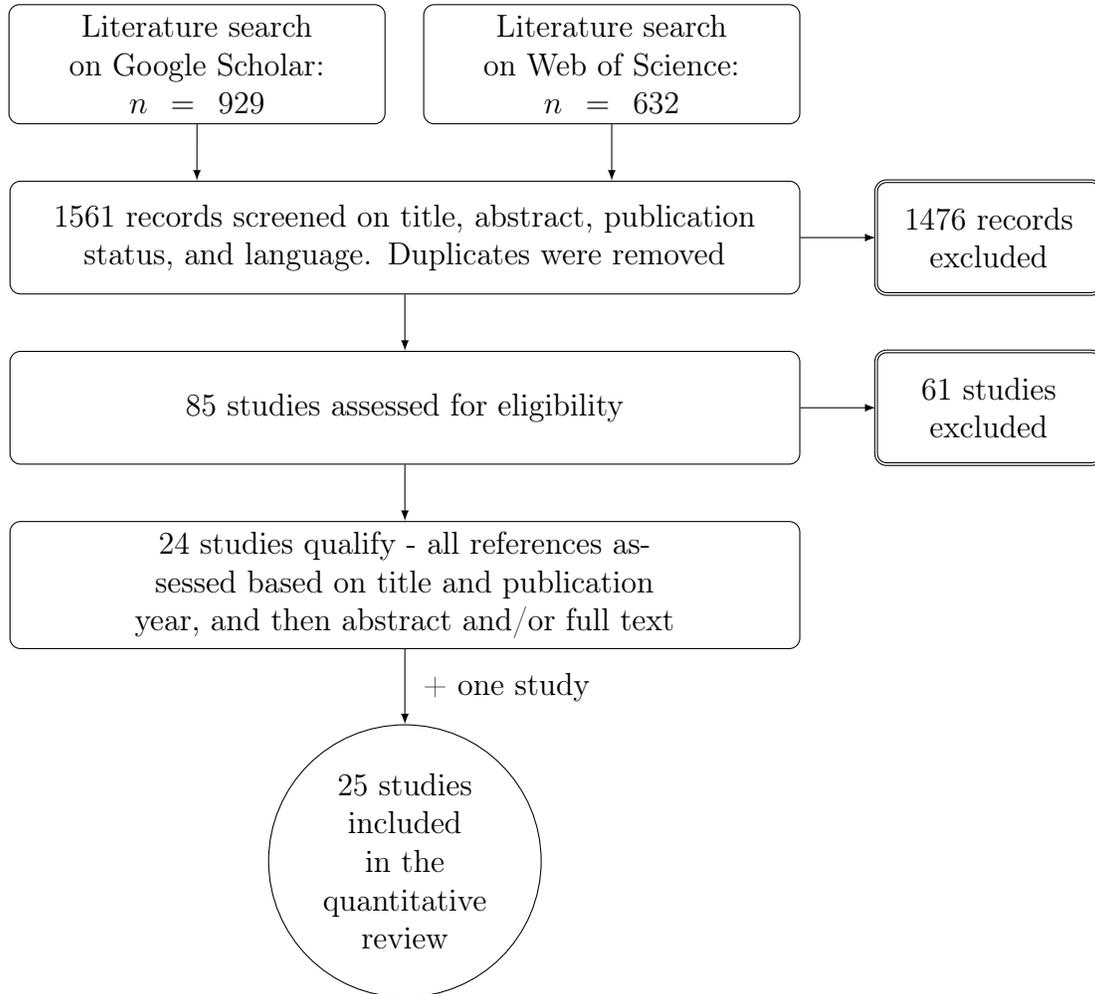
## Search Strategy and Study Selection

To ensure a systematic and transparent process of selecting studies, we have adhered to a widely used set of recommendations developed for systematic reviews in the medical sciences (Liberati et al. 2009). Figure 1 illustrates our study selection procedure. Using search strings such as “unequal representation” and “differential responsiveness”, we conducted topic searches on Web of Science and Google Scholar in order to identify potentially relevant studies. Our literature search yielded a total of 1561 potentially relevant studies, which we screened on title, abstract, language, and publication status. This reduced the set of potentially relevant studies to 85. On the basis of full-text assessments of the 85 studies, 24 studies qualified for inclusion in the quantitative review. To minimize the risk of omitting a relevant study, we assessed the references of all eligible studies, which yielded one additional study. Last, we discussed our list of studies with experts in the field, but this did not lead to new studies. We therefore ended up with 25 studies in total.

Having identified the studies, we recorded all estimates of political responsiveness from additive models, and from interactive models if the exact conditional effect was reported, together with the associated standard errors. We also recorded basic information about the study, such as the country, preferences, and political output under study, and how respondents are divided into income groups. Detailed information on the literature search and the

included studies is provided in Online Appendix A.

**Figure 1.** Flow Diagram of Study Selection.



## Main Results of Studies of Differential Political Responsiveness

Figure 2 summarizes the main results of published studies that statistically assess the link between affluence and political responsiveness. The y-axes show the regression coefficients, where higher values mean greater political responsiveness, and the x-axes denote the location of an income group in the income distribution from the survey.<sup>9</sup> The grey dots are the

---

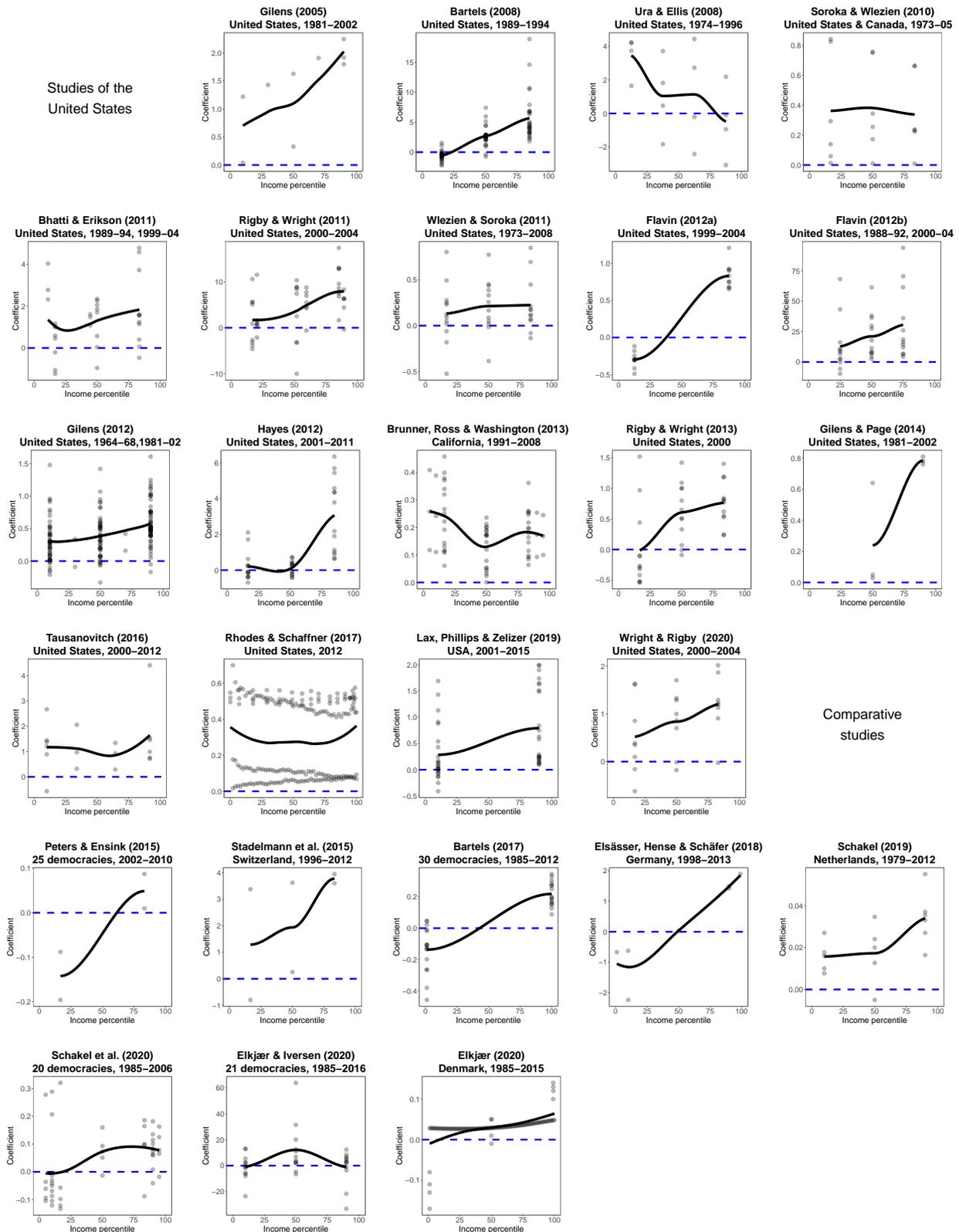
<sup>9</sup>Several studies divide respondents into groups (most often terciles) in which case we code the midpoint of the group's percentile position as its location in the income distribution.

coefficients reported by a study, and the black lines are loess smoothers that describe the overall association between income and political responsiveness for each study.

The figure shows that most studies find a positive income gradient in political responsiveness, indicating that policy makers respond more strongly to the preferences of higher income groups (e.g. Bartels 2008; Gilens 2005). At the same time, it illustrates a considerable divergence in results: Some studies find relatively equal levels of political responsiveness (Soroka & Wlezien 2010; Tausanovitch 2016; Wlezien & Soroka 2011), some find that political outcomes best reflect the preferences of the poor (Brunner et al. 2013; Ura & Ellis 2008), while still others find that policy makers respond most strongly to the preferences of the middle class (Elkjær & Iversen 2020). This divergence in results is often downplayed in (scholarly and public) discussions of the literature, yet it stands out clearly here.

Another striking feature of figure 2 is the similarity of findings across the U.S. and comparative studies. One may be tempted to interpret this similarity as an indication that some degree of political inequality is inherent in capitalist democracies but considering the widely different political-economic contexts of the U.S. and Europe, we would, still, expect to observe cross-national variation. It is, for instance, hard to see how political responsiveness can be equally unequal in countries like Germany or Denmark compared to the U.S. given these countries' much more equal distributions of income, stronger labor unions, higher turnout rates, and the smaller role of money in politics. The similarity of results across political-economic contexts is puzzling.

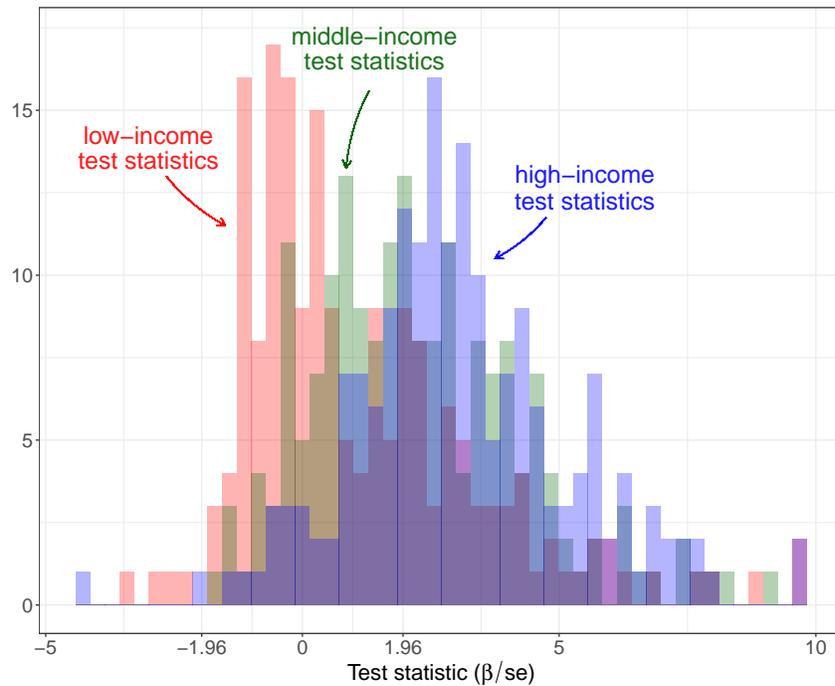
**Figure 2.** Main Results of 26 Studies of Differential Political Responsiveness



*Note:* The studies are ordered by region and publication date. Since Gilens (2005) presents similar results as Gilens (2012), the study is not included in the statistical analyses below, but we include it here to illustrate the development of the literature. N=1,172. Without Gilens (2005), N=1,163.

In figure 3, we display the test statistics of the coefficients shown in figure 2. Figure 3 shows that high-income coefficients more often have positive and larger test statistics than lower-income coefficients. The median test statistic of high-income coefficients is 2.95, whereas it is 2.0 and 0.3 for middle and low-income coefficients. For all groups the figure shows a small uptick in coefficients with test statistics around the typical significance threshold 1.96, which suggests that there is some publication bias in the literature. The most striking feature of figure 3, however, is that only about one of three low-income coefficients are positive with test statistics above 1.96 and that 43 percent are negative. In contrast, every other middle-income coefficient and three of four high-income coefficients are positive with test statistics above 1.96. And only fourteen and five percent of middle and high-income coefficients are negatively signed. Figure 3 thereby complements figure 2, suggesting that especially the poor lack a strong, consistent political voice. Neither figure, however, provides much direct evidence about the degree of differential responsiveness; a question we turn to now.

**Figure 3.** Test Statistics of Low, Middle, and High-Income Coefficients



*Note:* The figure shows the distribution of test statistics of the low (red), middle (green), and high-income coefficients (blue) displayed in Figure 2. If a study reports the coefficients of more than three income groups, the figure shows the test statistics of the groups with the lowest, median, highest income. The x-axis is truncated at 10, since a few coefficients have very large test statistics. N=829.

## The Degree of Differential Political Responsiveness

To assess the degree of differentials in political responsiveness, it is necessary to compare coefficients across studies and across models within studies. But since studies rely on different measures of political preferences and outcomes, it is not possible to directly do so. One way to ensure comparability would be to calculate standardized effects, but Achen (1977) warned us of the pitfalls of this approach decades ago, and even if we wanted to adopt the approach, it is complicated by the fact that studies rarely report the statistics needed for standardization. Another option would be to calculate ratios of income-group coefficients but that is also not feasible, because of the many negative low-income coefficients.

Instead, we create two ordered categorical variables that compare high-income coefficients

to low or middle-income coefficients.<sup>10</sup> The middle category has the value 4 and describes cases of *relatively equal representation* in which the sizes of two coefficients are within 15 percent of one another. Categories 3 and 5 describe a *moderate* bias in political responsiveness favoring either the poor/middle class or the rich in which one coefficient is equal to or more than 15 percent the size of the other but less than twice as large. Categories 2 and 6 contain cases of more *severe* bias in which one coefficient is equal to or more than twice as large as the other. Categories 1 and 7 describe the most *extreme* form of biased responsiveness in which political outcomes reflect the preferences of one group (implying a positive coefficient), while going against those of the other (implying a negative coefficient). Last, an auxiliary category contains ambiguous results in which both coefficients are either negative or statistically insignificant at the .1 level.<sup>11</sup>

The advantage of this coding is that it allows us to examine all cases of differential responsiveness in one model, while still capturing degrees of intensity. It also limits the influence of extreme observations. The drawback is that it forces us to choose arbitrary cut-off points. To ensure that the choice of cut-off points is not driving the results of the quantitative review, we experiment with different values in Online Appendix B. In all cases, the results are similar to those presented here.

---

<sup>10</sup>As in Figure 3, if a study reports the coefficients of more than three income groups, we compare the coefficients of the groups with the lowest, median, highest income.

<sup>11</sup>Formally the coding of the variables (`High_Low` and `High_Middle`) can be written as:

$$\text{High\_Low[Middle]} = \begin{cases} \text{1: extreme pro-poor[middle-class] bias} & \text{if } \beta_H < 0 < \beta_{L[M]} \\ \text{2: severe pro-poor[middle-class] bias} & \text{if } \beta_H/\beta_{L[M]} \leq 1/2 \\ \text{3: moderate pro-poor[middle-class] bias} & \text{if } 1/2 < \beta_H/\beta_{L[M]} \leq 0.85 \\ \text{4: relatively equal representation} & \text{if } 0.85 < \beta_H/\beta_{L[M]} < 1.15 \\ \text{5: moderate pro-rich bias} & \text{if } 1.15 \leq \beta_H/\beta_{L[M]} < 2 \\ \text{6: severe pro-rich bias} & \text{if } 2 \leq \beta_H/\beta_{L[M]} \\ \text{7: extreme pro-rich bias} & \text{if } \beta_{L[M]} < 0 < \beta_H \\ \text{Amb: ambiguous results} & \text{if } \beta_{L[M]} < 0 \text{ AND } \beta_H < 0 \text{ OR} \\ & \text{.1} < P_{\beta_{L[M]}} \text{ AND } .1 < P_{\beta_H}, \end{cases}$$

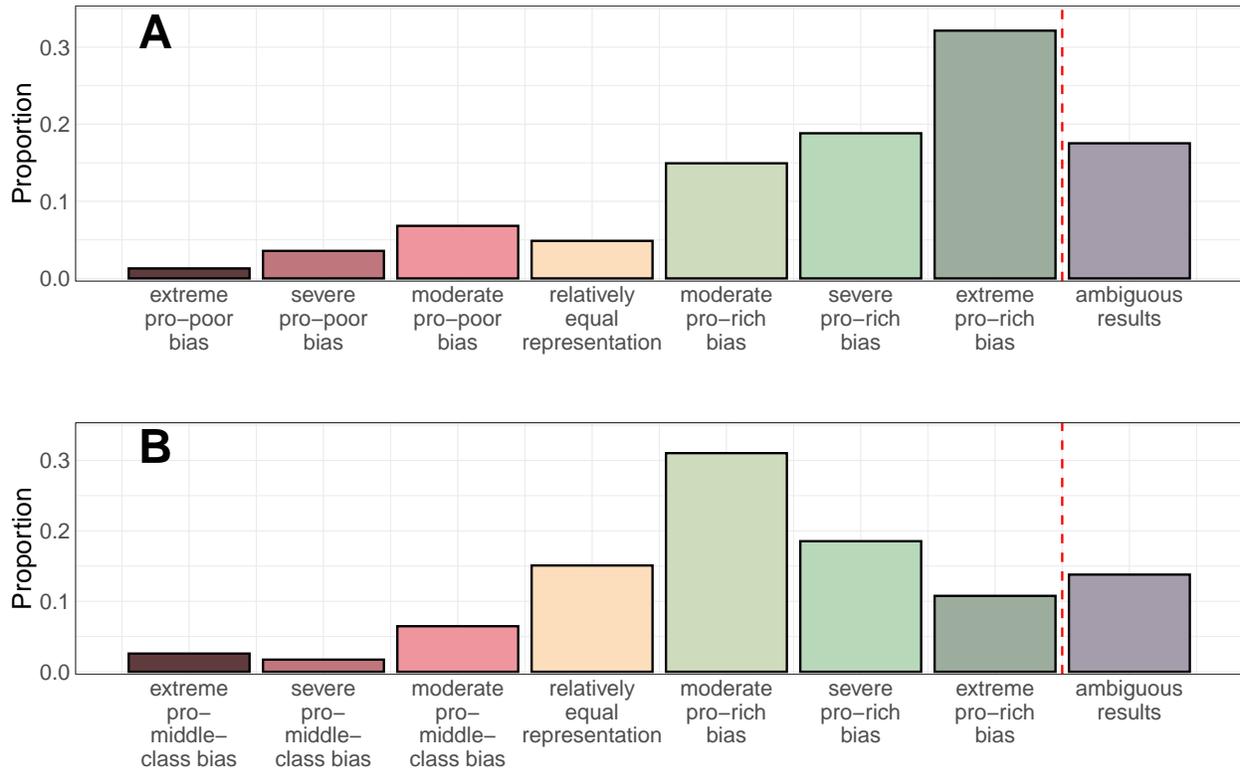
where  $\beta_H$  refers to coefficients of high-income preferences and  $\beta_{L[M]}$  to coefficients of low or middle-income preferences.  $P_{\beta_C}$  is the p-value of a coefficient of income-class preferences  $C$ . Because many studies rely on small samples, we use  $P < .1$  as the significance threshold.

Figure 4 displays the distributions of the two variables. The high-low income comparison in panel A shows that published research collectively suggests that the rich are vastly better represented than the poor: While the rich appear better represented in two of three cases (the green-shaded bars), the poor appear better represented in just 12 percent of cases (the red-shaded bars). In a mere five percent of cases, the representation of the two groups is roughly equal (the yellow bar). Ambiguous results account for the remaining 18 percent (the purple bar). Figure 4A also shows that the most extreme pro-rich bias – where the coefficient of the high-income group is positive, while that of the low-income group is negative – is the most frequent finding of the literature (32 percent of comparisons). This finding is striking because it suggests not only that the affluent are better represented than the poor; political outcomes often appear to be directly opposed to the preferences of the poor. At the same time, the finding is puzzling, since one of the most consistent findings in the literature is that the preferences of income groups are highly correlated. How political outcomes, in such a context, can be positively associated with the preferences of the rich while simultaneously be negatively associated with those of the poor warrants further scrutiny; we dig deeper below.

Figure 4B shows that, compared to high and low-income groups, differentials in political responsiveness between high and middle-income groups are both less commonly observed and less severe. About 60 percent of empirical models find that high-income preferences are better represented than middle-income preferences, most often with a factor less than two (the moderate pro-rich bias with 31 percent), whereas about 10 percent find that the middle class is better represented than the rich. Representation is roughly equal between high and middle-income groups in 15 percent of cases; ambiguous results make out the last 14 percent.

A final noteworthy feature of figure 4 is that the literature includes considerably more high-low than high-middle income comparisons (see note to figure), which considering the omnipresence of median-voter models in literatures on democratic policy-making and political representation appears somewhat peculiar. Directing attention to middle-income individuals should be an obvious next step for the literature; especially for the comparative literature,

**Figure 4.** Differentials in Political Responsiveness Are More Pronounced Between High and Low-Income Groups (A) Than Between High and Middle-Income Groups (B)



*Note:* The figure shows the distributions of two categorical variables that compare the political responsiveness of high-income groups to those of low (panel A) and middle-income groups (panel B).  $N_A=308$ .  $N_B=232$ .

which reports more than twice as many high-low as high-middle income comparisons.

## The Extent and Drivers of Differential Political Responsiveness

We now turn to the analysis of the extent and drivers of differential responsiveness, examining how published results vary across regions, model specifications, partisanship, issue specificity, and policy domains. To account for the hierarchical structure of the data, and the ordered categorical nature of the dependent variables (shown in figure 4), we estimate random-effects ordered logistic regressions with models nested within studies.<sup>12</sup> As controls, we include a measure of the distance in the income distribution between the income groups, and the number of observations used to estimate the model. We also include a dummy for whether

<sup>12</sup>The results are robust to using fixed-effects models (see Online Appendix C).

the model is estimated on a subset of policies on which preferences diverge.<sup>13</sup>

Table 1 presents the results.<sup>14</sup> Models (1) and (2) show the results for the high-low income comparison on a full sample of all studies and a subsample of U.S. studies. Likewise, models (3) and (4) display the results for the high-middle income comparison.<sup>15</sup> Since the logit coefficients in the table are difficult to interpret substantively, we analyze more substantively meaningful predicted probabilities below. For now, we want to highlight that the results are unaffected by the inclusion of the comparative studies, which demonstrates the high comparability of results across contexts. We also note that the relative distance in the income distribution between high and low/middle income groups is unrelated to differentials in responsiveness, suggesting that how scholars define income groups have little bearing on the results. And as discussed, Gilens (2012) – and the studies extending this approach to other contexts – find greater differentials in responsiveness when preferences diverge.

In models (5) and (6), we analyze why published results sometimes are ambiguous. The models show that a larger sample size is associated with a lower likelihood of obtaining ambiguous results, reflecting the greater statistical power of the estimated model. Results are also less likely to be ambiguous when studying general ideology, rather than specific policies, which comports with the findings of the broader literature on political responsiveness (Erikson 2015, 12-13). Finally, including more than one set of preferences in the model specification increases the probability of obtaining ambiguous results for the high-low income comparison (by about 50 percent), which is probably due to higher levels of multicollinearity as explained by Bhatti and Erikson (2011).

---

<sup>13</sup>Ideally we would treat preference divergence as a substantive variable, but because only a few studies, most notably Gilens (2012), use this empirical strategy we cannot provide reliable quantitative comparisons of how published results differ across degrees of preference divergence.

<sup>14</sup>Descriptive statistics of the independent variables are included in Online Appendix D.

<sup>15</sup>Readers mainly interested in the U.S. can find a full analysis of the U.S. studies in Online Appendix E.

**Table 1.** Predictors of Differential Political Responsiveness in Published Research

	High vs. Low		High vs. Middle		Ambiguous Cases	
	All	U.S.	All	U.S.	H-L	H-M
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Study/Model Characteristics</b>						
N of groups > 1	3.62*	3.24*	1.69*	1.74*	1.14*	0.63
	(0.51)	(0.54)	(0.38)	(0.46)	(0.51)	(0.61)
Partisanship: Democrat		-0.78		0.21	0.64	1.02
		(0.46)		(0.43)	(0.59)	(0.77)
Partisanship: Republican		0.84		-0.22	0.87	-0.06
		(0.43)		(0.39)	(0.54)	(0.80)
Domain: Non-economic	-0.23	-0.01	-0.05	0.01	-0.09	-0.99
	(0.56)	(0.60)	(0.42)	(0.46)	(0.64)	(0.73)
Domain: Economic	0.50	0.61	-0.67	-0.41	0.33	-0.72
	(0.67)	(0.73)	(0.51)	(0.61)	(0.68)	(0.82)
General political ideology	0.03	0.41	-0.01	0.01	-1.53*	-2.07*
	(0.72)	(0.76)	(0.41)	(0.47)	(0.67)	(0.97)
<b>Region of the World</b>						
United States	-2.46*		-0.37		0.25	2.09
	(0.97)		(0.54)		(0.71)	(1.20)
<b>Controls</b>						
Distance: H-L[M]	-0.00	-0.03	0.07	0.04	-0.00	0.09
	(0.03)	(0.04)	(0.04)	(0.05)	(0.02)	(0.09)
Observations (ln)	-0.05	0.14	-0.14	-0.06	-0.58*	-1.53*
	(0.20)	(0.24)	(0.14)	(0.19)	(0.23)	(0.41)
Preference divergence	1.71*	2.03*	1.91*	1.73*	1.06	-0.75
	(0.65)	(0.71)	(0.62)	(0.65)	(0.81)	(1.04)
<b>Random Effects</b>						
Study-level variance	4.55*	5.81*	0.15	0.31	0.27	0.66
	(1.94)	(2.72)	(0.17)	(0.29)	(0.38)	(0.90)
N	254	206	200	176	308	232
N of Studies	24	16	20	15	24	20
Log Likelihood	-296.6	-258.7	-308.3	-266.7	-125.4	-75.76

*Note:* \*  $p < 0.05$ . Models 1-4 are random-effects ordered logistic regressions, in which the dependent variables are the categorical variables shown Figure 4 (with ambiguous cases separated out). Models 5-6 are random-effects logistic regressions, in which the dependent variables are dummies for whether results are ambiguous (1) or not (0). Constants are estimated for all models but suppressed in the table (for full results see Online Appendix B). Baseline for number of groups is one. Baseline for partisanship is overall/not party-specific. Baseline for policy domains is unspecified/not issue-specific. Baseline for region is not the U.S.

## How Do Differentials in Responsiveness Vary Across Model and Study Characteristics?

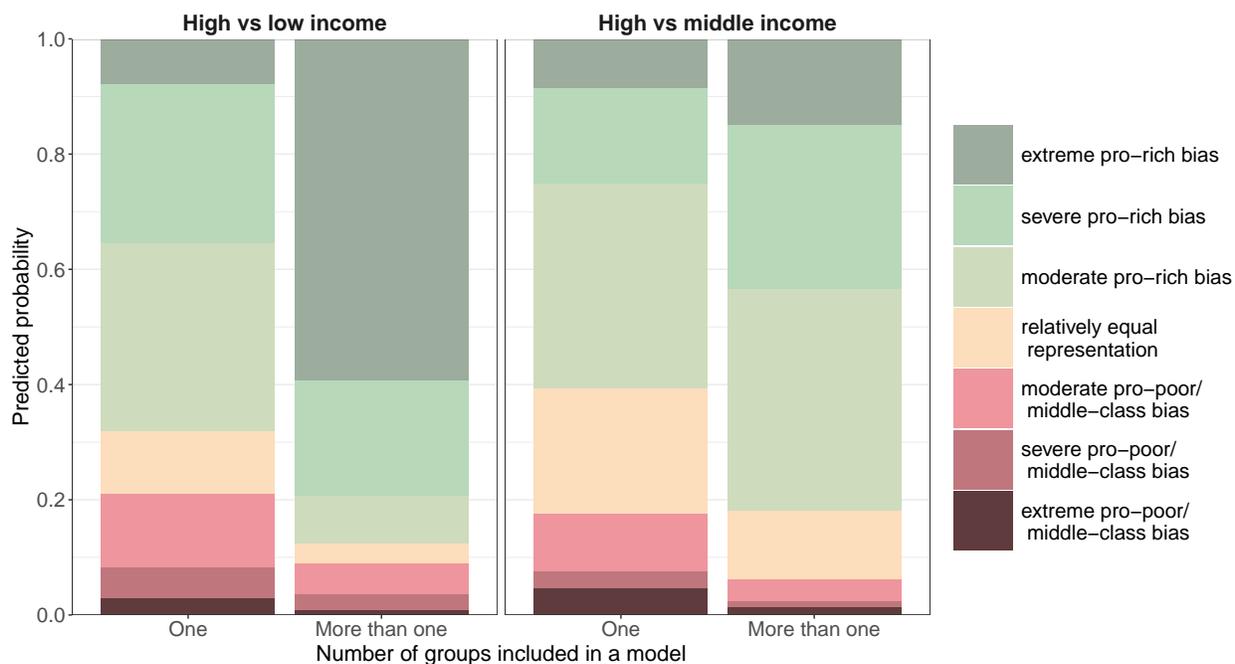
To present more intuitive estimates of how differentials in responsiveness vary across model and study characteristics, we use in-sample predictions to calculate the probability of obtaining a certain degree of differential responsiveness for each characteristic. The probabilities can be interpreted as the predicted proportion of published findings that fall into the different categories of differential responsiveness, given the model specified in table 1. We rely on the pooled samples of all studies for every predictor except partisanship, for which we use the U.S.-specific sample (since only U.S. studies disaggregate the analysis by party).

*Number of groups included in a model.* Whether a statistical model includes the preferences of *one* or *more* income groups turns out to be a strong predictor of the most extreme form of differential responsiveness, where the coefficient of the rich is positive (and significant) and that of the lower-income group is negative. Figure 5 shows that while the probability of observing such extreme differentials between high and low-income groups is .08 for models that include preferences separately, the probability is .59 for models that include preferences simultaneously. In fact, findings of extreme pro-rich bias are almost entirely driven by this one modeling choice. Wholly 96 percent of the statistical models that have produced this result thus include the preferences of multiple income groups simultaneously in one model. For the high-middle income comparison, the probabilities of observing an extreme pro-rich bias are .09 and .15, and 80 percent of the statistical models that have produced this finding include multiple sets of preferences.

Not only does the multivariate model estimate starker differentials in responsiveness, it is also more likely to find an overrepresentation of the rich. The probability that the rich are better represented than the poor (middle class) increases from .68 to .88 (.61 to .82) when including preferences simultaneously (the green shades combined).

The model dependency of published research ties to one of the biggest discussions in

**Figure 5.** The Model Specification Is A Strong Predictor of Economic-Elite Dominance



*Note:* The predicted probabilities can be interpreted as the predicted proportion of published findings that fall into each category of differential responsiveness accounting for other study and model characteristics.

the literature about the effects of highly correlated preferences. But since, as discussed in the narrative review, scholars disagree on whether the model dependence reflects statistical issues or substantively meaningful differences in results across specifications, it remains highly contested which model better capture actual differences in democratic responsiveness.

To help move the debate forward let us consider the two possible scenarios. The first scenario is one in which the multivariate model captures inequalities in political *influence*, whereas the bivariate model captures the unconditional *alignment* between political outcomes and preferences (cf. Gilens & Page 2014; Rigby & Wright 2013). If this interpretation is correct, we would expect a weaker model dependence in Europe than in the U.S., since a large literature in comparative political economy has documented that the interests of lower income classes are better represented in the more generous European welfare states; that is, lower income classes exert more influence on political outcomes in Europe compared to the U.S. (e.g. Huber & Stephens 2001; Iversen & Soskice 2006). Now, consider the alternative scenario in which the model dependence reflects some statistical issue of highly correlated

preferences, as argued most forcefully by Bashir (2015). If this is case, we would not expect to observe any difference in the degree of the model dependence across contexts.

It turns out that the model dependence is equally strong in and outside the U.S.: In both the U.S. and comparative studies, the two most severe forms of differential responsiveness (the severe and extreme pro-rich bias) are twice as likely to be found when the preferences of high and low-income groups are included in the same statistical model. This result may indicate that the multivariate model is poorly equipped to accurately capture degrees of differential responsiveness when preferences are highly correlated. Indeed, it is possible that differentials in responsiveness are generally small, but that informational disparities between income groups lead to more measurement error in lower-income preferences. In multivariate models then, the affluent, whose preferences are most precisely estimated, would be attributed the joint effect of all groups due to high levels of multicollinearity (Bashir 2015; Stimson 2011). Informational disparities may further bias estimates of relative representation to the extent that information conditions how individuals adjust their preferences to the political-economic context (Elkjær 2020; Elkjær & Iversen 2020; Soroka & Wlezien 2010).

Although these results do not demonstrate that either the dominance of the rich or the non-responsiveness of political outcomes to the preferences of the poor are modeling artefacts, they do raise the question. Because the model dependence is so strong, and there remains significant disagreement about how to interpret it, it is unfortunate that more than one third of published studies (9 of 25) rely on multivariate analysis of income-group preferences only. Researchers must carefully consider whether this is appropriate.

An important task for future research is to establish standards with respect to the statistical modeling and reporting of differential responsiveness, which would help to improve comparability of results across studies and clarify the normative and theoretical implications of the findings. We advise scholars to take a cautionary approach and first assess differences in responsiveness by including preferences in separate models and then, if feasible, assess the results of models that include preferences simultaneously (for a good example, see Rigby &

Wright 2013). It may also be fruitful to consider alternative research designs to illuminate the relative influence of different groups. One promising approach is to examine policies on which groups have opposing preferences, as this circumvents the problems that the multivariate analysis face and centers the analysis on policies on which politicians are forced to take sides (for good examples, see Branham et al. 2017; Lax et al. 2019). On the whole, the degree of differential responsiveness remains highly contested and it continues to be an important task to explore ways to reliably estimate it.

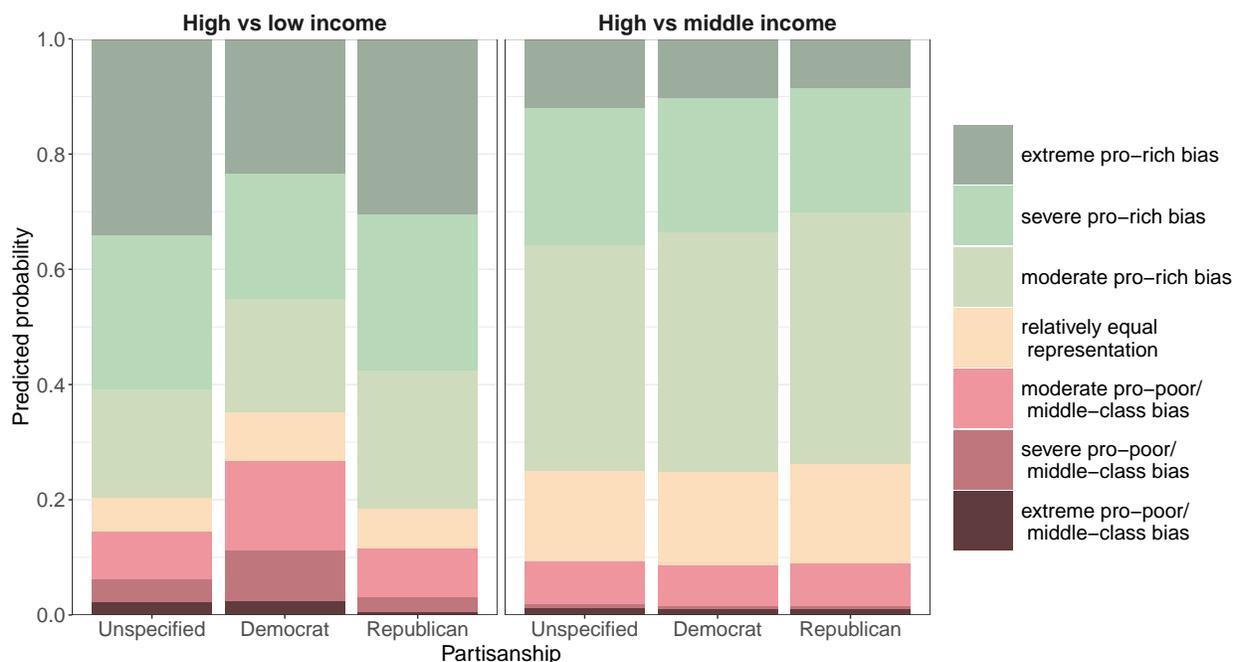
*Partisanship.* The left panel of figure 6 shows that in the U.S. both Democrats and Republicans respond more strongly to the preferences of the rich than to those of the poor (the green shades). At the same time, the figure shows a clear indication that Democrats are more responsiveness to the preferences of the poor than are Republicans. In eight of ten cases, Republicans overrepresent the rich compared to the poor, whereas for Democrats it is in roughly two of three cases. Moreover, a study is more than twice as likely to find that Democrats overrepresent the poor compared to Republicans (the red shades: .27 vs .12).

But whereas partisanship matters for the relative representation of the poor and the rich, the right panel of figure 6 shows that partisanship does not condition findings of differential responsiveness between middle and high-income groups. Here we see virtually no differences in results depending on the partisanship of the representative or government. In all cases, the rich are vastly overrepresented compared to the middle class.

How do these results line up with the theoretical expectations? The results for the high-low income comparison are partly consistent with partisan theories of democracy in that who is in office conditions the representation of the groups, but they are not fully consistent with such theories since even Democrats appear to overrepresent the rich. The results for the high-middle income comparison are inconsistent with most theories of democracy.

Even though these results suggest that income may matter more for political representation than partisanship, it would be a mistake to conclusively say so. One important limitation

**Figure 6.** Democrats Represent the Poor Relatively Better Than Republicans



*Note:* The predicted probabilities can be interpreted as the predicted proportion of published findings that fall into each category of differential responsiveness accounting for other study and model characteristics.

of the quantitative analysis is that it includes only studies that analyze one type of political representation (responsiveness). Recent studies that use alternative measures of representation find the opposite pattern that partisanship is more important for representation than income (Lax et al. 2019; Maks-Solomon & Rigby 2020). Overall then, it seems certain that partisanship is important for explaining differences in political representation; the question of how important remains to be settled.

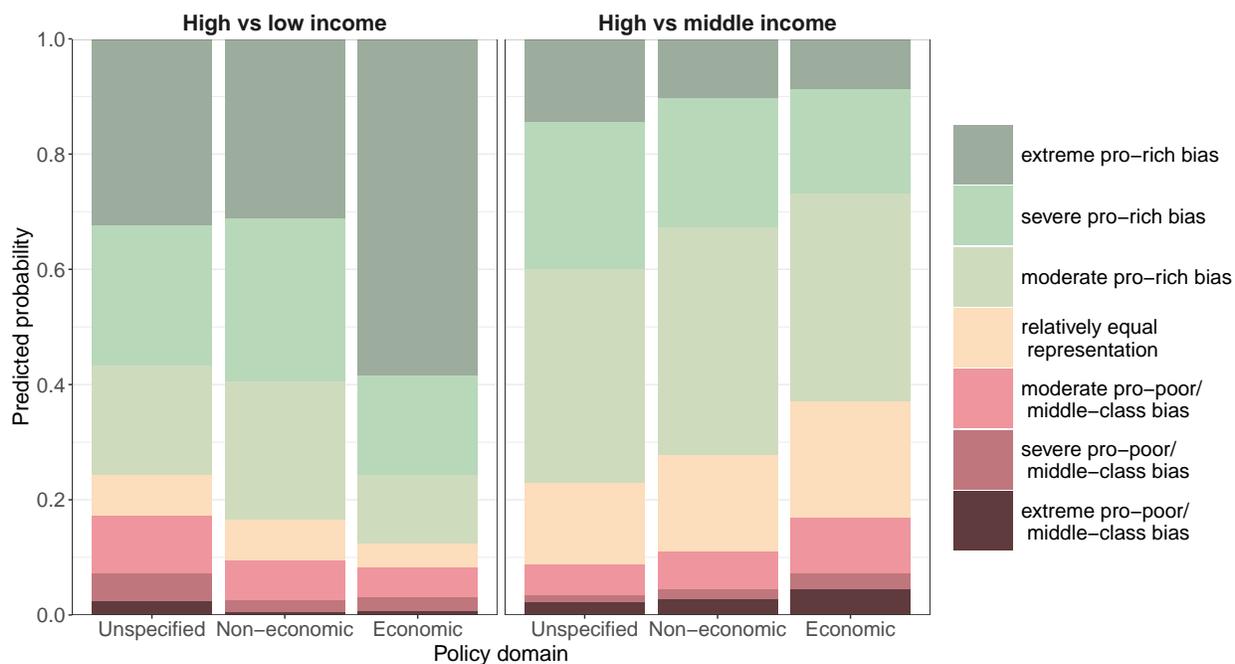
For this reason, disentangling the impact of partisanship remains an important research agenda. It is puzzling that the effect of partisanship is not stronger and that partisanship matters only for the relative representation of high and low-income groups. Future research should increase attention to the comparison between high and middle-income groups, which has received less attention than that between high and low-income groups. It cannot be ruled out that the greater emphasis on the rich-poor comparison highlights the importance of partisanship for explaining differences in representation between the rich and the poor, while leaving similar differences between the middle and the rich undocumented. Future re-

search should also continue to look into the conditions under which policy makers of different partisan stripes are more likely to respond to the preferences of different income groups (e.g. Rigby & Wright 2013; Wright & Rigby 2020). Finally, partisanship should be especially high on the agenda for comparative scholars, as the importance of partisanship for differentials in political responsiveness is almost entirely unexplored outside of the U.S.

*Policy domain.* Differences in published results across policy domains are statistically insignificant (see Table 1), but the distributions of probabilities shown in figure 7 suggest that studies observe greater differentials in responsiveness on economic issues when comparing the rich and the poor; especially the probability of observing the extreme pro-rich bias is high. This result, however, is driven solely by the comparative studies: In the U.S., there are no stark differences in results across domains; if anything, the differentials appear slightly smaller on economic issues (see Online Appendix E). The differences across domains are also insignificant when comparing the middle and the rich, but here published research indicate that middle-class preferences may be slightly better represented on economic issues.

How may these results help us understand the underlying mechanisms? If crony capitalism and money in politics were driving the observed differentials in responsiveness, we would expect representation to be more unequal on economic domains, as these directly affect the distribution of income and wealth. Although we observe some indication of this pattern when comparing the rich and the poor, it is driven solely by the comparative studies, and the differences are insignificant. Moreover, the middle class actually appears to be doing somewhat better on economic issues. These findings suggest that the driver of published results is not simply a story about crony capitalism and money in politics. Rather, it suggests the presence of a generic driver that affects responsiveness similarly across domains.

**Figure 7.** No Systematic Differences in Findings Across Policy Domains

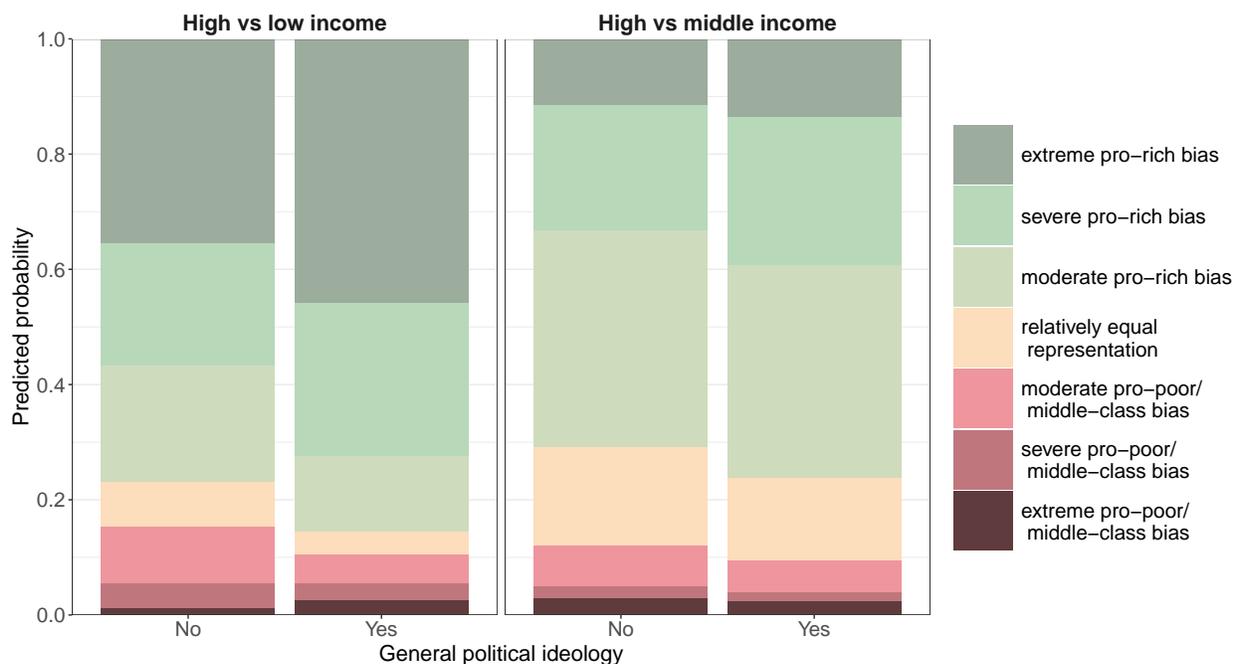


*Note:* The predicted probabilities can be interpreted as the predicted proportion of published findings that fall into each category of differential responsiveness accounting for other study and model characteristics.

**Level of aggregation of policies and preferences.** Figure 8 shows that differentials in responsiveness appear slightly weaker on specific policies, compared to aggregate measures of political outcomes. But as for policy domains, the differences in results across levels of aggregation are statistically insignificant (see table 1). These patterns are inconsistent with the notion that the rich and organized interests exert greater political influence on specific, technical policies where visibility and public attention is low. Of course, the results do not refute these arguments, but they suggest it is not what is driving published results. Rather, it may again point to the presence of a generic driver.

**Region.** The comparison between the high and low-income groups in the left panel of figure 9 shows that observed differentials in political responsiveness are starker outside the U.S. than in the U.S. In about seven of ten cases, comparative studies find the extreme pro-rich bias in which political outcomes reflect the preferences of the rich but go against those of

**Figure 8.** No Significant Difference in Findings Across Different Levels of Aggregation

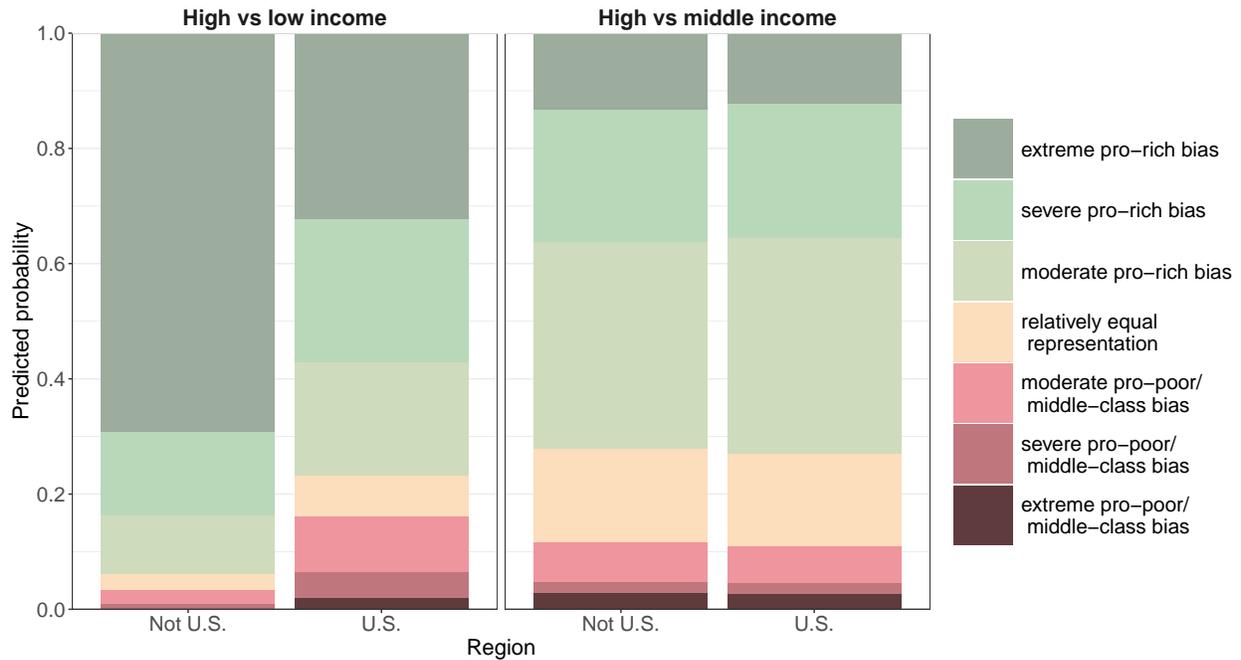


*Note:* The predicted probabilities can be interpreted as the predicted proportion of published findings that fall into each category of differential responsiveness accounting for other study and model characteristics.

the poor. The extreme pro-rich bias is also observed most frequently in the U.S. but in just three of ten cases. Moreover, studies of the U.S. are more than four times as likely as comparative studies to observe a pro-poor bias (.16 vs .034). The right panel of figure 9 shows that findings of differential responsiveness between high and middle-income groups are virtually identical in and outside the U.S., suggesting that representational disparities between middle and upper income classes are orthogonal to the political-economic context.

Considering that the countries studied in the comparative literature have lower levels of economic inequality, stronger left parties and labor unions, higher turnout rates, and less money in politics than the U.S., these results are puzzling. They go against conjectures that the U.S. might be a unique case regarding political inequality. And they challenge long-standing theories in comparative political economy, which explain the more egalitarian political outcomes in Europe partly as a function of political and economic institutions, a stronger working class, and greater political influence of low-income groups (e.g. Hall & Soskice 2001; Huber & Stephens 2001; Iversen & Soskice 2006).

**Figure 9.** Comparative Studies Find Starker Differentials in Political Responsiveness Than Studies of the US



*Note:* The predicted probabilities can be interpreted as the predicted proportion of published findings that fall into each category of differential responsiveness accounting for other study and model characteristics.

The lack of theoretically meaningful variation in results across contexts may help us understand the underlying mechanisms. U.S. scholars have proposed that differentials in responsiveness are driven by money in politics, a descriptive overrepresentation of the rich, or inequalities in the organization of interest groups (Bartels 2008; Becher & Stegmüller in press; Carnes 2013; Gilens 2015a). In Europe, where private campaign contributions are significantly smaller, scholars have highlighted disparities in turnout, descriptive representation, and interest-group mobilization as potential mechanisms (Elsässer et al. 2018; Peters & Ensink 2015; Schakel 2019). All of these mechanisms can be (and have been) theoretically connected to varying degrees of unequal representation. Yet they are all unable to explain why differentials in responsiveness appear more (or even equally) pronounced in Europe compared to the U.S. The system of private campaign finance is unique to the U.S., and in most European countries, organized labor groups are significantly stronger, and turnout is considerably higher than in the U.S. Moreover, although the poor tend to be underrep-

resented in European parliaments, politicians do not come from the absolute top echelons of the income distribution, which means that a descriptive underrepresentation of the poor cannot explain why middle-income groups appear similarly poorly represented compared to high-income groups in both the U.S. and Europe. We are thus left with a set of potential explanations that, although consistent with some degree of unequal representation in any individual country, cannot explain the similarity of findings across countries. Why social Europe appears to experience more unequal representation than liberal America is puzzling and warrants further scrutiny.

One suggested mechanism, consistent with the observed patterns of differential responsiveness, is disparities in information across income groups. Better informed individuals express preferences that are more consistent with the voting behavior of representatives in the U.S. Congress (Hill & Huber 2019). And better information among high-income individuals is arguably what is driving the findings across countries and in Denmark (Elkjær 2020; Elkjær & Iversen 2020). One potential direction for future research is to assess the degree to which the differentials in responsiveness can be explained by informational asymmetries, whether the explanatory power of this argument varies across contexts, and how equal responsiveness is once informational asymmetries are accounted for.

Regardless of the role of information, we encourage future research to take note of the similarity of findings across countries, which indicates the presence of (partly) similar underlying mechanisms and can help researchers rule out explanations. Thus, the U.S. and comparative literatures can benefit from greater attentiveness to each other. We also encourage scholars to take seriously the observed pattern of unequal responsiveness when forming theoretical propositions. For instance, published findings are not consistent with disparities in turnout because this would only be able to explain less severe forms of differential responsiveness: It cannot explain why the poor so often seem to be completely ignored or why the rich appear so much better represented than the middle class. Accounts seeking to explain unequal representation should be consistent with the empirically observed patterns.

## Conclusion

The systematic review of published research has shown that there is considerable variation in results across models and studies. In fact, the entire palette of possible findings is represented in the published literature (some studies find an overrepresentation of the rich, others of the middle class, and still others of the poor; add to this several cases of both equal representation and non-responsiveness). At the same time, the review found little (theoretically relevant) variation in results across contexts. The partisanship of the representative/government matters less than standard theories of democracy would predict, the variation in results between the U.S. and Europe is theoretically puzzling, and there is no systematic variation across either policy domains or political outcomes. These findings raise two seemingly contradictory questions: 1) Why do studies reach so different conclusions? 2) And what is driving the similarity in published results across domains, outcomes, parties, and countries?

Because published studies come to vastly different conclusions, it is difficult to give a full accounting of the divergence in results. The review does, however, highlight some possible explanations. Our quantitative analysis established that the model specification is the strongest driver of severe forms of differential responsiveness. Studies that rely on multivariate analysis of income-group preferences find starker differentials in political responsiveness than studies that (also) rely on bivariate analysis. Another important distinction is whether a study examines short-term changes in policies, which better reflect the preferences of the rich, or long-run levels of policies, which better reflect the preferences of the middle class. Finally, the overrepresentation of the poor may partly be explained by partisan differences, as Democrats represent the preferences of the poor better than Republicans. Yet, these factors can only partly account for differences in published results; much of the variation reflects more fundamental differences across studies.

Although the analysis showed considerable divergence in results across studies, it also showed little (theoretically relevant) variation across contexts. The most puzzling finding is that comparative studies find starker differentials in responsiveness than those of the U.S. This finding is likely related to model specification choices, as comparative studies rely more heavily on multivariate analysis, which, as we have seen, produces anti-conservative estimates of differentials in responsiveness. Specification choices, however, are unlikely to explain why lower-income individuals do not appear to be better represented in Europe compared to the U.S., as standard theories would suggest.

The similarity of published results across countries, domains, outcomes, and parties suggests that the driver is generic. Crony capitalism and money in politics would suggest stronger differentials on specific, technical economic policies in the U.S.; patterns we do not observe. Disparities in voter turnout predict similar patterns across domains and outcomes, but not across countries. Inequalities in interest-group mobilization would suggest starker differentials in the U.S., where organized labor is weaker than in Europe, but published research finds the opposite pattern. And while party politics appears important, the observed differences in results across Republicans and Democrats are smaller than partisan theories of democracy would predict.

One generic, and increasingly popular, explanation of published results is a descriptive underrepresentation of the poor and uneducated in local and national legislatures. Since more affluent and better educated politicians may not fully understand the circumstances and preferences of the poor, it can potentially explain why responsiveness to the preferences of the poor is so low across all contexts. But while the poor and uneducated are underrepresented in most legislatures, the educated middle class is well-represented in most European legislatures. Underrepresentation of the poor and uneducated, therefore, cannot explain why the educated middle class appears so poorly represented in both the U.S. and Europe, raising questions about the overall explanatory power of this argument.

Disparities in information and its effect on preferences and voting behavior are more

consistent with published results. Low levels of information among the poor may dilute the clarity of their preferences, making it harder for politicians to respond meaningfully to their preferences. It can also lead to votes for parties that do not represent their interests (Erikson 2015). Another possibility is that the poor sometimes are manipulated into supporting policies that go against their interests (Bartels 2008) but given the frequency of findings of non-responsiveness of policies to the preferences of the poor, it seems unlikely that it is happening on a grand scale.

While these effects of information would cause inequalities in substantive political representation, information also has the potential to cause biased estimates. Similar findings across contexts are consistent with differential measurement error in income-group preferences (Stimson 2011) and the argument that the rich adjust their preferences more strongly to the political-economic context than do lower income classes (Elkjær & Iversen 2020; Soroka & Wlezien 2010). And perhaps revealingly, studies tend to find similar differences in political responsiveness across educational and occupational groups as across income groups (Elsässer et al. 2018; Wlezien & Soroka 2011). What exactly is driving published results remains an open question.

Because the theoretical and democratic implications of the results depend on the drivers, a better understanding of the underlying mechanisms is critical to advancing the literature and our understanding of democracy. So far, scholars have focused predominantly on documenting differentials in responsiveness; a major task remains to fully understand the underlying mechanisms. We hope that this review will prove helpful in that regard.

## References

- Achen, C. H. (1977). Measuring Representation: Perils of the Correlation Coefficient. *American Journal of Political Science*, 21(4), 805-815.
- Achen, C. H. (1978). Measuring Representation. *American Journal of Political Science*, 22(3), 475-510.

- APSA. (2004). American Democracy in an Age of Rising Inequality. *Perspectives on Politics*, 2(4), 651–666.
- Bartels, L. M. (2008). *Unequal Democracy: The Political Economy of the New Gilded Age*. New York and Princeton: Russell Sage Foundation and Princeton University Press.
- Bartels, L. M. (2017). *Political Inequality in Affluent Democracies: The Social Welfare Deficit*. Working Paper 5-2017, Research Concentration: Elections and Electoral Rules, Vanderbilt University.
- Bashir, O. S. (2015). Testing Inferences about American Politics: A Review of the "Oligarchy" Result. *Research & Politics*, 2(4), 1–7.
- Becher, M., & Stegmueller, D. (in press). Curbing Unequal Representation: The Impact of Labor Unions on Legislative Responsiveness in the US Congress. *Perspectives on Politics*.
- Bhatti, Y., & Erikson, R. (2011). How Poorly Are the Poor Represented in the U.S. Senate? In P. K. Enns & C. Wlezien (Eds.), *Who gets represented?* (pp. 223–246). New York: Russell Sage Foundation.
- Branham, J. A., Soroka, S. N., & Wlezien, C. (2017). When do the Rich Win? *Political Science Quarterly*, 132(1), 43–62.
- Brunner, E., Ross, S. L., & Washington, E. (2013). Does less income mean less representation? *American Economic Journal: Economic Policy*, 5(2), 53–76.
- Carnes, N. (2013). *White-Collar Government: The Hidden Role of Class in Economic Policy Making*. Chicago: The University of Chicago Press.
- Elkjær, M. A. (2020). What Drives Unequal Policy Responsiveness? Assessing the Role of Informational Asymmetries in Economic Policy-Making. *Comparative Political Studies*, 53(14), 2213–2245.
- Elkjær, M. A., & Iversen, T. (2020). The Political Representation of Economic Interests: Subversion of Democracy or Middle-Class Supremacy? *World Politics*, 72(2), 254–290.

- Ellis, C. (2013). Social context and economic biases in representation. *Journal of Politics*, 75(3), 773–786.
- Elsässer, L., Hense, S., & Schäfer, A. (2018). *Government of the people, by the elite, for the rich: Unequal responsiveness in an unlikely case*. MPIfG Discussion Paper 18/5.
- Enns, P. K. (2015). Relative Policy Support and Coincidental Representation. *Perspectives on Politics*, 13(4), 1053–1064.
- Erikson, R. S. (2015). Income Inequality and Policy Responsiveness. *Annual Review of Political Science*, 18(1), 11–29.
- Flavin, P. (2012a). Does higher voter turnout among the poor lead to more equal policy representation? *Social Science Journal*, 49(4), 405–412.
- Flavin, P. (2012b). Income inequality and policy representation in the American States. *American Politics Research*, 40(1), 29–59.
- Gilens, M. (2005). Inequality and democratic responsiveness. *Public Opinion Quarterly*, 69(5), 778–796.
- Gilens, M. (2009). Preference gaps and inequality in representation. *PS - Political Science and Politics*, 42(2), 335–341.
- Gilens, M. (2012). *Affluence and Influence: Economic Inequality and Political Power in America*. New York and Princeton: Russell Sage Foundation and Princeton University Press.
- Gilens, M. (2015a). Descriptive representation, money, and political inequality in the United States. *Swiss Political Science Review*, 21(2), 222–228.
- Gilens, M. (2015b). The Insufficiency of “Democracy by Coincidence”: A Response to Peter K. Enns. *Perspectives on Politics*, 13(04), 1065–1071.
- Gilens, M. (2016). Simulating Representation: The Devil’s in the Detail. *Research & Politics*, 2(4), 1–3.
- Gilens, M., & Page, B. I. (2014). Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens. *Perspectives on Politics*, 12(03), 564–581.

- Hacker, J., & Pierson, P. (2010). Winner-Take-All Politics: Public Policy, Political Organization, and the Precipitous Rise of Top Incomes in the United States. *Politics & Society*, 38(2), 152–204.
- Hall, P. A., & Soskice, D. (2001). *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- Hayes, T. J. (2012). Responsiveness in an Era of Inequality: The Case of the U.S. Senate. *Political Research Quarterly*, 66(3), 585–599.
- Hill, S. J., & Huber, G. A. (2019). On the Meaning of Survey Reports of Roll-Call “Votes”. *American Journal of Political Science*, 63(3), 611–625.
- Huber, E., & Stephens, J. (2001). *Development and Crisis of the Welfare State: Parties and Politics in Global Markets*. Chicago: University of Chicago Press.
- Iversen, T., & Soskice, D. (2006). Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More Than Others. *American Political Science Review*, 100(2), 165–181.
- Lax, J. R., Phillips, J. H., & Zelizer, A. (2019). The Party or the Purse? Unequal Representation in the US Senate. *American Political Science Review*, 113(04), 917–940.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., ... Moher, D. (2009). The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration. *PLoS Medicine*, 6(7), 1–28.
- Maks-Solomon, C., & Rigby, E. (2020). Are Democrats Really the Party of the Poor? Partisanship, Class, and Representation in the U.S. Senate. *Political Research Quarterly*, 73(4), 848–865.
- Page, B. I., Bartels, L. M., & Seawright, J. (2013). Democracy and the Policy Preferences of Wealthy Americans. *Perspectives on Politics*, 11(01), 51–73.
- Peters, Y., & Ensink, S. (2015). Differential Responsiveness in Europe: The Effects of Preference Difference and Electoral Participation. *West European Politics*, 38(3), 577–

600.

- Rhodes, J. H., & Schaffner, B. F. (2017). Testing Models of Unequal Representation: Democratic Populists and Republican Oligarchs? *Quarterly Journal of Political Science*, *12*(2), 185–204.
- Rigby, E., & Wright, G. C. (2011). Whose Statehouse Democracy? Policy Responsiveness to Poor Versus Rich Constituents in Poor Versus Rich States. In P. K. Enns & C. Wlezien (Eds.), *Who gets represented?* (pp. 189–222). New York: Russell Sage Foundation.
- Rigby, E., & Wright, G. C. (2013). Political Parties and Representation of the Poor in the American States. *American Journal of Political Science*, *57*(3), 552–565.
- Schakel, W. (2019). Unequal policy responsiveness in the Netherlands. *Socio-Economic Review*, 1–21.
- Schakel, W., Burgoon, B., & Hakhverdian, A. (2020). Real but Unequal Representation in Welfare State Reform. *Politics & Society*, *48*(1), 131–163.
- Soroka, S. N., & Wlezien, C. (2008). On the Limits to Inequality in Representation. *PS: Political Science & Politics*, *41*(02), 319–327.
- Soroka, S. N., & Wlezien, C. (2010). *Degrees of Democracy. Politics, Public Opinion, and Policy*. New York: Cambridge University Press.
- Stadelmann, D., Portmann, M., & Eichenberger, R. (2015). Income and policy choices: Evidence from parliamentary decisions and referenda. *Economics Letters*, *135*, 117–120.
- Stimson, J. A. (2011). The Issues of Representation. In P. K. Enns & C. Wlezien (Eds.), *Who gets represented?* (pp. 347–360). New York: Russell Sage Foundation.
- Tausanovitch, C. (2016). Income, Ideology, and Representation. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *2*(7), 33–50.
- Ura, J. D., & Ellis, C. R. (2008). Income, Preferences, and the Dynamics of Policy Responsiveness. *PS: Political Science & Politics*, *41*(04), 785–794.
- Wlezien, C. (2017). Public Opinion and Policy Representation: On Conceptualization,

- Measurement, and Interpretation. *Policy Studies Journal*, 45(4), 561–582.
- Wlezien, C., & Soroka, S. N. (2011). Inequality in Policy Responsiveness? In P. K. Enns & C. Wlezien (Eds.), *Who gets represented?* (pp. 285–310). New York: Russell Sage Foundation.
- Wright, G. C., & Rigby, E. (2020). Income Inequality and State Parties: Who Gets Represented? *State Politics & Policy Quarterly*, 1-21.