Unequal Responsiveness in Sweden

– a quantitative study of the relationship between opinion and policy in Swedish national politics

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Abstract

According to the conventional view of democracy, all citizens should be considered politically equal. Still, research on policy responsiveness overwhelmingly show that the preferences of affluent citizens count for more than the preferences of poor citizens. With rising economic inequalities in the last few decades, this issue has become increasingly salient, engaging both academic and political debate. Unequal responsiveness in favor of the rich is usually explained by private donations and lobbying, which can push policymakers towards decisions favoring corporations and the wealthiest citizens. Sweden, a country with a very high degree of public funding of political parties and historically low economic inequality can therefore be considered a least-likely case for unequal responsiveness to exist.

In this thesis, I use survey data on public opinion between 1986 and 2021 to show that in Sweden, high-income citizens are better represented than low- and middle-income citizens, revealing that unequal responsiveness is present in Swedish national politics. I also address theoretical and methodological concerns in this area of research by examining the link between opinion and policy on policy proposals where preferences between low- and high-income citizens diverge, indicating that responsiveness might be more unequal on these proposals. The results from the diverging sample of proposals show the limits to coincidental representation of poorer citizens, and they provide insights into the usefulness and drawbacks of multivariate regression analysis in this strand of research.

Keywords: Responsiveness; representation; inequality; Sweden; policy

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Chapter 1. Introduction

1.1. Introduction

Political equality is one of the most defining features of democracy as we understand it. In Robert Dahl's words, the underlying principle for a democratic association is that

> all the members are to be treated […] as if they were equally qualified to participate in the process of making decisions about the policies the association will pursue. Whatever may be the case on other matters, then, in governing this association all members are to be considered as politically equal (Dahl, 1998, p. 37).

Political equality is present when each member has the same ability to influence the decisions that are being made. While complete political equality is already difficult to achieve, rising wealth and income inequalities in advanced and emerging economies in the last few decades have only served to put political equality under additional pressure (Qureshi, 2023).

Since the beginning of the 21st century, a new field of research has emerged, dedicated to investigating inequality of political representation in relation to economic inequality. A growing body of literature that examines whether political outcomes respond more strongly to the preferences of more affluent citizens than to those of poorer citizens, has shown that many of the liberal democracies in the western world suffer from political inequality (Elkjær & Klitgaard, 2021). The concept of political responsiveness, the way governments respond to the preferences of its citizens, is used in this strand of research to illuminate one important aspect of political inequality related to economic inequality.

Some of the pioneering work in this area of research by Gilens (2005) and Bartels (2009) in the U.S has shown that in American politics, political outcomes and legislators' behavior is more responsive towards the preferences of the rich than to those of the poor. At first, this finding was assumed to be a result of the somewhat unique system of lobbying and campaign contributions that define American politics. However, similar results have been found in European studies as well, showing that political inequality is not only present in notoriously

unequal countries but also in democracies with established welfare states, strong unions, and smaller levels of economic inequality (Elkjær & Klitgaard, 2021). Even in Sweden, a country with a record of equality and strong unions that can influence politics and policy, a recent study by Mikael Persson (2023) found that policy outcomes are more responsive towards affluent citizen than towards the poor. Since the very concept of democracy is centered around one citizen, one vote, the fact that many studies in the U.S and Europe show unequal responsiveness in favor of the rich has led to much discussion about the difficulties of achieving political equality in economically unequal societies.

There are, however, critical researchers who argue that it is not the rich but rather the middle class that dominates politics. The middle class, due to its position in the middle, has the role of tipping the scales when low- and high income groups are in disagreement, leading them to have a notable impact on political outcomes in a way that is compatible with democratic principles of political equality (Elkjær & Iversen, 2020). Additionally, some scholars argue that the tendency for the rich to dominate policy outcomes in many studies is due to statistical problems rather than being a reflection of a real subversion of democracy (Elkjær & Iversen, 2020; Elkjær & Klitgaard, 2021). The complexity of this issue makes it difficult to know what kinds of statistical and methodological models are most appropriate to shed light on the truth of political responsiveness.

The purpose of this thesis is to contribute to the research on political responsiveness by looking at Sweden as a least-likely case for unequal responsiveness. Studying Swedish national politics, I hope to contribute to our understanding of the form and extent of political responsiveness, while also providing some new methodological insights as a bridge to further research in this area. The research question that I will attempt to answer is: *is unequal political responsiveness present in Swedish national politics?*

Following the design of Martin Gilens and Mikael Persson, I use public opinion data from the SOM-Institute national surveys to estimate the average levels of support for policy proposals in different income groups between 1986 and 2021. I then compare the support for policy in different income groups to the actual policy outcomes on the national political level, using OLS regression to show the correlation between an income group's support for a policy and the probability of that policy being implemented.

Chapter 2. Prior Research and Theory

Before the start of the 21st century, research on political responsiveness mostly focused on governments' responsiveness towards the public and their opinions in general, namely the link between the opinions of the public and the response of politicians to implement or avoid implementing popular policies. Such research has shown that governments tend to respond to changing public opinion if that opinion is coherent and recognizable by policymakers (Manza & Cook, 2002). However, the fact that the public seldom has only one view of any political matter made it difficult to assert how responsive politicians are, especially across different fields of policy. To explain variation in the link between opinion and policy, further research was needed.

2.1. Prior Research on Unequal Responsiveness

One of the first researchers to give an explanation of the variation of responsiveness is Martin Gilens (2005), who argued that it is important to understand not only the responsiveness of politics towards the public in general, but also how responsiveness differs in relation to different groups in society. In his study of the responsiveness of the American political system, he finds that political responsiveness is tilted towards the most affluent citizens. This would in part explain why public support for policies sometimes leads to actual political change, while at other times it does not. By using data on public opinion from two decades of surveys, and putting this in relation to actual policy change, Gilens finds that the correlation between support for a policy and the implementation of that policy is stronger for high-income citizens than it is for low-income citizens. This effect is especially strong on policy proposals where the difference between the opinions of the low- and high-income groups is 8 percentage points or larger. Policy outcomes are strongly correlated with the preferences of the rich, and not as much with those of the poor. While Gilens does not study what causal mechanisms could explain this relationship, he speculates that the American political system, with a high degree of lobbyism and campaign contributions that fund political candidates, is very susceptible to this unequal responsiveness. However, subsequent studies in European

democracies with very different political system have also shown similar unequal responsiveness to what Gilens found in the U.S.

In a study aimed at replicating the design of Gilens in Germany, a country with a lesser degree of private contributions than the US, and with a system of public party funding, Elsässer, Hense and Schäfer (2018), find that unequal responsiveness is present to a higher degree than in America. In Gilens' pioneering study, all income groups had a positive correlation with implementation of policy (although the rich had a stronger correlation), but in Germany, the rich's opinions are well represented while the correlation between the opinions of the poor and implementation of policy is negative, although not statistically significant. When the authors look at policy proposals where the difference in opinion between the rich and the poor is 10 percentage points or larger, the correlation between the opinions of the poor and policy implementation is negative and statistically significant. The rich on the other hand have a positive correlation that is not statistically significant. Since unequal responsiveness seems to exist to a more severe degree in Germany than the US, the authors conclude that it cannot possibly be the American system of campaign contributions and corporate lobbying that best explains unequal responsiveness. Some other factors that are common within the western democracies that experience this issue should perform better at explaining why this political inequality exists.

In the Netherlands, another country with low income inequality and less money in politics compared to the U.S, Schakel (2021) finds that responsiveness is skewed toward the most affluent citizens. Schakel follows the design laid out by Martin Gilens, using survey data on public opinion on specific policy proposals and compares it with subsequent policy change. He discovers that there is a clear bias in political responsiveness that is geared toward richer citizens, to the detriment of the poor. The unequal political responsiveness that Schakel finds in Dutch politics is very similar to the unequal responsiveness that Gilens found in the U.S. This result also points towards the fact that unequal responsiveness is not something uniquely American, and probably cannot be solely explained by the large presence of money in American politics.

Schakel (2021) goes one step further than Gilens and attempts to examine what mechanisms explain this correlation and finds that lobbying by corporations probably contributes to unequal responsiveness. Corporations have a lot of money and can pressure politicians to

affect policy outcomes. Since the preferences of corporations are similar to those of the rich, affluent citizens have more avenues of influence than the poor. A higher degree of political participation of affluent citizens and the descriptive representation of politicians on the other hand, does not explain why political outcomes are more aligned with the preferences of the rich in the Netherlands.

Turning to Sweden, a country with most of the characteristics of a least-likely case for unequal political responsiveness, Mikael Persson (2023) uses survey data from 1956 to 2010 to show that the preferences of the rich are better represented than the preferences of the poor in Swedish national politics. As a country, Sweden is characterized by high political participation, a proportional election system, relatively high economic equality, weaker links between the rich and politicians than in America and other parts of the world, and a historically strong worker's movement that has opened many alternative avenues for influence. Because of these factors, Sweden should be one of the least ideal countries for unequal political responsiveness to exist. Despite this, Persson finds that there is a correlation between the preferences of the most affluent citizens and the implementation of policy. By regressing the preferences of different income groups with policy outcomes, Persson shows that political responsiveness is unequal in favor of the most affluent citizens, and that this effect is stronger over time.

In addition to the descriptive analysis of the correlation between opinion and policy, Persson (2023) examines what causal mechanisms could explain unequal responsiveness. He considers three different explanations, namely whether high-income citizens are better at controlling the political agenda, whether low-income citizens prefer more costly proposals, and whether there is a status quo bias that favors high income citizens. Persson finds no evidence for the first two explanations but does find that low-income citizens tend to favor change to a higher degree than high-income citizens, and that no policy change is a much more common occurrence than policy change. Psychological research has shown that humans tend to favor doing things like they always have, and Sweden's proportional election system often results in minority governments that have a hard time pushing through radical changes, especially if high-income citizens and corporations are able to block change via lobbying. All of this coincides to create a bias towards the status quo, a bias that favors those who wants less change: the most affluent citizens. Low-income citizens on the other hand usually favor

fundamental changes that redistribute resources in society to a higher degree. Such proposals are however seldom implemented, at least in part due to the status quo bias.

In Switzerland, a country with a unique set of circumstances related to the many expressions of direct democracy that characterizes its democratic processes, unequal responsiveness seems extremely unlikely. In a study on Swiss responsiveness, however, Stadelmann, Portmann and Eichenberger (2015) find that when comparing the referenda votes of voters in different income groups to the decisions of legislators on the exact same issues, there is a bias towards more affluent citizens. In the bivariate analysis the opinions of all income terciles are positively correlated with policy outcomes, and the difference between the responsiveness towards the three income terciles is relatively small. In the multivariate analysis, on the other hand, the preferences of the poorest tercile are negatively correlated with legislator's decisions, while the highest income tercile enjoys a large and positively correlated responsiveness towards their preferences. Middle income voters also have a slightly positive correlation in the multivariate analysis, but it is not statistically significant.

Questioning whether the results from USA and northern Europe can be generalized to other contexts, such as newer democracies, Lupu and Castro (2023) turn to Spain. Spain, unlike the countries previously studied, was democratized relatively recently, has a volatile party system, and a non-proportional election system. Another noteworthy detail is that Spain, unlike many other studied democracies, does not have class-biased unequal voter turnout. Since the researchers find that unequal responsiveness exists in Spain as well, they conclude that unequal political participation is probably not a very important explanatory factor. In addition, they look at if type of policy and incumbent government affects policy responsiveness, finding that economic and foreign affairs, and in particular cultural issues, are driving unequal responsiveness in favor of the affluent in Spain. On the other hand, they find no difference in responsiveness depending on left-, center-, or right-wing government.

This strand of research has, however, been criticized for issues related to collinearity in preferences between income groups along two lines. First, some researchers argue that there is a limit to unequal responsiveness in that the differences in opinions of low- and high-income groups are relatively small (Elkjær & Klitgaard, 2021). It is important, but sometimes difficult to tell the difference between policy changes that different citizens agree or disagree with (congruence), and policy changes that are a result of citizens' support for change

(responsiveness). If different income groups agree on most issues, it can be argued that some income groups are "coincidentally" represented, when in fact it is another groups' opinion that has an actual effect on policy. While some researchers (Enns, 2015) argue that this form of representation is an argument for political equality, others (Gilens, 2015) argue that coincidental representation cannot be compared to real political equality in the form of equal responsiveness. If the poorest citizens in society only get what they want when they want the same thing as the rich want, that is not true political equality. True political equality is only achieved if each group has the same impact on policy output, which lets majority opinion decide the outcome.

Second, when preferences are highly correlated between income groups, there is potential for statistical problems related to multi-collinearity (Elkjær & Klitgaard, 2021). Especially difficult is to separate the influence of high- and middle-income groups because of the high correlation between their preferences. Additionally, since high-income citizens are in general better informed about their own preferences, the measurements of their opinions are likely to have lower standard errors, leading them to dominate statistical analyses. In multivariate analyses, this can lead to an overestimation of the influence of affluent citizens on policy. To get around these issues, Elkjaer and Klitgaard suggest focusing on bivariate regression analysis, or limiting the analysis to proposals where rich and poor disagree. In doing so, we can be more confident in the fact that results are not driven by statistical issues but rather by actual differences in responsiveness.

Using a different approach than Gilens, Elkjaer and Iversen (2020) look at survey evidence for policy preferences as well as macro evidence for *levels* of spending and rates of redistributive transfers, instead of looking at support for *change* in spending and rates of redistributive transfers. Elkjaer and Iversen argue that measuring support for policy change rather than support for levels of spending is conducive to pro-rich bias. When looking at preferred levels instead of change, they find that it is the middle class that dominates politics. These results are more consistent with the ideal of political equality since the middle class has the advantage of swinging the vote when the preferences of high- and low-income groups diverge. This unequal effect on policy is therefore not due to income inequality, but due to the mechanics of representative democracy. According to this evidence, the middle class does not enjoy a larger impact on policy because their preferences necessarily matter more, but because of how decisions by majority work.

The literature in this area of research overwhelmingly points toward unequal responsiveness being present in favor of the most affluent citizens in many or all western liberal democracies. Still, there is some uncertainty regarding the extent and form of unequal responsiveness, as some researchers argue that the results are mainly driven by statistical issues, rather than representing real unequal responsiveness. Additionally, the fact that studies of European countries show similar unequal responsiveness as those of the U.S, has led to much discussion about what the mechanisms behind this correlation might be.

I aim to contribute to this research by addressing the issues with multivariate analysis in this strand of research, as well as adding survey data from 2010 to 2021 to see if the results from Persson's (2023) study can be replicated with partially new data. By studying proposals where preferences between high- and low-income citizens diverge, I plan to examine the potential limitations of coincidental representation when it is compared to real responsiveness, as well as contribute to the methodological design of further research in this area. It is my hope that this contribution will expand our understanding of responsiveness towards different groups in society, not only in Sweden but in other democracies as well.

2.2. Theory

Based on the previous research in this area, I have formulated two main hypotheses, and two additional conditional hypotheses that I aim to test. As can be seen above, most western democracies seem to experience unequal responsiveness in favor of the most affluent citizens. In countries with as different and diverse political systems as Sweden, USA, Germany, Netherlands, Spain, and Switzerland, politicians seem to have a bias towards the preferences of high-income citizens when making policy decisions (Elsässer et al., 2018; Lupu & Tirado Castro, 2023; Persson, 2023; Schakel, 2021; Stadelmann et al., 2015). This bias can be a result of many factors, among them status quo bias that favors the rich, money in politics in the form of campaign contributions and political donations, interest-groups influence, agenda-setting, unequal political participation, and the descriptive representation of politicians. Even though Sweden is a country where many of these issues should not exist to the same degree as in America, all these factors might still contribute to unequal responsiveness in favor of high-income citizens. Since most research on political

responsiveness has found bias in favor of the most affluent citizens, I hypothesize that it could be found in Sweden as well.

H1: Unequal responsiveness is present in favor of high-income citizens in Swedish national politics.

While most studies on responsiveness have shown a bias towards the most high-income citizens (Elkjær & Klitgaard, 2021), there is also evidence which suggests that unequal responsiveness could be favoring middle-income citizens instead (see Elkjær & Iversen, 2020). Due to its position in the middle, the middle class can tip the scales when low and high-income groups disagree. If the middle class is particularly influential, it is likely because of the mechanics of representative democracy, where middle class voters can turn the tide of an election, not because of money-related influence.

H2: Unequal responsiveness is present in favor of middle-income citizens in Swedish national politics.

Beyond analyzing the general responsiveness towards different income groups, I will attempt to probe into whether unequal responsiveness is present on issues where the preferences of low- and high-income groups diverge, and therefore present two conditional hypotheses related to H1 and H2. The reasons are partly methodological (see chapter 3 on statistical issues with multivariate regression when variables are collinear), but also theoretical. Since preferences are in general highly correlated between income groups (Elkjær & Klitgaard, 2021), coincidental representation, where one income groups' preferences are represented by virtue of agreeing with a more impactful groups' preferences, might account for much of the representation of low-income citizens. Such representation is still a form of representation, but something very different from true equal responsiveness to the preferences of all citizens (Gilens, 2015). On policy proposals where the lowest income group favors change while the highest income groups oppose it – or vice versa – coincidental representation should be much less present. These issues are also highly contested and often of economical character, making them especially important for low- and high-income citizens. I therefore hypothesize that responsiveness in these cases might be more severe than on all policies.

H3: Responsiveness is more unequal in favor of high-income citizens on policy proposals where high- and low-income groups' preferences diverge.

If it is the case, however, that the middle class dominates policy, the selection of policy proposals where the preferences of low- and high-income groups diverge, should create an optimal situation for the swing power of the middle class. If the middle class has additional influence due to its ability to tip the scale, issues where low- and high-income groups disagree should be the optimal situation for the influence of swing-power, and responsiveness should be more unequal in their favor on these issues.

H4: Responsiveness is more unequal in favor of middle-income citizens on policy proposals where high- and low-income groups' preferences diverge.

Chapter 3. Research Design

I have chosen to study Swedish national politics as a case of unequal responsiveness for two main reasons. First, since this type of research requires manual coding, it necessitates the ability to read and interpret domestic sources of many different kinds, as well as adequate knowledge of a country's politics. Since I have grown up in Sweden and because of my familiarity with the Swedish language and with Swedish politics, I am much more suited to study responsiveness in Sweden than in any other country in the world. Second, Sweden is a good example of a least-likely case for unequal responsiveness to exist. If unequal responsiveness were to be found here, where we expect it to not be very likely, we can argue that it should also exist in cases that are more likely to suffer from it (Esaiasson et al., 2012), making Sweden a good case for testing the hypotheses surrounding unequal responsiveness.

While it is true that Sweden has had a recent increase in economic inequality (The Lancet, 2023; Standfast, 2022), Sweden has historically been a relatively equal society. In a comparative perspective, most Swedish parties has a low degree of financing through private contributions, as there is a high degree of public funding of parties by the state (Eriksson, 2023; Kammarkollegiet, 2024). Sweden also has a history of strong unions and worker's movements which have opened avenues to influence politics that are not exclusive to affluent citizens (Esping-Andersen, 1990). Additionally, Sweden regularly ranks very low on the annual corruption perception index (Transparency International, 2024), indicating that political decisions are not for sale. Taking all these factors into account, Sweden can be considered a least-likely case for unequal responsiveness, since the avenues for influencing politics are relatively equal from a comparative perspective.

3.1. Data

Following the work of Gilens (2005) and Persson (2023), I use survey questions from the Swedish Society, Opinion, and Media (SOM) Institute that ask about specific policy proposals to determine the levels of support for policy proposals in different income groups

over time. Persson's study also had data from the Swedish National Election Survey (SNES), which contains surveys conducted during election year, from the 1950s and forward. I chose not to include the SNES data due to time constraints and to ensure consistency across the whole dataset, since the SOM-institute national surveys are conducted every single year, while the SNES data is collected only during election years.

Data from the SOM-institute national surveys are available from 1986 to 2021, and the surveys are conducted with the aim to collect survey data under as identical circumstances as possible, to make cross-year comparisons possible (SOM-institute, 2022). The sample of respondents has differed over time, with respondents ranging from 15 to 85 years of age, at some periods with only Swedish citizens, at other times both Swedish and foreign citizens that are resident in Sweden. Respondents under the age of 18 and foreign citizens were excluded from my data since they do not have the right to vote in the parliamentary election. When the surveys started in 1986 the sample size was 2500 respondents, increasing over time, to a total of 24 500 respondents in 2021 (155691 respondents over the whole period). The sampling procedure for selection of respondents is systematic probability sampling, which is a form of random sampling (Esaiasson et al., 2012; Folke & Österman, 2023), applied to the Swedish address registry (SPAR), from which the sample is drawn. The surveys are sent out via mail, but it is also possible to respond online.

Questions from the SOM-surveys are included in my data if they point to a specific policy proposal for which the outcome can be measured, such as introducing a six-hour work week, increasing the unemployment insurance benefits, abolishing nuclear power, joining the European Monetary Union, limiting the right to abortion, banning for-profit organizations from tax-funded welfare services, et cetera. The unit of analysis is a policy proposal in any given year. In total, 48 unique questions were identified, giving us 512 measurements of public opinion (as most questions are asked multiple times). Sixteen of these proposals were identified as diverging, meaning that opinions in the highest and lowest income groups were opposed to each other for the whole period. I use these measurements to calculate the average support for a specific policy in different income groups for each point in time, using a scale of five different income groups.

The focus on policy as the unit of analysis, instead of party positions and political elites' opinions, is warranted because government policy is the ultimate output of representation

(Schakel, 2021). Unlike other measurements, policy output shows in the most direct sense who and what politicians represent. Studies that look at more descriptive and symbolic representation will always struggle with concluding how much this matters for actual policy output. Focusing on policy bypasses all these steps to look directly at political output. Additionally, policy output has the most direct impact on ordinary citizens lives, meaning that unequal representation in policy output could have a negative impact on those who are not well represented.

The scale of five different income groups is derived from self-reported household income in the SOM national surveys (SOM-institute, 2022). While it would be interesting to look at personal income, that metric was only included very recently in the SOM surveys. Household income is still a serviceable measurement to determine support in different income quintiles as household income (HI) is positively correlated with personal income (PI) for the years that both measurements are available (see table 1). For example, almost 70 percent of respondents in the low HI category are in the low PI category, while only two percent are in the high PI category. In the high HI category, 45 percent are in the high PI category, while only 6 percent are in the low PI category.

Table 1. Pearson's r. Correlation between household and personal income.

	Household income
Personal income	0.311^{***}
	(0.0340)
Constant	0.227^{***}
	(0.0131)
N	10148

Standard errors in parentheses
$^{*} p < 0.05$, $^{**} p < 0.01$, $^{***} p < 0.001$

I chose to only use household income when calculating support in different income groups, for three main reasons. First, I wished to ensure consistency across all years. Second, I argue that household income is theoretically relevant, since households usually share income, affecting preferences. Thirdly, while every citizen has a personal vote, politicians make policy decisions not only as a response to individuals' needs and preferences, but to households as well. Because of this, I believe that household income has its own merits, regardless of how well it works as a proxy for personal income.

To calculate the average support for a policy in each household income quintile, individuals that agree or strongly agree with a proposal are considered supporters of that proposal, while individuals who neither agree nor disagree, disagree, or disagree strongly, are considered non-supporters of that proposal. Those who answer, "do not know", or otherwise invalid answers are excluded. I then recoded these levels of support to a dichotomous variable of support, taking the value of 1 for supporters and the value 0 for non-supporters. This recoded variable of support is used to calculate the average support for each policy proposal in each of the five income groups, along a continuous scale ranging between 0 and 1. The average levels of support for each policy in each income quintile are the independent variables in this study[1].

Regarding the dependent variable, i.e., the outcome of the 48 policy proposals, I have coded the outcome to a dichotomous variable which takes the value of 1 if the policy was implemented on the national level, and 0 if it was not, for every year between 1985 and 2023. To determine whether a policy was implemented, I looked through official government records, reports from government agencies and trade associations, official statistics, law texts and news reports. In some cases, the outcome is the absence of a policy, such as the introduction of a six-hour work week. To determine that this policy had not been implemented during the studied years, I looked at the current rules and regulations around working hours and the absence of any changes to it during the relevant period. Trusting my own judgement as a political science student with good knowledge of the Swedish political landscape, I asserted that a six-hour work week was not implemented in any year during this period. The value 0 was thus assigned to the outcome variable for every year on this specific proposal.

In this type of research, it will be nearly impossible to code the outcomes perfectly, as the coding must be done by a human who makes interpretations and judgments. While established researchers can assign PhD students and conduct inter-coder reliability tests, I do not have those resources. I have tried to be aware of my own position and biases, ensuring rigorous double-checking and in cases where I find it difficult to decide on coding, I have

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[1] In this thesis, ChatGPT (OpenAI, 2024) has been used to assist my use of the data analysis software Stata. I have used it to help me write Stata commands to produce figures (such as figures 1-4 in section 3.2), to write codes to restructure the data, and to navigate the data in general. It has not been used in the coding of the dependent variables, in writing any text in this thesis, or in the actual analysis of Stata output. I have also made sure to verify the information from ChatGPT via other resources such as stathelp.se (Sundell, 2024) and the manuals on stata.com (StataCorp, 2024).

asked some political science master-student classmates to help me make the most correct decision. My general rules for coding were as follows:

1. The formulation of the policy proposal in the SOM-institute is put in relation to the language of mainstream political discussion and what the policy in the given area looked like at the time.
2. The outcome of a policy proposal takes the value of 1 when the decision was made.
3. Policy proposals of legislative character, or of any character that makes a policy "continuous", will be coded as a 1 the year when a decision is made, but also subsequent years when the policy is active, until any time the policy decision is reversed.
4. Proposals related to costs and rates are compared to the previous year, and those that are not based on percentages are calculated in 2023 monetary value.

First, in many cases, proposals could be interpreted in several different ways. The formulation of the proposal in the SOM-institute survey questions is what determines what type of outcome I am looking for. I am always looking for the closest match to the formulation of the proposal, and what is generally meant by such statements and proposals in the mainstream political debate. For example, the policy proposal "abolish the nuclear power", will be coded 1 when all nuclear power plants are closed and 0 when nuclear power plants are still open, for each year between 1985 and 2023. The word "abolish", is the reason why it will only be coded as 1 after every nuclear power plant is closed. When a policy proposal instead is formulated as "sell government owned companies", it will be coded 1 for the years when at least one state government owned company was sold, and 0 the years when no government owned companies were sold, as the word "sell" determines when this policy is activated. If the policy proposals ask about no change, as in "keep nuclear power", or "keep government owned companies", the coding follows the same rules, but 1 for no change, and 0 for change.

Second, if the policy proposal is to join or apply to NATO, I code it as 1 the year that the political decision was made in Sweden to apply for NATO membership – and subsequent years – if the policy does not change in the opposite direction (e.g. leaving NATO or stopping the application). This is because I believe it to be a better measurement of policy responsiveness to measure when politicians make decisions that are aligned with the

implementation of the policy proposal, than when the policy is eventually implemented in practice. Also, focusing on implementation could increase issues of reverse causality. If a decision was taken in 2010, which implemented a policy in 2012, it would be problematic to measure responsiveness based on how opinion in 2012 affects implementation in that same year, when the actual decision was taken in 2010. It could then be argued that the decision in 2010 affected public opinion in 2012, i.e., reverse causality. However, many policies are not directly decided by the parliament or government but are implemented by agencies over time. In such cases, I focus on when the policy was implemented.

Third, the policy of joining NATO, EMU, or any change of legislative or continuous character, will be coded as 1 the year when a decision was made, and the following years until changed. As you can only join the EMU when you are not in it, these kinds of proposals are not the kinds of policy that can be implemented repeatedly (such as increasing unemployment insurance rates) and are therefore considered to be in effect until reversed.

Fourth, since I use binary coding, I code the outcome of proposals related to costs and rates in comparison to the previous year. If the proposal is to lower national defense costs, it will be coded as 1 if costs were lower than the previous year (in 2023 monetary value), and 0 if there was no change or an increase in national defense costs. To make comparisons across years in budget spending, rates of insurance, taxes and so on, I calculate these numbers in 2023 monetary value. One other option would be to use share of GDP, but I chose to use this method instead because when politicians make decisions on whether to raise or lower certain rates or spending, those decisions are always marked up in relation to cost increases that are due to inflation. Share of GDP is farther away from the scope of what politicians can control, as GDP can change due to many factors that politicians are not in direct control of. Therefore, I believe it to be a slightly inferior way of measuring responsiveness.

3.2. Method

To estimate the correlation between the preferences of different income groups and policy implementation, I use Ordinary Least Squares (OLS) regression as my main model, replicating the methodology in Mikael Persson's (2023) study on responsiveness in Sweden. OLS regression with a dichotomous dependent variable is called a Linear Probability Model (Deke, 2014). In a Linear Probability Model, the regression coefficient shows the change in

likelihood of the dependent variable taking the value of 1, when the value of the independent variable increases by 1. While a dichotomous outcome variable is not the optimal case for using OLS, I have chosen to use it for ease of interpretation, and to be able to make a better comparison with the results in Persson's study. The other common option, logistic regression, is usually a better fit for estimating probabilities as it takes a non-linear form, but it is harder to interpret (Folke & Österman, 2023). Examples of logistic regression, mirroring the results of the OLS regression can be found in the appendix.

In most studies on political responsiveness, researchers determine whether a policy has been implemented in the four years following the survey question asking about that specific policy (see Elsässer et al., 2018; Gilens, 2005; Lupu & Tirado Castro, 2023; Schakel, 2021). In those cases, a policy proposal takes the value of 1 on the dependent variable if it was implemented at any point during the following 4 years. In this study, following the design of Mikael Persson's (2023) study, every year in the dataset is coded as implementation or non-implementation, and I make several regressions with year-lagged independent variables to see the correlation between opinion and policy from different points in time. I believe that this design is preferable because some policies (not many, but a few), have notable variation from one year to another. If it is the case that a policy is implemented once during a four-year period and non-implemented for three of those years, in the design by Gilens and others, that will be considered as implemented during the 4-year period. This form of coding is in my view problematic. While it works well for many proposals that do not have much variation between implementation and non-implementation, for some proposals it will skew the results.

Since the policy process usually moves rather slowly, it is most likely difficult to turn support for a policy into its implementation in less than a year. The measure of correlation between support and implementation during the same year could also run into issues of reverse causality since policy implementation can lead to change in citizens' opinions. This is especially true for proposals where researchers are forced to or choose to focus on implementation rather than decisions, when the decision by politicians could have been taken several years before the policy was eventually implemented. It might be hard to determine whether public opinion is causing a change in policy, or whether it is the change in policy that is causing a shift in public opinion. By looking at the correlation at different points in time, we can see whether that correlation is stronger or weaker closer to implementation and

circumvent some of the issues of reverse causality, since it would be unreasonable to suggest that policy output in, for example 2005 would influence support for that policy in 2003.

According to conventional rules of representative democracy, the most direct way for citizens to turn support into policy is through elections. In Sweden, between 1970 and 1993 elections occurred every 3 years (Valmyndigheten, 2024). Since 1994, elections occur every 4 years. As previously mentioned, when studying the relationship between opinion and policy, many studies are conducted with a 4-year window. In Mikael Perssons (2023) study on the other hand, he runs regression with lagged variables over a 10-year window. However, because of the cycle of politics being closely related to elections, I do not believe that going much further beyond the four-year window is theoretically justified. As such, I include regressions for a 6-year window, hoping to capture responsiveness over most of the regular cycle of policy and politics.

One issue with studying responsiveness is that the preferences of different income groups are usually very closely correlated, meaning that there is an expectation that multivariate regression could run into issues related to multi-collinearity (Winship & Western, 2016). Not only the standard errors, but also the regression coefficients could be affected by these issues, leading to a risk of overestimating the impact of a certain groups' preferences on policy. While the issue of large standard errors can be solved by larger datasets, issues related to the regression coefficients cannot, since model-misspecification of this sort does not only cause large standard errors but could implicate the whole model. One suggested remedy in the literature on political responsiveness is to report bivariate regression results as well as multivariate (Elkjær & Klitgaard, 2021), since bivariate regression will not have these issues of multi-collinearity. However, focusing on bivariate regression could lead to underestimating the marginal effect of an income groups' preferences on policy implementation. Another way to circumvent these issues is to look at policy proposals where preferences diverge to a greater extent, leading to less collinearity in preferences. First, I run regressions as bivariate analyses with the lowest income, the middle-income, and the highest income quintiles' independent relationship with policy implementation. Then I run multivariate analyses with these 3 quintiles in the same model. I also run the same regressions with a selection of policy proposals where the preferences of the highest and lowest income quintiles are divergent, attempting to circumvent issues related to multi-collinearity.

Looking at the average support among the lowest income quintile and comparing it to the highest income quintile (figure 1), we can see that there is a high degree of collinearity, but it is not perfectly linear. Comparing support among the middle- and high-income quintiles shows even higher degrees of collinearity (figure 2), suggesting that multivariate regression could be marred with the kinds of issues discussed above.
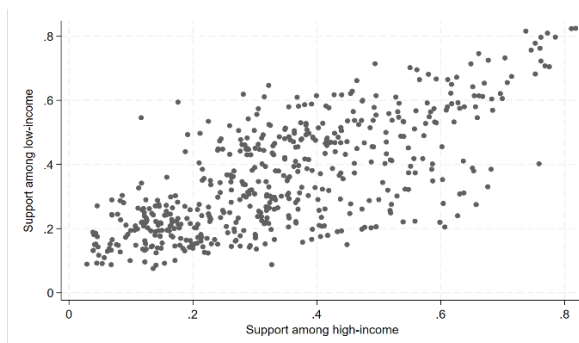

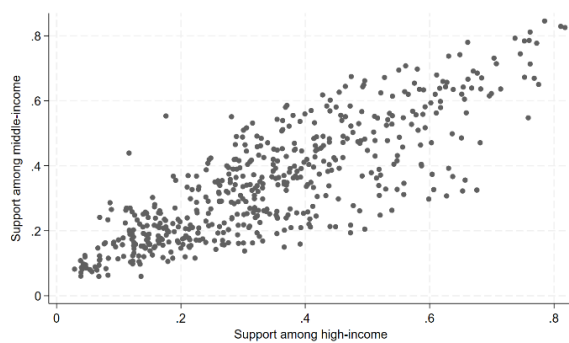**Figure 1.** Support among low- and high-income.

Figure 2. Support among middle- and high-income.

To additionally address the issues of multi-collinearity, I also run regressions with policy proposals where the preferences of the lowest and highest income quintiles are opposed to each other across the whole dataset. Some researchers (Elsässer et al., 2018; Gilens, 2005) who look at issues where preferences diverge choose a percentage point number of divergence (for example 8 or 10 percentage points) and see whether there is some difference in responsiveness on these specific issues. Using that technique will result in the inclusion of proposals where both groups have the same majority opinion, but to different degrees. To avoid that, I have chosen to define diverging preferences as policy proposals where the majority preference of the lowest and highest income quintiles is opposed to each other, when looking at the general preference across the whole time-period. This method ensures that the majority preference is not the same in both groups, but it means that the percentage point difference could be as small as one or a few percentage points. Using this technique leaves us with a selection of proposals that should experience fewer issues related to multi-collinearity. Since the majority preferences in the low- and high-income quintiles are opposed to each other across the time-period, and only implementation or non-implementation is possible, only the low- or high-income group should generally get what they want (barring some large general shifts in public opinion from one year to the other). Looking at only these 16 proposals (figure 3 and 4), we can see that while there is some level

of collinearity still, it is not as present among these issues, especially when comparing support in the low-income quintile to support in the high-income quintile.
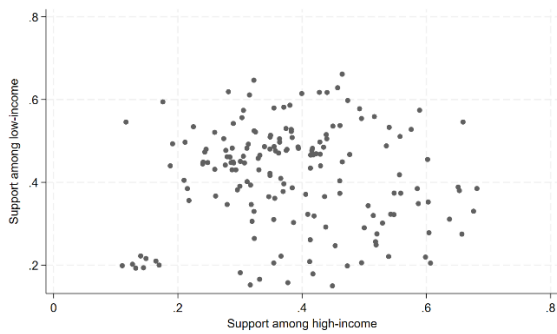

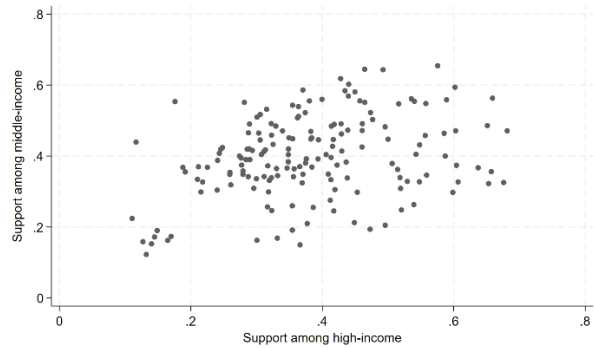**Figure 3.** Support among low- and high-income.

Figure 4. Support among middle- and high-income.

These proposals are, however, obviously not randomly selected. Many of these proposals are economic in character, dividing the population along class-based interest-conflicts, such as raising the unemployment insurance rate, introducing a 6-hour work week, or selling state owned corporations. In this sample, many proposals also regard safety and defense issues where the low-income group often favors fundamental changes to the way many nation-states operate, such as interrupting military operations in foreign countries, lowering defense costs and closing nuclear power plants. Most of these issues are therefore very likely to suffer from status-quo bias, which usually favors the most affluent citizens (Persson, 2023). Furthermore, some of these proposals are only measured a handful of times (3 times at least), while others are measured very often across the period (25 times at most). This means that proposals that are measured often are going to be driving the results to a higher degree, now that only 16 proposals will be included in the analysis. Despite these issues, I believe that it is valuable to look at proposals where preferences diverge, both for theoretical and methodological reasons (as discussed above). Since there are many limiting factors in this kind of research, any additional small piece of evidence is very important in building a body of literature that can answer such important questions about the state of democracy in the western world.

In Linear Probability Models, robust standard errors are usually used to account for heteroscedasticity (see Persson, 2023). Another possible option could have been to use clustered standard errors, on the year or proposal level. In some studies on political responsiveness researchers have used clustered standard errors on year, country or legislator (see Schakel, 2021; Schakel et al., 2020; Stadelmann et al., 2015). Since my data only includes 38 years and 48 proposals, it is not certain that there are enough clusters to warrant

clustering of standard errors. When studying only a selection of these proposals, this drops down to only 16 proposals. Because of this uncertainty as to which specification is best suited to the data, and since robust standard errors is most used in this area of research, I have chosen to use robust standard errors in all specifications.

3.3. Limitations

This study is limited to looking at the broader correlation between opinion and policy, which is a form of descriptive analysis (Teorell & Svensson, 2007). It is beyond the scope of this thesis to study a specific causal mechanism or even ascertain whether there is or is not a definite causal relationship between the opinions of certain income groups and the implementation policy. It is entirely possible that the opinions of different income groups do not have a causal effect on the implementation of policy; but instead that some other causal relationship explains the correlation. There are many potential confounders involved that could explain a correlation between support in different income groups and policy outcome, which makes this phenomenon very difficult to study.

Additionally, an important assumption in this strand of research is that the opinions of the sample of citizens in different income groups in national surveys are representative of the actual opinions of all citizens in those income groups. However, there is always a margin of error in surveys of any kind, which might lead to results that are driven by measurement errors or randomness, rather than an actual change in public opinion. If it is the case, however, that the evidence continues to point towards unequal responsiveness being present in America, Europe, and Sweden, it can be regarded as the result of some form of subversion of democracy, in that our democracy is unable to equally represent the opinions of all citizens. This is something that we can only understand better by continuing to study it with all the means that are available to us, however limited those means are.

Chapter 4. Results

In this chapter, the results from the regression analyses will be presented, both regarding the overall correlation between opinion and policy, as well as the correlation between opinion and policy on proposals where preferences between low- and high-income citizens diverge. Regression analysis is done with the lowest, middle-, and highest-income groups, from the 5-level scale of self-reported household income. Note that correlations between opinion and policy in this chapter is not necessarily a reflection of a causal relationship, but rather a statistical correlation that can answer the broader descriptive question about unequal responsiveness.

4.1. Responsiveness in Swedish National Politics

Since there has been a lot of academic debate about the issues with multivariate regression due to multi-collinearity, I present the results of both bivariate and multivariate regression. In this context, I consider the results from the bivariate regression to be the most reliable, because they do not suffer from potentially biased regression coefficients due to multi-collinearity. In a Linear Probability Model, where the outcome is a dichotomous variable, the OLS regression coefficient shows the likelihood of the outcome being 1 (policy implementation), over 0 (policy non-implementation), when support for policy proposals changes from 0 percentage points to 100. Remember that the independent variables (level of support in different income quintiles), are continuous variables that range from 0 to 1. Logistic regression analyses are available in the appendix, showing the same general results as in this chapter, but with a better non-linear fit. For ease of interpretation, however, only OLS regression will be reported in this chapter.

When regressing low-income, middle-income, and high-income quintiles separately (table 2) – i.e., bivariate regression – we can see that there is a statistically significant negative correlation between low- and middle-income citizens' preferences and implementation of that policy, across the whole 6-year window. The negative correlation is somewhat weaker further

away from implementation, suggesting that the opinions of low- and middle-income citizens are more likely to negatively impact policy implementation the closer you get to decision making. For the lowest income group, the likelihood of implementation decreases by around 0.21-0.28 percentage points for each increase in support by 1 percentage point. The middle-income quintile has a similar negative correlation of between 0.18 and 0.24 percentage point decrease in likelihood of implementation for each increase in support by 1 percentage points. The result for the high-income quintile is not statistically significant but has a slight positive coefficient, not allowing us to draw any reliable conclusions about whether that group's support has an independent correlation with policy implementation.

In the multivariate regression (table 3), on the other hand, only the correlation between support in the high-income quintile and policy implementation is consistently statistically significant, showing that the likelihood of implementation increases by between 0.56 and 0.78 percentage points for each increase in support by 1 percentage point. As in the previous analysis, the coefficients for the low- and middle-income quintiles are negative, but only statistically significant between the 3- and 6-year window for the middle-income quintile.

While these results are somewhat inconclusive, they suggest that the high-income group is better represented in Swedish national politics than the low- and middle-income groups are. The evidence suggests that low- and middle-income groups suffer from opposite responsiveness – when they want something it is less likely to occur – while the high-income group either has no statistically significant independent effect on policy, or a statistically significant and substantial effect on policy implementation when other groups' preferences are controlled for. Compared to Persson's (2023) study on Swedish national politics, where he used the 10th, 50th, and 90th percentile, the major difference is that my bivariate regression analysis shows statistically significant negative correlations with policy implementation for the low- and middle-income groups, while in Persson's analysis the 10th and 50th percentile had a slightly positive correlation, and only the 90th percentile had a positive and statistically significant correlation with policy implementation. In the multivariate analysis on the other hand, Persson finds evidence for larger unequal responsiveness, where the 10th percentile has a negative correlation (statistically significant for about half of the ten-year time-window), while the 90th percentile has a large and statistically significant correlation with policy implementation. One other difference is that, in general, the correlation between opinion and policy was stronger over time in Persson's study (either more strongly positive, or more

Table 2. Bivariate OLS regression. Relationship between opinion and policy.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_{t-1}	X_{t-2}	X_{t-3}	X_{t-4}	X_{t-5}
Low income	-0.282***	-0.259**	-0.267**	-0.253**	-0.215*	-0.205*
	(0.0792)	(0.0810)	(0.0833)	(0.0886)	(0.0909)	(0.0957)
Middle income	-0.235**	-0.193*	-0.232**	-0.221*	-0.193*	-0.183
	(0.0773)	(0.0781)	(0.0809)	(0.0871)	(0.0909)	(0.0969)
High income	0.0191	0.0835	0.0394	0.0843	0.121	0.0920
	(0.0857)	(0.0832)	(0.0867)	(0.0919)	(0.0934)	(0.0991)
N	512	515	515	495	480	462

Robust standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3. Multivariate OLS regression. Relationship between opinion and policy.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_{t-1}	X_{t-2}	X_{t-3}	X_{t-4}	X_t
Low income	-0.174	-0.282	0.0149	0.121	0.250	0.192
	(0.316)	(0.327)	(0.305)	(0.334)	(0.339)	(0.364)
Middle income	-0.535	-0.452	-0.779*	-0.945*	-1.070**	-0.896*
	(0.388)	(0.390)	(0.366)	(0.401)	(0.413)	(0.435)
High income	0.558**	0.627***	0.642***	0.742***	0.783***	0.655***
	(0.180)	(0.175)	(0.177)	(0.182)	(0.185)	(0.183)
Constant	0.247***	0.231***	0.245***	0.237***	0.224***	0.239***
	(0.0382)	(0.0374)	(0.0383)	(0.0403)	(0.0397)	(0.0425)
N	512	515	515	495	480	462

Robust standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

strongly negative), while my results show more variance between years.

The results presented above primarily reflect statistical correlations, they do not a provide evidence for a definitive causal relationship between opinion and policy. Many confounders are likely present that explain why there is a co-variance between income groups' preferences and the implementation of policy. This form of analysis is an attempt at answering a broader descriptive question about the existence of unequal responsiveness in Sweden. In these analyses, I find no evidence for the hypothesis that unequal responsiveness is present in favor of the middle class (H2). This means that the conditional hypothesis that unequal responsiveness would be more unequal in favor of the middle class on issues where preferences diverge (H4), immediately falls. There is on the other hand some evidence for the hypothesis that unequal responsiveness is present in Swedish national politics, and that it is in favor of the most affluent (H1).

4.2. Responsiveness When Preferences Diverge.

We turn now to a replication of the analysis from above, but only with policy proposals where high- and low-income groups' preferences are opposed to each other. Disregarding (for now) potential issues related to the sample of proposals in this analysis, the bivariate regression analysis (table 4) shows that support in the low- and middle-income quintiles is negatively correlated and statistically significant with implementation for every year in the 6-year window. An increase of 1 percentage point support for a policy by the lowest income quintile is correlated with a decrease in likelihood of implementation by between 1.12 and 1.33 percentage points. Similarly, an increase in the middle-income quintiles' support for a policy proposal by 1 percentage point is related to a decrease in the likelihood of its implementation by 0.74 to 1.07 percentage points. The highest income quintile on the other hand, enjoys a positive and statistically significant correlation between support for a policy proposal and policy implementation by between 0.72 and 1.05 percentage points for each increase in support by 1 percentage point.

Table 4. Bivariate OLS regression. Relationship between opinion and policy when preferences diverge.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_t-1	X_t-2	X_t-3	X_t-4	X_t-5
Low income	-1.128***	-1.122***	-1.325***	-1.331***	-1.273***	-1.143***
	(0.265)	(0.274)	(0.282)	(0.292)	(0.287)	(0.299)
Middle income	-0.735*	-0.751*	-1.066***	-1.045**	-0.965**	-0.846*
	(0.297)	(0.316)	(0.309)	(0.315)	(0.338)	(0.346)
High income	1.011***	1.047***	0.721*	0.929**	0.885**	0.837**
	(0.254)	(0.255)	(0.284)	(0.295)	(0.301)	(0.307)
N	145	147	148	144	142	139

Robust standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5. Multivariate OLS regression. Relationship between opinion and policy when preferences diverge.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_t-1	X_t-2	X_t-3	X_t-4	X_t-5
Low income	-1.221	-0.931	-1.040	-0.905	-1.008	-0.989
	(0.633)	(0.619)	(0.633)	(0.655)	(0.698)	(0.788)
Middle income	0.149	-0.187	-0.323	-0.449	-0.231	-0.0883
	(0.728)	(0.707)	(0.686)	(0.698)	(0.794)	(0.853)
High income	0.933**	1.061**	0.776	0.977*	0.836*	0.736
	(0.352)	(0.342)	(0.398)	(0.394)	(0.397)	(0.397)
Constant	0.321*	0.280*	0.519**	0.430*	0.449*	0.414*
	(0.138)	(0.138)	(0.176)	(0.182)	(0.177)	(0.193)
N	145	147	148	144	142	139

Robust standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The multivariate regression shows inconclusive results (table 5). The general pattern is similar to the bivariate regression but some of the coefficients are smaller, and the standard errors are much larger. While the issues of multi-collinearity should be lessened in this sample of policy proposals, there is still much uncertainty due to the small amount of policy proposals that were able to be included in this analysis, leading to imprecise estimates. Addressing the issues of biased regression coefficients using this selection of proposals shows that if this type of analysis could be conducted with a larger sample, the issues of large standard errors could be circumvented, and the multivariate analysis would be more credible.

The correlation between support in the high-income quintile and implementation of policy is statistically significant for most years in the 6-year window and show that an increase in support by 1 percentage point correlates with an increase in the likelihood of implementation by between 0.78 and 1.06 percentage points. The coefficients for the low- and middle-income quintiles are mostly negative, but rarely statistically significant, offering only suggestions as to what the connection between opinion and policy looks like, when other groups' preferences are controlled for.

While these results do not ascertain the existence of a causal relationship between opinion and policy, they point toward answering the broader descriptive question about the existence of unequal responsiveness in Sweden. In these analyses, I find further evidence for the hypothesis that unequal responsiveness is present in favor of the rich (H1), and no evidence for the hypothesis that the unequal responsiveness is present in favor of the middle class (H2). Since in the previous analyses (table 2 and 3), I also found no evidence to support the hypothesis that unequal responsiveness is present in favor of middle-income citizens (H2), the hypothesis that they would have an increased influence on policy proposals where preferences diverge (H4), has fallen already. Still, this evidence points to the middle class having a smaller correlation with policy implementation when preferences diverge, showing that that hypothesis would probably not hold either way. On the other hand, the results do suggest that support in the highest income group has an even larger impact on policy outcomes when preferences diverge. While the lowest income groups' support has a larger negative correlation with policy outcomes when it comes to these proposals, the highest income group has larger and statistically significant correlation with policy implementation, giving some support to that hypothesis (H3). However, a direct comparison between coefficients is not certain evidence that the difference between coefficients in the larger and

smaller sample of policy proposals is statistically significant. Therefore, suffice it to say that the evidence points in the direction of support for hypothesis 4, but it cannot be said for certain. Evidence to support hypothesis 1, on the other hand, is found in the analysis of both samples, giving strong support to that hypothesis.

These results suggest that the lowest income group largely gets its representation through coincidence, rather than actual impact on policy. When they agree with high-income citizens, they seem to be more likely to get what they want than when they disagree with high-income citizens. While such coincidental representation is still some form of representation, it is clearly not the same as actual responsiveness towards the opinions of those citizens.

Chapter 5. Concluding Discussion

The evidence presented in this thesis shows that responsiveness in Sweden is unequal in favor of the most affluent citizens and suggests that unequal responsiveness could be more severe on issues where preferences between low- and high-income citizens diverge. In this chapter, I will discuss these results in relation to the existing literature and reason around which kinds of mechanisms might be causing unequal responsiveness not only in Sweden but in many liberal democracies around the world.

5.1. Unequal Responsiveness Comparatively

Since I have argued that Sweden is a least-likely case for unequal responsiveness to occur, the existence of this phenomenon in Swedish national politics suggests that it can be expected to exist in cases that are more likely to experience it as well. Democracies where the strength of the workers movement is smaller, corruption higher, where economic inequality is greater or there is more money in politics, can also be expected to suffer from unequal responsiveness in favor of the rich.

How then, does one explain that many studies on European democracies find greater inequalities in responsiveness than studies in the U.S? While in the pioneering work by Gilens (2005), all income groups had at least a slightly positive correlation with implementation, there is now evidence from Germany (Elsässer et al., 2018), Switzerland (Stadelmann et al., 2015), Sweden (Persson, 2023), and from this thesis, that the lower income groups suffer from negative responsiveness, meaning that when they want something, it is statistically less likely to occur. Across studies previously published, there is in general a great deal of similarity between the extent of unequal responsiveness in the U.S and in European countries (Elkjær & Klitgaard, 2021). While most of these studies compare the 10th, 50th, and 90th or even 99th percentiles, I was only able to study responsiveness using a categorization of five different income groups. This has two important implications for the interpretation of the results in relation to other studies. One, a larger group should generally

have a larger impact on policy, due to the mechanics of democracy, with majority rule as a leading principle. Two, if, however, it is corporate lobbying and the richest individuals' connections to policymakers that drive unequal responsiveness, comparing the 90th or 99th percentile to the 1st or 10th, has the potential to show much larger inequalities in responsiveness. However, comparing coefficients from different studies directly to each other is not a certain way of telling the difference in the extent of unequal responsiveness in the world. Taking all these factors into consideration, I conclude that unequal responsiveness is present in Swedish national politics in favor of the most affluent and that lower income groups suffer from negative responsiveness. While I have not attempted to research potential mechanisms in this thesis, the results still allow me to theorize about the reasons behind unequal responsiveness in the western world.

The fact that unequal responsiveness has been found in many liberal democracies with both similar and dissimilar political systems, suggests that there must be some form of common denominator that causes unequal responsiveness. If one does not simply conclude that democracy is in itself unequal in relation to economic status, which factors unify countries like the U.S, Spain, Sweden, Germany, The Netherlands and Switzerland? Some of the mechanisms that previous studies have been able to find evidence for are lobbying by corporations and status-quo bias (Persson, 2023; Schakel, 2021). Now, why does the status quo bias and lobbying by corporations contribute to unequal responsiveness in favor of the most affluent? While all liberal democracies that have been studied are capitalist, which is conducive to economic inequality, researchers seem hesitant to attribute the issue of unequal responsiveness to a failure of democracy in capitalist societies (Elkjær & Klitgaard, 2021). However, the status quo of a capitalist society is inherently unequal in favor of the wealthy, and some of the most influential and powerful entities on the planet are corporations. When lobbying by powerful corporations interacts with the status quo bias, it becomes a lot easier for corporations to obstruct and stop proposals of fundamental anti-capitalist character that are usually favored by low-income citizens. The hesitancy by some scholars to ascribe these issues to a fundamental feature of capitalist democracies is in my eyes a mistake.

An explanation related to democracy in capitalist societies that has not been explored to a high degree is the power of a global trend towards neoliberalism and a much more globalized economy. This global trend has caused many countries to suffer from larger economic inequalities, combined with austerity politics and a liberalization of the economy, adjusted to

the competition of the global market in the last few decades (Huber et al., 2015; Obinger & Starke, 2015). While some studies use data from as far back as the 50s (see Persson, 2023), many studies are conducted with data from the 80s and onward (see Elsässer et al., 2018; Gilens, 2005; Stadelmann et al., 2015). In my own data, I have noticed that there is a trend of asking a lot more questions about policy proposals during the latter decades than when the surveys began in 1986 (SOM-institute, 2022). For comparison, in the first few years of surveying by the SOM-institute in the 80s, respondents usually were only asked about 2 policy proposals. Fast forward to the 2010s, and there were regularly about 20 questions about policy proposals each year, meaning that a clear majority of observations of public opinion are from the last few decades. Given this bias, one explanation for why responsiveness seems more unequal in this thesis than in Persson's study – where he also used data from the 50s in the Swedish National Election Survey – could be that a time-related trend towards neoliberalism and a globalized economy has impacted policy implementation in favor of the most affluent citizens in the last few decades. Perhaps politicians are encouraged by the pressures of globalization to pursue policies that are unpopular among low- and middle-income citizens, and to block policies that these groups favor. High-income citizens, because they usually agree more with liberalization of the economy and favoring the status quo, are favored by the trend towards globalization. This hypothesis could be tested in future research, in countries where survey data is available from the time-period of the expanding welfare states in Europe, by comparing responsiveness across different decades.

Researching responsiveness is a very important but limited endeavor. Only a select few policy proposals are usually included in national surveys, there is always a margin of error when calculating public opinion based on surveys, and the eventual causal link between opinion and policy is difficult if not impossible to determine. While descriptive analysis of this kind certainly is valuable in answering questions about the state of democracy, uncovering possible causal mechanisms becomes increasingly important as the research field moves forward. Additionally, the same methodology and data can be used to study responsiveness related to other constituent characteristics, such as gender, ethnicity, and age.

Due to the limitations in this area of research, and the general uncertainty that comes with all manner of scientific research, there is no best practice in the design of a study on responsiveness. In attempting to further illuminate the true nature of responsiveness, scholars

need to keep searching for new designs and methodologies, hoping to come closer to the truth with each step on the way.

5.2. Contribution

This thesis contributes to the existing literature on unequal responsiveness in several ways. The results presented here contributes to the growing body of literature that has uncovered political inequalities present in modern liberal democracies. When studying the period between the 1980s and the 2020s in Sweden, the evidence presented in this thesis points towards unequal responsiveness being more severe than previous research in Sweden has shown (see Persson, 2023). Additionally, studying not only the overall relationship between opinion and policy, but also the relationship when preferences diverge, has both theoretical and methodological value. First, it explores the limits of coincidental representation of the least affluent citizens, showing that when low-income citizens want something different than high-income citizens, they are quite unlikely to achieve it. I argue that this finding suggests that coincidental representation is merely a façade that hides the true nature of unequal responsiveness and should not be compared to real responsiveness towards the preferences of all citizens, regardless of their economic status. Second, limiting the analysis to these proposals avoids some of the issues with multi-collinearity in multivariate regression. While the analysis of the diverging sample of proposals also shows that this analysis has its issues – because of the limited number of proposals included – future studies that can increase the sample size and conduct similar analyses could find this methodology useful in the search for better answers about the true nature of unequal responsiveness.

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Appendix A: Logistic Regression

In the following tables (6-9), logistic regression is presented, mirroring the results in chapter 4. A negative logit coefficient shows that there is a negative relationship between and income groups' opinions and policy, while a positive coefficient signifies a positive correlation. I have included one example of a substantive interpretation of these results in the form of predicted probabilities. These numbers show the predicted probability that a policy proposal will be implemented when an income group supports that proposal at the 10 and 90 percent levels. In the bivariate logistic regression of the whole sample of proposals (table 6), the only major shift in predicted probability comes from the low- and middle-income groups, where the predicted probability of a policy being implemented drops around 15-20 percentage points when support increases from 10 to 90 percent in those groups. In the multivariate regression (table 7), the predicted probability drops in the low- and middle-income groups, but the logit coefficients are only statistically significant between year 3 and 6 for the middle-income group. During year 3 to 6, the predicted probability for policy implementation drops almost 50 percentage points when support in the middle-income group increases from 10 to 90 percent. The high-income groups predicted probability increases remarkably when support moves from 10 to 90 percent, by about 50 to 60 percentage points.

In the sample of proposals where preferences between the low- and high-income groups diverge, the bivariate logistic regression shows that the probability of a policy being implemented drops by about 50 to 70 percentage points when support in the low- and middle-income groups increases from 10 to 90 percent (table 8). A change of support in the high-income group from 10 to 90 percent, on the other hand, is associated with an increase in the probability of policy implementation by around 70 to 80 percentage points. In the multivariate logistic regression, there is rarely any statistical significance for the logit coefficients, giving much uncertainty to the predicted probabilities (table 9). The pattern in this analysis is like the bivariate, as the predicted probability drops when support increases from 10 to 90 percent in the low- and middle-income groups, while it increases by about 50 to 60 percentage points with the same change of support in the high-income group.

Table 6. Bivariate logistic regression. Relationship between opinion and policy.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_t-1	X_t-2	X_t-3	X_t-4	X_t-5
Low income	-1.971***	-1.802**	-1.770**	-1.628**	-1.347*	-1.231*
	(0.584)	(0.595)	(0.583)	(0.602)	(0.594)	(0.598)
Middle income	-1.621**	-1.318*	-1.534**	-1.417*	-1.207*	-1.102
	(0.563)	(0.558)	(0.562)	(0.586)	(0.593)	(0.604)
High income	0.123	0.535	0.243	0.506	0.713	0.526
	(0.550)	(0.526)	(0.531)	(0.546)	(0.542)	(0.560)
Predicted probability if 10 % favor:						
Low income	0.27	0.26	0.28	0.28	0.27	0.28
Middle income	0.25	0.24	0.26	0.27	0.26	0.27
High income	0.19	0.17	0.19	0.19	0.18	0.20
Predicted probability if 90% favor:						
Low income	0.07	0.08	0.09	0.10	0.11	0.13
Middle income	0.09	0.10	0.10	0.10	0.12	0.13
High income	0.20	0.24	0.22	0.26	0.29	0.28
N	512	515	515	495	480	462

Robust standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7. Multivariate logistic regression. Relationship between opinion and policy.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_{t-1}	X_{t-2}	X_{t-3}	X_{t-4}	X_{t-5}
Low income	-1.126	-1.893	0.182	0.855	1.654	1.201
	(2.207)	(2.290)	(2.037)	(2.173)	(2.172)	(2.210)
Middle income	-3.516	-2.850	-4.983[*]	-5.917[*]	-6.583[*]	-5.286[*]
	(2.691)	(2.706)	(2.450)	(2.635)	(2.694)	(2.678)
High income	3.466[**]	3.873[***]	3.877[***]	4.397[***]	4.577[***]	3.703[***]
	(1.107)	(1.075)	(1.050)	(1.076)	(1.082)	(1.026)
Constant	-1.088[***]	-1.202[***]	-1.119[***]	-1.184[***]	-1.270[***]	-1.177[***]
	(0.249)	(0.248)	(0.243)	(0.255)	(0.250)	(0.254)
Predicted probability if 10 % favor:						
Low income	0.23	0.27	0.20	0.18	0.16	0.18
Middle income	0.35	0.31	0.44	0.50	0.54	0.50
High income	0.11	0.10	0.11	0.10	0.10	0.12
Predicted probability if 90% favor:						
Low income	0.11	0.08	0.22	0.29	0.39	0.35
Middle income	0.03	0.05	0.02	0.01	0.01	0.02
High income	0.60	0.64	0.66	0.71	0.73	0.67
N	512	515	515	495	480	462

Robust standard errors in parentheses
[*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$

Table 8. Bivariate logistic regression. Relationship between opinion and policy when preferences diverge.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_t-1	X_t-2	X_t-3	X_t-4	X_t-5
Low income	-6.792***	-6.807***	-7.474***	-7.659***	-7.044***	-6.398***
	(1.572)	(1.664)	(1.711)	(1.814)	(1.691)	(1.747)
Middle income	-4.438*	-4.596*	-6.114**	-6.041**	-5.424**	-4.819*
	(1.833)	(1.982)	(1.928)	(1.975)	(2.043)	(2.082)
High income	6.407***	6.726***	3.988*	5.332**	4.875**	4.691**
	(1.686)	(1.715)	(1.606)	(1.785)	(1.735)	(1.793)
Predicted probability if 10% favor:						
Low income	0.67	0.66	0.74	0.75	0.73	0.68
Middle income	0.49	0.49	0.64	0.63	0.60	0.55
High income	0.04	0.03	0.09	0.06	0.07	0.07
Predicted probability if 90% favor:						
Low income	0.01	0.01	0.01	0.01	0.01	0.01
Middle income	0.03	0.02	0.01	0.01	0.02	0.03
High income	0.87	0.89	0.71	0.82	0.79	0.77
N	145	147	148	144	142	139

Robust standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9. Multivariate logistic regression. Relationship between opinion and policy when preferences diverge.

Window (years)	1	2	3	4	5	6
Independent variable	X_t	X_{t-1}	X_{t-2}	X_{t-3}	X_{t-4}	X_{t-5}
Low income	-8.994	-6.956	-6.414	-5.765	-6.220	-6.110
	(4.958)	(4.979)	(4.333)	(4.736)	(4.678)	(5.112)
Middle income	2.543	0.0967	-1.336	-2.168	-0.688	0.108
	(5.419)	(5.414)	(4.672)	(5.097)	(5.291)	(5.512)
High income	5.146[*]	6.047[**]	4.079	5.359[*]	4.373	3.844
	(2.202)	(2.205)	(2.256)	(2.401)	(2.268)	(2.240)
Constant	-0.765	-1.024	0.326	-0.173	-0.0935	-0.276
	(0.881)	(0.913)	(0.955)	(1.058)	(0.960)	(1.072)
Predicted probability if 10% favor:						
Low income	0.76	0.63	0.65	0.59	0.65	0.64
Middle income	0.14	0.21	0.30	0.33	0.28	0.23
High income	0.06	0.05	0.12	0.07	0.09	0.10
Predicted probability if 90% favor:						
Low income	0.00	0.01	0.01	0.02	0.02	0.02
Middle income	0.42	0.22	0.15	0.10	0.19	0.25
High income	0.72	0.79	0.65	0.76	0.69	0.64
N	145	147	148	144	142	139

Robust standard errors in parentheses
[*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$

Appendix B: Policy Proposals

Below, I have included the 48 policy proposals, of which 16 are proposals where the majority preference of the low- and high-income groups are opposed to each other, i.e. the diverging sample. Translations from Swedish – the language in which the surveys are conducted – to English, are from the SOM-Institute English codebook for the SOM-surveys cumulative dataset (SOM-institute, 2022).

PROPOSAL #	SURVEY QUESTION	DIVERGING SAMPLE
1	Proposal: Hold more national referendums	Yes
2	Proposal: Introduce six-hour workday	Yes
3	Proposal: Set a time limit on unemployment benefits	Yes
4	Proposal: Increase unemployment benefits	Yes
5	Proposal: Convert public utilities like Swedish Telecom into private enterprises	Yes
6	Proposal: Sell government owned companies that run business activities	Yes
7	Proposal: Reduce defense spending	Yes
8	Proposal: Stop Sweden's participation in the UN military mission in Afghanistan	Yes
9	Proposal: The Nordic countries should come together and form a federal state	Yes

10	Proposal: Sweden should not be involved in any military deployments abroad	yes
11	Proposal: Sweden should become a member of the EMU	Yes
12	Proposal: Keep nuclear power after 2010	Yes
13	Proposal: Sweden should in the long run abolish nuclear power	Yes
14	Proposal: Increase the number of private schools	Yes
15	Proposal: Prohibit all forms of pornography	Yes
16	Proposal: Raise the alcohol tax	Yes
17	Proposal: Allow active euthanasia	No
18	Proposal: Allow homosexual couples to adopt children	No
19	Proposal: Limit the right to abortion	No
20	Proposal: Prohibit research that uses fertilized eggs (embryonic stem cells)	No
21	Proposal: Introduce the death penalty for murder	No
22	Proposal: Ban face-covering veils in public places	No
23	Proposal: Make Sweden a republic with an elected president	No
24	Proposal: Make Sweden a republic	No
25	Proposal: Lower the voting age to 16 in all elections	No
26	Proposal: Lower the elections threshold to the parliament	No
27	Proposal: Hold municipal and	no

		parliamentary elections at different times	
28		Proposal: Raise taxes	No
29		Proposal: Lower taxes	No
30		Proposal: Reduce spending in the public sector	No
31		Proposal: Have the state take over responsibility for the schools from the municipalities	No
32		Proposal: Allow private companies to provide care for the elderly	No
33		Proposal: Profits should be forbidden within tax-financed health care, education, and social care	No
34		Proposal: Prevent for-profit companies from running hospitals	No
35		Proposal: Reduce Swedish foreign aid to developing countries	No
36		Proposal: Sweden should apply for NATO membership	No
37		Proposal: Re-establish compulsory national service	No
38		Proposal: Sweden should introduce the euro as currency	No
39		Proposal: Sween should withdraw from the EU	No
40		Proposal: Ban chemical pesticides in agriculture	No
41		Proposal: Increase the petrol tax substantially to improve the environment	No
42		Proposal: Ban plastic bottles and aluminum cans	No

43	Proposal: Legislate about recycling household garbage	No
44	Proposal: Prohibit detergents containing optical brighteners	No
45	Proposal: Increase the CO2 tax on petrol	No
46	Proposal: Keep the nuclear power	No
47	Proposal: Lower the alcohol tax	No
48	Proposal: Allow the sale of beer, wine, and liquor in grocery stores	No