

---

# UNEQUAL DEMOCRACIES

*Working paper n°35*

*May, 2022*

---

## Who Influences Whom? Inequality in the Mutual Responsiveness Between Voters and Elites

**Max Joosten** (University of Geneva)  
[max.joosten@unige.ch](mailto:max.joosten@unige.ch)



## **ABSTRACT:**

Recent years have seen a proliferation of research on the connection between voters and elites. One literature explores whether elites' responsiveness is biased towards affluent voters, but does not allow for reverse causality. Another literature investigates voters' responsiveness to elite cues, but pays limited attention to potential inequality in such responsiveness. This study combines insights from both literatures by analysing class inequality in elite responsiveness to voters, and vice versa. It does so by using detailed time-series data on citizens' preferences and party positions towards government spending in the Netherlands. Empirical analyses reveal that middle and lower educated citizens seem to exert the strongest influence on parties, while the higher educated adapt their preferences the most in response to party cues. The analysis has important implications for the study of representation and inequality and, more broadly, for the relationship between citizens and elites in established democracies.

## **ACKNOWLEDGEMENTS:**

This paper has benefitted from support by the Unequal Democracies program at the University of Geneva, made possible by funding from the European Research Council (grant agreement no. 741538). Earlier versions of were presented at the Unequal Democracies Workshop at the University of Geneva on November 4-5, 2021, the PETGOV research seminar at the University of Amsterdam on 14 December, 2021, and at the Swiss Congress of Political Science at the University of Lausanne on 3-4 February, 2022. I thank participants of these seminars/panels and, in particular, Nadja Mosimann, David Willumsen, Wouter Schakel, Brian Burgoon and Jonas Pontusson for their constructive feedbacks.

## Introduction

This study addresses the responsiveness of political elites to voter preferences, and vice versa, around elections. Such mutual responsiveness is vital to understanding the democratic process; indeed, many scholars of representation stress its interactive nature, where citizens and policymakers communicate with and influence each other throughout the policy process (Pitkin, 1967; Mansbridge, 2003; Saward, 2010; Wolkenstein and Wratil, 2021). By extension, to understand inequality in the democratic process, we should also pay attention to skews in both directions between voters and elites. In this study, I ask whether party elites are more receptive to some citizens' preferences than to others, and whether some citizens adapt their preferences more strongly to elite cues than others do.

To be sure, there are many studies which have addressed different parts of this question. On one side, a prominent line of scholarship investigates whether political outcomes are more responsive to affluent citizens than to the middle and working class, often finding that they do (cf. Gilens and Page 2014; Branham et al. 2017; Elkjaer and Iversen 2020; Elsässer et al. 2020; Schakel et al. 2020). On the other side is a literature on voter responsiveness, much of which concludes that the policy preferences of average citizens are influenced by elite signals (Zaller, 1992; Ray, 2003; Gabel and Scheve, 2007; Soroka and Wlezien, 2010; Lenz, 2013).

However, each of these research lines has been limited by its relative neglect of the other. Most of the literature on unequal elite responsiveness treats public opinion as exogenous and is therefore – to varying degrees – vulnerable to the threat of endogeneity (Iversen and Soskice, 2019, p. 25). Conversely, the literature on voter responsiveness does consider two-way influence between elites and masses (Steenbergen et al., 2007; Hakhverdian, 2012; Barberá et al., 2019) but pays very little attention to possible inequality in these relationships (with some exceptions, e.g. Soroka and Wlezien 2010). As a result, our knowledge of the (unequal) ties between voters and elites remains limited.

Importantly, this limited knowledge means that there is room for different interpretations of the existing findings. For instance, what has been presented as evidence for a class bias voter influence may actually reflect a class bias in voter adaptation (see Mathisen et al. 2021 pp. 26-27). The same applies to findings of 'middle-class supremacy' (Elkjaer and Iversen, 2020). These scenarios not only have different causes and consequences in empirical terms, they also have different normative implications. It is quite clear that biased influence on the basis of social class is incompatible with basic notions of political equality (Dahl, 1989; Sabl, 2015; Ingham, 2021), but it is arguably less obvious where the harm is in some citizens being more attentive or susceptible to elite cues than others. Finally, if it is concluded that both situations should be avoided, the solutions to ameliorate either are very different.

*Max Joosten*

The current study is an attempt to move the literature forward by addressing unequal influence (of voters on elites) and unequal adaptation (of voters to elites) at the same time. I do so using detailed time-series data on citizens' preferences and party positions towards government spending in the Netherlands, measured around parliamentary elections in 2010, 2012 and 2017. In separate regression analyses, including fixed effects for years, parties and policy areas, I consider which education groups affect and are affected by parties' election pledges. Moreover, I compare left-wing parties to right-wing parties, and parties in government to parties in opposition.

The analyses suggest that considering all parties together, middle educated voters exert more influence than the higher educated on party positions, and even the lower educated seem to trump the latter. These findings point to the enduring relevance of the well-worn median voter theorem in the run-up to parliamentary elections. Interestingly, however, much of the results for lower educated voter influence on parties seems to depend on left-wing parties that then end up in opposition. Reversely, higher educated voter influence on parties appears to be coming from those parties that end up in the government coalition after elections. This makes sense in light of the skewed responsiveness literature focusing on policy outcomes (but see Schakel and Burgoon 2022), while at the same time point to the importance of studying where inequalities arise in different phases or stages of representation (Burgoon et al., 2022; Becher and Stegmueller, 2021a). On the other side, it is the higher educated that adapt their policy views the most in response to the election promises of their preferred party. This points both to the importance of educational skews in political engagement as well as the suggestion that there are more cues from those parties that win elections and end up in government.

Altogether,

## Theory

The past years have seen a resurging interest in the age-old question of whose demands and needs are reflected in political outcomes, and particularly whether skews in socioeconomic resources yield skews in political power (for reviews, see Erikson 2015; Peters 2018; Bartels 2021). This literature has already contributed greatly to our understanding of political representation in established democracies, but it also faces a number of lingering issues. Perhaps the most fundamental of these issues concerns causality. Few will disagree with the view that, in addition to the potential influence of citizens on political elites, elites also influence citizens' attitudes, and the fact that both may occur at the same time can have large implications for the study of (unequal) representation. However, previous studies have not done enough to address and guard against the possibility of endogeneity

*Max Joosten*

in their research designs.

This is most obvious in analyses of congruence, which focus on who gets what in purely descriptive terms, with citizen and elite positions often measured at the same point in time (e.g. Lesschaeve 2017; Schakel and Hakhverdian 2018; Lupu and Warner 2022; Rosset and Kurella 2020). One might say that the direction of causality is of no concern here, given that congruence is not based on causal inference in the first place. However, many researchers implicitly or explicitly assume that potential inequalities in congruence arise from inequalities in citizens' influence on elites, which is afforded much more weight in their conclusions than the reverse possibility (e.g. Lesschaeve 2017; Schakel and Hakhverdian 2018; Lupu and Warner 2022).

The same problem arises in studies of responsiveness, where the goal is to find out who has a causal impact on political outcomes, with citizens' positions usually measured before elites' (e.g. Peters and Ensink 2015; Elkjaer and Iversen 2020; Schakel et al. 2020). For example, Martin Gilens' influential analysis of unequal representation in the United States is based on a research design which measures public opinion as support for policy change, while the dependent variable is whether policy actually changed in the four years after the survey was conducted (Gilens 2012; the same approach is adopted by Persson and Gilljam 2019; Mathisen 2019; Elsässer et al. 2020; Lupu and Castro 2021; Schakel and Van Der Pas 2021; Schakel 2021). In many instances, however, it is likely that policy change was already being discussed by elites before the survey was conducted; indeed, many survey questions explicitly mention changes proposed by political actors. Hence, many studies of unequal responsiveness are vulnerable to the threat of endogeneity.

Clearly, then, we need to consider influence (of citizens on elites) and adaptation (of citizens to elites) at the same time to gain more insight into substantive representation<sup>1</sup>. This is what is done in the current study. I discuss my expectations regarding each of these below, starting with influence.

## Unequal influence

Can we expect inequality in citizens' influence on elite and policy outcomes? This question has been asked by many scholars in the recent past. Mirroring the elitism-pluralism debate of the 1950's and 1960's (Truman, 1951; Mills, 1956; Dahl, 1961; Domhoff, 1967), many studies find that the affluent dominate the policy process (Ellis, 2013; Rigby and Wright, 2013; Gilens and Page, 2014; Peters and Ensink, 2015; Bartels, 2016; Elsässer et al., 2020; Lefkofridi and Giger, 2020; Schakel et al., 2020; Lupu and Castro, 2021; Schakel, 2021), while others argue that the middle

---

<sup>1</sup>From the point of view of elites, the terms of "influence" and adaptation" are reversed, but we use these terms from citizens' point of view throughout the paper to avoid confusion

class is (also) decisive (Soroka and Wlezien, 2010; Enns, 2015; Rhodes et al., 2017; Elkjaer and Iversen, 2020, 2021; Rosset and Kurella, 2020).

While this evidence is far from definitive, these studies do provide some indications of what to expect. First, and perhaps unsurprisingly, there is no consensus in the literature on whose views prevail in the political sphere. Second, however, there is more evidence for a pro-affluent bias than a pro-middle-class bias in influence, which is not limited to particular contexts or issue areas. And third, even those who are most optimistic about the prospects of political equality, such as Elkjaer and Iversen (2020), discount the political power of the poor (see also Käppner et al. 2021).

In terms of mechanisms, we can similarly find arguments to expect either middle groups or the affluent to whom parties are trying to appeal. The major power resource of the middle is that it is closest to the median voter, which is expected to be pivotal in the classic Downsian model (Downs, 1957a). This is particularly relevant in the context of this paper’s research design, as I am using party’s positions in the run-up to parliamentary elections. At the same time, other power resources suggest that political outcomes skew away from the middle and towards the top, as Downs himself acknowledged at one point when he argued that “inequality of political influence is a necessary result of imperfect information, given an unequal distribution of wealth and income in society” (Downs 1957b, p. 141). Beyond information, we see inequalities in electoral participation (Schlozman et al., 2012; Gallego, 2015), descriptive representation (in European parliaments particularly in terms of education and occupational background) (Best, 2007; Bovens and Wille, 2017; O’Grady and Abou-Chadi, 2019; Carnes and Lupu, 2021), political donations (Bonica et al., 2013), organized interest lobbying (Strolovitch, 2006) and structural power (Lindblom, 1982; Culpepper, 2015). As there is room to argue in different directions, I expect either the middle or the higher educated to be most influential, while the voice of the lower educated should essentially be irrelevant.

This results in the first set of hypotheses about parties’ responsiveness taking into account all parties at the same time:

*H1a: Middle-educated voters exert most influence on party positions*

*H1b: Higher-educated voters exert most influence on party positions*

These hypotheses, however, might conceal differences between left and right parties and opposition and government parties. For the former, I expect positions for left-wing parties to be influenced more by their lower-educated voters. Indeed, we could expect that left-wing governments implement left-wing policies (Imbeau et al., 2001). But such congruence should not in and of itself indicate *respon-*

*siveness* to the lower-educated. I could, however, expect influence for example because to some extent lower-class interests have a comparative advantage in their access to left-wing elites – be it via decreasing, but still more frequent background in organized labor or the working class found among Social Democratic ministers (Carnes and Lupu, 2015; Alexiadou, 2022) or through established ties with lower-class groups (Flavin, 2018; Becher and Stegmueller, 2021b). Moreover, Bartels (2016) and Becher and Stegmueller (2021b) find left-wing legislators to be more responsive to low-income citizens. I expect the reversed to be true for right-wing parties, as Alexiadou (2022) shows that centre-right governments are dominated by liberal professional and the owning class. Acknowledging that there are also studies finding the opposite (Rigby and Wright, 2013), the second set of hypotheses expects a moderating effect by party:

*H2a: Lower-educated voters exert more influence on left parties than do higher-educated voters*

*H2b: Higher-educated voters exert more influence on right parties than do low-educated voters*

Lastly, given the focus on influence in the run-up to parliamentary elections, I expect that while it might be possible that parties want to appeal to more strongly to middle groups on average, parties that end up in the government coalition are influenced by higher-educated voters. For this expectation it is useful to consider looking at it from the perspective of subsequent *stages* or *channels* in the chain of representation (Burgoon et al., 2022; Becher and Stegmueller, 2021a). We know that in the Netherlands in policy outcomes there is unequal responsiveness skewed towards the higher educated (Schakel and Burgoon, 2022). We also from the literature on fiscal retrenchment that unpopular policies are mostly avoided around election time (Zohlnhöfer, 2007; Wenzelburger et al., 2020; König and Wenzelburger, 2017). Lastly, Bolhuis (2017) has showed that there is a discrepancy between election manifesto's and coalition agreements that favours business and disfavors households. Taking all of this together, it is plausible that higher-educated voters influence more strongly the parties ending up in government coalition. Therefore the last hypothesis for influence is that:

*H3: Higher-educated voters exert more influence on government parties than do low-educated voters*

Implications for this last hypothesis should be emphasized a bit more because it argues against recent work by Schakel and Burgoon (2022) that demonstrated that

unequal responsiveness already manifests in party platforms. Empirical support for H3 would suggest that in the run up to elections parties move towards the middle (and possibly lower) educated to attract votes, but that there is something about the election results and coalition formation process that eliminates this pro-middle (pro-low) bias.

## Unequal adaptation

Next, I turn to potential inequalities in adaptation, which brings us to the voluminous literature on voter responsiveness to elites (Zaller, 1992; Ray, 2003; Gabel and Scheve, 2007; Soroka and Wlezien, 2010; Lenz, 2013; Leeper and Slothuus, 2014). This literature is based on the idea that, as Hacker and Pierson put it, voters “are not unmoved; they are mobilized, messaged, and sometimes manipulated” by elites (Hacker and Pierson 2020, p. 12). There are several variations of this theme across the field. For example, one discussion focuses on the *extent* of voter responsiveness. Most relevant here are studies which, like mine, allow responsiveness to go in both directions. Several of these studies conclude that voters exert a stronger influence on elites than vice versa (Steenbergen et al., 2007; Hakhverdian, 2012; Barberá et al., 2019), though others find a larger (or equally large) role for elite cues (Soroka and Wlezien, 2010; O’Grady, 2022). Scholars also disagree about the form of responsiveness, with some arguing that elites prime certain aspects of a pre-existing set of preferences (Jacoby, 2000), while others put forward that voters respond when they learn the policy position of their party (Lenz, 2013), and still others assert that elite cues actually shape these preferences (Slothuus and Bisgaard, 2021; O’Grady, 2022). From the voters’ perspective, there are also different perspectives. Voters’ identity can be strongly tied to a party, making them engage in partisan motivated reasoning to signal loyalty to their party (Campbell et al., 1980). But voters could also have cost-benefit considerations, where parties act as informational shortcuts for voters. Still, despite these variations, the common denominator is that public preferences are sensitive to elite signals.

For the purposes of this paper, however, the most important question is which education groups adapt their attitudes to elite cues, and, more specifically, whether there is inequality in the adaptation to such cues. This corner of the literature is surprisingly sparse find (with Cavaillé and Neundorf (2022) as a recent exception), though existing studies do inform what answers we might plausibly expect to.

First, we must ask whether there is any heterogeneity in voter responsiveness or whether all groups of voters move in tandem over time. The latter is suggested by classic studies of Page and Shapiro (1992, pp. 289-320) and Soroka and Wlezien (2010, pp. 145–167) and more recently in a study of change in discourse on British welfare policy (O’Grady, 2022), who concludes that the policy preferences of different groups of citizens differ in levels but hardly in over-time changes (except

for different parties). If so, there is little space for unequal adaptation. On the other hand, other analyses do find group differences in voter responsiveness, often on the basis of political knowledge (or ‘political awareness’; for an overview, see Druckman and Lupia (2000, pp. 13–15)).

Second, assuming there is some unequal adaptation, who would I expect to respond most strongly to elites? Here, too, the likely answer is either groups in the middle or those most politically aware, which is illustrated well in another classic study by Zaller (1992). Zaller’s seminal model of public opinion departs from the notion that voter responsiveness varies as a function of the propensity to receive and accept elite cues, which again brings us to political awareness. One likely scenario is that politically aware citizens receive the cues sent by elites, but also tend to be more capable of critically assessing the cues they receive. Individuals that are least aware might be susceptible to these cues, but they have a smaller chance of receiving them in the first place. This leaves the moderately aware: they both receive the cue, but are less capable of resisting it. On the other hand, Zaller also finds instances where adaptation rises monotonically with awareness, which is possible when reception is more important than acceptance and/or when reception is low overall. Of course, this is only relevant for my argument insofar that education correlates with political knowledge, but there are many studies which show that the former positively predicts the latter (Delli Carpini and Keeter, 1996; Erikson, 2015; Schlozman et al., 2012; Bovens and Wille, 2017).

*H4a: Middle-educated voters most strongly adapt their preferences to party positions*

*H4b: Higher-educated voters most strongly adapt their preferences to party positions*

Although in terms of voter adaptation I do not expect there to be differences for left-wing or right-wing parties<sup>2</sup>, I expect that adaptation for government parties is stronger. First and foremost because the parties (and their programs) that eventually end up in the governing coalition are much more exposed in the media in the months following the election. In particular because the budgetary estimations used in the empirical analysis are important for parties in the coalition negotiations (Bolhuis, 2017), exactly these positions are more likely to be publicly discussed.

---

<sup>2</sup>Although I think it is plausible that there are differences: one could expect that when parties advocate policies against what they are known for, this has a bigger effect on public opinion. O’Grady (2022) shows how the Labour party in the United Kingdom turned against the welfare state, the system they had set up in the first place. This had large consequences for public support for the welfare state. The data, however, does not give me enough leverage to explore these differences by interacting austerity elections and left-right parties.

Be it because parties can re-emphasize that they will absolutely not compromise on some of their key positions, or because each coalition party is given a platform to highlight the points they won during the negotiations. Therefore, the fifth and last hypothesis is:

*H5: Adaptation is stronger for government parties than for opposition parties*

On balance, I expect that this adaptation is strongest either for the middle educated and the higher educated, while weaker for the lowest educated, based on the effects of receiving and accepting elite communications.

Before moving on to the data and methods section, let me acknowledge some limitations to this study. The biggest limitation is the aggregated structure of the data, which will in detail be discussed in the next section. This makes the empirical strategy prone to the risk that what I interpret as adaptation of public preferences to party platforms could also be the result of people switching to different parties after they realize that their previous party's platform is not in line with their views. And if higher educated citizens do that more often than others – which is plausible – this is a source of bias. I acknowledge that this is an alternative explanation that I cannot dismiss with certainty and that should ideally be taken into account. Nevertheless, Appendix A1 shows the composition of the electorate in the sample by other descriptive variables and shows that party-education groups are rather similar across waves. In any case, given the relatively limited knowledge on the topic, I address the more basic questions first, stripping away important but less fundamental aspects for the moment.

## Data and methods

I test my expectations using mass surveys and spending pledges in the Netherlands. In this section, I discuss my case selection, research design, operationalization of variables and analysis, respectively.

### Case

Regarding influence, Schakel (2021) has previously argued that the Netherlands constitutes a least-likely case for class-based inequalities, though the same study found large skews in policy responsiveness. The 'least-likely' claim may have been too strong, but the Dutch context still makes for a relatively unlikely case, given its proportional electoral system, muted levels of income inequality, relative lack of money in politics and pluralist regime of organized interests. However, by

focussing on education, the Netherlands might also be characterized as a typical case (Schakel and Van Der Pas, 2021).

In terms of unequal adaptation, the Netherlands is also likely to be a typical case, though the scarcity of studies of the topic makes it difficult to judge. On the one hand, the Dutch party system has a high level of volatility on both the aggregate and individual levels (Van der Meer, 2017). Hence, it has relatively weak party attachments, which reduces the likelihood of adaptation among voters. On the other hand, according to Zaller's model of preference formation, variation in elite rhetoric should increase attitudinal change. We see particularly large shifts occurring when comparing the elections of 2010 and 2012 with that of 2017. The former two being characterized by austerity, with strong emphasis on spending cuts, the latter by less fiscal pressure and more proposals to increase spending in various policy areas. From these reversals in party positions on spending items we can expect voters' policy opinions to change accordingly (Slothuus and Bisgaard, 2021; O'Grady, 2022). If I do find adaptation, it is fairly likely to be unequal, given roughly average educational differences in political knowledge and participation among Western European countries (e.g. Bovens and Wille 2017). All in all, I expect findings from the Netherlands to be fairly representative of similar democracies in Western Europe.

## Research design

My analyses rely on time series data of public opinion and party positions towards government spending in the Netherlands, where citizens' preferences for changes in spending are linked to parties' plans for changes in the same policy areas. I choose this set-up for a number of reasons. First, amid low levels of political information among the majority of the electorate, preferences for more or less spending are relatively undemanding and are hence likely to contain a consistent and meaningful signal about the public's wants (Soroka and Wlezien, 2010, pp. 14-20). Second, benefiting from a unique characteristic of the Dutch political system, spending pledges are available for almost all political parties in the Netherlands. The estimated budgetary effects are calculated by the Netherlands Bureau for Economic Policy Analysis Statistics (CPB) on the basis of any and all policy proposal included in a party's election manifesto, which incentivizes parties to be concrete and prevent "position blurring" to attract broader support (Rovny, 2013). These estimations are both highly publicized in the run-up to parliamentary elections and could be interpreted as an indicator for the plans proposed in the parties' manifesto's, making them likely to affect and be affected by voters. Third, spending pledges are discussed at a specific point in time, given that they are made available several weeks before the election and lose most of their public relevance afterwards (Bolhuis, 2017, p. 4), while remaining relevant for parties participating

in the coalition formation process (Suyker, 2013). This is important for reducing the risk of endogeneity in the analysis. Fourth, compared to actual spending, pledges are less noisy, as the former is affected by many factors outside of parties' control (see for example the 'dependent variable problem' in welfare state research; Allan and Scruggs 2004; Green-Pedersen 2004).

Having said this, the data also has its limitations. First and foremost, the downside of spending pledges is that they are not actual policy, which can be considered "the ultimate metric of representation" (Caughey and Warshaw, 2018, p. 250). I can reasonably expect a strong correlation between pledges and policy changes, particularly for parties who end up in the governing coalition (Suyker, 2013; Thomson, 2017; Bolhuis, 2017). But going from the pre-electoral to the post-electoral stage (see Burgoon et al. 2022; Becher and Stegmueller 2021a) of the policy process may also introduce bias. For instance, an in-depth analysis by Bolhuis (2017) showed that (post-election) coalition agreements are more advantageous to business and less advantageous to households compared to election manifestos in the Netherlands. Hence, it is plausible that bias to the affluent will be introduced or amplified only after the electoral phase. Another downside of my data is that I cannot link responses from the same individuals over time. Instead, I rely on repeated group means of party supporters. This not only costs me statistical power but also makes for weaker causal inferences by introducing the risk that the composition of the group changes in systematic ways between survey waves. Lastly, unfortunately the data do not give me much leverage to explore variation across particular policy areas, election years or even more fine-grained analyses across parties.

Turning to the specifics of our design, my analysis matches voter preferences to party positions for three elections (2010, 2012 and 2017), eight policy areas and nine parties (although the PVV is not included in the 2017 election). As a result, the observations in my data are parties (or party supporters) (8-9), nested in policy areas (8) and elections (3), resulting in a total N of 208.

There is a significant share of respondents in the surveys that indicate that they would vote were there to be an election, but that they are yet undecided which party they would vote for (see Appendix Table A1). The claim that parties only cater to the demands of their core-voters is probably too strong, as they would also want to appeal to voters that are not yet sure which party to vote for. On the other hand, these groups are large compared to election-education group sizes by party. Just adding the undecided voters to each party would attenuate the influence of core-voters too much. In avoiding getting into thorny questions of exactly which voters parties are trying to attract with their manifesto's, I decided to calculate the positions of undecided voters per election-area-education group and weight these as 50%, while the other 50% is estimate based on the same election-area-education

groups, but for the specific parties. The intuition is that parties dedicate half of their attention to core-voters and their demands, and half of their attention to potential voters. I do not expect that undecided voters adapt their preferences to all parties on average in the same way, so for the adaptation part I focus on the results within political parties. In general, a focus on parties aligns with an established tradition in research on responsiveness (e.g. Dalton 1985; Zaller 1992; Adams 2012; Slothuus and Bisgaard 2021).

The political parties I include are those which are included in the CPB for three elections: the People’s Party for Freedom and Democracy (VVD), Labour Party (PvdA), Christian Democratic Appeal (CDA), Socialist Party (SP), Democrats 66 (D66), GreenLeft (GL), Christian Union (CU) and Reformed Political Party (SGP). Plus, the Freedom Party (PVV) is only included in the 2010 and 2012 election because it chose to not have its election manifesto analyzed in the 2017 election. I chose include the party anyway, because it is relevant both in terms of seats and in terms of its’ influence. These parties represent 90% of all parliamentary seats in this period. Roughly half of the missing seats are covered by the PVV in 2017, while the rest are small parties. These are notable omissions, though its limited size compared to all other parties means it has modest consequences, at most. See Appendix Table A1 for the electorate per party broken down by education group in our data. For left-wing and right-wing parties, I follow Schakel and Burgoon (2022) in operationalizing left-wing parties as those grouped under social democratic, socialist and ecologist party families and right-wing as liberal, conservative and nationalist parties in the Manifesto Project Database (Burst et al., 2021)). Governmental parties are those parties that end up in the government coalition *after* the election.

The policy areas I can match are social welfare, health care, education, defense, mobility, environment, crime and international cooperation. On average, these eight areas represent 79% of the absolute changes in spending proposed by parties, as calculated by the CPB. In some cases, policy areas are worded slightly differently in the survey; in a two cases, I combined two survey questions to match one policy from the party data (for details, see Appendix Table ??).

To illustrate the structure and timing of the data, figure 1 shows an example of spending preferences for one party (VVD) and one policy area (defense). To be clear, I only use the waves in the shaded areas. The figure makes it clear that the lag between surveys and elections varies somewhat over the years. While I would prefer to use equal lags across all cases, all surveys were conducted within a year of their respective election. Because the publication of the budgetary effects of party manifesto’s is conceived both as a stand-alone incentive and as a more general indicator for parties’ positions from the start of the electoral campaign up until the final coalition agreement, I excluded the April – May 2017 survey wave.

This wave took place several months before the final coalition agreement, while the subsequent wave took place in October – November 2017. Appendix Table A11 shows that using the earlier wave as a robustness check, which is closer to the CPB’s publication, produces the same results. The exact timing of the elections and survey waves are shown in Appendix Table ??.

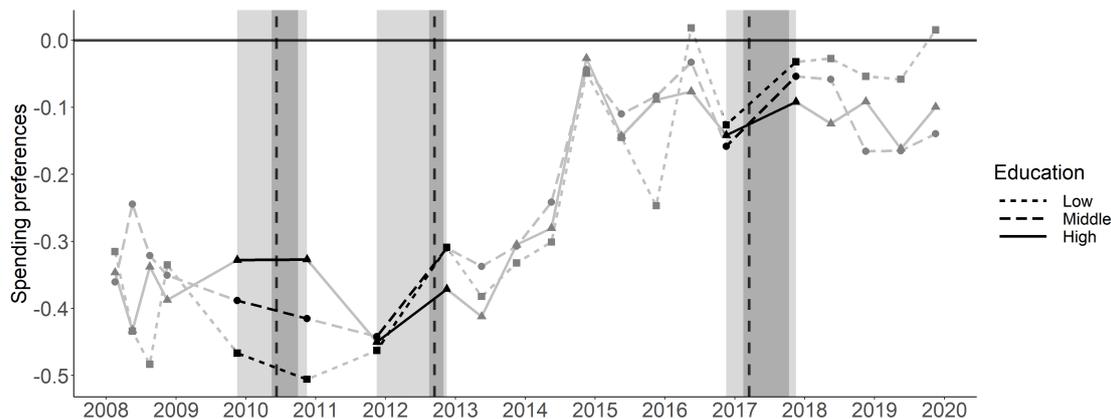


Figure 1: Preferences on defense spending over time by liberal voters (including undecided). Light-shaded areas show the time-period covered in between the survey-waves used, while dark-shaded areas show the period from the publication of the estimated budgetary effect until the coalition agreement, with vertical dashed lines as the elections.

## Variables

As mentioned above, my measure of party position is based on the unique feature of the Dutch political system that the budgetary effect of election manifestos are estimated by the CPB. For each election pledge, the CPB estimates its budgetary effect relative to a counterfactual scenario where the pledge would not be implemented. It groups these changes by policy area, indicating how much more or less each party proposes to spend. I divide the original figures by ten, so that an increase of one corresponds to a proposed spending increase of €10 billion. Given the range of the data, this puts party positions on range from -1 to +1, with a similar standard deviation to public preferences (see below). It should be highlighted that, like my variable for voter preferences, this variable indicates what parties suggest should be change relative to the current amount of spending.

On the side of voter preferences, I use the Social State of the Netherlands (COB) from the Netherlands Institute for Social Research (SCP), which is a quarterly, nationally representative survey. The battery of spending questions that I use in

my analysis are included 22 times between 2008 and 2020, but I only use the survey waves before and after elections. This means I use data from six waves.

Respondents are grouped by their highest completed level of education. This is a meaningful and relevant group as it has a strong effect on income, occupational status and many other life chances (Ross and Wu, 1995; Bol, 2013; Organization for Economic Cooperation and Development, 2019). This is particularly true in the Netherlands, where educational cleavages in social, political and economic life are strong and arguably growing (cf. Van de Werfhorst 2015; Bovens and Wille 2017; Schakel and Van Der Pas 2021. More practical reasons for choosing education over income – which many other studies choose – are that the former has almost no missing values (0.36% in our six waves)<sup>3</sup>.

I group respondents into three education groups, with the lowest encompassing everything up to lower secondary education, the highest including higher vocational and university education and the middle covering everything in between. This aligns with the definition used by Statistics Netherlands and produces three groups of roughly equal sizes (each covering 32-36% of the sample). Unsurprisingly, and as mentioned before, the size of education groups vary across parties.

Spending attitudes are measured as preferences for change in each area, using a five-point scale that ranges from “much less” to “much more” money<sup>4</sup>. These categories are recoded to range from -1 to +1, such that the former indicates unanimous support for much less spending and the latter indicates unanimous support for much more spending. Lastly, party choice is measured by asking respondents which party they are most likely to vote for if there were elections that day.

## Analysis

In testing the hypotheses, I consider influence and adaptation in separate multivariate regression models. For both models, I run OLS regressions. Regarding adaptation, I regress post-election spending preferences on parties’ spending plans, controlling for pre-election spending preferences. I run separate models for the three education groups, where the key independent variable (party positions) is the same. I include fixed effects for elections, parties and policy areas. This is partly motivated by the clustering of my data on each of these levels and partly to

---

<sup>3</sup>Income has 10,12% missing values. Moreover, whereas education groups are roughly equal in size (32% low, 36% middle and 32% high), income groups in my data are more different in size (44% low, 26% middle and 20% high).

<sup>4</sup>The introduction to the spending battery reads as follows (translated from the original Dutch): “Choices have to be made in politics. Spending more money for some purposes means there is less money for others. Do you want national politicians to spend more or less money on the following purposes?”

minimize the risk that – notwithstanding the lagged dependent variable – parties and voters respond to the same time- or policy-related factors. Appendix Tables A4 - A7 show how the different fixed effects play out in our data. Particularly the inclusion of fixed effects for policy areas are influential, as differences between areas are largest.

The analysis of influence is similar in some ways, though here I regress parties' election plans on pre-election spending preferences. I do not control for parties' plans at the previous elections for a few reasons. First, since these lagged values are in some cases five years before they are hard to interpret. Second, party positions are measured as change to the current amount of spending. In combination with the first point, values at one election are not helpful in explaining values at the next election. Last, more practically, because the right-wing populists did not have its' manifestos' budgetary effect estimated by the CPB in 2006, including lags will exclude this party-election observation. To be sure, including controls for parties' plans at the previous election does not substantively alternate the results nor do they have a significant effect on party positions (see Appendix Table A8). I also control for changes in actual government expenditure between the two elections per policy area, using data on the Classification of the Functions of Government (COFOG) from Statistics Netherlands (see Appendix Table ??). The rationale behind this is that parties and voters may both respond (thermostatically) to such spending changes (Soroka and Wleziën, 2010).

Finally, there are a lot more respondents in some party-area-waves than others, simply because some parties are more popular than others. To ensure that my analysis reflects these differences, I weigh all observations by the inverse of the standard error around their average spending preferences. Excluding the weights does not substantively change the results (see Appendix Table A9 - A10).

## Results

Following the order of the theoretical discussion, I will first discuss the empirical results of elite responsiveness to voters' preferences, and then those of voter responsiveness to elites' preferences.

### Unequal influence

Table 1 shows the analysis of influence. The dependent variable – parties' spending promises – is the same across all four models, but they include different groups of their voters. As a reminder, the preferences of the latter are measured before the election.

Figure 2 shows the predicted values of parties' support as a function of voters' support for changes in spending. The left plot in the figure corresponds to models 1-3, while the right plot corresponds to model 4.

Table 1: Linear regression models of parties' spending positions (including undecided voters 50-50)

	<i>Dependent variable:</i>			
	Party positions			
	(1)	(2)	(3)	(4)
Lower educated voter preferences	0.666*** (0.141)			0.346** (0.168)
Middle educated voter preferences		0.748*** (0.157)		0.588** (0.256)
Higher educated voter preferences			0.476*** (0.104)	-0.069 (0.180)
Change in spending since previous election	-0.690*** (0.170)	-0.719*** (0.159)	-0.592*** (0.133)	-0.748*** (0.157)
Constant	0.091* (0.054)	0.030 (0.051)	-0.025 (0.049)	0.069 (0.056)
Fixed effects	Yes	Yes	Yes	Yes
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.479	0.488	0.497	0.499

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

Models 1-3 show that all groups' views are positively associated with party positions, such that voters and parties tend to prioritize spending increases and decreases in the same areas, even net of fixed effects for parties, years and policies. You can already observe some differences here, since middle educated voters have the strongest effect on parties, while the effect is weakest for the higher educated.

This is borne out further by model 4, which includes all three groups at once and hence provides the most appropriate test of influence. This model suggests that the middle educated exert substantial influence on parties. Also striking is that the preferences of the lower educated have an independent effect on parties as well, though their influence is a little more than half that of the middle. Lastly, the effect for the higher educated is not distinguishable from zero. These results suggest empirical support for H1a and not for H1b.

To gauge the size of these effects, I note that a coefficient of 0.588 (model 4) means that parties are expected to increase spending ambitions by €5.8 billion when their middle educated supporters move from total opposition (-1) to a neutral position (0), or from the latter to total support (1). Put differently, a one standard deviation increase in preferences increases parties' spending targets by half of a

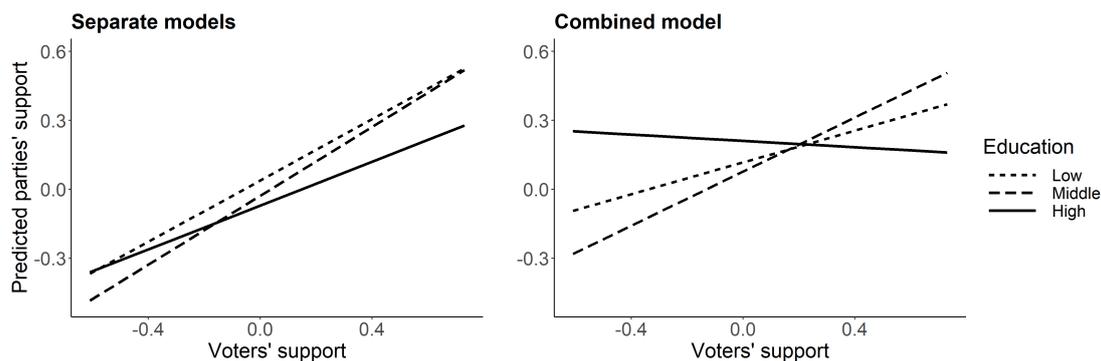


Figure 2: Predicted values of parties' position and support among low, middle and higher educated voters

standard deviation. Clearly, this is a very substantial effect.

Beyond my main variables of interest, changes in spending since the last election have a negative effect, such that parties are likely to suggest spending decreases when spending has gone up in previous years and vice versa. Appendix table A8 shows the results including the lagged dependent variable, which has little effect. This is perhaps unsurprising when we remember that this is measured several years before its current value. After all, a party which supports higher spending in a policy area might indeed see higher spending in subsequent years and adjust its position accordingly, which is plausible looking at the effect of changes in spending. The main results are nevertheless similar including the lagged dependent variable, although the effect of lower educated reduces slightly. This can also be caused by the exclusion of one wave of the right-wing populists, as they have no lagged value for the election previous to 2010. The inclusion of undecided voters seem to mainly have an effect on the coefficients for low and middle voters. Appendix table A11 shows the results when the analysis is limited to party-voters, as is also done for the adaptation analyses. The results are the same, but the larger coefficients for lower and middle educated voters could suggest that parties try to attract precisely these undecided voters. Catering to their demands might prove most efficient as these groups have lower turnout rates.

Table 2 further considers the interaction effect of a party being left-wing, right-wing or of a party being in government. As mentioned earlier, while I am aware of the overlap between government participation and right-wing party identity (and *vice versa* for opposition and left-wing parties), I think it is meaningful to draw conclusions from the interactions. All interactions clearly show coefficients in the expected directions, but as they do not clear conventional thresholds of statistical significance these are purely suggestive and I can not accept either H2a or H2b. The influence of low-educated voters on party positions is stronger for left

parties, essentially no effect for middle-educated voters, and negative for the higher educated. Only the negative effect for higher educated voters is significant at the  $p < 0.1$  level. Roughly the mirrored effects can be observed looking at the right-wing interactions, with higher educated being better represented by these parties. Maybe worth noting is that the middle has a large (not significant) coefficient for right-wing parties. Unsurprisingly, the directionality of the coefficients of the different groups interacted with a government dummy is similar: lower educated and middle-educated appear to have lesser influence over government parties while higher educated have more influence.

Even though we cannot confidently reject the null hypotheses that there is no effect, these interactions are important to discuss in light of the face validity of the data. As discussed in the theoretical framework, neither the pro-affluent literature nor the middle-class supremacy strand find independent lower class influence. Therefore the results of table 1 could be interpreted as surprising. Re-emphasizing both the electoral context of the study and the nature of the dependent variable, it is obvious that this pro-low bias that exists in the main results is eliminated somewhere in the fact that left-wing parties do not end up in government coalitions. Also interesting then is that even middle-educated preferences are less influential for governing parties, basically reducing overall responsiveness.

## Unequal adaptation

Now turning to the reversed causal direction, as shown in Table 3 and figure 3. Here, it is the independent variable that is the same in all models, namely party positions measured around the election. I use this to predict the preferences of different groups of voters, as measured after the election.

Like before, there is a positive effect of my main variable of interest in all three models, suggesting that voters adjust their spending preferences in response to the election-time positions of parties. However, this is only statistically different from zero in model 3. This means we can again observe inequalities between groups, though they are of a different kind than before.

The results suggest that higher educated voters adapt their preferences much more than the lower and middle educated; the regression coefficient for the former is twice as large as for either of the latter. This suggests that I can confidently accept hypothesis H4b that higher educated voters adapt their preferences most strongly to party positions, while finding no support for hypothesis H4a. To help interpret the coefficients, I note that a one standard deviation increase in party positions causes an increase of one eighth of a standard deviation in spending support among higher educated voters.

Moving then lastly to the conditional hypothesis formulated in H5. Here I

Table 2: Linear regression models of parties' spending positions (left, right and government interactions)

	<i>Dependent variable:</i>					
	Party positions					
	(1)	(2)	(3)	(4)	(5)	(6)
Lower educated voter preferences	0.346** (0.168)	0.128 (0.172)	0.346** (0.168)	0.391* (0.216)	0.344** (0.169)	0.539** (0.237)
Middle educated voter preferences	0.588** (0.256)	0.367 (0.256)	0.588** (0.256)	0.695** (0.316)	0.546** (0.253)	0.579* (0.309)
Higher educated voter preferences	-0.069 (0.180)	0.260 (0.167)	-0.069 (0.180)	-0.195 (0.205)	-0.042 (0.177)	-0.213 (0.214)
Change in spending since previous election	-0.748*** (0.157)	-0.579*** (0.136)	-0.748*** (0.157)	-0.800*** (0.214)	-0.738*** (0.155)	-0.720*** (0.228)
Low * Left		0.610 (0.397)				
Middle * Left		0.024 (0.573)				
High * Left		-0.709* (0.409)				
Left	0.085* (0.047)	0.197 (0.124)				
Low * Right				-0.034 (0.368)		
Middle * Right				-0.560 (0.574)		
High * Right				0.531 (0.419)		
Right			0.113** (0.046)	0.103 (0.116)		
Low * Gov						-0.379 (0.379)
Middle * Gov						-0.385 (0.592)
High * Gov						0.584 (0.445)
Gov					-0.051 (0.036)	-0.092 (0.122)
Constant	0.069 (0.056)	0.039 (0.054)	0.069 (0.056)	0.070 (0.071)	0.097 (0.061)	0.121 (0.101)
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	208	208	208	208	208	208
Adjusted R <sup>2</sup>	0.499	0.550	0.499	0.501	0.502	0.498

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

Table 3: Linear regression models of the public's spending preferences

	<i>Dependent variable:</i>		
	Lower educated	Middle educated	Higher educated
	(1)	(2)	(3)
Party positions	0.038 (0.047)	0.067 (0.045)	0.127*** (0.039)
Lagged low educated	0.573*** (0.088)		
Lagged middle educated		0.622*** (0.075)	
Lagged high educated			0.779*** (0.056)
Change in spending since previous election	-0.013 (0.153)	0.401** (0.158)	0.122 (0.112)
Constant	-0.074* (0.045)	-0.126*** (0.040)	-0.070** (0.035)
Fixed effects	Yes	Yes	Yes
Observations	208	208	208
Adjusted R <sup>2</sup>	0.874	0.867	0.853

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

expected to effects to be stronger for parties ending up in government, because of their more extensive exposure after the elections. First and foremost, I find hardly any evidence for a conditional effect. Looking at table 4, only for middle educated voters there is a relatively strong (but insignificant) interaction effect. As they have the strongest negative interaction effect for influence on government parties, it might be that they lose their interest after seeing their influence decline after the elections. Again, as the results are non-significant these evaluations are purely suggestive.

In sum, the analyses reveal that political influence is skewed towards middle educated and, to some extent, lower educated voters, while the higher educated adapt their views to elites. Overall, the findings might be interpreted as saying that there is more influence than adaptation between voters and parties. Looking at the interaction models, the political influence of lower educated voters seems to be mostly nested in opposition and left-wing parties, while adaptation appears to be very similar across subsets of government and opposition. As left-wing parties overlap strongly with parties in opposition, this could be a step in the chain of representation that eliminates some of the pro-lower and pro-middle educated bias.

Table 4: Linear regression models of the public's spending preferences including interactions with government parties

	<i>Dependent variable:</i>					
	Lower educated		Middle educated		Higher educated	
	(1)	(2)	(3)	(4)	(5)	(6)
Party positions	0.037 (0.047)	0.033 (0.057)	0.075* (0.044)	0.078 (0.058)	0.124*** (0.039)	0.126*** (0.048)
Government dummy	-0.001 (0.020)	-0.205** (0.085)	0.050* (0.026)	-0.105 (0.082)	-0.011 (0.020)	-0.014 (0.072)
Lagged low educated	0.573*** (0.088)	0.553*** (0.098)				
Lagged middle educated			0.628*** (0.074)	0.599*** (0.103)		
Lagged high educated					0.781*** (0.055)	0.713*** (0.079)
Change in spending since previous election	-0.013 (0.153)	-0.019 (0.165)	0.394** (0.157)	0.485** (0.215)	0.121 (0.112)	0.289** (0.146)
Party position * Gov		0.0002 (0.105)		-0.074 (0.093)		-0.022 (0.067)
Constant	-0.074 (0.047)	0.037 (0.054)	-0.156*** (0.046)	-0.041 (0.067)	-0.063* (0.038)	-0.051 (0.057)
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	208	208	208	208	208	208
Adjusted R <sup>2</sup>	0.873	0.881	0.869	0.873	0.853	0.859

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

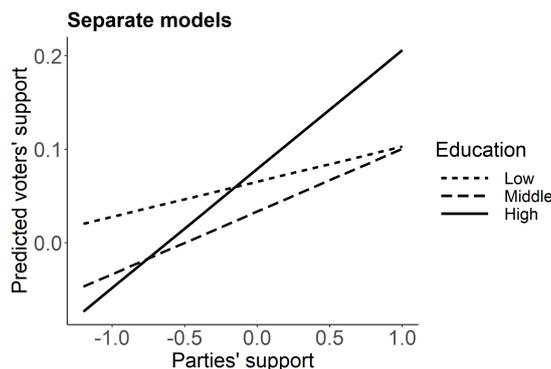


Figure 3: Predicted values of low, middle and higher educated voters' support and parties' positions

## Conclusion

The above-presented evidence suggests that there are inequalities in influence and adaptation between voters and elites, though the two are of a different kind. In the run-up to parliamentary elections, voters that are in the middle educated category have largest influence on party positions. At the same time, lower educated voters have an independent positive effect as well. This latter finding is somewhat surprising, given the absence of lower class influence in most of previous studies (see for example Schakel 2021; Elkjaer and Iversen 2020; Käppner et al. 2021).

Furthermore, the conditional hypotheses could not be confirmed. However, the empirical results point to directions in which we should look to contextualize the main findings and explain them. One direction that it is a turnout story, where the higher educated voters, who influence right-wing parties, have turnout rates higher than lower and middle educated voters. Hence their party, in this case the liberal party, becomes the largest (pivotal) party giving them the position to start negotiating a coalition. Yes, parties on average might be responsive to middle and lower educated, but variation in responsiveness across parties allow the pivotal party to pick and choose those parties for a coalition that – like them – are more responsive to higher educated voters. This step would eliminate some of the pro-low, and even pro-middle, bias. This goes against findings by ?? about inequalities already occurring in party manifesto's, but re-emphasizes the need to study different stages in the chain of representation ?. Indeed this is compatible with the work of Bolhuis (2017), who showed that in the Netherlands about 70 – 80% of the policies presented in party manifesto's end up in coalition agreements, with this 20 – 30 % gap being favourable to business and unfavourable to households. Such interpretation specifically points to the importance of the coalition formation period as a phase to be studied.

Combining these notions with the consequent and robust findings that higher educated voters are most adaptive to party positions, this study provides insights into conflicting arguments over political outcomes being more congruent with middle or upper classes. Firstly, the empirics show support for the mechanism in which awareness of cues is more important than resistance thereof. If there is a shift after elections that eliminates some of the lower and middle bias, it is then not surprising that higher educated voters that see the parties that they influence win and form coalitions receive most cues and adapt. Depending then on the exact timing of the data of congruence studies, varying results might represent small but significant variations in stages in the election period. Lastly for the adaptation literature, this paper suggests more work to be done in the realm of inequalities of cue reception. In line with Cavallé and Neundorf (2022), my results indicate that attitudes form at the intersection between the discursive context and individual conditions.

## References

- Adams, J. (2012). Causes and electoral consequences of party policy shifts in multiparty elections: Theoretical results and empirical evidence. *Annual Review of Political Science*, 15:401–419.
- Alexiadou, D. (2022). Cabinet ministers and inequality. *European Journal of Political Research*, 61(2):326–350.
- Allan, J. and Scruggs, L. (2004). Political partisanship and welfare state reform in advanced industrial societies. *American Journal of Political Science*, 48(3):496–512.
- Barberá, P., Casas, A., Nagler, J., Egan, P. J., Bonneau, R., Jost, J. T., and Tucker, J. A. (2019). Who leads? who follows? measuring issue attention and agenda setting by legislators and the mass public using social media data. *American Political Science Review*, 113(4):883–901.
- Bartels, L. (2021). Measuring political inequality. In Lupu, N. and Pontusson, J., editors, *Unequal Democracies: Public Policy, Responsiveness, and Redistribution in an Era of Rising Economic Inequality*. Cambridge University Press.
- Bartels, L. M. (2016). *Unequal democracy: The Political Economy of the New Gilded Age*. Princeton University Press.
- Becher, M. and Stegmueller, D. (2021a). On the mechanisms behind unequal representation in legislatures. In Lupu, N. and Pontusson, J., editors, *Unequal Democracies: Public Policy, Responsiveness, and Redistribution in an Era of Rising Economic Inequality*. Cambridge University Press.
- Becher, M. and Stegmueller, D. (2021b). Reducing unequal representation: The impact of labor unions on legislative responsiveness in the us congress. *Perspectives on Politics*, 19(1):92–109.
- Best, H. (2007). New challenges, new elites? changes in the recruitment and career patterns of european representative elites. *Comparative Sociology*, 6(1-2):85–113.
- Bol, T. (2013). *Why Does Education Pay Off?: Relations Between Institutional Context and the Mechanisms by which Education Pays Off in the Labor Market*. Universiteit van Amsterdam: Doctoral Dissertation.
- Bolhuis, W. (2017). *De rekenmeesters van de politiek: De doorrekeningen van de verkiezingsprogramma's door het CPB*. Van Gennep Amsterdam.

- Bonica, A., McCarty, N., Poole, K. T., and Rosenthal, H. (2013). Why hasn't democracy slowed rising inequality? *Journal of Economic Perspectives*, 27(3):103–24.
- Bovens, M. and Wille, A. (2017). *Diploma democracy: The rise of political meritocracy*. Oxford University Press.
- Branham, J. A., Soroka, S. N., and Wlezien, C. (2017). When do the rich win? *Political Science Quarterly*, 132(1):43–62.
- Burgoon, B., Lupu, N., Pontusson, J., and Schakel, W. (2022). Understanding unequal representation. *European Journal of Political Research*, pages 1–7.
- Burst, T., Krause, W., Lehmann, P., Lewandowski, J., Matthieß, T., Merz, N., Regel, S., and Zehnter, L. (2021). Manifesto corpus.
- Campbell, A., Converse, P. E., Miller, W. E., and Stokes, D. E. (1980). *The american voter*. University of Chicago Press.
- Carnes, N. and Lupu, N. (2015). Rethinking the comparative perspective on class and representation: Evidence from latin america. *American Journal of Political Science*, 59(1):1–18.
- Carnes, N. and Lupu, N. (2021). Working-class office holding in the oecd. In Lupu, N. and Pontusson, J., editors, *Unequal Democracies: Public Policy, Responsiveness, and Redistribution in an Era of Rising Economic Inequality*. Cambridge University Press.
- Caughey, D. and Warshaw, C. (2018). Policy preferences and policy change: Dynamic responsiveness in the american states, 1936–2014. *American Political Science Review*, 112(2):249–266.
- Cavaillé, C. and Neundorf, A. (2022). Elite cues and economic policy attitudes: The mediating role of economic hardship. *Political Behavior*, pages 1–22.
- Culpepper, P. D. (2015). Structural power and political science in the post-crisis era. *Business and Politics*, 17(3):391–409.
- Dahl, R. (1989). *Democracy and its Critics*. Yale University Press.
- Dahl, R. A. (1961). *Who governs? Democracy and power in an American city*. Yale University Press.
- Dalton, R. J. (1985). Political parties and political representation: Party supporters and party elites in nine nations. *Comparative political studies*, 18(3):267–299.

- Delli Carpini, M. and Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press.
- Domhoff, G. W. (1967). *Who Rules America?* Prentice-Hall.
- Downs, A. (1957a). *An economic theory of democracy*. Harper & Row New York.
- Downs, A. (1957b). An economic theory of political action in a democracy. *Journal of Political Economy*, 65(2):135–150.
- Druckman, J. and Lupia, A. (2000). Preference formation. *Annual Review of Political Science*, 3(1):1–24.
- Elkjaer, M. A. and Iversen, T. (2020). The political representation of economic interests: Subversion of democracy or middle-class supremacy? *World Politics*, 72(2):254–290.
- Elkjaer, M. A. and Iversen, T. (2021). The democratic state and redistribution: Whose interests are served? *Paper presented at Unequal Democracies seminar series, 26 February 2021*.
- Ellis, C. (2013). Social context and economic biases in representation. *The Journal of Politics*, 75(3):773–786.
- Elsässer, L., Hense, S., and Schäfer, A. (2020). Not just money: unequal responsiveness in egalitarian democracies. *Journal of European Public Policy*, pages 1–19.
- 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*, 18:11–29.
- Flavin, P. (2018). Labor union strength and the equality of political representation. *British Journal of Political Science*, 48(4):1075–1091.
- Gabel, M. and Scheve, K. (2007). Estimating the effect of elite communications on public opinion using instrumental variables. *American Journal of Political Science*, 51(4):1013–1028.
- Gallego, A. (2015). *Unequal political participation worldwide*. Cambridge University Press.
- Gilens, M. (2012). *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton University Press.

- Gilens, M. and Page, B. I. (2014). Testing theories of american politics: Elites, interest groups, and average citizens. *Perspectives on politics*, 12(3):564–581.
- Green-Pedersen, C. (2004). The dependent variable problem within the study of welfare state retrenchment: Defining the problem and looking for solutions. *Journal of Comparative Policy Analysis: Research and Practice*, 6(1):3–14.
- Hacker, J. S. and Pierson, P. (2020). *Let them eat tweets: How the right rules in an age of extreme inequality*. Liveright Publishing.
- Hakhverdian, A. (2012). The causal flow between public opinion and policy: government responsiveness, leadership, or counter movement? *West European Politics*, 35(6):1386–1406.
- Imbeau, L. M., Pétry, F., and Lamari, M. (2001). Left-right party ideology and government policies: A meta-analysis. *European Journal of Political Research*, 40(1):1–29.
- Ingham, S. (2021). Representative democracy and social equality. *American Political Science Review*, pages 1–13.
- Iversen, T. and Soskice, D. (2019). *Democracy and prosperity*. Princeton University Press.
- Jacoby, W. (2000). Issue framing and public opinion on government spending. *American Journal of Political Science*, 44(4):750–767.
- Käppner, K., Joosten, M., Poltier, J., and Pontusson, J. (2021). Voter preferences and redistributive policy: Exploratory analysis based on a comprehensive dataset on preferences. *Unequal Democracies Working paper n.30*, pages 1–64.
- König, P. D. and Wenzelburger, G. (2017). Honeymoon in the crisis: A comparative analysis of the strategic timing of austerity policies and their effect on government popularity in three countries. *Comparative European Politics*, 15(6):991–1015.
- Leeper, T. J. and Slothuus, R. (2014). Political parties, motivated reasoning, and public opinion formation. *Political Psychology*, 35:129–156.
- Lefkofridi, Z. and Giger, N. (2020). Democracy or oligarchy? unequal representation of income groups in european institutions. *Politics and Governance*, 8(1):19–27.
- Lenz, G. S. (2013). *Follow the leader?: how voters respond to politicians' policies and performance*. University of Chicago Press.

- Lesschaeve, C. (2017). Finding inequality in an unlikely place: Differences in policy congruence between social groups in Belgium. *Acta Politica*, 52(3):361–383.
- Lindblom, C. E. (1982). The market as prison. *The Journal of Politics*, 44(2):324–336.
- Lupu, N. and Castro, A. T. (2021). Unequal policy responsiveness in Spain.
- Lupu, N. and Warner, Z. (2022). Affluence and congruence: unequal representation around the world. *The Journal of Politics*, 84(1):000–000.
- Mansbridge, J. (2003). Rethinking representation. *American political science review*, 97(4):515–528.
- Mathisen, R. (2019). Understanding the affluent’s influence: Evidence from a least likely case. *University of Bergen: Unpublished Manuscript*.
- Mathisen, R., Schakel, W., Hense, S., Elsässer, L., Persson, M., and Pontusson, J. (2021). Unequal responsiveness and government partisanship in northwest Europe. *Unequal Democracies Working paper n.31*, pages 1–40.
- Mills, C. W. (1956). *The Power Elite*. Oxford University Press.
- O’Grady, T. (2022). *Transformation of British Welfare Policy: Politics, Discourse, and Public Opinion*. Oxford University Press.
- O’Grady, T. and Abou-Chadi, T. (2019). Not so responsive after all: European parties do not respond to public opinion shifts across multiple issue dimensions. *Research & Politics*, 6(4):2053168019891380.
- Organization for Economic Cooperation and Development (2019). *Education at a Glance 2019: OECD Indicators*. Available at: <https://doi.org/10.1787/f8d7880d-en> (Accessed: 23 December 2019).
- Page, B. and Shapiro, R. (1992). *The rational public*. University of Chicago Press.
- Persson, M. and Gilljam, M. (2019). Who got what they wanted? the opinion-policy link in Sweden 1956–2014. *University of Gothenburg: Unpublished Manuscript*.
- Peters, Y. (2018). Democratic representation and political inequality: How social differences translate into differential representation. *French Politics*, 16(3):341–357.

- Peters, Y. and Ensink, S. J. (2015). Differential responsiveness in europe: The effects of preference difference and electoral participation. *West European Politics*, 38(3):577–600.
- Pitkin, H. F. (1967). *The Concept of Representation*. University of California Press.
- Ray, L. (2003). When parties matter: The conditional influence of party positions on voter opinions about european integration. *The Journal of Politics*, 65(4):978–994.
- Rhodes, J. H., Schaffner, B. F., et al. (2017). Testing models of unequal representation: Democratic populists and republican oligarchs? *Quarterly Journal of Political Science*, 12(2):185–204.
- Rigby, E. and Wright, G. C. (2013). Political parties and representation of the poor in the american states. *American Journal of Political Science*, 57(3):552–565.
- Ross, C. E. and Wu, C.-I. (1995). The links between education and health. *American sociological review*, pages 719–745.
- Rosset, J. and Kurella, A.-S. (2020). The electoral roots of unequal representation. a spatial modelling approach to party systems and voting in western europe. *European Journal of Political Research*.
- Rovny, J. (2013). Where do radical right parties stand? position blurring in multidimensional competition. *European Political Science Review*, pages 1–26.
- Sabl, A. (2015). The two cultures of democratic theory: Responsiveness, democratic quality, and the empirical-normative divide. *Perspectives on Politics*, 13(2):345–365.
- Saward, M. (2010). *The Representative Claim*. Oxford University Press.
- Schakel, W. (2021). Unequal policy responsiveness in the Netherlands. *Socio-Economic Review*.
- Schakel, W. and Burgoon, B. (2022). The party road to representation: Unequal responsiveness in party platforms. *European Journal of Political Research*, 61(2):304–325.
- Schakel, W., Burgoon, B., and Hakhverdian, A. (2020). Real but unequal representation in welfare state reform. *Politics & Society*, 48(1):131–163.

- Schakel, W. and Hakhverdian, A. (2018). Ideological congruence and socio-economic inequality. *European Political Science Review*, 10(3):441–465.
- Schakel, W. and Van Der Pas, D. (2021). Degrees of influence: Educational inequality in policy representation. *European Journal of Political Research*, 60(2):418–437.
- Schlozman, K. L., Verba, S., and Brady, H. E. (2012). *The unheavenly chorus: Unequal Political Voice and the Broken Promise of American Democracy*. Princeton University Press.
- Slothuus, R. and Bisgaard, M. (2021). How political parties shape public opinion in the real world. *American Journal of Political Science*.
- Soroka, S. N. and Wlezien, C. (2010). *Degrees of democracy: Politics, public opinion, and policy*. Cambridge University Press.
- Steenbergen, M., Edwards, E., and De Vries, C. (2007). Who’s cueing whom? mass-elite linkages and the future of european integration. *European Union Politics*, 8(1):13–35.
- Strolovitch, D. Z. (2006). Do interest groups represent the disadvantaged? advocacy at the intersections of race, class, and gender. *The Journal of Politics*, 68(4):894–910.
- Suyker, W. (2013). Hoe sterk is de samenhang tussen regeerakkoord en doorgerekende verkiezingsprogramma’s? *CPB Background Document The Hague*.
- Thomson, Robert, e. a. (2017). The fulfillment of parties’ election pledges: A comparative study on the impact of power sharing. *American Journal of Political Science*, 61(3):527–542.
- Truman, D. B. (1951). *The governmental process: Public Interests and Public Opinion*. Alfred A. Knopf.
- Van de Werfhorst, H. (2015). *Een kloof van alle tijden: verschillen tussen lager en hoger opgeleiden in werk, cultuur en politiek*. Amsterdam University Press.
- Van der Meer, T. (2017). *Niet de kiezer is gek*. Spectrum.
- Wenzelburger, G., Jensen, C., Lee, S., and Arndt, C. (2020). How governments strategically time welfare state reform legislation: empirical evidence from five european countries. *West European Politics*, 43(6):1285–1314.

- Wolkenstein, F. and Wratil, C. (2021). Multidimensional representation. *American Journal of Political Science*, 65(4):862–876.
- Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge University Press.
- Zohlnhöfer, R. (2007). The politics of budget consolidation in Britain and Germany: The impact of blame avoidance opportunities. *West European Politics*, 30(5):1120–1138.

## A Appendix

Table A1: Distribution of education groups per political party

	Lower	Middle	Higher	Total
CDA	233	177	156	566
PvdA	223	187	228	638
SP	172	244	134	550
VVD	154	272	369	795
GL	44	80	187	311
CU	67	95	89	251
D66	65	139	290	494
SGP	61	56	31	148
PVV	310	256	98	664
Undecided	347	530	358	1235
Total	1676	2036	1940	5652

Table A2: Definition of policy area by dataset

SCP (voters)	CPB (parties)	COFOG (spending)
Education	Education	Education
Health	Health	Health
International military missions and conflict management	Defense	Defense
International environmental problems and climate change	Environment	Environmental protection
Development aid	International cooperation	Foreign economic aid
Mobility (public transport and roads)	Mobility	Transportation
Safety on the street (violence and nuisance)	Safety	Public order and safety
Terrorism in the Netherlands		
Poverty	Social protection	Social protection
Unemployment		

Table A3: Timing of surveys and elections

Year	Survey before	Published estimations	Elections	Coalition agreement	Survey after
2010	7 October 2009 – 11 November 2009	May 2010	9 June 2010	30 September 2010	5 October 2010 – 3 November 2010
2012	4 October 2011 – 3 November 2011	August 2012	12 September 2012	29 October 2012	2 October – 5 November 2012
2017	1 October 2016 – 9 November 2016	February 2017	15 March 2017	10 October 2017	2 October 2017 – 5 November 2017

Table A4: Linear regression models of parties' spending positions (including undecided voters 50-50) with different fixed effects

	<i>Dependent variable:</i>			
	Party positions			
	(1)	(2)	(3)	(4)
Lower educated voter preferences	-0.278 (0.169)	0.570*** (0.187)	-0.280* (0.166)	-0.285 (0.175)
Middle educated voter preferences	0.036 (0.300)	0.670** (0.278)	0.137 (0.280)	0.055 (0.302)
Higher educated voter preferences	0.297* (0.167)	-0.058 (0.211)	0.207 (0.165)	0.276 (0.168)
Change in spending since previous election	-0.240** (0.122)	-0.259*** (0.094)	-0.676*** (0.184)	-0.236** (0.117)
Constant	-0.055*** (0.015)	0.044 (0.030)	0.027 (0.044)	-0.096** (0.049)
Fixed effects	None	Area	Year	Party
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.021	0.381	0.204	0.031

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table A5: Linear regression models of the lower educated spending preferences with different fixed effects

	<i>Dependent variable:</i>			
	Lower educated			
	(1)	(2)	(3)	(4)
Party positions	0.077** (0.034)	0.158*** (0.044)	0.022 (0.035)	0.055* (0.031)
Lagged low educated	0.910*** (0.034)	0.577*** (0.086)	0.891*** (0.041)	0.910*** (0.031)
Change in spending since previous election	0.031 (0.080)	0.008 (0.070)	0.097 (0.166)	0.028 (0.078)
Constant	0.014 (0.013)	-0.019 (0.036)	-0.018 (0.032)	-0.034* (0.018)
Fixed effects	None	Area	Year	Party
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.829	0.853	0.837	0.842

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table A6: Linear regression models of the middle educated spending preferences with different fixed effects

	<i>Dependent variable:</i>			
	Middle educated			
	(1)	(2)	(3)	(4)
Party positions	0.051 (0.032)	0.112*** (0.038)	0.018 (0.037)	0.063* (0.033)
Lagged middle educated	0.902*** (0.031)	0.665*** (0.083)	0.845*** (0.035)	0.904*** (0.031)
Change in spending since previous election	0.056 (0.085)	0.049 (0.076)	0.450*** (0.172)	0.057 (0.086)
Constant	0.013 (0.014)	-0.028 (0.029)	-0.099*** (0.037)	0.017 (0.022)
Fixed effects	None	Area	Year	Party
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.828	0.846	0.850	0.828

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table A7: Linear regression models of the higher educated spending preferences with different fixed effects

	<i>Dependent variable:</i>			
	Higher educated			
	(1)	(2)	(3)	(4)
Party positions	0.102*** (0.032)	0.148*** (0.036)	0.098*** (0.034)	0.107*** (0.029)
Lagged higher educated	0.853*** (0.025)	0.738*** (0.050)	0.833*** (0.025)	0.868*** (0.025)
Change in spending since previous election	0.012 (0.057)	0.009 (0.059)	0.166* (0.090)	0.003 (0.056)
Constant	0.029*** (0.009)	0.028 (0.024)	-0.016 (0.022)	-0.030 (0.021)
Fixed effects	None	Area	Year	Party
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.836	0.838	0.838	0.852

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table A8: Linear regression models of parties' spending positions (including undecided voters 50-50) with lagged party positions

	<i>Dependent variable:</i>			
	Party positions			
	(1)	(2)	(3)	(4)
Lower educated voter preferences	0.596*** (0.170)			0.291* (0.175)
Middle educated voter preferences		0.690*** (0.179)		0.561** (0.286)
Higher educated voter preferences			0.427*** (0.110)	-0.045 (0.206)
Lagged party positions	0.067 (0.124)	0.097 (0.121)	0.120 (0.123)	0.071 (0.125)
Change in spending since previous election	-0.677*** (0.188)	-0.727*** (0.178)	-0.588*** (0.141)	-0.750*** (0.175)
Constant	0.081 (0.057)	0.023 (0.053)	-0.032 (0.051)	0.058 (0.061)
Fixed effects	Yes	Yes	Yes	Yes
Observations	200	200	200	200
Adjusted R <sup>2</sup>	0.474	0.487	0.501	0.495

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

*Max Joosten*

Table A9: Linear regression models of parties' spending positions (including undecided voters 50-50) unweighed

	<i>Dependent variable:</i>			
	Party positions			
	(1)	(2)	(3)	(4)
Lower educated voter preferences	0.581*** (0.125)			0.302** (0.151)
Middle educated voter preferences		0.653*** (0.145)		0.496** (0.224)
Higher educated voter preferences			0.457*** (0.100)	-0.012 (0.156)
Lagged party positions	-0.550*** (0.142)	-0.639*** (0.153)	-0.545*** (0.138)	-0.661*** (0.148)
Change in spending since previous election	0.062 (0.046)	0.029 (0.047)	-0.023 (0.046)	0.055 (0.050)
Fixed effects	Yes	Yes	Yes	Yes
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.461	0.474	0.454	0.476

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

Table A10: Linear regression models of the public's spending preferences un-weighted

	<i>Dependent variable:</i>		
	Lower educated	Middle educated	Higher educated
	(1)	(2)	(3)
Party positions	0.049 (0.054)	0.066 (0.051)	0.141*** (0.039)
Lagged low educated	0.504*** (0.087)		
Lagged middle educated		0.603*** (0.074)	
Lagged high educated			0.747*** (0.065)
Change in spending since previous election	0.068 (0.154)	0.372** (0.150)	0.133 (0.121)
Constant	-0.085* (0.048)	-0.115*** (0.039)	-0.089** (0.039)
Fixed effects	Yes	Yes	Yes
Observations	208	208	208
Adjusted R <sup>2</sup>	0.832	0.844	0.823

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.

*Max Joosten*

Table A11: Linear regression models of parties' spending positions (not including undecided voters 50-50)

	<i>Dependent variable:</i>			
	Party preferences			
	(1)	(2)	(3)	(4)
Lower educated voter preferences	0.406*** (0.088)			0.222** (0.098)
Middle educated voter preferences		0.478*** (0.097)		0.415*** (0.146)
Higher educated voter preferences			0.277*** (0.071)	-0.081 (0.119)
Change in spending since previous election	-0.609*** (0.155)	-0.608*** (0.152)	-0.532*** (0.134)	-0.630*** (0.139)
Constant	0.048 (0.053)	0.005 (0.053)	-0.015 (0.053)	0.023 (0.053)
Fixed effects	Yes	Yes	Yes	Yes
Observations	208	208	208	208
Adjusted R <sup>2</sup>	0.485	0.508	0.499	0.517

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include fixed effects for years, parties and policy areas.