Economic Inequality and Political Power in Norway

Ruben Berge Mathisen

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Abstract

For as long as democratic forms of government have existed, people have discussed whether economic inequality undermines the democratic ideal of political equality. Do citizens with vastly different economic resources really have more or less the same level of influence on government? Previous research from the United States and Europe suggests that the answer is *no*: affluent citizens appear to enjoy considerably more policy influence than the average citizen and the poor.

In this thesis, I study the relationship between economic inequality and political power in Norway. Norway is interesting in this regard because it is widely considered one of the most well-functioning democracies in the world. Furthermore, compared to other countries, Norway has low levels of economic inequality, strong unions, and important institutions limiting the influence of economic elites. If its possible, within a modern capitalist society, for rich and poor to have more or less equal influence on government, then Norway would be one of the places where we should observe it. The thesis consists of the following three articles:

In **Article 1** (*Affluence and influence in a social democracy*) I use an original dataset on public opinion and public policy containing 603 specific issues over five decades (1966-2014). I show that public policy in Norway in general has responded much more strongly to the preferences of high-income citizens than to the preferences of citizens with average or low income. Still, the affluent in Norway do not appear to enjoy the exclusive political influence that similar studies have found in the United States (e.g. Gilens 2012). This is because education appears to be a more important determinant than income, and because the poor seem to have had sway on economic policy issues, comparable in magnitude to that of the affluent.

Article 2 (*Taxing the 1 percent: Public Opinion vs. Public Policy*) shows that despite

the general pattern of economic policy being relatively equally responsive to affluent and poor, public opinion and public policy can still become seriously detached on an issue of high relevance to the rich—namely, high income taxation. In an original survey, I asked Norwegians to design their preferred tax rate structure, and subsequently matched their answers with registry data on what people at different incomes actually pay in tax. I show that within the top 1 percent, tax rates are far below (as much as 23 percentage points) from where citizens want them to be. A follow-up survey showed that this divergence is entirely driven by capital incomes being taxed too low compared to what public opinion prefers.

Article 3 (*Gender, Economic Inequality, and Political Power*) shows that unequal responsiveness to economic groups can imply unequal responsiveness to men and women. This is because women make up a larger part of low-income groups, and economic elites predominantly consist of men. I combine the dataset used in Article 1 with comparable data for the United States from Gilens (2012). I then document a major gap in responsiveness between men and women in both Norway and the United States over the past 50 years. Part of the gap is accounted for by economic inequality between the genders, and poor women appear to be particularly powerless. In Norway, however, the gender-gap has virtually disappeared over time, a development that is statistically attributable to the increasing share of women in parliament. In the US on the other hand, the gap has remained remarkably stable over time.

Sammendrag (Norwegian)

Så lenge demokratiske styreformer har eksistert har folk diskutert om økonomisk ulikhet undergraver det demokratiske idealet om politisk likhet. Har borgere med vidt forskjellige økonomiske ressurser i virkeligheten lik innflytelse på myndighetene? Tidligere forskning fra USA og Europa tyder på at svaret er *nei*: velstående borgere ser ut til å ha betydelig mer politisk innflytelse enn gjennomsnittsborgeren og de fattige.

I denne avhandlingen studerer jeg forholdet mellom økonomisk ulikhet og politisk makt i Norge. Norge er interessant i denne forbindelse fordi det regnes som et av de mest velfungerende demokratiene i verden. I tillegg, sammenlignet med andre land, har Norge lave nivåer av økonomisk ulikhet, sterke fagforeninger og viktige institusjoner som begrenser innflytelsen til økonomiske eliter. Hvis det er mulig i et moderne kapitalistisk samfunn for rik og fattig å ha mer eller mindre lik innflytelse på myndighetene, så er Norge et av stedene vi burde observere dette. Avhandlingen består av de følgende tre artiklene:

I **Artikkel 1** (*Velstand og innflytelse i et sosialdemokrati*) bruker jeg et originalt datasett om opinion og offentlig politikk som inneholder 603 spesifikke saker i norsk politikk over fem tiår (1966-2014). Jeg viser at offentlig politikk i Norge generelt har respondert mye sterkere på preferansene til borgere med høy inntekt, enn preferansene til borgere med gjennomsnittlig eller lav inntekt. Likevel ser ikke de velstående i Norge ut til å nyte den eksklusive politiske innflytelsen som lignende studier har funnet i USA (f.eks. Gilens 2012). Dette er fordi i Norge ser utdanning ut til å være en viktigere faktor enn inntekt, og fordi de fattige ser ut til å ha hatt innflytelse i økonomiske saker, sammenlignbar i størrelsesorden med de velstående.

Artikkel 2 (*Hvordan skattlegge de rike: Folkeopinion vs. offentlig politikk*) viser at selv om økonomisk politikk har vært relativt lydhør overfor både velstående og fattige, kan folkeopinion og offentlig politikk fortsatt bli alvorlig løsrevet fra hverandre på et spørsmål

av høy relevans for de rike – nemlig høyinntektsbeskatning. I en original spørreundersøkelse ba jeg nordmenn utforme sin foretrukne skattestruktur, og matchet deretter svarene deres med registerdata om hva personer med ulike inntekter faktisk betaler i skatt. Jeg viser at innenfor den øverste 1 prosenten er faktiske skattesatser langt lavere (hele 23 prosentpoeng) fra der innbyggerne ønsker at de skal være. En oppfølgingsstudiue viste at denne divergensen i sin helhet er drevet av at kapitalinntekter er skatlagt lavere enn hva opinionen ønsker.

Artikkel 3 (*Kjønn, økonomisk ulikhet og politisk makt*) viser at ulik politisk responsivitet til økonomiske grupper kan resultere i ulik responsivitet til menn og kvinner. Dette er fordi kvinner utgjør en større del av lavinntektsgrupper enn menn, og fordi økonomiske eliter består i overveiende grad av menn. Jeg kombinerer datasettet brukt i Artikkel 1 med sammenlignbare data for USA fra Gilens (2012). Jeg dokumenterer deretter et stort gap i politisk responsivitet mellom menn og kvinner i både Norge og USA de siste 50 årene. En del av gapet skyldes økonomisk ulikhet mellom kjønnene, og fattige kvinner ser ut til å ha spesielt lite innflytelse. I Norge har imidlertid kjønnsforskjellen nærmest forsvunnet over tid, en utvikling som kan tilskrives den økende kvinneandelen i Stortinget. I USA derimot, har gapet holdt seg bemerkelsesverdig stabilt over tid.

List of articles

1) Mathisen, Ruben B. 2022. “Affluence and Influence in a Social Democracy”. *American Political Science Review*, 1-8

2) Mathisen, Ruben B. “Taxing the 1 percent: Public Opinion vs. Public Policy”. Under review at *British Journal of Political Science*

3) Mathisen, Ruben B. “Gender, Economic Inequality, and Political Power”. Revise and Resubmit (second round) at *Journal of Politics*

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1 Introduction

1.1 Overview

For as long as democratic forms of government have existed, people have discussed whether economic inequality undermines the democratic ideal of political equality. Do citizens with vastly different economic resources have more or less the same level of influence on government? Much work within modern political science has taken for granted that citizens in Western formal democracies do have approximately equal voice in politics.[1] This allegedly follows from the fact that under free and fair elections one person has one, and only one, vote. However, that argument is only valid if we assume that voting is the only way to influence politics—which is clearly not case in the real world.

Beyond the ballot box, campaign funding, lobbying, disinvestment, media funding, and running for public office, are just some of the methods that can be used to achieve influence on government. What is common to all of them is that they cost money. This means that the ability to utilize them will be proportional to the economic resources of each citizen. Economic resources (income and wealth) are always unevenly distributed, and in most societies there are large disparities between rich, middle, and poor. Therefore, without effective interventions to severe the links between money and politics, economic inequality implies unequal political influence—*political inequality*.

Only very recently has political scientists tried to use large-n datasets and modern statistical tools to examine the extent of political inequality in modern formal democracies. So far, most studies have focused on the United States, and have concluded that the opinions of affluent Americans appear to have much more influence on government policy than the opinions of middle-class and poor Americans; some even finding that the latter two have

[1] I use the term "formal democracy" the same way as Dahl used the term "polyarchy", i.e. to refer to a country that has democratic political institutions like free and fair election, freedom of speech, and freedom of assembly (Dahl 1971)

“near-zero” impact when accounting for the preferences of the affluent (Gilens and Page 2014). Similar research in others parts of the world is still scarce. However, the studies that do exist appear to show just as much political inequality in other Western countries as has been found in the United States.

In this thesis, my goal is to contribute to our knowledge on the relationship between economic inequality and political inequality by providing evidence about a new case that has received little attention in the literature thus far: Norway. Like the other Nordic countries, Norway is commonly viewed as a highly egalitarian social democracy with low levels of income inequality, a generous welfare state, and a well-functioning democracy. In the United States, the “Nordic Model” has been embraced by politicians on the left, like Bernie Sanders and Alexandria Ocasio-Cortez, portraying it as the solution to many of the ills of the US system.

The three articles that constitute this thesis deal with three main research questions pertaining to political inequality in Norway. Article 1 asks: To what extent does public policy in Norway respond unequally to the preferences of high-, middle- and low-income citizens? Article 2 asks: To what extent does public policy deviate from public opinion when it comes to high income taxation? And finally, Article 3 asks: To what extent does unequal responsiveness based on economic differences imply unequal responsiveness to men and women?

1.2 Relevance of the thesis

This thesis is essentially a study of the extent to which citizens have unequal influence on public policy. But why should we care about that? One possible answer to this question is to say that we shouldn’t actually care. Several prominent political scientists in the 20th century argued that the goal of democracy should not be to ensure that all people have equal political influence. As Schumpeter wrote, “[d]emocracy means only that the people have the opportunity of accepting or refusing the men who are to rule them”. In fact, Schumpeter maintained that “the typical citizen” tends towards “irrational prejudice and impulse”, arguing in ways that are “infantile” and “primitive” (Schumpeter 2013 [1942], 262, 269). Walter Lippman and Reinhold Niebuhr expressed similar sentiments; sentiments that are also echoed by the more recent work of Christopher Achen and Larry Bartels, *Democracy for realists* (Achen and Bartels 2017).

Some studies support this pessimistic view of the competency of ordinary citizens in the realm of politics. Painting a sobering picture of the “quality” of public opinion, studies have found that citizens’ preferences are often uninformed (Carpini and Keeter 1996), unstable over time, and inconsistent across related issues (Converse 1964). Other studies have found that these shortcomings are not as problematic in practice as they may seem. As a substitute for first-hand knowledge, citizens can rely on cues from opinion leaders whom they trust (Popkin 1991). Furthermore, different citizens might care about different issues and have complementary areas of knowledge. While few citizens know the relevant facts across all issues, most issues have a base of citizens who care a lot and have substantial knowledge (a so-called *issue public*, see Krosnick 1990). Thus, aggregate public opinion might espouse more wisdom than any one citizen. Aggregate public opinion has also been shown to be considerably more stable than the opinions of individual citizens. This is because the kind of noise one typically encounters when measuring individual opinions tends to cancel out when aggregating preferences across many individuals (Page and Shapiro 1992).

Still, even though citizens might have preferences that are meaningful enough, this does not automatically justify why we should care if citizens have unequal influence. One way to make that case however, is to say that the opposite—political equality—is a moral ideal in itself. For example Sidney Verba writes that “[p]olitical equality is a valued good per se… it confers an important and valued status on its members: that of citizens who have the equal right and ability to control their own lives through influence over collective decisions” (Verba 2003, 667). While many might agree, this justification is silent about *why* political equality, and not some other ideal, is desirable.

A more plausible justification for political equality is that it is desirable because it is the safest way to make sure that the interests of all citizens are considered equally. This is the argument made by Robert Dahl and it rests on two assumptions: (1) the interests of people should be considered equally and (2) people are themselves the best judges of their own interests (Dahl 2007, 4). As to assumption (1), we might ask *why* there should be equal consideration of interests. In my own view, the most plausible answer to that question is a utilitarian one: Equal consideration of interests is desirable because it is necessary in order to minimize the total of amount of suffering and maximize the total of amount of happiness—which is what we should strive for (Singer 2011).

As to assumption (2), it is an empirical question whether citizens are indeed the best judges of their own interests. To be sure, in some instances they might not be. Some collective decisions are of a deeply technical nature—for example what the maximum allowable concentration of lead in public drinking water should be—and thus might be best left to experts with the necessary knowledge, making decisions under public scrutiny. Save for such exceptions though, it is hard to see how a select few citizens could better reflect the interests of the public, than the public itself. To the contrary, history has confirmed time and again that where unchecked power has been concentrated in the hands of the few, the "public good" soon becomes a euphemism for the self-interests of the current rulers—as per the famous saying "power corrupts, and absolute power corrupts absolutely". Also, there is probably few who would object to the observation that when specific segments of the population have been obstructed from voicing their preferences in the political system (e.g. because of their gender or race), this has not been to the benefit of their interests (Dahl 2007, 4–5).

1.3 Contributions of the thesis

1.3.1 Data, methods, and theory

This thesis contributes to our understanding of political inequality with advances in terms of data, methods, theory, and empirical findings. The largest contribution in terms of data is the main dataset containing 603 Norwegian policy proposals (1966-2014) with information on public opinion and policy outcome for each one. This dataset is publicly available online at Harvard Dataverse (https://doi.org/10.7910/DVN/ISBPIH). Here one can also find all the computer code files that were used to construct it. One of the major advantages of this dataset is its comparability with data from the United States, gathered by Gilens (2012).

In terms of methods, Article 1 and 3 employ the same methods that were used in some of the most ambitious studies in the field to date (Gilens 2012; Gilens and Page 2014), both to ensure validity, but also to gain comparability with these previous studies. Article 2 on the other hand uses a more innovative approach, which (to the best of my knowledge) has not been used before: Namely, to compare citizens' preferred tax rates and actual tax rates by matching answers from an original survey with tax registry data.

In terms of theory, Article 1 contributes to the literature on unequal policy responsiveness with its argument that social democracy can be a countervailing force against the influence of economic elites, rendering government responsiveness more equal to rich and poor in some policy areas. Article 2 contributes to the same literature with its argument that the rich is likely to channelize the influence that they do posses (even in a social democracy) towards "income defense", making sure that the tax burden on the rich is minimized. Article 3 contributes theoretically by linking responsiveness based on economic differences to responsiveness based on gender. The core theoretical argument is that a patriarchal pattern of policy responsiveness follows directly from 'rule by the rich' if the rich disproportionately consist of men.

1.3.2 Main empirical findings

1) Public policy in Norway over the period 1966 to 2018 has, in general, responded much more strongly to the preferences of high-income citizens than to the preferences of citizens with average income. [Article 1]

2) The question of *how much more* responsiveness there is to the affluent than to the average citizen is difficult to answer because there are a lot of ways to estimate that difference. Nevertheless, based on the analyses reported in this dissertation, the most optimistic estimate is that a citizen at the 90th income percentile has twice as much policy influence as a citizen at the 50th income percentile. Meanwhile, the most pessimistic estimate is that the difference is more than ten-fold (see Figure 1). [Article 1]

3) The relationship between money and influence in Norway still appears to be weaker and less robust than in the US. Three pieces of evidence support this conclusion. First, responsiveness is more strongly conditioned by education than by income: the opinions of the highly educated generally matter more than the opinions of the affluent.[2] Second, although the main estimates of income group influence presented in Article 1 shows inequality of the same magnitude as in the US (see Figure 1 Dataset 1 here), if we use all available data that I gathered for Norway (including data that are arguably not directly comparable to the US data), inequality is lower than in the US (see Figure 1 Dataset 2 here). Third, on economic policy issues, it appears that low-income citizens have had independent influence on policy outcomes at roughly the same magnitude as high-income citizens. [Article 1]

4) Although policy responsiveness on economic issues appears to have been relatively equal in Norway over the past half-century, this conclusion must not be exaggerated.

[2] Note that 'affluent' refers to the highest income estimate that the data (both for Norway and the US) allow for, namely the 90th income percentile. It is possible—and probably quite likely—that the truly rich in Norway (e.g. the top 1% or 0.1%) have more influence than the highly educated.

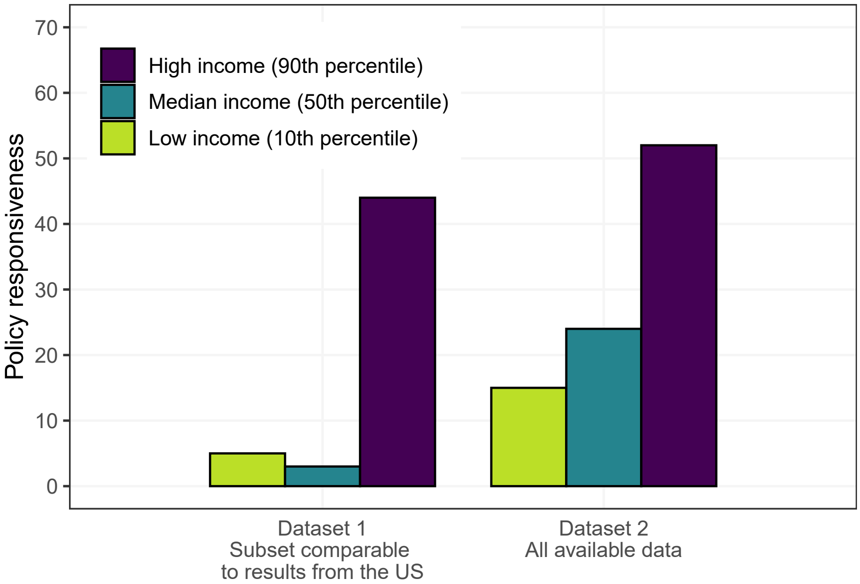

Figure 1: Policy responsiveness to high-, median- and low-income Norwegians, when their preferences diverge. *Note*: Policy responsiveness measured as the predicted change in probability that a policy proposal will be adopted when going from 20% to 80% support within a group (expressed in %-points). Numbers are calculated based on the models reported in Article 1 Table 2 and Article 1 Appendix Table D3. The estimates for the 90th income percentile are from the models where their preferences diverge from the 50th income percentile. US results refer to Gilens (2012, see page 82).

Looking at an important case of economic policy—high income taxation—policy decisions since the 1960's seem to have been seriously at odds with average public opinion—and even more with opinions of the poor. Over a period of 40 years, the top marginal income tax rate in Norway was cut from around 80% to almost half that. Meanwhile, estimated public support for cutting taxes on high incomes over this period was never higher than 39%, and most of the time it was lower than 30%. [Article 2]

5) Not only that, the tax rates that the highest income earners pay today seem to be far removed from what citizens would like them to pay. Comparing public opinion with tax registry data for 2018 reveals that incomes within the top 1 percent are taxed as much as 23 percentage points lower than what the average citizen would prefer. Current rates are even further from the preferences of the poor. [Article 2]

6) Tax rates at the top of the income distribution are much lower than what public opinion prefers because of preferential taxation of capital incomes. In most countries—including Norway—people at the top of the distribution predominantly get their incomes from capital investments. Such incomes are usually subject to flat, preferential tax rates, whereas labor is taxed at higher and progressive rates. When asked to set tax rates for labor incomes and capital incomes respectively, the average respondent preference on labor income taxation was largely in line with how labor incomes are actually taxed. The preference on capital income taxation, however, was much more progressive, and higher for top incomes, compared to how capital incomes are actually taxed. [Article 2]

7) The policy preferences of women have been severely underrepresented in public policy in both the Norway and the United States over the past 50 years. Overall, the data show large inequalities in policy responsiveness between the genders. On the issues where men and women diverged in what they wanted from government, the preferences of men usually had substantial effects on policy. The preferences of women on the other

hand, appear to have had little or no effect at all in the United States, and a moderate (although not statistically significant) effect in Norway. [Article 3]

8) Economic inequality between men and women likely explains most of the unequal responsiveness between men and women in Norway, but a more modest proportion in the US. These results suggests that if women and men had had the same level of income, policy responsiveness might have been less skewed in men's favor. [Article 3]
9) Still, over the course of the period under study (1966-2014). the gender inequality in responsiveness in Norway appears to have been virtually wiped out. In this period, Norway saw a large increase in the share of women in parliament, a factor that correlates with inequality of responsiveness, and accounts for the whole time trend. In the US on the other hand, gendered unequal responsiveness seems to have been highly stable of time, and women's descriptive representation appears to have made little difference. [Article 3]

1.4 Definitions of key concepts

In the existing literature on political inequality, scholars have used a number of different words—such as "representation", "responsiveness", "congruence", "influence", "power", etc.—to describe a set of distinct but related concepts. There is no definitive answer as to what these different words should mean, and authors often adopt their personal set of definitions. While this is of course sub-optimal—it is nonetheless manageable as long as scholars are clear about how *they* use specific terms.

For this thesis, I try as best as possible to use the central concepts in the following ways. *Political inequality* refers to the unequal representation of popular policy preferences. Political inequality has two faces: unequal congruence and unequal influence. *Congruence* and *influence* are theoretical concepts, and I use them the same way that Bartels (2021) does. That is, congruence refers to the extent to which policy satisfies some preferences.

This is a descriptive concept, containing no causal claims. A high level of congruence simply means that the status of a policy, or a policy change, aligns with public opinion.[3] Influence (or *power*, which I use synonymously) on the other hand, refers to the extent to which public opinion actually shapes policy. This is a causal concept—that is, public opinion must cause changes in public policy to talk of influence. This is not a requirement for congruence. Its rather important to recognize that congruence can arise even if the group whose preferences policy aligns with had no actual influence. Scholars in the literature have referred to this situation as "coincidental representation" (Gilens 2015; Enns 2015). For example in a dictatorship, everyone who shares the preferences of the dictator will see high policy congruence, but probably little policy influence.

Furthermore, I consider the terms *deviation* and *responsiveness* to be methodological concepts. Deviation refers to the extent to which a specific policy deviates from public opinion at a cross section in time. For example, as I show in Article 2, actual tax rates can deviate from the tax rates preferred by average public opinion. Responsiveness on the other hand, refers to the extent to which policy *changes* follow public opinion (e.g Article 1 and 3). Thus the central distinction between deviation and responsiveness is whether we compare public opinion with policy at a cross section, or with policy changes.

Both deviation and responsiveness can illuminate congruence. In other words we can study whose preferences are satisfied both in terms of policy at a cross section, and policy changes. When it comes to learning about who has *influence* on policy, however, a study of responsiveness will usually be better than a study of deviation. Since responsiveness is about policy changes, this approach comes closer to testing the causal effect of opinions on policy. Yet responsiveness does not automatically say anything about influence. Bivariate estimates of responsiveness, without some approach to disentangle the independent impact of

[3] By *public opinion*, I am referring to the expressed preferences of an individual, or the aggregate preference of a group of individuals.

the opinions of different actors, will usually say more about congruence than about influence.

2 Economic Inequality and Political Power

Before going further into the details of my PhD research, I will review the existing scholarly literature dealing with the relationship between economic inequality and political power. To that end, I give a cursory overview of older scholarly work from Antiquity to the 20th century. From there, I go through the new empirical literature on unequal responsiveness that has emerged in the 21st century. Here, I pay particular attention to controversies and debates that are of high relevance for the empirical analyses that I myself perform in the thesis articles. Then, I move on to the mechanisms of political inequality, reviewing the existing empirical evidence for six ways that money can potentially buy influence in modern formal democracies. Finally, I discuss implications for political inequality along the gender dimension. In sum, I believe, this will provide the reader with a good amount of background knowledge to better be able to interpret the findings for the Norwegian case that emerge from my work.

2.1 Does money buy political influence?

2.1.1 The orthodox view in political science and economics

The most prominent view about power relations under formal democracy holds that the system works as it should: Citizens, empowered by elections, are the ones who ultimately decide policy. This is a very familiar story, repeated in the media, high school textbooks, and a plethora of work within political science and economics.

An elaborate incarnation of this idea is the *Median Voter Theorem* (Hotelling 1929; Black 1948; Downs 1957). The original Median Voter Theorem states that in a two-party system, the policy positions of two competing, vote-seeking parties, will gravitate towards the preference of the median voter. That is, so long as voter preferences can be reduced to a single dimension (e.g. left-right), and the distribution of voter preferences are single peaked. An implication of this is that policy will be perfectly responsive to popular majorities, and there is no a priori bias towards any group of citizens. The logical can be extended to multi-party systems since a coalition government will most likely depend on the "median party" that contains the median voter (Kang and Powell Jr 2010, 1015; Laver and Schofield 1998, 113).

Critiques of the median voter theorem are many (e.g. Rowley 1984; Harms and Zink 2003). Yet the most problematic part about it is arguably that it takes for granted that policy is simply a function of elections. Thus it naively expects the median voter to control public policy so long as she controls the outcome of elections. This idea is clearly at odds with empirical reality. In the real world, it is rather obvious that many factors beyond elections influence policy. I will go through a number of such factors in Section 2.2. Suffice it to say now that although citizens might be equal in terms of their one vote, they are *unequal* in their ability to utilize other important methods of making their voices heard.

2.1.2 Theories about the influence of economic elites

Scholarly interest in the relationship between economic inequality and political power at least dates back to Aristotle. In his book *Politics*, Aristotle writes that "when some possess too much, and others nothing at all, the government must either be in the hands of the meanest rabble or else a pure oligarchy" (Aristotle 2009 [350 B.C.], Book IV, Chapter XI). That is, at a certain point of wealth inequality, the wealthy few will dominate politics, unless the poor majority redistributes wealth by force (*expropriation* would be the modern term). Aristotle considered both these scenarios to be unjust: It is "unjust" for the poor to "distribute among themselves the possessions of the wealthy"; and it is "unjust" for the wealthy to "plunder and take away the possessions of the many" (cited in Lockwood and

Samaras 2015, 170). Aristotle's solution for a stable democracy was "to take care that the majority of the community are not too poor", and he suggested specific measures that states could take to ensure this (Aristotle 2009 [350 B.C.], Book VI, Chapter V).[4]

Aristotle highlighted a tension between economic inequality and democracy that appears in the writing of many subsequent scholars. Nearly 2000 years after Aristotle, James Madison, the main author of the United States Constitution, worried that giving the public too much influence in public affairs surely would lead to demands of economic redistribution. Madison writes that "[i]n England, at this day, if elections were open to all classes of people, the property of the landed proprietors would be insecure. An agrarian law would soon take place." Therefore in the US system, government—mainly through the Senate—should make sure to "protect the minority of the opulent against the majority" (Yates 1836 [1787], 170).

Also interested in the English system, Adam Smith harshly criticized government for putting the interests of the economic elite over the public. Smith writes in the *Wealth of Nations* that "the English legislature has been peculiarly attentive to the interests of commerce and manufacturers", who "have been by far the principal architects" of "this whole mercantile system" (Smith 1937 [1776], 324, 513). This is especially problematic because, as Smith argues, "[t]he interests of the dealers ... is always in some respects different from, and even opposite to, that of the public" (200).

However, the most influential account of the relationship between economic and political inequality is that of Karl Marx and Friedrich Engels, further developed by later Marxist theorists. Marx and Engels write in the *Communist Manifesto*:

> the bourgeoisie has at last, since the establishment of Modern Industry and

[4] Aristotle writes: "what can be saved out of the public money should be put by, and then divided at once among the poor, if possible, in such a quantity as may enable every one of them to purchase a little field, and, if that cannot be done, at least to give each of them enough to procure the implements of trade and husbandry" (Aristotle 2009 [350 B.C.], Book VI, Chapter V)

> of the world market, conquered for itself, in the modern representative State, exclusive political sway. The executive of the modern State is but a committee for managing the common affairs of the whole bourgeoisie. (Marx and Engels 2019 [1848])

This kind of argument, that the state is a mere instrument for the capitalists (or the *bourgeoisie*), is typical of the early writings of Marx. In *The Germany Ideology* Marx expresses the same sentiment, writing that the state "is nothing more than the form of organisation which the bourgeois necessarily adopt both for internal and external purposes, for the mutual guarantee of their property and interests" (Marx and Engels 1970 [1846]). But Marx's writing changed after 1848, around the time when European states, such as France and Germany, saw autocrats take the power by force.[5] As explained by Jon Elster, Marx from then on awarded the state more autonomy vis-a-vis the capitalists. The capitalists would tolerate not being in direct control of the state, letting autocrats or aristocrats run public affairs, so long as the state did not stray too far away from core capitalist interests (Elster 1985, Chapter 7). This even had the added benefit, Marx wrote about France, that it would "conceal" who was truly in power, and leave the capitalists free of having to "confront the subjugated classes" themselves (Marx 1978 [1852], 23). Marx's later writings thus developed a more nuanced understanding of the relationship between economic resources and power: The state was not necessarily just an instrument at the disposal of the wealthy. The state could act in a variety of ways so long as they were not directly at odds with the economic interests of the wealthy.

Arguably, this adjustment salvaged the Marxist theory of the state in the face of the wide-spread proliferation of universal suffrage in the 20th century. During Marx's time,

[5] Of the most well-known cases was Napoleon III's coup d'état in Paris in December 1851; subsequently declaring himself Emperor of France.

political rights were mostly a luxury of the capitalist class. Marx himself predicted that a move towards universal suffrage would transfer power to the masses and serve as an important step towards revolution (Bottomore 1993, 20–21). Absent any revolution, in a stable formal democracy with universal suffrage, it is much less obvious why the Marxian idea of a ruling capitalist class is still valid. If the people are free to throw out the rulers at the ballot box, how could capitalists still be in power? A plausible solution was the idea that capitalists could rule indirectly through the mere knowledge on the part of the political elite, that thwarting the interests of the capitalists could lead to disinvestment with far-reaching negative social consequences. This line of argument (sometimes referred to as the *Structural dependence of the state on capital*, see Przeworski and Wallerstein (1988)) saw its contours with Marx's post-1848 writings, but was developed further in the 1960's and 70's by Marxist scholars such as Fred Block and Nicos Poulantzas (Block 2021 [1977]; Poulantzas 1969, discussed in more detail in the next section).

Up until the 20th century, the dominant perspective on the relationship between economic and political inequality, as we have seen, had been that property in itself implies influence. However, in the 20th century, the scholarly literature began to redirect its focus towards the power of elites, broadly defined (Winters 2011, 26). In this branch of the literature (commonly known as *elite theory*), property is but one out of many power resources that determine the distribution of political influence. Elite theory started with scholars such Mosca (Mosca 1939 [1896]), Pareto (Pareto 1968 [1901]), and Michels (Michels 2001 [1911]), arguing that voters in modern democracies could not realistically hope to control government. Politics would inevitably remain in the hands of a small governing elite.[6]

C. Wright Mills continued this tradition in the 1950's with his seminal book *The Power Elite* (Mills 1959 [1956]), in which he argued that US politics was dominated by a

[6] For Michels this was a logical consequence of his more general argument that any organization would over time inevitably come to be ruled by a minority (i.e. his famous *iron law of oligarchy*).

network of elites occupying key positions in corporations, government and the military. The members of the elite were drawn predominantly from the upper class, but their power, Mills argued, did not originate from their wealth (Mills 1959 [1956], 279; Gilens and Page 2014, 566). So while Mills, and the other post-war elite theorists (e.g. Schattschneider 1975 [1960]; Domhoff 1967; Hunter 2017 [1953]), surely considered business as an important actor with strong influence on government, it was the corporate executives, not the owners, who were in the spotlight. Furthermore, the political elite was not dependent upon the economic elite in the Marxist sense. In fact, Mills was critical of the, as he saw it, "economic determinism" in Marxist theory, arguing instead that "the higher agents of each of these three domains [business, politics, and military] now often have a noticeable degree of autonomy" (Mills 1959 [1956], 277).

The elite theorists were criticized by another important scholarly tradition in the post-war decades, namely pluralism. Pluralism arguably falls somewhere in between the orthodox view that ordinary citizens ultimately decide, and the elitist view. Pluralists, such as Robert Dahl (Dahl 2005 [1961]) and David Truman (Truman 1971 [1951]) disagreed with the notion of elite domination at the core of elite theory. Instead they proposed that political influence was plural: That is, it was distributed across a wide variety of organized groups representing different interest, and who exerted power in different domains. In his famous study of power relations in the American city of New Haven (Dahl 2005 [1961]), Dahl clearly acknowledges what he calls the "the interrelation of money and influence", but he also sees real opportunities for ordinary citizens to organize and effectively compete for influence in the public sphere:

> The individual of low income is not without resources [in politics], but lacking money he does lack one resource of considerable importance. He may be able to compensate for lack of money by using other resources such as his time and

> energy more fully or skillfully, and as a group, the influence of the aggregate votes of the poor may more than offset the influence of the aggregate wealth of the rich. (Dahl 2005 [1961], 243)

Some of the work of Norwegian political scientist Stein Rokkan is similar to Dahl in the regard. Focused on political power relations in Norway, Rokkan emphasized that policy making was influenced both through the electoral channel and the corporate channel. Elections matter, but, in his words, "[t]he vote potential constitutes only one among many different power resources [. . .] what really counts is the capacity to hurt or halt a system of highly interdependent activities", therefore "votes count, but resources decide" (Rokkan 1966, 107, 106). The argument is reminiscent of the Marxist idea of structural dependence of the state on capital. However, Rokkan points out that not only the business owners wield this kind of influence. Organized peasants and workers could also hurt the economic system by suspending production. Hence, although "resources decide", it is not necessarily business or the wealthy who rule. That would depend on the particular distribution of resources at a specific time and place.

After the elitism-pluralism debate in the 1950s and 60s, work on political inequality become less about the actual distribution of power, and more about narrower issues that where easier to investigate empirically. This includes work on inequalities in legal rights (e.g. Thernstrom 1987), and the well-known work by Sidney Verba and colleagues on unequal political participation, particularly with respect to voting (Verba and Nie 1987 [1972]; Verba, Nie, and Kim 1978; Brady, Verba, and Schlozman 1995; see Bartels 2021, 5–6). The ancient question of who was actually in power largely fell out of mainstream of political science, although interesting debates on the topic continued in Marxist circles (e.g. the Poulantzas-Miliband debate, Miliband 1969; Poulantzas 1969; Barrow 2016; see Schakel 2020, 25).

More recently, new theories on the power of economic elites have emerged, such as

Thomas Ferguson's "Investment theory of party competition" (Ferguson 1995), and Jeffrey Winter's theory of oligarchy (Winters 2011). These contributions have helped bring the discussion of money and power back to its root. Instead of focusing on the people who at any point in time occupy elite positions within the economic and political system—the approach of most 20th century work on elites—these scholars, much like Aristotle and Marx, are interested in the material sources of power.[7]

2.1.3 The recent empirical literature on unequal responsiveness

Before the 21st century there is little systematic empirical work that could tell us anything about how much political influence the rich actually have compared to other citizens. At least that is the case if we stipulate that such an analysis must somehow measure the extent to which the preferences of well-off citizens have more impact on policy than the preferences of less well-off citizens. The long absence of such studies might be in large part because they require data that are usually far from readily available. Scholars in the 1970s and 80s studying inequalities in political participation (a related but different topic) were well aware of the challenges of measuring inequalities in actual political influence. Verba and Orren (1985) note difficulties that are almost just as relevant today as they were back then:

> Political equality cannot be gauged in the same way as economic equality. There is no metric such as money, no statistic such as the Gini index, and no body of data comparing countries. (Verba and Orren 1985, 15)

To be sure, political scientists have been studying the relationship between public opinion and public policy (or, alternatively, representatives' voting behavior) for half a cen-

[7]Winters is quite explicit that "elite theory played a significant role in undermining the precision and utility of oligarchic theory", among others things by conflating terms like "oligarchs", "elites, aristocrats, governing elites, and ruling classes", and by "downplaying ... material power resources" (Winters 2011, 31–32).

tury. Starting with Miller and Stokes (1963), a substantial literature has established that there is a fairly strong correlation between average public opinion and policy changes over time both in the United States (Burstein 2003; B. Page and Shapiro 1983; Erikson, MacKuen, and Stimson 2002; Monroe 1998; Wlezien and Soroka 2012) and other established democracies (Brooks 1987, 1990; Binzer Hobolt and Klemmensen 2008; Soroka and Wlezien 2004). One prominent scholar even interpreted such findings from the US as providing "a sanguine picture of democracy at work" (Shapiro 2011). Two others argued that "the people ultimately decide" when it comes to changes in government spending (Soroka and Wlezien 2010, 182; Bartels 2017, 1–2). The problem however, is that these studies do not disaggregate public opinion by economic groups to try to compare the opinion-policy relationship for well-off and less well-off citizens. Therefore, while such studies do support the somewhat unsurprising conclusion that public policies tend to reflect citizens' preferences, they do not say *whos* preferences it is that government mainly follows.

It was not until the 2000s that political scientists started to examine the *who*-question (for reviews of the literature since then see Erikson 2015; and Elkjær and Klitgaard 2021). The question of who has influence on policy (i.e. political inequality) reemerged in mainstream political science around the time of the 2003 American Political Science Association (APSA) Task Force on inequality and American democracy. With a mandate to evaluate "the health and functioning of U.S. democracy in a time of rising inequality", the Task Force concluded in its final report that despite great achievements in equalizing legal rights, "the voices of American citizens are raised and heard unequally" (American Political Science Association Task Force 2004, 651). While the report, understandably, focused on the US and its rapidly increasing economic inequality (Piketty and Saez 2003), in hindsight, the same worry would have been justified in a number of other established democracies (Piketty 2020; Chancel et al. 2021).

2.1.3.1 Studies of the United States

One of the early studies of political inequality in the US, Martin Gilens' *Affluence and influence* (Gilens 2012, see 2005), arguably remains the most extensive and ambitious to date. Gilens collected over 2,000 survey items from pre-existing surveys where Americans had been asked whether they support or oppose some proposed change in national government policy. Most of the questions where asked between 1981 and 2002, while the remaining where asked in 1964-69 and 2005-06. For each policy proposal, Gilens and a "virtual army of research assistants" coded whether or not the proposal was adopted by government in the subsequent 4 years after the question was put to the public. For his analyses, Gilens estimated the support each policy proposal enjoyed among citizens at the 10th, 50th, and 90th income percentiles. He could then examine the impact that the support of these three groups had on the probability that a policy would be adopted. Gilens' conclusions were damning. He found that "when preferences across income groups diverged, only the most affluent appeared to influence policy outcomes"; "policy responsiveness for the 10th and 50th income percentiles is essentially zero" (Gilens 2012, 234, 257). Gilens and Page (2014) used different statistical methods on the same data, and found very similar results: Ordinary citizens, they argued, "often get the policies they favor", but only when they happen to agree with economic elites, "who wield the actual influence" (576). The conclusions of Gilens and Page (2014) had an unusual popular outreach, igniting debate about money and politics in the US.[8]

Criticism of Gilens (2012) and Gilens and Page (2014) has mainly revolved around the relative similarity between the policy preferences of the different income groups used in their studies.[9] Bashir (2015) focus on the alleged methodological complications this creates. He

[8] See for example "Rich people rule!", The Washington Post, 4 April 2014; "Study: US is an oligarchy, not a democracy", BBC, 17 April 2014; and "Is America an Oligarchy?", The New Yorker, 18 April 2014.

[9] The Pearson correlation between the preferences of the 90th percentile and the 50th percentile in Gilen's data is 0.94. This is reduced to 0.78 after taking correlated measurement error into account (Enns 2015, 1062; Gilens and Page 2014, 571).

argues, based on data simulations, that the main result reported by Gilens and Page (2014) is "likely to have been produced by chance because the income-based independent variables are highly correlated" (Bashir 2015, 2). Gilens (2016) responded to this critique arguing that Bashir's simulation "is flawed in ways that undermine the conclusions that Bashir draws", and that highly correlated independent variables only "increases the uncertainty around the coefficient estimates"; it does not "bias the coefficients or the standard errors" (Gilens 2016).

Other critics focused more substantively on the preference similarity across income groups (Soroka and Wlezien 2008; Ura and Ellis 2008; Alexander Branham, Soroka, and Wlezien 2017; Enns 2015). Soroka and Wlezien (2008) analysed opinion differences across income groups on eight survey questions about government spending, finding that "income really only matters in isolated cases, specifically, welfare spending preferences". From this, they concluded that "the scope for inequality in policy representation ... is rather limited", and that "regardless of whose preferences policymakers follow ... policy will end up in essentially the same place" (Soroka and Wlezien 2008, 319, 325). Gilens (2009) responded by analyzing opinion differences in his large dataset of policy proposals, showing that "income-based preference gaps are much larger and more widespread than their [Soroka and Wlezien's] data suggest". Alexander Branham, Soroka, and Wlezien (2017) made a similar point, this time re-analyzing Gilens' own data, with a focus on the "win rate" of the different income groups. The win rate is defined as the share of issues on which policy went in the direction favored by the majority of a group. The authors find that even "when the middle and rich disagree, it is nearly a coin flip as to which group wins" (Alexander Branham, Soroka, and Wlezien 2017, 56).[10] Gilens and Page (2016) responded to this critique arguing that "[m]ajority "win rates" don't really measure policy influence" because "[p]olicymakers have little incentive to lean one way" if the public or a sub-group thereof "is closely divided".

[10]The authors report that on the issues where majorities in the 90th and 50th income percentile were on different sides, the win rate for the former was 53% and for the latter 47% (Alexander Branham, Soroka, and Wlezien 2017, 51).

Gilens (2015) shows that if one uses the more meaningful benchmarks of strong and weak support (over 75% or under 25% support) among income groups, the "congruence rate" for the affluent is much higher than for the middle class.[11]

Also re-analyzing Gilens' data, Enns (2015) reiterates the point that due to preference similarity, policy outcomes would be similar regardless of whether government responds to the affluent or the middle-class. However he also touches on the normative implications of this, arguing that "[i]f 'rich people rule,' it rarely appears to be at the expense of those in the middle. Coincidental representation appears to be the norm". Gilens (2015) disagrees with the extent of preferences similarity (see previous paragraph). He also argues that even though " 'democracy by coincidence' is an important feature of contemporary American politics", it is "a debased and conditional form of democracy (if it is a form of democracy at all)", leaving the majority in a "politically tentative and precarious position" (Gilens 2015, 1070).

An important take-away from this debate is that we need to be careful when discussing political inequality to distinguish between *congruence* and *influence*. Larry Bartels (2017) notes: "Studies purporting to cast doubt on the reality of biased responsiveness" have been "motivated by a quite different question—*who gets their way* [congruence] rather than *whose preferences matter* [influence]" (6; emphasis in original), referring specifically to Soroka and Wlezien (2008) and Enns (2015). The point is that there might be substantial congruence between public policy and the opinions of ordinary citizens (in fact, such a pattern might even arise in non-democratic countries, see e.g. Horne (2012); Malesky and Schuler (2010)). Alas, this does not necessarily mean that ordinary citizens have any real influence on policy—which is presumably what we mean when we talked about political equality.

A number of additional studies on political inequality in the US have found similar conclusions to those of Gilens (2012) and Gilens and Page (2014). Perhaps the most fa-

[11] The reported figures are 66% for the 90th income percentile and 34% for the 50th percentile (Gilens 2015, 1066).

mous, Larry Bartels showed that roll-call voting in the US Senate responded to high-income preferences, but little to middle- or low-income preferences (Bartels 2016 [2008], Chapter 8). Jacobs and Page (2005) studied influence on US foreign policy. Combining surveys of ordinary citizens, policy-makers, and various elites, they found that US foreign policy "is most heavily and consistently influenced" by business leaders, while the general public "seems to have considerably less effect" (Jacobs and Page 2005, 107). At the state level, Flavin (2012) found that "citizens with low incomes receive little or no substantive political representation", while Rigby and Wright (2013) found "differential responsiveness" to rich and poor for the ideological positions of parties.

2.1.3.2 Studies of other countries

While most studies to date have focused on the US case, there is a growing literature documenting political inequality in European countries, using the methods developed by Gilens (2012). Part of this thesis—Article 1—constitutes an attempt at expanding this literature to the case of Norway. Elsässer, Hense, and Schäfer (2020, see 2017) use data on public opinion and policy outcomes for 746 proposal (222 of which had information on income) in Germany (1980-2013). They found that "political decisions are systematically skewed in favor of citizens that have achieved higher . . . incomes" (1891). Similarly, Schakel (2021) analyzes data for the Netherlands (291 proposal, 1979-2012), finding that "policy responsiveness is much stronger for high incomes than for low or median incomes". While it is difficult to compare coefficients across different studies directly, both of these studies find unequal responsiveness by income similar in magnitude to what Gilens (2012) found in the US.[12]

Looking at Sweden (960 proposals, 1956-2014), Persson and Gilljam (2018) also found clear income-based inequalities in responsiveness. Perhaps even more surprisingly, however:

[12] The difficulty has to do with the fact that the datasets across these three cases are constructed somewhat differently, and also the authors run slightly different statistical models than Gilens (2012) did.

in contrast with Gilens (2012) and the other two studies, this study (which was comparatively well powered) found no statistically significant relationship at all "between general public support and policy change" for the full dataset. A direct comparison to US, German, and Dutch results would lead us to the rather shocking conclusion that while there is at least a moderate relationship between what the public wants and what it gets in these countries (i.e. the public see some level of *congruence*, not necessarily *influence*), there is no such relationship at all in Sweden. A more likely explanation however, is that differential data sources across these four studies means that they are capturing responsiveness on different kinds of issues.[13] This presents challenges for comparing results across countries. These challenges are noted in a recent paper pooling together the data from the studies mentioned above, and also the data for Norway that are part of this thesis (Mathisen et al. 2021).

Two additional country case studies using the methods of Gilens (2012) have recently emerged. Lupu and Castro (2022) use data on public opinion and policy outcomes for 214 proposal (58 of which had information on income) in Spain (1976-2016), concluding that "the preferences of the most affluent have more influence over policy-making than do the preference of the least affluent". However, due to the scarcity of survey data containing info on respondent income, the authors mostly report results of unequal responsiveness by education and occupation to back up their conclusion. While such inequalities certainly are interesting in their own rights, they arguably do not tell us much of whether the "affluent" are more influential than the less affluent.[14] Still, the authors do find income-based inequalities in responsiveness in the 58 proposals where they do have such data, providing at least some evidence that influence depends on affluence also in the Spanish case. Finally, the most recent "Gilens-type" study is Manuel Wagner (2021)'s analysis of 399 proposals (277 of which

[13] See the Appendix D for Article 1 in the thesis for a more elaborate discussion on this.

[14] That is, assuming affluence means money, either in the form of income or wealth. While money, education, and occupation surely will be correlated in most cases, we should be careful in conflating the three. Clearly, it is of relevance—e.g. in terms of implications and possible remedies—whether it is the affluent, the highly educated, a specific occupational group, or a combination of the three, that dominate policy making.

had information on respondent income) in Switzerland (1987-2017), with the important contribution of testing the consequences of direct democracy on responsiveness. He finds that policy outcomes is "strongly skewed towards rich" and that "the Swiss political system as a whole does not produce more equal political outcomes than other democratic countries, despite its outstanding direct democratic institutions." (2-3).

In a first effort to combine data for multiple country case studies of unequal responsiveness, Mathisen et al. (2021) pools together data from the above-mentioned studies of Germany (Elsässer, Hense, and Schäfer 2020), Netherlands (Schakel 2021), Sweden (Persson and Gilljam 2018), and Norway (Article 1 in this thesis). Focusing on differences in responsiveness across Left- and Right-wing governments, they find that "unequal responsiveness is less pronounced under Left-leaning governments in Germany, the Netherlands, and Sweden", while in Norway "Left-leaning governments seem to favor the affluent more than Right-leaning governments". The Norwegian exception is only present on cultural issues, though—where the preferences of the affluent tend to be more progressive than the middle-class and poor.

In addition to a growing number of country case studies, several studies have taken a cross-national approach to unequal responsiveness. The advantage of such an approach is obvious, as more countries means that one can start testing country-level explanations for differences in unequal responsiveness. The disadvantage however, is that the broad coverage in these studies is usually at the expense of having to use more aggregate measures of policy outcomes—such as government spending across broad categories, or the ideological orientation of governments and parties. Peters and Ensink (2015) match income-disaggregated support for redistribution with subsequent changes in government social spending for 25 European countries. They find that "[l]ower-income groups tend to be under-represented while higher-income groups appear over-represented" and that "low levels of turnout seem to emphasise" this pattern (596). Bartels (2017) similarly finds what he calls a "social welfare deficit" of 10-15% in affluent democracies due government spending being biased in favor of the preferences of the affluent. Moreover, Giger, Rosset, and Bernauer (2012) find that "generally, the poor are represented worse than the rich" in terms of their distance to the nearest party and the government on a left-right scale. However, they observe "considerable variation in the effect" across 21 Western democracies (57). In subsequent work, the authors find that the unequal ideological proximity is smaller in PR systems (Bernauer, Giger, and Rosset 2015), and in countries with lower levels of economic inequality (Rosset, Giger, and Bernauer 2013).

As the literature on unequal responsiveness has grown, new critiques have emerged. Elkjær and Iversen (2020) analyse the relationship between support for redistribution and government social spending in 21 European countries. Like Peters and Ensink (2015), who performs a very similar analysis,[15] Elkjær and Iversen (2020) find that changes in social spending respond much more strongly to the preference of high income citizens than middle or low income citizens. Nevertheless, they find that the *level* of social spending only correlates with the preferences of the middle. They believe that these results are "suggesting that the middle class is instrumental in setting the level of redistribution". However, as Bartels (2021) notes, that interpretation "sounds like a simple conflation of "alignment" [congruence] with influence" (37; recall the discussion above about the distinction between congruence and influence). If we accept that change data are better suited to tell us who has *influence* on policy, then it seems that Elkjær and Iversen (2020)'s analyses largely corroborate previous findings of unequal responsiveness.

Elkjær (2020) pursues a different line of critique. Matching public opinion on spending with actual government spending in Denmark, he finds, just like previous studies that "policy responsiveness increases monotonically with income" (2215). However, breaking with

[15] The main difference between Elkjær and Iversen (2020) and Peters and Ensink (2015) appears to be that the former used public opinion data from the International Social Survey Programme, while the latter used public opinion data from the European Social Survey.

most other studies, his proposed explanation for this finding is not that influence increases with income; rather, it is that the affluent are "more involved in political discussions; they are better informed about political and economic issues; and they express more balanced, thermostatic, and counter-cyclical preferences compared with lower income classes" (2215). Therefore, he argues, they have preferences that "coincidentally" will correpond with the decisions of any governments that "pursue standard macroeconomic policies" (2238). While Elkjær (2020) demonstrate all of these points with survey data, Bartels (2021) notes that this only constitutes "circumstantial evidence" as Elkjær (2020) does not test empirically whether these patterns in fact account for the observed differences in policy responsiveness (26). Furthermore, even if such a test were to support the explanation, it would still only apply to "macroeconomic policies", leaving observed inequalities in all other policy domains (e.g other economic issues, morality policy, foreign policy, etc.) unexplained.

2.1.4 Summary

Scholars ranging from Artistotle, Adam Smith, and Karl Marx, to Thomas Ferguson and Jeffrey Winters, have all argued in some form or another that the rich in economically unequal societies exert disproportionate influence on government. This goes against the conventional wisdom in political science, which holds that ordinary citizens ultimately control government through elections. It is only in the past 20 years, however, that political scientists have taken it upon themselves to systematically investigate the degree to which well-off citizens indeed have more policy influence than the rest. Thus far, empirical studies have shown that public policy responds much more strongly to the policy preferences of citizens with high income than citizens with average or low income. This appears to be true both in the United States (the most studied case to date) and in Europe. Although the literature has not produced much in terms of causal evidence of *influence*, the fact that we see robust relationships between public policy changes and the preferences of the affluent, and little or no such relationships for other citizens when their preferences diverge from those of the affluent, is at least an indication that money matters.

2.2 How does money buy political influence?

In a country that has universal suffrage, free and fair election, freedom of speech, and freedom of assembly (what I call a *formal democracy*), it is not immediately obvious how the rich would exert disproportional political influence. I will now go through some possible ways that this can occur. The following should not be read as an attempt to produce an exhaustive list of all mechanisms, but rather as an overview of some of the important ones.

2.2.1 Descriptive representation

Much of the work arguing that economic elites dominate policy making contend that they do so by having members of their own group be personally involved in the policy making process. That is, the rich achieve disproportionate influence by being numerically over-represented in important positions within the different branches of government, such as parliament. This was the focus of some Marxist scholars such as Ralhp Miliband (1969), but also elite theorists like C. Wright Mills (1959, 1956).

Political elites are usually high up in the economic hierachy. Across the EU countries for example, the average salary for a member of parliement (MP) is 2.4 times higher than average earnings in the country.[16] And that is just counting official MP salaries, excluding additional incomes (e.g. from investments). Meanwhile in the US, a majority of Congress members are millionaries.[17] To the degree to which personal characteristics of elected representatives affect their behavior, it is possible that their affluence make them more attentive

[16]Granted there is substantial variation, all the way from a ratio of 1.1 in Malta to 5.3 in Italy. See https://www.euronews.com/2016/04/12/who-are-the-best-paid-mps-in-the-eu (accessed 8 July 2022).

[17]See https://www.opensecrets.org/news/2020/04/majority-of-lawmakers-millionaires/ (accessed 8 July 2022).

to affluent interests. This is difficult to test empirically however, since—in cotrast with other traits—*all* representatives are usually in the top tiers of the income distribution (Gilens 2012, 236).

A more feasible way to get at the meaning of descriptive representation in producing unequal responsiveness to economic groups, is to look at representatives' class backgrounds (commonly measured by occupation). Carnes (2012) looked at how the class background of members of the US House of Representatives affected their roll-call voting in the 20th century. He concludes that "The underrepresentation of the working class in Congress skews roll-call voting in favor of conservative economic policies" (22). Moreover, Carnes and Lupu (2015) looked at opinion surveys of legislators in 18 Latin American countries. They found that "[w]hen external actors like political parties force their hands—as they often do when bills are put to a vote— legislators from different classes behave about the same". However, "when they have discretion—as they often do during the agenda-setting stages of the legislative process—their choices on economic issues differ by class" (14). This suggests that unequal despcriptive representation might be more important for the question of which bills are voted over, rather than the outcome of the votes.

2.2.2 Unequal turnout

Second to actually running for office one self, the most obvious way to influence politics is voting in elections. Furthermore, given two equally sized groups, if members of the first group turn out to vote at a higher rate than the second group, then—all else equal—the first group will have more influence on the election outcome than the second. Voting entails individual costs, such as time, transport, and—depending on the country—registration, and getting time off from work. More resourceful citizens will likely be less discouraged by these obstacles than less resourceful citizens. Therefore, turnout inequality consitutes a potential source of political inequality.

It is a well-established fact that in most Western formal democracies, income is positively correlated with the probability of turning out to vote. A long line of empirical work within political science deals with this topic (e.g. Verba and Nie 1987 [1972]; Verba, Nie, and Kim 1978; Brady, Verba, and Schlozman 1995), usually motviated specifically by the belief that unequal participation will lead to political inequality.

While the logic of turnout inequality accounting for political inequality might be reasonable, this explaination does have some problems with it. Consider one of the latest additions to the turnout inequality literature. Polacko (2021) looks at survey data for "102 elections, across 30 advanced democracies from 1996 to 2016" (742). For this full dataset, Polacko (2021) reports a turnout of 78.6% for the lowest income quintile and 89.6% for the highest quintile (i.e. a difference of 11 percentage points). Regardless of whether this constitutes a "substantial income gap in turnout" as the author claims (744), there is a more subtle point to be recognized here. In practical terms, the only implication of unequal turnout by income is that it would take a larger group of low-income citizens (voting at a lower rate) to acheive the same electoral influence as the high-income citizens (voting at a higher rate). *How much larger?* is the relevant question. Based on the 11 point voting gap reported by Polacko (2021) we can easily calculate how large the low-income group would have to be in order to wield the same electoral influence as the highest income quintile (assuming conservatively that the second lowest quintile votes at the same rate as the lowest quintile). It turns out that that number is 22.8 percent.[18] In other words, the implication of this 11-point turnout gap is that instead of the bottom 20% and top 20% on the income scale having the same electoral influence, the top 20% has about as much influence as the bottom 22.8%. Even if we look at the country with the highest turnout inequality in Polackos's data, the United

[18] The percentage who votes in the highest quintile is 0.2*0.896 = 0.1792. The percentage who votes in the lowest quintile is 0.2*0.786 = 0.1572. The differences is 0.1792-0.1572 = 0.022. Assuming conservatively that the second lowest quintile, like the lowest quitile, has a turnout of 0.786, it would take 0.022/0.786 = 0.02799 of this group, in addition to the bottom quintile (combined 0.22799) to have the same number of people turning out to vote as the top quintile.

States (with a gap of 26 point between the lowest and highest income quintile), the top 20% has about as much electoral influence as the bottom 30%.[19] Presented this way, it hardly makes sense that turnout-inequality could account for findings in the literature on unequal responsiveness suggesting that high-income citizens have strong policy influence while *both* middle- and low income citizens have little or no independnent influence.[20] The argument becomes even more implausible if the reality is that responsiveness is mostly consentrated not in the top quintile but in the top 1% (e.g. Hacker and Pierson (2010)). Even if a group that small were to vote at 100% (which might not be far from the truth actually, Page, Bartels, and Seawright (2013)), their turnout could not possibly account for their influence. In that case the poorest 5% would then surpass the top 1% in influence as long as they had a turnout of more than 20%.

Studies attempting to empirically test the link between turnout inequality and unequal responsiveness have provided mixed results. Schakel (2021) estimates income-based unequal responsiveness for both voters and non-voters in the Netherlands, finding that unequal voting "does seem to matter, but it cannot fully account for the gap in responsiveness" (53). Bartels (2016, 2008) found that election turnout was unrelated to responsiveness, while Gilens (2012) found that the relationship between income and voting did not "resemble[] the pattern of representational inequality" that he documents (239-241).[21] Also telling is the fact Lupu and Castro (2022) finds evidence of uneuqal responsiveness in Spain, a country

[19]Polackos does not report turnout by quintile for specific countries. However if we assume, based on the 26 point gap he reports for the US, that turnout is 86% for the highest quintile and 60% for the lowest, we get the following calculation: The percentage voting in the top quintile: 0.2*0.86 = 0.172. The percentage voting in the bottom quintile: 0.2*0.60 = 0.12. The differences: 0.172-0.12 = 0.052. Assuming the same turnout for lowest and second lowest quintile, it would take 0.052/0.60 = 0.0867 of this group, in addition to the bottom quintile (combined 0.2867) to have the same number of people turning out to vote as the top quintile.

[20]The literature suggest that this is even the case when the preferences of the middle and poor align against the affluent (Gilens 2012, 84; Mathisen et al. 2021)

[21]Specifically, he shows that income vs. voting has a functional relationship that looks logarithmic (the poor is markedly lower than both the middle and affluent), while income vs. responsivenesss has a functional relationship that looks exponential (both the poor and the middle are markedly lower than the affluent).

where the poor tend to vote at the same rate as the affluent (Lupu and Castro 2022, Table 1; also Kasara and Suryanarayan 2015).

In sum, turnout inequality might explain some of the observed patterns of unequal responsivness. However, given the availble evidence, it seems that other explanations are needed to account for the dramatic differences in responisvenss that the literature has uncovered.

2.2.3 Campaign contributions

Unlike voting or running for office, which are in principle open to everyone, campaign contributions as a source of influence are limited by the size of one's wallet. Giving a $100,000 donation to a political candidate is inconceivable for most people. For a billionaire its a small matter. Absent effective regulation of political money, the potential to make use of political donatations is simply a function of how much money a person has available to spend.

There are two ways to think about how donations can influence policy. First, a donor might make an arrangement with an electoral candidate promising her a donation in return for a certain policy outcome if she wins office. (Morton and Cameron 1992, 88) describes this as "a straightforward quid pro quo of money for services: campaign contributions resemble bribes, although provision of services may be perfectly legal". While this certainly happens, the limitations of such an approach are obvious, as arrangements of these sort soon become at odds with the law.

The second way to think about donations involves no quid pro quo. Candidates and parties do not—because of donations—change their behaviour to reflect the interests of the donor; rather, in order the recieve the donation in the first place, the they would have to have policy programs that already reflects the interests of the donor. The most elaborate version of this argument is Thomas Ferguson's "Investment Theory of party competition" (Ferguson 1995). The Investment Theory is based on the assumption that parties need money for campaigning in order to get votes. Furthermore since "ordinary voters can't afford to invest much", parties are instead financed by "blocs of major investors who coalesce to advance candidates representing their interests" (27). Different blocs of investors might have somewhat different preferences—which means that different parties will cater to different blocks of investors—however, "on all issues affecting the vital interests that major investors have in common, no party competition will take place" (27).

But do parties really need money to get votes? In the US, research by Ferguson and his colleagues suggest that the link between campaign spending and votes is very strong. For the 2012 US Presidential Election, they find an almost linear relationship—with an R-squared statistic of 0.80—between a candidate's share of total spending and their vote share at the disctrict level (Ferguson, Jorgensen, and Chen 2013). The relationship was similar in magnitude for other elections going back to the 1980's (Ferguson, Jorgensen, and Chen 2019). Bekkouche and Cagé (2018) also showed that campaign spending was important for votes in French elections.

Knowing just how expensive US election campaigns have become over the years—the 2020 election coming in at a dizzying $14 billion total—campaign contributions appear to provide a convincing explanation of political inequality in the US. The problem however, is that the US patterns of unequal responsivness (e.g. Gilens 2012) look very similar to those found in European countries where private money does not play as big a role in elections, and parties largely rely on state subsidies (e.g. Germany (Elsässer, Hense, and Schäfer 2020) and the Netherlands (Schakel 2021)). This does not mean that private campaign contributions do not play a role in these coutnries, only that additional explanations are probably needed to give a full account of political inequality.

2.2.4 Lobbying

While campaign contributions seem less relevant in Europe than it does in the US, that is not the case with lobbying. Lobbying refers to the act of "influencing the formation of public policy, its passage through the legislature and its implementation, by means of contacting and pressurizing policymakers such as individual legislators, ministers and civil servants" (Bernhagen and Bräuninger 2005, 58–59; Richardson 2000). This is commonly done by individuals, interest groups, or private companies in order to promote their own policy prefernecces. Doing this obviosuly takes economic resources. Indeed, many studies in the literature has focused on the importance of resources as a determinant of successfull lobbying (Baumgartner et al. 2009; Binderkrantz, Christiansen, and Pedersen 2015; Stevens and De Bruycker 2020).

Yet there are few studies that have estimated the independent impact that interest groups have on changes in public policy. One of the major attempts to do so is actually that of Gilens (2012 Chapter 5) and Gilens and Page (2014). Gilens matched the policy positions of the 25 most powerful interest groups in the US with policy outcomes on nearly 2,000 policy proposals. In their multivarite analyses, incorporating different types of interest groups (as well as public opinion for average and affluent citizens), Gilens and Page (2014) conlude that "organized groups representing business interests have substantial independent impacts on U.S. government policy", while "mass-based interest groups have little or no independent influence".

2.2.5 Structural power of capital

Arguably the most profound way that economic inequality can lead to unequal influence is through the structural power of capital (Przeworski and Wallerstein 1988). Like any other actor, business will often lobby government to protect their interests. However, the "structural power" argument holds that capital owners can influence government without any active effort to do so. Because capital owners take decisions on a regular basis that can make or break the economy, politicians are strongly incentivized to pay attention to their interests. Failing to do so can lead to low levels of investment, stagnation, unemployment, and crisis. Vote-seeking politicians are doubly incentiviced since a bad economy will also hamper their chances of re-election. This argument is eloquently elobaroted by Fred Block (2021), who argues that state managers are constrained in their decision making by the need to maintain “business confidence”. Block writes:

> In a capitalist economy, the level of economic activity is largely determined by the private investment decisions of capitalists. This means that capitalists, in their collective role as investors, have a veto over state policies in that their failure to invest at adequate levels can create major political problems for the state managers.

Not only can capital owners reduce or pause domestic investment if public policy is not to their liking, they might also move production abroad. Numerous scholars have argued that a globalized economy with limited capital controls puts additional constraints on goverment’s ability to implement policies that go against the interests of capital (Rodrik 2011; Streeck 2016; Piketty 2014).

While there has been much theorizing about the structural power of capital, strong empirical evidence has been difficult to obtain (see Culpepper (2015)). Some take the paradox of redistribution—that large economic inequalities persist over time in formally democratic countries—as suggestive evidence of capital interests undermining government’s ability to redistribute (Bernhagen and Bräuninger 2005). More direct evidence is provided by Sattler (2013) who shows that stock markets “drop considerably after the election of a left government and increase after the election of a right government” in cases where there are few political contraints on the executive (i.e. checks and balances). There are also some interesting qualitative case studies about the 2008 Global Financial Crisis. Culpepper and Reinke (2014) argue that the UK and France failed to implement their preferred banking regulation because of the "strategic exercise of structural power" by domestic banks. Young, Banerjee, and Schwartz (2018) argue that US investors went on a "capital strike" in the aftermath of the financial crisis in an effort to kill any major attempt at tightening financial regulation.

What is special about the structal power of capital as a mechanism for political inequality is its general applicability to most (if not all) Western countries. The fact that wealthy investors make economic decisions that have far reaching consequences is not an American phenonomon. It is an integral part of all capitalist economies. Nevertheless, we should be careful in thinking deterministically about this mechanism. As highlighted by Hacker and Pierson (2002), capital faces varying constraints across different contexts, meaning that the importance of structural power in determining the distribution of influence will likely vary as well. Indeed, the sheer variation in welfare state regimes and tax policies across Europe and North America would suggest that there are other factors at play besides the structural power of capital.

2.2.6 Control over media

The previous five mechanisms all describe ways in which people with money might increase the chance that policy will follow their preference, as opposed to other peoples' preferences. The last mechanism, control over media, differs from the others in that the main goal here is to influence policy indirectly, by bringing other peoples' preferences closer to one's own preference. The underlying expectation is that if more people share one's policy stance, this will increase the chance of it having an effect on policy.

Control over media can be a source of political inequality between economic groups to the degree to which media ownership is for sale. In most countries privately owned media constitute a large share of the total media landscape (Djankov et al. 2003). In their "propaganda model" of media ownership, Herman and Chomsky (2010) argue that private media essentially serve the interests of the owners and the advertisers who finance them. They analyze multiple case studies of US media to substantiate this claim. Gilens and Hertzman (2000) provide further evidence. They looked at the effects of media ownership on reporting of the 1996 Telecommunications Act in the US and found "substantial differences in how newspapers reported ... depending on the financial interests of their corporate owners". More recently, Grossman, Margalit, and Mitts (2022) showed that billionaire Sheldon Adelson's strategy of launching a free nationwide newspaper in Israel "exerted significant electoral influence, primarily benefitting Netanyahu and his Likud party". Thus, there is some evidence to support Herman and Chomsky (2010)'s notion that private media can proliferate the policy preferences of their owners, and potentially "manufacture consent" for the policies that they favor.

2.3 The gender dimension

A possible side-effect of the unequal representation of economic groups is the unequal representation of men and women. Some studies have found that women's political preferences tend to be worse represented than those of men (e.g. Homola 2019; Reher 2018). To be sure, there might be many reasons for this that have little to with economic inequality—such as a patriarchical culture (Gilligan and Snider 2018). Yet studies of intersectionality have found that one type of inequality can exacerbate another type of inequality when the two overlap (Severs, Celis, and Erzeel 2016; Strolovitch 2008). There seems to be ample opportunity for inequality in influence along the economic dimension to exacerbate inequality in influence along the gender dimension, since we know that economic elites predominantly consist of men (Atkinson, Casarico, and Voitchovsky 2018).

Overrepresentation of men among economic elites would imply that—all else being

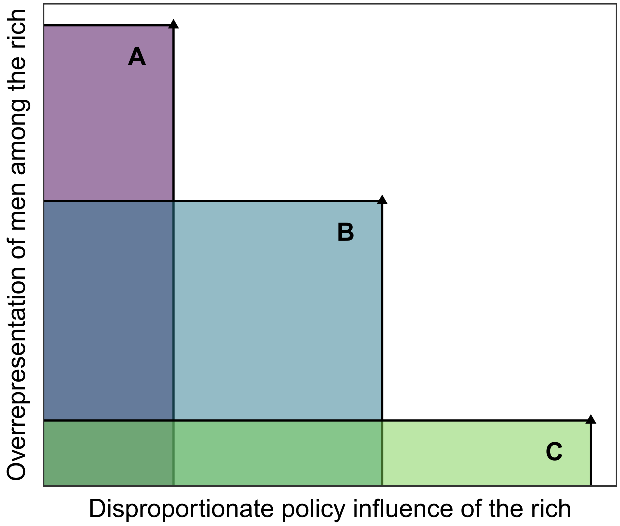

Figure 2: How disproportionate influence of the rich implies disproportionate influence of men. *Note:* The graph is a theoretical model where the disproportionate influence of men is calculated as (disporportionate influence of the rich) x (overrepresentation of men among the rich). This has the geometric property as the area of a rectangle. Out of the three scenarios (A, B, C), men have most influence in scenario B, where the rich have strong influence and there is substantial overrepresentation of men among the rich.

equal—more power to the rich means more power to men. This point is illustrated in Figure 2. Figure 2 presents the the influence of men as a function of (1) men's presence among the rich, and (2) the influence of the rich. Both terms increase the disproportionate influence of men. However, men's presence among the rich is useless if the rich have no disproportionate influence. Likewise, the disproportionate influence of the rich is useless has no bearing on gender inequality if there is gender parity among the rich. It is the combination of the two factor that exacerbates political inequality between the genders.

3 The case of Norway

As we have seen in the literature review, political inequality appears to be a highly generalizable pattern across Western societies. Previous studies have with very few exceptions found substantial differences in responsiveness across income groups, with strong bias in favor of the well-off. Indeed, Bartels (2017) notes that his unpublished manuscript from 2016 on the responsiveness of migration flows to public opinion is "the *only* study", as far as he knows, "providing positive evidence of egalitarian responsiveness to the preferences of affluent and poor people" (10, emphasis in original). Yet, the most promising route to try to learn how political inequality can be tackled, is probably to keep looking for exceptions to the rule. Enter Norway.

Norway provides a least likely case for finding political inequality based on economic differences. At the same time, Norway is still a capitalist liberal democracy, and thus has the same institutional bedrock as other Western countries. This makes it an interesting case because it might give us an indication as to whether something resembling political equality is possible under these initial conditions. Thus, in this section, I will give an overview of the potential for political inequality based on economic differences in the Norwegian case.

In any country, the potential for political inequality based on economic differences can be thought of as a function of three factors. First, it depends on the level of economic inequality. If there are small differences between rich and poor, then the resource advantage enjoyed by the rich in the political sphere is lower than it would be under large inequality. Second, it depends on the extent to which money can be translated into political influence. Differences in economic resources cannot lead to political inequality unless those resources can somehow be translated into political clout. Third, it depend on the presence of countervailing sources of influence. Even under significant economic inequality and ample possibilities of turning this into influence, other actors (such as unions) might serve as a counterweight that evens out the distribution of power. Thus, in order to illuminate the potential for political inequality based on economic differences in Norway, I will first discuss its level of economic inequality, then I will look at the possibilities for translating money into influence, and the countervailing forces.

3.1 Economic inequality

Compared to most other countries, Norway has low levels of economic inequality in terms of income and wealth. Figure 2 shows both income and wealth inequality for 174 countries measured as the share of total income/wealth held by the richest 10 percent. On average across the world, the richest 10 percent get 45% of all income and control 62% of all wealth. Meanwhile in Norway, the richest 10 percent have 30% of all income and 52% of all wealth. The only two countries that have lower inequality than Norway both in terms of income and wealth are the Netherlands and Slovakia.

We should be mindful that Figure 2 is based on *pre-tax* income and wealth. If we on the other hand look at inequality after the operation of taxes and transfers, inequality in Norway is even lower: Using disposable income (which takes into account all taxes and social benefits in cash) the share of the richest 10 percent drops to 24%. And if we also include the value of in-kind benefits (e.g. public health care and education), the share drops

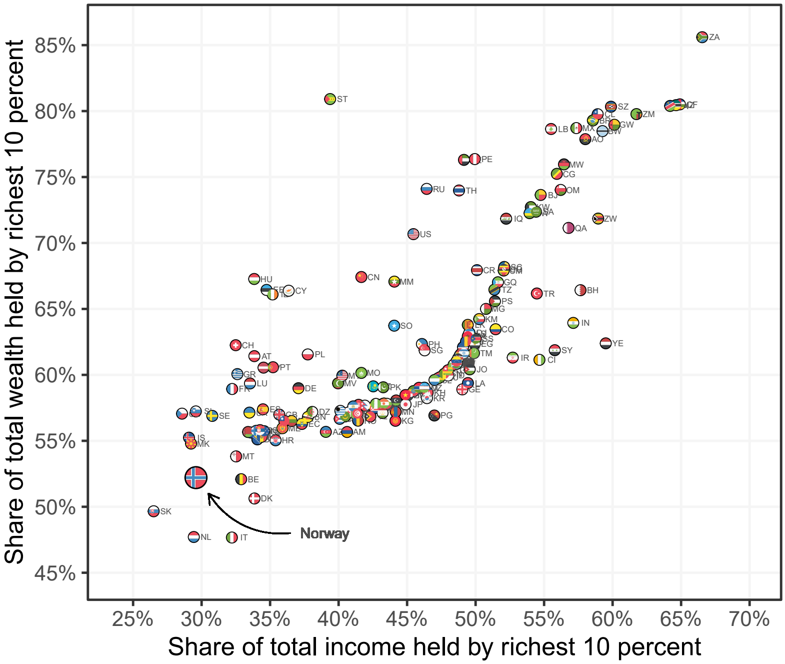

Figure 3: Income and wealth inequality in Norway and 173 other countries in 2020. Data: World Inequality Database.

further down to 22%. For comparison, the bottom 50% on the income scale receive 25% of all pre-tax income, 31% after taxes and cash transfers and accounted for, and 34% after adding in-kind benefits.[22] Unsurprisingly, this shows that the tax and transfers system has the effect of reducing the income share of the top 10 percent, and increasing the share for the bottom 50 percent.

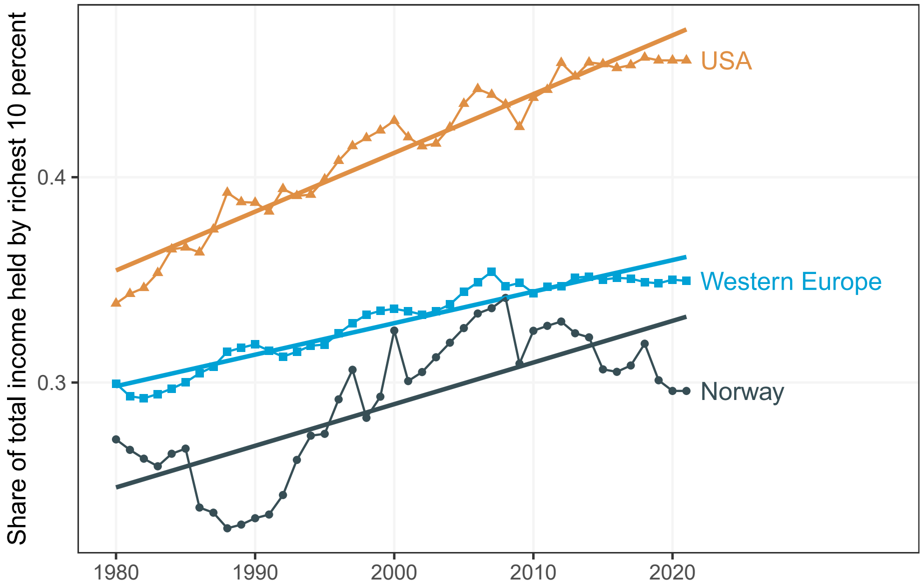

Figure 4: Income inequality over time in Norway, the United States, and Western Europe. Fitted lines estimated with OLS. *Data*: World Inequality Database.

Even though Norway has comparatively low inequality, it is still far from equal. This is especially obvious when looking at the distribution of wealth. Consider for example this simple observation in the latest wealth inequality data from the World Inequality Database: In 2021, *in every single country for which there is data (174 countries), the top 5% owns more net wealth than the bottom 80%.* In other words, in every country, an average person

[22] Accessed 19 July 2022, https://wid.world/country/norway/

in the top 5% owns at least 16 times as much wealth as an average person in the bottom 80%. For Norway the ratio is 20.7.[23]

Moreover, inequality in Norway has been increasing over the past decades (Aaberge et al. 2018). This is apparent from Figure 3. Figure 3 shows that although there is some year-to-year fluctuation in the (pre-tax) income share of the top 10 percent, the general trend since 1980 is rising inequality. The same trend can be seen for Western Europe and—to an even greater extent—for the United States.

3.2 Mechanisms of political inequality

With regards to descriptive representation, Norway has sometimes been characterized as having comparatively high shares of MPs with working class background (Hartmann 2010). For example, Gulbrandsen (2018) finds that in 2015 33% of Norwegian MPs had working class background, compared to 39% in 1967 (58, 60). Yet working class "background" refers to upbringing and not the class of the MP herself. If we on the other hand count MPs who previously had a working class occupation, the share is much smaller: Around 5% from the 1960's to the early 2000's (Narud and Valen 2008, Figure 4). So to the degree to which the share of workers in parliament matter (Carnes 2013), the underrepresentation of workers in Norway could serve as a mechanism for political inequality.

Similarly, like in most countries, participation is stratified by income and wealth. Kasara and Suryanarayan (2015, 614) report that turnout inequality in Norway between the top wealth quintile and bottom wealth quintile is actually fairly high in global perspective: The top quintile turns out to vote somewhere between 1.17 and 1.34 times the rate of the bottom quintile. Recall however, the discussion from Section 2.2 highlighting the limitation

[23] In Norway, the top 5 percent owns 39.7% of total net wealth, while the bottom 80% owns 30.4%. Ratio calculation: 30.4/16 = 1.9; 39.3/1.9 = 20.864. Sources: Accessed 19 July 2022, https://wid.world/world/#shweal_p95p100_z/US;FR;DE;CN;ZA;GB;WO/2021/eu/k/p/yearly/s/false/27.2585/125/curve/false/country, and https://wid.world/world/#shweal_p0p80_z/US;FR;DE;CN;ZA;GB;WO/2021/eu/k/p/yearly/s/false/-3.7960000000000003/60/curve/false/country.

in turnout inequality as a mechanism for political inequality.

The possibilities for rich citizens to influence politics and policy via campaign contributions in Norway is certainly present, although the option is probably more limited than in most other places in the world. First, while Norway has no limits on the size of contributions to political parties nor limits on how much parties can spend, it maintains a general ban on political advertisement on television.[24] This is likely to be consequential. In the US, where political finance seems to play a major role in elections (Ferguson 1995), television advertisement is the major campaign expenditure for candidates (Ridout et al. 2012). There is also strong evidence suggesting that it is an effective way of persuading voters (Shaw 1999; Huber, Arceneaux, and Huber 2007). Second, the importance of private funding in Norway is limited by the strong public financial support that parties receive—constituting around 70 percent of party revenues. Public funding was introduced in 1970, before which membership fees constituted the main source of revenue for Norwegian parties (Falguera, Jones, and Ohman 2014, 214, 222, 224). Third, the aspect of countervailing forces is quite clear when it comes to campaign contribution. Figure 3 shows that labor organizations (unions) account for roughly half of all campaign contributions to political parties in Norway—more than individuals and corporations combined. Hence, if in the end campaign contributions affect policy outcomes, then policy will not only be shaped by wealthy donors, but to a substantial degree by unions.

Nonetheless, the role of money in Norwegian elections is changing, arguably in ways favorable to anyone seeking to influence politics via donations. As shown in Figure 3, the total amount of donations to political parties in the 2021 parliamentary election was 135% higher than in the 2013 parliamentary election (inflation was only 20% over the same period).[25] Moreover, parties are increasingly using social media (such as Facebook) for advertisement,

[24] Accessed 20 July 2022, https://www.idea.int/data-tools/country-view/228/55

[25] Accessed 5 July 2022, https://www.norges-bank.no/tema/Statistikk/Priskalkulator/.

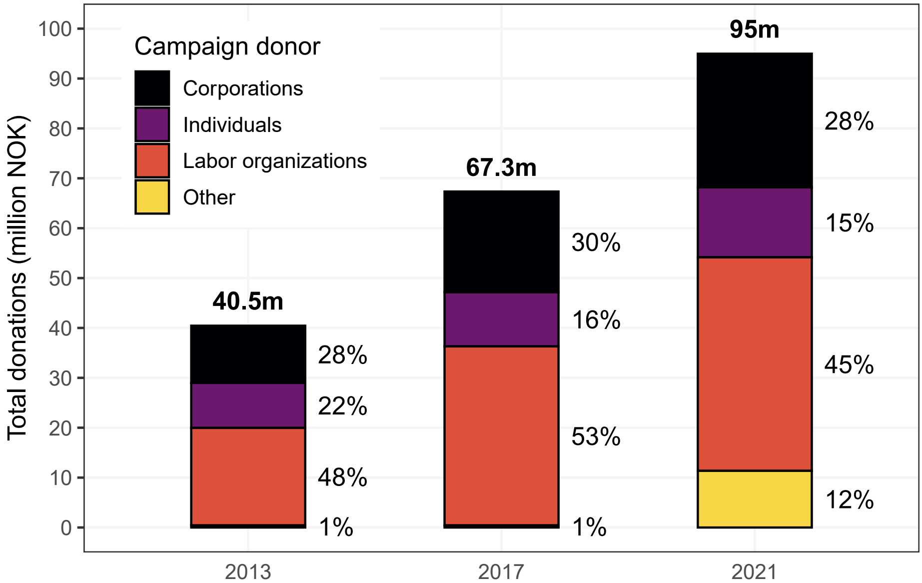

Figure 5: Compaign contributions to Norwegian parties before the last three parliamentary elections. *Data*: Statistics Norway.

which is not subject to the same ban as television advertisement.[26] Finally, the last election (2021) saw controversial instances of dark money during the campaign, when an association that did not disclose its donors spent substantial amounts on campaigning, and also donated to several parties.[27]

Little is known about the impact that lobbying has on public policy in Norway. What we do know however is that lobbying in Norway is fairly unregulated. Indeed, Espeli (1999) notes that the Norwegian Storting (the parliament) has "rarely if ever laid any real obstacles in the way of lobbying", and has only regulated the most elementary aspects of it such as "proposal deadlines" (273). Norway also does not have a lobby register (in contrast to the United States and the EU), meaning that there is limited transparency in terms of who lobbies and how much.[28] Furthermore, we know that lobbying has become increasingly professionalized with public relations firms selling advice and services with the aim of helping their clients influence government (Allern 2011). At the same time, lobbying is being used not just by wealthy special interests, but also by unions—partially as a response to the decline of the corporatist channel of decision making (Rommetvedt et al. 2013; Grødem and Hippe 2019). Hence, as with campaign contributions, there might be significant countervailing forces challenging the influence of the rich in the lobbying arena.

When it comes to the structural power of capital, the first thing to note is that Norway has a capitalist economy just like other Western countries. Hence, the Norwegian economy hinges on private investors having sufficient confidence to invest. There is little reason to doubt that maintaining such confidence features into the evaluations of state managers when deciding what to do and what not to do in terms of policy reform. In the Norwegian public

[26] Accessed 20 July 2022, https://www.nrk.no/tromsogfinnmark/sa-mye-har-arbeiderpartiet__-senterpartiet__-hoyre-og-de-andre-store-brukt-pa-valgkamp-hos-facebook-1.15638270.

[27] Accessed 20 July 2022, https://www.vg.no/nyheter/innenriks/i/47ElK6/omstridt-forening-har-gitt-11-million-til-de-borgerlige-har-ikke-sjekket-hvor-pengene-kommer-fra.

[28] Proposals to set up a lobby register has been raised several times. The latest one was rejected by the Presidium of the Storting in May 2022. Accessed 20 July 2022, https://www.nrk.no/nyheter/nei-til-lobbyregister-pa-stortinget-1.15972901

debate, it is often referred to as creating good "framework conditions" and "competitiveness" for the business community. For example, in 2016, the Finance Minister commented on a recent trend of increasing unemployment the following way:

> the prerequisites for [new jobs] must be that someone dares to invest in new jobs. ... That revolves around both a competitive tax system that makes companies invest here, and not in our neighboring countries, and about framework conditions that make it attractive to be in Norway and employ more people. Therefore, the government is using a wide range of instruments to make it happen, and we have no intention of giving up until the [unemployment] trend turns.[29]

Moreover, there has regularly been cases of major investors trying to put pressure on government to either change existing policies, or to abandon plans for future one.[30]

At the same time, Norway might be less vulnerable to a loss of private investment than other countries due to its substantial public capital stock. For example, the Norwegian government owns about 1/3 of the stocks on the Oslo stock exchange (Folketrygdfondet 2017), and State Owned Enterprises account for almost half the value of the country's top ten companies. This is a very large share in comparative perspective: in the US and Germany for instance, the share is zero, while Sweden is at 8 percent (Kowalski et al. 2013, 6, 22). And while the typical Western state barely owns any of its country's wealth (or even has negative net wealth as in the case of the US and the UK), the Norwegian government owns 60

[29] St Nr 29 Møte 68-70, page 2805 (accessed 21 July 2022, https://www.stortinget.no/no/Saker-og-publikasjoner/Publikasjoner/Referater/Stortinget/2015-2016/160427/?utm_medium=rss&utm_source=www.stortinget.no&utm_campaign=Referater%20fra%20Stortinget).

[30] Norway's richest person, John Fredriksen, declared in 2010 that he would move his shipping business abroad because of "uncertainty" about the "framework conditions" in Norway (accessed 21 July 2022, https://www.nettavisen.no/artikkel/blir-syk-av-norge-flagger-ut/s/12-95-2967968). Also, during the 2021 election campaign, the sixth richest person in Norway, Gustav Witzøe, threatened to move out of the country if a new government where to raise the wealth tax (accessed 21 July 2022, https://e24.no/naeringsliv/i/rW7wOm/laksemilliardaer-gustav-witzoee-knallhardt-ut-mot-formuesskatt).

percent of total wealth (Alvaredo et al. 2018). This is partially due to the oil fund, which is the world's largest sovereign wealth fund, valued at over one trillion USD. It came in handy during the financial crisis in 2009. While in the US, government was pleading with investors to increase investment (Young, Banerjee, and Schwartz 2018), the Norwegian government took matters into its own hands as "the fund gave fiscal room to large-scale expansionary policies that mitigated any serious unemployment impact" (Mehlum, Moene, and Torvik 2012, 180).

In sum, Norway has some of the lowest levels of economic inequality in the world. Yet *comparatively low* is not the same as *low*. Like in all countries, there are large differences between rich and poor, and inequality seems to be increasing over time. Furthermore, there are several possibilities for translating money into political influence, although they are probably more limited and subject to stronger countervailing forces than in other countries. These insights suggest two things: (1) Norway might plausibly serve as a least likely case for political inequality based on economic differences, and (2) despite being a least likely case there might still be ample room for differences in influence to arise.

4 Methods

It almost goes without saying that when it comes to complex social phenomena, like the relationship between economic inequality and political power, there will always be many possible ways to go about studying it. Indeed, if we are to gain as complete an understanding of this phenomenon as possible, we probably have to use a variety of approaches. All methods have their limitations, so as a research field, our best bet will probably be to exploit the comparative advantages of every reasonable method.

For the lion's share of this thesis (Articles 1 and 3), I study the relationship between economic inequality and political power by estimating the extent to which changes in public policy are responsive to the preferences of different groups of citizens (e.g. affluent vs. poor; high educated vs. low educated; men vs. women). In so doing, I utilize a dataset that I—with the help of a research assistant—built during the course of the first year of my PhD project.[31] The dataset was modeled after Gilens (2012)'s dataset for the United States, and consists of 603 policy proposals that the Norwegian public have been asked whether they support or oppose—through representative public opinion samples—at some point between 1966 and 2014. For each proposal, the data set contains survey data on the level of support that the proposal enjoyed among different sectors of the public, as well information on whether or not the proposal was adopted by government within four years after the question was put to the public. Details on the data collection procedure can be found in Articles 1 and 2 and their associated appendices. The dataset is publicly available online at Harvard Dataverse (https://doi.org/10.7910/DVN/ISBPIH). Here one can also find all the computer code files that were used to construct the dataset.

Perhaps the biggest comparative advantages of the approach used in Articles 1 and 3 is the large number of specific policy proposals in the dataset. The specificity of the proposals means that public opinion and policy outcomes are measured for actual policy decisions. The often-used alternative, namely aggregate scales that for example capture the left-right ideological positioning of the electorate (Giger, Rosset, and Bernauer 2012) or the conservativeness of the public "mood" (Erikson 2015) suffer from the fact that they are trying to proxy with one dimension a myriad of policy issues that often will not be reducible to such. A recent study provides empirical evidence that using left-right ideological scales to measure congruence can be "highly misleading" as "unequal representation of socio-economic groups is much more muted" than if using issues (Schakel and Hakhverdian 2018, 441, 454). At the end of the day, public policy comes down to concrete decisions made by policy-makers.

[31] I was so lucky as to get funding by the Meltzer Reserach Fund to hire a research assistant. I was even luckier to hire Martin Instebø Jamne, who did a huge amount of coding work in the limited time that he was part of the project.

Therefore, the most direct way we can estimate the extent to which policy follows public opinion is to capture both for a series of specific proposals.

Furthermore, the broad coverage of topics in the dataset means that my conclusions are likely to capture general trends in how the system works—as opposed to possible idiosyncrasies of a particular policy area. This coverage is the result of the selection criteria for the survey items: any policy proposal about national government policy was included so long as it was asked about in a representative survey, was formulated specifically enough to subsequently determine whether it was adopted by government, was asked unconditionally, and had a bipolar support-oppose answer scale (these are the same criteria used by (Gilens 2012, 57–58). Hence, the proposals span all major policy issues—including questions about the EU, refugees, foreign aid, abortion, the wine monopoly, gay rights, taxes, the oil fund, farm subsidies, waters plants, and oil drilling; to name just a few. Now, some topics are obviously asked about more frequently than others, and the same questions are sometimes repeated several times. For the survey items extracted from commercial polls (72% of the dataset) this is probably a good thing, since the frequency with which pollsters ask the same questions likely reflect the salience of the issue in public debate. This way, issues that where more salient are weighted more heavily in the data than issues that were less salient (Gilens 2012, 58). The same logical, however, is unlikely to apply to academically run surveys (details in Article 1 Appendix D).

The methods used in Article 2 are different than the two other Articles. While Articles 1 and 3 study responsiveness—that is, changes in public policy as a function of public preferences—Article 2 mainly looks at policy deviation (distance between public opinion and public policy at a cross section in time. Article 2 looks at this question for the particular case of the income tax system. The comparative advantage of this approach is that if policy and preferences are measured on comparable scales (tax rates in my case), it can tell us precisely how much public policy in a particular area deviates from public opinion. This is not information that we can get when studying responsiveness. By definition responsiveness is about changes at the margins of a policy (e.g. increasing or decreasing a tax rate by a certain amount). One can easily imagine a scenario in which marginal changes strongly reflect public policy, but where the general level of the policy is way off from where people want it to be. This is the main argument made by Simonovits, Guess, and Nagler (2019).

Throughout the thesis, I use survey respondents' self-reported income to determine their economic position, usually distinguishing between respondents at the 10th, 50th, and 90th income percentile. This approach is not uncontroversial and thus deserves some attention. First, the choice of using income rather than wealth is largely forced. It is very rare for survey organizations to ask respondents about their wealth (at least the survey organizations that gathered the original data for my dataset), so using wealth to determine economic position is not really an option.[32] However, in the context of studying how economic inequality affects policy, wealth is probably more relevant than income, at least to the extent that investor decisions matter as a way of influencing government (as previously discussed). Nonetheless, income and wealth are of course correlated, meaning that we capture part of the wealth effect when using income.[33] The issue however, is that wealth tends to be considerably more unevenly distributed than income. Therefore, using income as a replacement for wealth means that I am underestimating economic inequality and probably also the extent of unequal responsiveness.

Another reason why I likely underestimate unequal responsiveness is that I am only able to measure the policy preferences of citizens with modestly high incomes. All standard population surveys—using samples of around a thousand individuals—have the limitation that they rarely if ever capture the truly wealthy. The highest point on the income scale

[32]Other scholars have also noted the regrettable tendency to neglect wealth in survey research (e.g. Piketty 2018).

[33]In the case of Norway, registry data from microdata.no show that gross income percentile and gross wealth percentile are correlated at r=0.54

for which I am able to reliable estimate policy responsiveness is the 90th income percentile. According to the World Inequality Database, the 90th income percentile in Norway in 2018 had a gross income of 1.3 million NOK (or roughly $150,000).[34] Clearly, that amount does not warrant use of the term “rich”. Like Gilens (2012), I instead consider people at the 90th percentile to be fairly “affluent”. Policy responsiveness to the affluent gives us an approximation of that same quantity for the rich. Nevertheless, it seems almost unthinkable that truly rich individuals—some of whom in Norway have incomes above 200 million NOK (and wealth stocks that are obviously much larger)—do not enjoy more political influence than the affluent. Therefore, the unequal responsiveness to different income groups that I uncover in this thesis should be viewed as conservative estimates.

Moreover, the choice of studying public opinion when trying to assess political inequality is not unproblematic. Public opinion arguably constitutes the best available measure of popular preferences. Still, using it for assessing influence means that we are ignoring any form of political inequality that runs indirectly through the shaping of public opinion. As discussed in section 2.2.6, one mechanism for unequal influence is that people with sufficient resources can buy media ownership to proliferate their beliefs and opinions. Taking public opinion at face value essentially means that this way of influencing policy is not taken into account. This possibly constitutes yet another way that my methods of assessing unequal influence underestimate its true extent.

Finally, it is important to highlight the challenges associated with causal identification when studying the relationship between public opinion and public policy. Just because public policy changes are correlated with the preferences of a specific group of citizens does not mean that that group is in fact causing policy to change. Like with all studies using observational data, the hurdles of inferring causality from correlation come in two main

[34]According to the same source, the 50th income percentile had an income of 630,000 NOK ($76,000) and the 10th income percentile 130,000 NOK ($16,000) (https://wid.world/country/norway/, accessed 7 July 2022.)

categories: Confounders and reversed causality. A major type of confounding in studies of unequal policy influence is the preferences of other groups of citizens besides the group whose influence is being estimated. As I discuss in all three thesis articles, a simple bivariate relationship between Group A's preferences and public policy outcomes can potentially be explained by Group A's preferences being correlated with those of Group B, who is the only one with a causal influence on policy.

A standard way of dealing with (observed) confounders is to use multivariate regression. This is the approach I take in Article 2, which uses individual level data. However, the special nature of the data I use in Articles 1 and 3 means that multivariate regression is not a straithforward option.[35] Instead I use a number of complementary approaches to disentangle the preferences of different groups and estimate the independent association between their preferences and policy outcomes.

In terms of reversed causality, one could imagine that an association between opinions and policy could be explained not by opinions affecting policy, but by policy affecting opinions (details in Article 1). However, there are aspects of my research design that at least partially protect against this possibility. In Articles 1 and 3, public opinion is always meaasured *before* the policy proposal has been decided on. Hence, citizens cannot know—at least not with certainty—what the policy outcome will be. To be sure, there is the theoretical possibility that citizens tend to prefer the current policy, meanwhile policy has a status quo bias. This could give rise to an non-causal positive association between public opinion and public policy. However, in the data, while there certainly seems to be a status quo bias in policy (with only 25% of proposed changes adopted), public opinion does not seem to markedely favor the stutus quo (average support for policy change is 47%). Additionally, as discussed in Articles 1 and 3, some of the observed heterogeneity in the relationship between opinions and policy

[35] This has to do with correlated measurement error in the preference estimates of diffserent sub-groups. See details in Articles 1 and 3

is not easily reconsilable with the idea of policy affecting opinions.

5 Conclusion

A core principle of democracy is that citizens have equal opportunity to influence government. There has probably never existed a country that has truly achieved that goal. Its quite possible that some inequality in representation will always exist. Yet differences of degree matter. Small inequalities in political influence might be reconcilable with an otherwise democratic system. Large inequalities, on the other hand, undermine the very essence of democracy.

This thesis set out to investigate the extent to which people with different economic resources have unequal influence on public policy. And it did so in Norway—a Scandinavian social democracy, widely considered one of the most democratic countries in the world. The findings from this thesis suggest that even in Norway policymakers usually respond much more strongly to the preferences of affluent citizens than to the preferences of the middle-class or the poor. This finding is in a way surprising; not that there exists *some* differences between rich and poor also in Norway, but that the inequalities are so large (see Figure 1). It would seem that Norwegian social democracy has not managed to prevent economic inequality from translating into political inequality.

At the same time, there is an important exception to this overall pattern. In the area of economic policy, responsiveness to affluent and poor has usually been relatively equal—possibly because of the power of unions and their focus on economic issues. Nevertheless, also in this area, major policies sometimes appear seriously detached from public opinion, favoring the interests of the rich—as shown in Article 2 with respect to the income tax system.

Furthermore, my findings suggest that education might be even more important than income when it comes to policy responsiveness. This raises an interesting normative question of whether educational differences in political influence is equally problematic for democracy as economic differences in political influence. On one side, it might be tempting to interpret educational differences as less problematic. After all, education is commonly assumed to reflect competency, a desired trait in leaders. Also, in a system with freely available higher education, one could argue that everyone has—at least on paper—the same opportunity to climb the educational hierarchy. On the other hand, education is not a neutral form of skill improvement. Higher educated individuals have substantially different policy preferences and priorities than lower educated individuals. This means that "rule by the educated" will introduce biases in policy making (though perhaps different ones than under "rule by the rich"). In practice there are also large inequalities in which kinds of people are likely to actually attend higher education—even when it is freely available (Bonneau and Grobon 2022; Bütikofer, Risa, and Salvanes 2019). Thus, education constitutes an important source of political inequality that should be studied further in the future.

The thesis also shows how economic inequalities in responsiveness can be interlinked with gender-differences in responsiveness. Article 3 shows that over the past 50 years, public policy in Norway has responded more to the preferences of men than women. Yet this inequality is reduced substantially when accounting for economic differences. This suggests that income inequality between men and women might have powerful consequences for their ability to voice their opinions in the political arena. The good news is that despite of this link between income and gender, gender-inequality in responsiveness has been gradually reduced over time as the share of women in parliament has increased. Hence descriptive representation might serve to counteract political inequality between men and women—even in the face of considerable income differences.

All in all, despite its status as one of the world's most well-functioning democracies, Norway still seems to be a long way from realizing the democratic ideal of poltical equality.

To be sure, the link between money and politics does not appear to be as strong in Norway as in the United States. Nevertheless, the pattern that emerges in most of the evidence presented in this thesis is one of inequality—whether it be inequality between affluent and poor, high and low educated, or (at least in the past) men and women. Public policy in the past 50 years has not responded equally to all citizens—far from it. Most of the time it has clearly favored the preferences of affluent, well-educated men. Such systematic inequalities in whom government listens to are problematic for democracy. The essence of democracy is some sort of "rule by the many". Yet the reality looks a lot more like "rule by the few"—even in a country like Norway.

The research literature on unequal responsiveness is still at an early stage. Thus far, most of the research has been focused on documenting the existence of unequal responsiveness in a handfull of rich countries—now also including Norway. There are many useful paths that scholars could follow in future research. I shall limit myself to suggesting three. First, existing research has usually looked at income differences in responsiveness in isolation. However, as shown in this thesis, inequalities along other dimensions (e.g. education and gender) are often important, not just in their own rights, but in order to fully understand the relationship between economic and political inequality. Future research should examine unequal responsiveness in a multidimensional way, preferably estimating inequality along multiple dimensions in the same model. Second, we need data for more countries. Only by buidling large cross-national comparative databases of public opinion and public policy can we assess which countries and regions are doing better and worse when it comes to political inequality. This ties into my final point: understanding the causes of political inequality. The widespread prevalence of unequal responsiveness across different countries makes it hard to tease out what is causing it. We have many suspected mechanisms (see section 2.2), but we don't know the extent to which they actually account for the observed patterns of unequal responsiveness. To find that out, we need more data and better methods.

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Article 1

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Letter
Affluence and Influence in a Social Democracy

RUBEN B. MATHISEN *University of Bergen, Norway*

Research from the United States and Europe suggests that affluent citizens enjoy considerably more policy influence than do average citizens and the poor. I examine the extent of unequal policy responsiveness in one of the countries that have gone farthest in reducing economic inequality and restricting money in politics: Norway. I use an original dataset on public opinion and public policy containing 603 specific issues over five decades (1966–2014). The results show that although policy is certainly skewed toward the preferences of the privileged, Norway stands out among previously studied cases for two reasons: (1) The preferences of the poor seem to have some sway on economic issues and (2) not all affluent citizens get their way: educational attainment appears to be the more important determinant. The Norwegian case suggests that influence need not be as dependent upon affluence as in the United States.

"[C]ountries in Scandinavia, like Denmark, Norway, Sweden, they are very democratic countries, obviously."
—Bernie Sanders[1]

INTRODUCTION

A defining feature of democracy is that citizens, considered as political equals, have influence over policy making. In contrast to this ideal, there is mounting evidence from the United States suggesting that the rich enjoy disproportionately large policy influence at the expense of the average citizen (Bartels 2016; Erikson 2015; Gilens 2012). Research on this topic for the rest of the world remains sparse. There are some studies that have looked at differential responsiveness in Western Europe (Elsässer, Hense, and Schäfer 2017; Peters and Ensink 2015; Rosset 2016). They tend to point in the same direction as the American studies, but they are usually not directly comparable to them. If we were to measure political inequality in exactly the same way as has been done in the most prominent U.S. studies (Gilens 2012; Gilens and Page 2014), but in a social democracy that has come far in equalizing opportunities, economic differences, and limiting the role of money in politics, what would we find? Would the poor and middle class have more influence than in the US and Western Europe?

Ruben B. Mathisen, PhD Candidate, Department of Comparative Politics, University of Bergen, Norway, Ruben.Mathisen@uib.no.

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[1] Interview on ABC, May 3, 2015, https://abcnews.go.com/ThisWeek/video/sen-bernie-sanders-us-scandinavia-30770990.

Academics disagree about the roots of political inequality and, consequently, how it can be tackled. Some argue that institutional reform such as tightening the rules on electoral campaign finance (Page and Gilens 2020), more descriptive representation in parliament (Carnes 2013), and redistributing income and wealth (Piketty 2020), should lead to a more even dispersion of political power. Others are not that optimistic. Unequal responsiveness could be a systemic problem of capitalism or, worse, a direct consequence of any distribution of economic resources that is not equal (Przeworski 2012). The debate is not new. In fact it was salient in the early twentieth century, when the socialist movement split into reformists who believed that "the people" could successfully voice their opinions through electoral politics, and revolutionaries who believed it to be a lost cause. The reformists developed social democracy as a compromise intended to ensure workers' control over politics, within a capitalist system (Przeworski 1986). Whether it succeeded is an open question.

In this research letter, I apply the methodology from one of the flagship studies of political inequality in the US, *Affluence and Influence* (Gilens 2012), to a very different case—namely Norway. Norway is a prime example of social democracy, with low levels of income inequality, strict regulations of campaign spending, strong unions, and a generous welfare state. If social democracy is capable of curtailing the disproportionate influence of the affluent, then we should see it in this case. I constructed an original dataset of Norwegian public opinion on 603 specific policy proposals at the national level from representative surveys between 1966 and 2014. Then, for each proposal, I estimated the level of support among different income percentiles and matched those data with information on which of the proposals were subsequently adopted by government.

I find that although public policy in Norway is clearly tilted toward the preferences of high-income citizens (Figure 1), the affluent do not appear to enjoy the kind of exclusive influence that characterizes the American case. First, within economic issues the preferences of both the poor and the affluent seem to matter (Figure 2). Second, the opinions of the highly educated are strongly related to policy regardless of their income (Figure 3). These results suggest a weaker link between money and politics in Norway than in the US.

CASE STUDY: NORWAY

Norway is commonly perceived to be a particularly well-functioning democracy, with little room for the rich to exert disproportionate political influence (EIU 2020). There are several plausible reasons for this.

First, Norway is widely considered a social democracy in the comparative welfare state literature (Esping-Andersen 1990; Powell, Yörük, and Bargu 2020). As such, it has generous and universal welfare schemes and high levels of redistribution (Hicks 1999). In combination with strong unions and centralized wage bargaining that contribute to a compressed wage structure (Allern, Aylott, and Christiansen 2007; Pontusson, Rueda, and Way 2002), the resulting level of income inequality is among the lowest in the world.[2] Low inequality implies less of a resource advantage for the affluent to be used (in whichever way possible) to influence politics. Additionally, it has been argued that the universality of the social democratic welfare schemes generates legitimacy and support across classes (Rothstein 2005). That means that such policies, which are usually strongly favored by the poor, have a better chance at being maintained or even expanded by government (Brooks and Manza 2008). Thus, the process might have a self-reinforcing component by which new policy gains for the poor are more easily achieved over time.

Second, in contrast to the US, where political candidates depend on large donations from private individuals and organizations to run effective election campaigns (Ferguson 1995), parties in Norway get about two-thirds of their financing from public subsidies.[3] The country also maintains a general ban on political advertisement on television, which is the major campaign expenditure in the US (Ridout et al. 2012).

Third, Norway has historically had strong trade unions. In the literature, unions have been found to be pivotal in shaping social welfare policy in the interest of organized workers (Esping-Andersen 1990). Norwegian unions have influenced economic and social policy through pressure in the corporate channel but also through their close ties with the Norwegian Labor Party (Allern, Aylott, and Christiansen 2007). In the context of policy responsiveness, this could serve as a countervailing force to the influence of the wealthy.

Fourth, Norway's exceptional oil and gas resources have widened the spectrum of policy options available to government by allowing extra spending, usually amounting to around 5% of mainland GDP every year (Holden 2013). Potentially, this makes it easier to respond to a diverse set of popular preferences. To illustrate, Norway has been able to maintain generous welfare transfers while imposing lower tax rates than would otherwise be necessary (Holden 2013), presumably catering to the preferences of both the poor and the wealthy. Also, during economic crises, such as the Great Recession in 2008, the government has used oil money, rather than spending cuts or tax increases, to finance stimulus packages (Mjøset and Cappelen 2011).

Finally, the country's political class is not particularly rich. Although MP salaries surely are in the top third of the income distribution, the median wealth among MPs is in fact zero, according to tax data.[4] Therefore, it is unlikely that policy is biased toward the rich because politicians are rich themselves (Carnes 2013).

To be sure though, relatively small differences in political influence between rich and poor in Norway could have more indirect reasons if, for instance, there were little political inequality along—or simply an absence of—other dimensions that usually intersect with economic affluence, such as gender or ethnicity (Crenshaw 1989). Previous studies in the US and Europe have suggested that the interests of both women and ethnic minorities tend to be politically underrepresented (Costa 2017; Reher 2018; Whitby 2000). However, in Norway, policy makers have actively sought to increase the political influence of women—for example, by adopting laws requiring gender balancing in government institutions and company boards, an approach sometimes called "state feminism" (Hernes 1987; Siim and Skjeie 2008). Because women on average have lower income than men do,[5] these measures might have indirectly increased the influence of low-income citizens. Furthermore, for most of the period under investigation here, both ethnic fractionalization in Norway and the share of foreign-born citizens have been comparatively low (Dražanová 2020; see Appendix H). The absence of a prominent ethnic cleavage overlapping with class suggests that this type of double underrepresentation might not be as common among the Norwegian poor as for example among the poor in the US (e.g., Strolovitch 2008).

[2] Accessed October 26, 2020, https://wid.world/world/#sdiinc_p90p100_z/US;FR;DE;CN;ZA;GB;WO/last/eu/k/p/yearly/s/false/21.2205/50/curve/false/country.

[3] Accessed January 25, 2020, https://www.ssb.no/valg/statistikker/partifin.

[4] Accessed June 27, 2020, https://www.abcnyheter.no/penger/privatokonomi/2017/10/27/195342958/de-rikeste-politikerne-pa-stortinget.

[5] As late as 2011, the average household income of women was still 71% of the average among men. Accessed July 28, 2021, https://www.ssb.no/statbank/table/09903/.

TABLE 1. Policy Responsiveness by Income

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	*N*
All	0.44***	0.11	0.17	0.41	2.4	397
Income percentile						
P10	0.29***	0.1	0.2	0.36	1.8	397
P30	0.36***	0.1	0.18	0.38	2.1	397
P50	0.42***	0.11	0.17	0.4	2.3	397
P70	0.49***	0.11	0.16	0.42	2.7	397
P90	0.54***	0.11	0.15	0.44	2.9	397

Note: Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. *p < 0.10, **p < 0.05, ***p < 0.01.

MEASURING POLICY RESPONSIVENESS

To examine the possibility of unequal responsiveness in Norway, I constructed an original dataset, containing Norwegian public opinion on 603 concrete policy proposals at the national level as well as information on which of these proposals were subsequently adopted by government. The dataset was constructed following the same procedure as in Gilens (2012). Policy questions posed to representative samples of the Norwegian population were extracted from preexisting surveys.[6] Data were available for the period 1966–2014. To be included in the dataset, questions had to ask respondents whether they support or oppose some change in national government policy. This can be anything from "should the right to abortion be extended to week 16?" to "should Norway send troops to Afghanistan?" The proposed change had to be specific enough so that it could be reliably determined whether or not the change was subsequently adopted.

I managed to obtain 431 survey items from commercial surveys and 172 from academic ones (total of 603). I then imputed, for each policy proposal, the percentage that favored the proposed change among respondents at different income percentiles, using Gilens' approach. Finally, each proposal was coded, using government and media sources, as either adopted or not adopted in the subsequent four years (for details about the data collection and imputation method, see Appendix F).

Three studies inspired by Gilens (2012) have examined unequal policy responsiveness outside the US. All find that policy is skewed toward the preferences of the affluent. Although all provide interesting results, only one of the studies, of Germany (Elsässer, Hense, and Schäfer 2017), is directly comparable to Gilens's results for the US. For the other two, the Netherlands (Schakel 2021) and Sweden (Persson and Gilljam 2017), according to the authors, the results are not strictly comparable because their survey data partially or fully come from academic sources, whereas Gilens (2012, 54–6) used commercial survey data (the distinction is discussed in Appendix D).

To make my data maximally comparable to Gilens's U.S. data, I do three things: (1) I primarily analyze the sample of proposals from the commercial surveys, (2) I filter out policy proposals that would require constitutional change (n = 43), and (3) I remove policy proposals that were "half-adopted" (n = 3; Gilens 2012, 60). After this, 397 proposals are left for the analysis below.[7]

FINDINGS

I begin by looking at the overall relationship between public opinion and policy.[8] A simple bivariate logistic regression of policy outcome on policy support (Table 1, first row) suggests a moderate relationship between what the public wants and what it gets (b = 0.44, p < 0.001).[9] Predicted probabilities allow us to better understand the size of the effect: If 20% of Norwegians support a policy proposal, it has a predicted 17% chance of being adopted within the subsequent four years. If 80% favor it, the probability increases to 41% (i.e., it increases by a factor of 2.4). Public opinion matters, although with a status quo bias. This is quite similar to the results from the US (see Gilens 2012, 76).

Next, Table 1 presents results from bivariate logistic regression models where policy outcome is regressed on the policy support of five income percentiles. Although the effect sizes vary (from a factor 1.8 for the 10th percentile, to 2.3 for the 50th, to 2.9 for the

[6] The replication materials include the finalized dataset as well as all code necessary to reproduce the dataset and analyses (Mathisen 2022). However, the original surveys files are subject to restricted access. Appendix I explains how interested researchers can obtain such access.

[7] Analyses with the academic surveys included showed somewhat less unequal responsiveness across income groups, strengthening the paper's final conclusion (see Appendix D).

[8] I refer to this relationship as *policy responsiveness.*

[9] Overall, 27% of the proposed policies were adopted. All support variables are logit transformed as in Gilens (2012, 73–96).

TABLE 2. Policy Responsiveness When Preferences Diverge by More Than 10 Points across Income Percentiles

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	*N*
Poor vs. affluent						
Poor	0.08	0.18	0.28	0.33	1.2	177
Affluent	0.83***	0.21	0.13	0.59	4.7	177
Middle vs. affluent						
Middle	0.04	0.32	0.3	0.33	1.1	89
Affluent	0.76***	0.3	0.15	0.59	3.9	89

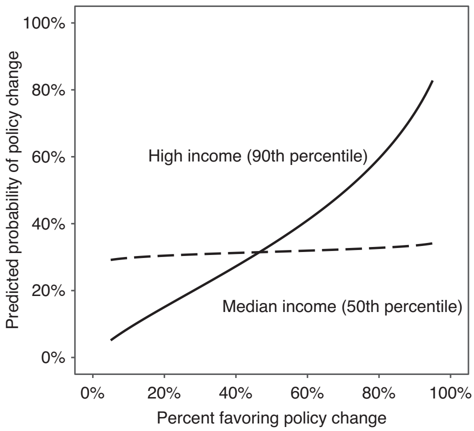
Note: Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. Poor = P10, Middle = P50, and Affluent = P90. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$.

90th), all income groups have a positive, statistically significant effect on policy.

However, the preferences of the income groups are highly correlated. Consequently, the moderate responsiveness to the preferences of the middle-class and the poor that we observe in Table 1 could arise merely because these groups often want the same from government as do the affluent. In order to disentangle the preferences of the income groups and estimate their independent effects, one would normally use multivariate regression. But as Gilens (2012) points out, this will produce biased results due to the correlated measurement error of the opinion estimates for the income percentiles (Achen 1985). As an alternative, I subset the data, as has become standard in this type of study, keeping only policy proposals where preferences diverge by at least 10 percentage points across income groups (Elsässer, Hense, and Schäfer 2017; Gilens 2012; Schakel 2021).[10]

Having filtered out the policy proposals where income groups more or less agree, Table 2 paints a very different picture of whose opinions matter. Although the preferences of the affluent still have a substantial, statistically significant effect on policy, there is no detectable effect for any of the other income groups. On the issues where the preferences of the affluent and the poor diverge, responsiveness to the preferences of the affluent is even greater than before: From low to high popularity among affluent respondents, the probability of policy adoption changes from 13% to 59% (factor of 4.7). In contrast, popularity among the poor only marginally affects the probability (28% vs. 33%, factor of 1.2), and the effect is statistically indistinguishable from zero (p = 0.66). When comparing the affluent and the middle class in the same way, I find the same: responsiveness to the affluent is substantial (factor of 3.9), whereas responsiveness to the middle class is weak and insignificant

FIGURE 1. Policy Responsiveness to High Income and Median Income Respondents When Their Preferences Diverge by More Than 10 Percentage Points



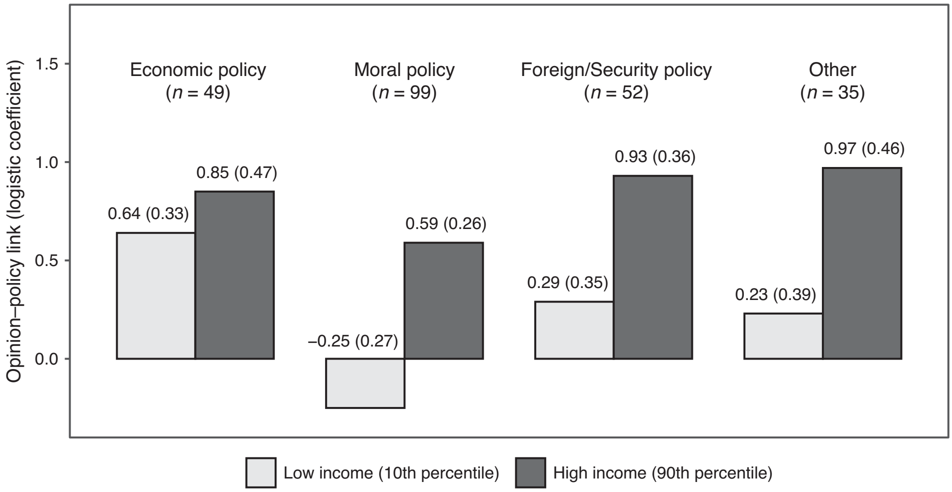
Note: Predicted probabilities for each whole percentage between 5% and 95% support, based on the logistic regressions reported in Table 2 (rows 3 and 4).

(factor of 1.1, $p = 0.9$). The magnitude of this unequal responsiveness is illustrated in Figure 1, which plots predicted probabilities of policy change at different levels of support among the middle class and the affluent.

To rule out that the results above are caused by the more or less arbitrary choice of a 10-point threshold for preference divergence, I also ran the regression models in Table 2 using multiple different thresholds. This showed a clear pattern of increasing unequal responsiveness the higher the threshold (see Appendix B). I also checked whether unequal responsiveness has

[10] Appendix A reports some of the most contested proposals in different policy areas.

FIGURE 2. Unequal Responsiveness When Preferences Diverge, by Policy Area



Note: Full results reported in Appendix Table A3. Standard errors in parentheses.

increased over time and whether it is lower on highly salient issues. The results suggest that unequal responsiveness has been quite stable over time and that it does not decrease on the more salient proposals (see Appendix C).

Is there any policy area in which the preferences of the poor matter? Yes. Figure 2 shows estimates of responsiveness for the poor and the affluent, by policy area.[11] Within moral issues, foreign policy and national security, and other (uncategorized) issues, the familiar pattern is observed: strong effect for the affluent, near zero effect for the poor. The economic area is somewhat different. Here as well, responsiveness to the affluent is substantial, but so is responsiveness to the poor. Given that the proposals of relative agreement have been excluded, it seems that on economic policy, the government sometimes follows the will of the affluent and other times the will of the poor, when the two are opposed.

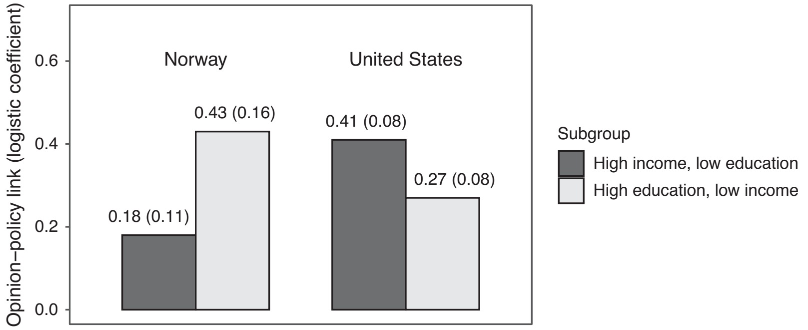
Although my data do not include public opinion estimates by race/ethnicity, they do contain estimates by gender. Regression results (Appendix G) suggest that on economic issues, women's preferences are better represented than are men's (despite being less represented overall). Because women on average have lower income than men do, this could possibly account for some of the responsiveness to low-income citizens in this area.

Is the overall policy bias toward the preferences of the affluent simply explained by the fact that they are more educated than the rest? To investigate this, I imputed the policy preferences of different combinations of income and education percentile (see Appendix E). Then, I estimated policy responsiveness to income percentiles at the same level of education. The results, presented in Appendix Table E1, show that education explains some but not all of the unequal responsiveness across economic groups. Still, what is also evident from the results is that education has a stronger effect than income. For example, the preferences of respondents with high education and low income (i.e., at the 90th education percentile and 10th income percentile) have a strong effect on policy, whereas respondents with high income and low education have a weak, insignificant effect.[12] This suggests that education is by itself enough to see ones preferences reflected in policy. Income, on the other hand, must be coupled with a certain level of education. This is interesting because it is the exact opposite from what Gilens found in the US. In the US, "high income alone seems sufficient to ensure a strong association between preferences and outcome, while education alone does not" (Gilens 2012, 95). This contrast is visualized in Figure 3, where the results

[11] See Appendix A for an overview of how proposals were coded into different areas.

[12] Appendix H shows, using registry data, that these two groups are comparable in size in the actual population and that although the groups disproportionately consist of certain types of occupations (e.g., service workers and teachers in the group with low income/high education; managers in the opposite group), they are quite heterogeneous. Therefore, it seems unlikely that such differences would be driving much of the reported effects.

FIGURE 3. Income versus Education, Norway and the US Compared



Note: "High" is the 90th income/education percentile; "low" is the 10th income/education percentile. Standard errors in parentheses. Full results reported in Appendix Table E1.

from Norway are juxtaposed to the equivalent ones for the US.[13]

IMPLICATIONS

The findings of this study are twofold. On the one hand, there are surprising similarities between my results for Norway and Gilens's (2012) results for the United States. The most important is that public policy tends to be heavily skewed toward the preferences of the privileged, violating the democratic principle of political equality. However, the Norwegian case deviates from the American in two rather consequential ways, suggesting that influence is not quite as dependent on affluence as in the US.

First, the data show responsiveness to both poor and rich citizens on economic issues. It is somewhat striking that the exception lies in this particular area, given that it is here that class interests are most clearly opposed and where one usually expects the wealthy to wield the strongest influence. One plausible explanation is the focus on economic welfare and redistribution in Norway's social democratic project as well as the powerful allies that the poor have in this domain through the unions and the left (Allern, Aylott, and Christiansen 2007). In that case, it suggests that social democracy can be expected to empower the have-nots in one of the policy areas that affects them the most as a class. It is also possible that Norway's gender equality policies have indirectly increased the voice of the less well-off. To be sure though, Norway's oil wealth might play a special role within the economic sphere by granting government extra leeway to satisfy the interests of both affluent and poor (Holden 2013). If this is indeed an important part of the explanation, Norway might represent a sort of upper bound of what can be expected from social democracies in terms of equality of responsiveness.

Second, education is a stronger predictor of responsiveness than income; the opposite of what Gilens (2012) found in the US. In Norway, public policy generally reflects the preferences of low-income citizens, so long as they are higher educated. A possible explanation is the fact that government members are predominantly recruited from the highly educated, which causes their descriptive overrepresentation (Bovens and Wille 2017; Lie Andersen 2014). Although this is certainly also the case in the US (Carnes 2013), there might be more room for it to have an effect on policy in Norway. The importance of political finance in U.S. elections constrains the behavior of politicians as they try to attract private funding (Ferguson 1995). The absence of a comparable mechanism in Norway would imply that other factors, such as an education-based value system, could potentially play a larger role in determining their behavior.

It is important to emphasize that the type of data employed here, and in Gilens (2012), cannot demonstrate that popular opinions are in fact *causing* policy change. Even though this is the usual interpretation of opinion–policy links in the literature, there is evidence of reversed causality as well: cues from political elites can shape public opinion, and such effects might be stronger and occur more quickly for the rich and highly educated (Zaller 1992), possibly explaining part of the unequal responsiveness. Although Gilens (2012, 93–6) argued that this was unlikely in the American case, it cannot be ruled out as an explanation for my results. However, it is unlikely to be the whole story. For example, it does not explain why there would be less unequal responsiveness on economic issues, as shown above.

The main conclusion from this study is that although social democracy, of the kind that exists in

[13] Extracted from Table A3.4 in Gilens (2012, 259).

Norway, probably cannot be counted on to eliminate political inequality, the link between money and politics does appear to be weaker than in the American case. Public policy, at least partially, reflects the economic preferences of the poor and is robustly associated with the preferences of the highly educated, suggesting that political influence need not be reserved for the affluent.

Achieving results similar to those of Norway in other contexts could prove difficult and perhaps most difficult precisely where reforms are most needed—that is, where the affluent already hold dominant influence. Still, reducing the initial level of economic inequality, restricting how money can be used to influence elections, and strengthening the countervailing forces (such as unions), are some steps that might change the balance of power in favor of the less well-off.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit http://doi.org/10.1017/S0003055422000739.

DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the American Political Science Review Dataverse: https://doi.org/10.7910/DVN/ISBPIH.

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CONFLICT OF INTEREST

The author declares no ethical issues or conflicts of interest in this research.

ETHICAL STANDARDS

The author affirms this research did not involve human subjects.

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Appendix for Article 1

Online appendix for: Affluence and influence in a social democracy

Ruben Berge Mathisen (University of Bergen)

June 2022

Appendix A: Policy areas

Table A1: Most constested policy proposals across income levels, by policy area

	Policy	Support among income groups (%) Poor (P10)	Middle (P50)	Affluent (P90)	P90-P10	Adopted after 4 years?
Economy						
1983	Prioritise Norwegians when hiring	72	66	46	-26	NO
1982	Government bail-out of businesses	61	55	37	-24	YES
1984	Ban private hospitals	69	58	45	-24	NO
1982	Inflation adjusted NRK fee	6	20	30	+24	NO
1986	Increase national budget	59	54	35	-23	YES
1990	Gas fee	19	26	41	+22	NO
1988	1988 Bill on income regulation	67	54	46	-22	YES
1989	Government decides wage level	91	75	70	-21	YES
1983	Reduce tax on high incomes	17	25	37	+21	YES
1977	Wage equalization fund	45	35	25	-20	NO
Moral						
1992	Apply for EU membership	25	41	63	+38	YES
1990	EEA Agreement	69	87	95	+27	YES
2007	Military troops to Southern Afghanistan	37	52	56	+18	NO
2004	Apply for EU membership	47	55	65	+18	NO
1978	Withdraw troops from Lebanon	53	34	35	-18	NO
1978	Traffic control cameras	83	70	65	-18	NO
1984	Information office for PLO in Norway	32	38	49	+17	YES
1980	Leave NATO	33	12	17	-16	NO
2003	Full military participation in Iraq	38	28	22	-16	NO
2007	Withdraw troops from Afghanistan	51	51	35	-16	NO
Foreign/security						
1972	Allow liquor serving on Saturdays	44	66	82	+38	YES
1972	Allow liquor serving on hollidays	38	54	74	+36	YES
1978	No homosexual doctors	50	36	18	-32	NO
1978	Allow homosexuals teachers	43	59	72	+29	YES
1970	Re-criminalize intoxication in public	72	59	43	-28	NO
1982	The Wine Monopoly closed on Saturdays	67	63	39	-28	NO
1970	Ban "strong beer" from grocery stores.	55	42	28	-27	NO
1966	Allow Norwegian Riksmål in offical grammar	60	73	87	+27	NO
1978	Allow homosexuals priests	44	59	70	+26	NO
1988	Forcefully isolate people with AIDS	54	42	28	-26	NO
Other						
1988	Second nationwide TV-channel	47	74	75	+27	YES
1993	Merging of municipalities	25	34	51	+26	NO
1988	No main airport in Hurum	59	47	34	-25	NO
1988	Ban TV3 in Norway	39	16	14	-25	NO
2013	Impact assessment in LoVeSe	51	59	73	+22	NO
1979	Oil search north of the 62nd latitutde	41	53	63	+22	YES
1989	No main airport in Hurum	89	81	67	-22	YES
2006	Prevent MP spending on social events	76	66	55	-21	NO
1989	Limit on car use, 10.000 km/year/houshold	50	34	30	-20	NO
1981	Other broadcasters than NRK	59	69	77	+18	YES

Table A2: Coding of policy areas (n in full dataset / n in dataset used in letter)

Economic policy (162/110)	Moral policy; value issues (212/164)	Foreign/Security policy (134/68)	Other issues (95/55)
economic welfare (35/20)	abortion (14/13)	bilateral relations (9/7)	climate (26/10)
fees (14/14)	adoption (5/4)	EU (37/9)	decentralization (7/3)
government intervention in economy (16/15)	age limits (2/1)	foreign aid (21/9)	energy (10/5)
labor market (25/22)	alchohol (34/34)	foreign operations (8/8)	environment (9/3)
oil fund (2/2)	animal welfare (2/2)	international sports (4/4)	infrastructure (6/5)
pensions (7/7)	beggars (4/1)	military (24/14)	other regulation (5/5)
privatization (12/6)	children (3/3)	NATO (13/7)	political system (15/8)
spending (12/5)	crime (9/7)	police authority (6/1)	sports (4/4)
subsidies (10/7)	death penalty (4/4)	surveillance (10/7)	television (13/12)
tax (29/12)	drugs (3/2)	terrorism (2/2)	
	euthanasia (6/4)		
	gender (8/7)		
	GMO (3/0)		
	HIV/AIDS (11/11)		
	homosexuality (16/10)		
	immigration (6/3)		
	language (4/4)		
	other moral (8/7)		
	pornography (4/0)		
	prostitution (6/6)		
	religion (22/9)		
	school (23/18)		
	tobacco (11/10)		
	treatment (2/2)		
	violent sport (2/2)		

Table A3: Policy reponsiveness when preferences diverege, by policy area.

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
Economy						
Poor (P10)	0.64*	0.33	0.17	0.54	3.2	49
Affluent (P90)	0.85*	0.47	0.15	0.65	4.4	49
Moral						
Poor (P10)	-0.25	0.27	0.33	0.2	0.6	99
Affluent (P90)	0.59**	0.26	0.14	0.46	3.3	99
Foreign/Security						
Poor (P10)	0.29	0.35	0.22	0.39	1.7	52
Affluent (P90)	0.93**	0.36	0.11	0.62	5.6	52
Other						
Poor (P10)	0.23	0.39	0.25	0.39	1.5	35
Affluent (P90)	0.97**	0.46	0.1	0.61	6.4	35

Note:
Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. Included are policy proposals where preferences diverege between the 90th and 10th income percentiles. To ensure an acceptable sample size in each domain (around 50 or more where possible), the cutoff-point for inclusion was set to 8 points for economic and moral issues, and 4 points for foreign policy and 'other' issues (due to the lower n on the latter two topics). The lower threshold for the latter two could pose a challenge for comparison if it showed equal responsiveness, however, since it already shows highly unequal responsiveness, we can be fairly certain that this would not change much with a higher threshold. The same, of course, applies to moral issues. The effect size for the poor on economic policy remained essentially the same at higher cut-off points (b=0.62, se=0.33 at 10p; b=0.58, se=0.37 at 12p). The results are also robust to an alternative model specification, as reported in Table A4 below.*p<0.1; **p<0.05; ***p<0.01

Table A4: Alternative specification for estimating unequal responsiveness by policy area

	Effect (OLS coefficient)	Standard error	p-value	N
Economy				
Affluent minus poor	-0.09	0.41	0.835	110
Moral				
Affluent minus poor	0.71***	0.21	0.001	164
Foreign/Security				
Affluent minus poor	1.48***	0.43	0.001	68
Other				
Affluent minus poor	1.34***	0.47	0.006	55

Note:
OLS regression models (rows). Alternative specification, as proposed by Schakel, Burgoon and Hakhverdian (2020, 154-155). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. The independent variable 'Affluent minus poor' was calculated by taking (% support of P90) minus (% support of P10). A positive coefficient means that policy is biased towards the preferences of the affluent, while a negative coefficient means that policy is biased towards the preferences of the poor. All models include controls for overall policy support. See Schakel, Burgoon and Hakhverdian (2020) for details about this method. *p<0.1; **p<0.05; ***p<0.01

Appendix B: Cutoff-points for preference divergence

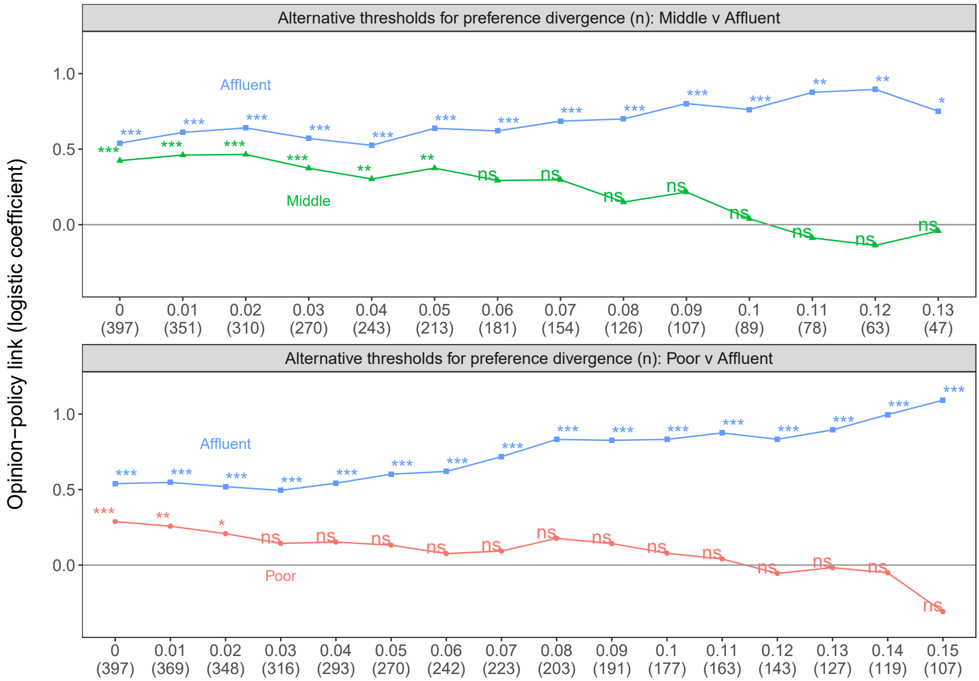

Figure B1: Alternative cutoff-points for the preference divergence between income groups.*p<0.1; **p<0.05; ***p<0.01.

Appendix C: Is unequal responsiveness conditioned by time and issue salience?

To check whether inequality has increased over time I simply split the sample of proposals where preferences diverge into two: those before 1985 and those after (this creates two almost equally sized samples). The results are quite similar in the two samples with respect to the overall conclusion. To check whether inequality is lower on more salient issues, I extracted all the survey items that had a ‘don’t know’ response option. Salience was then measured using the percentage of respondents answering ‘don’t know’ (or equivalents) to the survey item, under the assumption that salient issues have a lower share of such responses. I again split the sample into two: those with less than 13% ‘don’t know’s’, and those with more than 13% (two almost equally sized samples). Unequal responsiveness was even larger in the high salience sample than in the low salience sample of, suggesting no extra influence for the less-well off on highly salient matters.

Table C1: Policy reponsiveness when preferences diverege (>10p), by time period.

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
1966-1984						
Poor (P10)	-0.03	0.24	0.36	0.34	1	83
Affluent (P90)	0.6**	0.25	0.2	0.57	2.9	83
1985-2014						
Poor (P10)	0.23	0.28	0.21	0.33	1.6	94
Affluent (P90)	1.27***	0.38	0.06	0.67	11.6	94

Note:
Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. *p<0.1; **p<0.05; ***p<0.01

Table C2: Policy reponsiveness when preferences diverege (>10p), by issue salience.

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
Low salience (% 'Don't knows' > 13)						
Poor (P10)	0	0.43	0.3	0.3	1	47
Affluent (P90)	0.67*	0.35	0.14	0.52	3.6	47
High salience (% 'Don't knows' < 13)						
Poor (P10)	0.2	0.36	0.18	0.27	1.5	49
Affluent (P90)	1.58**	0.62	0.03	0.7	24.5	49

Note:
Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. *p<0.1; **p<0.05; ***p<0.01

Appendix D: Analyses with academic survey data included

When examining whose support affects the probability of a policy proposal being adopted, the choice of which policy proposals to include in the dataset is clearly of importance. Gilens' (2012) approach was to use archived survey data originally from commercial pollsters such as "Harris, Gallup, CBS, and *Los Angeles Times*" (Gilens 2012, 57; his emphasis). In Gilens' own words, his sample "constitutes a broadly defined group of policies that plausibly represent the range of issues that were on the public agenda over this time period (...). To the extent that news media and survey organizations tailor their questions to the more prominent policy issues of the day, the set of questions I collected should reflect at least in a loose way the set of concerns that the federal government and the American public were grappling with" (Gilens 2012, 56).

Hence, the rationale is that pollsters tend to ask about relatively salient issues at the time when they are on the public agenda. This is arguably crucial with respect to the 4-year coding window employed in Gilens' research design. This window assumes that the initial date of the question has some substantive meaning. And to the degree that Gilens is correct in his assessment of pollsters asking about salient issues at the time when they are most debated, it has. Therefore, it seems that government would have a fair opportunity to act within a 4-year period after the question was posed.

The simplest way to approximate Gilens' research design in a country like Norway, would be to go the same kinds of sources, that is, pollsters asking survey questions often on behalf of newspapers, and collect survey items for the dataset. And indeed, this is exactly what I have done for the dataset analyzed in the research letter (n=397, excluding constitutional issues and half-adopted proposals).

Additionally however, like two of the three other studies that have used Gilens' research design in other countries, I collected survey items from what we might call academic surveys, such as election studies and surveys made by research centers. While survey items from these sources might satisfy Gilens' criteria pertaining to the content of the question (such as being specific and unconditional), it is important to recognize that the decision by the original surveyor to pose the question hardly follows the sort of logic described above. Questions in such surveys *could* of course be asked based on salience in current debates, but often they are based on more fundamental social science research interests, and specific priorities are usually at the discretion of the researchers administrating the survey. Furthermore, standard "core" policy questions are often asked repeatedly with fixed time intervals for decades. At least this is the case for the Norwegian academic surveys presented below (the Norwegian Election Studies and the Norwegian Citizen Panel). This suggests that policy questions from these sources cannot be expected to reflect "the range of issues that were on the public agenda" for a given time period, in the same way as Gilens' polling data.

Empirically, the academic and commercial survey data are somewhat different. Looking at Table D1 we see, just as expected, that the academic surveys repeat the same questions twice as often as the commercial (42 percent non-unique vs. 21 percent in the commercial), and that they contain three times as many "gradual" questions ("reduce", "increase", "expand", etc.) as the commercial (36 percent vs. 12 percent). The latter could be important since these proposals clearly have a lower threshold for getting adopted than other proposals (e.g. any increase, no matter how small, would count as adoption of a proposal about increasing the number of soldiers in Afghanistan).

When combining the academic and commercial survey data, the results show somewhat less unequal responsiveness across income groups when using a 10 percentage point cutoff for preference divergence (see Table D3). However, when using multiple different cutoffs, the overall pattern is quite similar to the results without the academic data (cf. Figure D1 and Figure B1).

Table D1: Differences and similarities between commercial and academic survey data

	Data source	
	Commercial survey	Academic survey
N (policy propals)	431	172
Mean support P10	0.47	0.49
Mean support P50	0.46	0.48
Mean support P90	0.46	0.48
Mean absolute support distance (P10,P90)	0.11	0.09
Share of policies adopted	0.25	0.25
Share of gradual questions ('reduce', 'increase', 'expand', etc.)	0.12	0.36
Share of proposals asked about more than once	0.21	0.42

Table D2: Policy responsiveness by income, when including the data from academic surveys (Norwegian Election studies 1969-2013, and the Norwegian Citizen Panel 2013-2014; not included in the data presented in the main maunscript).

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
All	0.53***	0.09	0.15	0.43	2.9	557
Income percentile						
P10	0.41***	0.09	0.17	0.39	2.3	557
P30	0.45***	0.09	0.16	0.4	2.5	557
P50	0.5***	0.09	0.15	0.41	2.7	557
P70	0.56***	0.09	0.14	0.44	3.1	557
P90	0.61***	0.09	0.13	0.46	3.4	557

Note:
Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. *p<0.1; **p<0.05; ***p<0.01

Table D3: Policy responsiveness when preference diverege by more than 10 points, when including data from academic surveys.

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
Poor vs. affluent						
Poor (P10)	0.27	0.16	0.22	0.37	1.7	231
Affluent (P90)	0.96***	0.2	0.1	0.62	6	231
Middle vs. affluent						
Middle (P50)	0.43*	0.25	0.18	0.42	2.3	137
Affluent (P90)	0.98***	0.27	0.1	0.63	6.3	137

Note:
Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. *p<0.1; **p<0.05; ***p<0.01

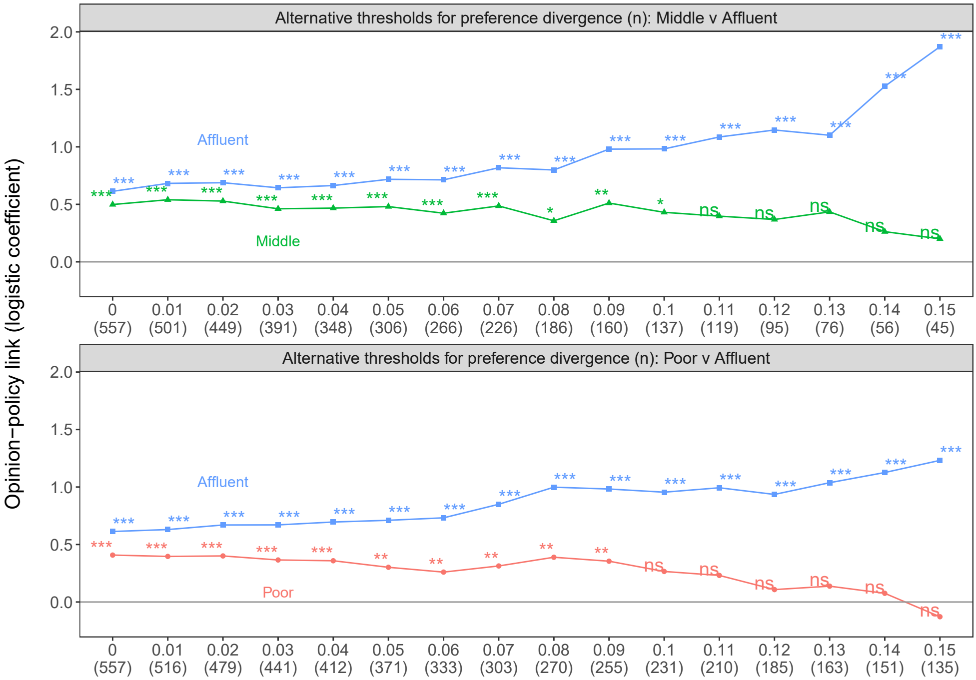

Figure D1: Alternative cutoff-points for the preference divergence between income groups, when including the academic survey data.*p<0.1; **p<0.05; ***p<0.01.

Appendix E: The role of education

In order to impute the preferences of income/education combinations I ran OLS regression models based on a variance/covariance matrix for each policy question. Just like Gilens' data, my data has an aggregate structure which lacks information about the covariance between income and education; information that is necessary to estimate the joint effect of the two on policy support. Gilens calculated the covariance between education and income for the period under investigation using the General Social Survey. For Norway, I calculated the covariance over time using the Norwegian Election Studies, since this is the only Norwegian surveyor (to the best of my knowledge) asking about income and education all the way back to the 1960's. I calculated the covariance between household income and education in each election study from 1965 to 2013. Since the survey is only performed in tandem with elections, I imputed the covariances for the in-between years using locally estimated scatterplot smoothing (LOESS). I then had all the information required to impute the preferences of income/education percentile based on OLS regressions on a variance/covariance matrix for each question.

One issue that arose was that since both Gilens and I use logit-transformed percentages in the analysis, imputed values cannot exceed 1 or go below 0 (if that is the case they cannot be logit-transformed). If the imputed percentages were based on logistic regression this would not be a problem, but since they are based on OLS on a variance/covariance matrix they can, theoretically, go outside the 0-1 range. On 8 proposals in my dataset, this is the case for one or more of the income/education combinations. One solution here would be to just drop these observations. However, this would not be wise, for the very reason that these are proposals where one or more of the income/education groups are very strongly opposed or in favor (that is why they have a predicted support slightly below 0 or above 1). In order to include these observations in the models, before logit-transforming them, I recoded the ones below 0 to 0,0001 and those above 1 to 0,9999. This way they are registered as the ones with the strongest (weakest) support for the relevant group, but still within the 0-1 range. As a robustness check I also ran the models while excluding these observations; results were basically unchanged. I also ran the models without logit-transforming the percentages so that negative values and values above 1 could be included. Also here results were essentially the same.

Table E1: Policy responsiveness to income/education percentile.

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
Education P10						
Income P10	-0.03	0.09	0.3	0.29	0.9	265
Income P50	0.01	0.12	0.29	0.3	1	265
Income P90	0.18	0.11	0.25	0.35	1.4	265
Education P50						
Income P10	0.09	0.14	0.27	0.32	1.2	265
Income P50	0.3*	0.15	0.21	0.39	1.8	265
Income P90	0.47***	0.14	0.18	0.44	2.5	265
Education P90						
Income P10	0.43***	0.16	0.19	0.43	2.3	265
Income P50	0.59***	0.16	0.15	0.49	3.2	265
Income P90	0.54***	0.13	0.16	0.47	2.8	265

Note:
Bivariate logistic regression models (rows) for 9 combinations of education and income percentile. The support among an income/education combination is the logit-transformed imputed percentage of respondents favoring the policy change in that income/education combination. Included are policy proposals with minimum 10 point preference divergence between the 90th and 10th income percentiles or 90th and 10th education percentiles. The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. *p<0.1; **p<0.05; ***p<0.01

Appendix F: Data collection and imputation

Survey items for the dataset were selected based on the selection criteria used by Gilens (see Gilens 2012, 57-60). Consequently, if a question used a Likert scale, it was dicotomized to support/oppose. If a question asked about a policy already in place, responses were reversed so as to indicate support for repealing said policy. Conditional questions were not included.

Also, some survey question have been asked multiple times. Identical questions were included in the dataset as long as they were asked in different calender years.

The dataset consists of survey items originally from five commercial survey companies (TNS Gallup AS, Opinion, MMI (now Ipsos), ACNielsen, and Respons Analyse AS), as well from two academic surveys (The Norwegian Election Study, and the Norwegian Citizen Panel). The commercial survey items were extracted from the opinion poll archive maintained by the Norwegian Centre for Research Data (https://www.nsd.no/meningsmalingsarkivet/search, accessed 25 January 2021).

In coding which policies were adopted by government, the main sources used were the legislative archive Lovdata, and the archive of Norwegian newspapers at Retriever. About half of the data were coded by myself; the other half was coded by a research assistant.

I here describe how the preferences of income groups where imputed. The exact same procedure was followed with regards to education. In order to determine the level of support for each policy proposal among different economic groups, I broke down responses to each survey item by the household income variable used in the relevant survey. However, herein lies a challenge: Different surveys use different cut-off points and numbers of categories for their income variables. This was solved using a 3-step procedure proposed by Gilens (Gilens 2012, 61), which entails the following for each of the survey items: First, the survey's income variable is standardized, by replacing each income category with a percentile score, indicating where on the income distribution respondents in that income group is placed. This score is determined by calculating the share of respondents in each income group, and choosing the percentile midpoint for each group. Second, a logistic regression model is specified, with support for the policy proposal in the survey (1/0) as the dependent variable, and two independent variables: the new standardized income variable, and the same variable squared (to allow for a curve linear relationship between income and probability of supporting the policy). Finally, this model is used to impute the probability of supporting the policy for the desired income percentiles.

Appendix G: Responsiveness by gender

Table G1: Policy responsiveness by gender

	Effect (logit coefficient)	Standard error	Predicted probability of policy change at 20% support	Predicted probability of policy change at 80% support	Relative change in probability	N
All issues						
Men	0.47***	0.11	0.16	0.41	2.6	395
Women	0.36***	0.1	0.18	0.38	2.1	395
When preferences diverge						
Men	0.88***	0.32	0.15	0.67	4.5	98
Women	0.29	0.24	0.28	0.46	1.7	98
Economic policy, preferences diverge between rich and poor						
Men	0.67	0.45	0.16	0.55	3.4	48
Women	1.02**	0.43	0.11	0.67	6.2	48

Note:
Bivariate logistic regression models (rows). The dependent variable is a dichotomous measure of whether or not the policy change was adopted within four years of the time of the survey question. Rows 3 and 4 based on the set of issues where the preference distance between men and women is larger than 10 points. Rows 5 and 6 based on the set of issues where the preference distance between the 10th and 90th income percentile is larger than 8 points (cf. Table A3).*p<0.1; **p<0.05; ***p<0.01 *p<0.1; **p<0.05; ***p<0.01

Appendix H: Demography

Since most of the original polls used when creating my data contained little demographic information besides income, education and gender, Table H1 reports information about survey demography in three waves of the Norwegian National Election Studies that contain information about immigration and some other variables, spread out over the time period of the dataset. The first two waves ask if the repondent was raised abroad, while the third asks

Table H1: Survey demography

Statistic	1965	1989	2013
% Women	49.5	49.6	50.1
% With only primary, lower secondary, or no education	76.1	54.9	9.2
% Married	77.6	60.7	49.7
% Born/raised abroad	0.9	0.9	5.1
Mean age	47.0	43.3	47.7

Note:
Source: Norwegian National Election Studies.

if the respondent was born abroad. Notice the low shares in the first two waves, which are similiar to population stats (provided by the statistics bureau of the Norwegian government) on foreign born citizens around the same time period (1.5% in 1970, 3.4% in 1989, 11.7% in 2013; source: https://www.ssb.no/statbank/table/05182/, accessed 28 July 2021).

With regards to the analysis interacting income and education (see in particular Figure 3 in the manuscript, and Section E here), it is helpful to have some information on the prevalence and characteristics of these groups in the population. Hence, I have included two tables based on registry data for Norwegian citizens, using the platform *microdata.no* (a service provided jointly by the Norwegian Centre for Research Data (NSD) and the Norwegian government's statistics bureau; accessed October 5, 2021). Table H2 shows the joint distribution of income and education in the Norwegian population. While the analysis in the manuscript uses policy support at specific percentiles (i.e. points in a distribution), in order to get a sense of the prevalence of different income/education combinations, we must use some set of brackets. Education is difficult to bracket in the microdata because the education variable only consists of eight categories. However, it is possible to get three groups of roughly equal size if we define the first as *incomplete upper secondary or lower* (37%), the second as *completed upper secondary* (30%), and the third as *higher educated (with or* *without degree)* (34%). The income variable is easier to work with (since it measures the exact numeric personal annual income) and can be split into terciles. As expected, the most common combinations are high income/high education (18 percent), and low income/low education (19.4 percent). Less common are the combinations high income/low education (4.9 percent) and low income/high education (5.9 percent).

To get a better sense of what sort of people are at the high/low and low/high combinations of income and education, Table H3 provides information on the occupational distribution of these groups. When it comes to the people with high education, but low income, they are most clearly overrepresented among sales and service workers (38%, vs. 23% in the overall population), under which the largest sub-category is personal care workers (17%, vs. 11%). They are also overrepresented among professionals (29%, vs. 26%), and particularly so within the sub-category teachers (13%, vs. 7%). The people with low education, but high income are overrepresented among managers (15%, vs. 9%), but also quite overrepresented among plant and machine operators (17%, vs. 6%). Despite some differences from the overall population, however, it is clear that both of these groups are quite heterogeneous. It therefore appears unlikely that such differences would be driving much of the reported effects. If anything, one could expect the overrepresentation of managers in the high income/low education group to give them more influence. Still, the opinion-policy link for this group is rather weak.

Table H2: Combinations of income and education in the Norwegian population

	Income			
	Low	Middle	High	Sum
Education				
Low	19.4	12.5	4.9	36.7
Middle	8.0	11.2	10.5	29.7
High	5.9	9.6	18.0	33.6
Sum	33.3	33.3	33.3	100.0

Note:
Entries are percentages of total population. Source: microdata.no. Registry data for 4,250,361 individuals. Low, middle, and high education refer to 'incomplete upper secondary or lower', 'completed upper secondary', and 'higher educated (with or without degree)' respectively. Low, middle, and high income refer to the bottom, middle, and top income tercile.

Table H3: Occupational distribution for different combinations of income and education

	Percent who hold occupation (%)		
	Population	High edu, low inc	Low edu, high inc
Occupation (ISCO-08)			
Managers	8.9	1.8	15.0
Professionals	25.5	28.6	8.7
Technicians and associate professionals	14.7	11.4	18.6
Clerical support workers	6.7	8.5	10.3
Service and sales workers	22.5	37.6	13.9
Skilled agricultural, forestry and fishery workers	0.7	0.7	1.2
Craft and related trades workers	8.3	1.3	10.2
Plant and machine operators, and assemblers	6.3	1.9	16.6
Elementary occupations	4.8	7.2	4.9
Armed forces and unspecified	1.4	1.1	0.7
Total	100.0	100.0	100.0

Note:
Source: microdata.no. Registry data for 2,420,335 individuals who are currently registered with an occupation. Low and high education refer to 'incomplete upper secondary or lower' and 'higher educated (with or without degree)' respectively. Low and high income refer to the bottom and top income tercile.

Appendix I: Data access

The data included in the replication materials at Harvard Dataverse include all but the original survey data files used to construct the opinion-policy dataset analyzed in the paper, as well as some of the tables in the appendix. The original survey data for the opinion policy dataset are subject to restricted access, and cannot be shared in the Dataverse. Researchers who want to replicate the construction of the finalized dataset can get access to all the original survey files by contacting the data provider Sikt - Norwegian Agency for Shared Services in Education and Research (email: bestilledata@sikt.no). Researchers should then request access to all the datasets listed in the document "Names of policy survey items, by dataset name" in the replication materials.

The data used for Tables H2 and H3 come from microdata.no, an online database of registry data on Norwegian citizens. It is fairly simple to gain access to the database as long as you are affiliated with a Norwegian university: "Researchers, PhD- and master's students at Norwegian universities, colleges, researchers at approved research institutions in Norway, and employees in ministries and directorates can access microdata.no. Access for end users is arranged by the campuses / institutions / employers themselves after having signed an institutional access contract with microdata.no. The institution sends e-mail to microdata@ssb.no and requests access. It is not necessary to apply. Everyone who meets the requirements gets access." (source: https://www.microdata.no/en/bli-bruker/). However, as of 1 June 2022 there is not yet a way for scholars based in foreign universities to access the database: "microdata.no is working with access solutions for users at international universities and research institutions." The raw data on microdata.no cannot, for privacy reasons, be exported. They must be analyzed using the online analysis tool. Within this analysis tool, it is possible to create and save code scripts. The replication materials include the code necessary to recreate Tables H2 and H3.

The data for Table H1 is from the Norwegian National Election Surveys. These are part of the original survey data material for the finalized dataset and can be accessed as described above.

References

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