

LWS

Working Paper Series

No. 19

Wealth Distribution and Individual Voting Preferences: A Comparative Perspective

Piotr Paradowski, Lindsey Flynn

Revised version from January 2017



A revised version of this paper has been published as:
"Can Unequal Distributions of Wealth Influence Vote Choice? A Comparative Study of Germany, Sweden and the United States", in *Public Policy, Governance and Polarization: Making Governance Work*, edited by David K. Jesuit and Russell Alan Williams, Chapter 3. New York, NY: Routledge Critical Studies in Public Management, 2017.

Luxembourg Income Study (LIS), asbl

Abstract

Theories of economic voting have provided essential insights into determinants of voting behavior. With increasing levels of economic inequality and polarization among voters and elites, economic voting may be of even greater salience today. Historically, economic voting has been measured by income or class but never by wealth. Wealth inequality, however, is typically twice as large as income inequality. This paper extends the political science literature to examine the role of wealth in voting behavior by examining three countries, each considered ideal types for particular political and social regimes. Greater levels of both wealth and income are associated with a greater likelihood of voting for a conservative party in the United States, a liberal welfare regime. Income and employment matter more in Germany, a corporatist regime. Despite increasing wealth and income inequality, there is little support for economic voting in Sweden, the classic social-democratic regime. The findings of this paper indicate that economic voting is mediated by political and economic context. Individual-level data are drawn from the American National Election Studies (ANES), the Comparative Study of Electoral Systems (CSES), and the Luxembourg Wealth Study (LWS) Database. Statistical matching methods are utilized to integrate electoral and wealth surveys, and probit regression models are used to analyze relationships quantitatively.

A revised version from January 16, 2017

Introduction

It is widely accepted that income influences voting behavior. Does wealth? Is the effect similar across countries? Studies of wealth and voting behavior have not existed until recently, in part because of the absence of data on wealth holdings. The findings in this paper indicate that wealth is related to voting behavior in some countries but not others. The paper models the effects of wealth on one form of voting behavior, vote choice, in three archetypal countries - the United States, Germany, and Sweden, each representing a distinct political and social welfare regime. If vote choice is predicated on wealth holdings above and beyond the effect of income, the growth in wealth inequality experienced since the 1970s serves to further polarize electoral outcomes. This polarization impedes decision making and implementation at both the governmental and policy level.

Citizenship grants a key political resource - the right to vote - regardless of economic resources. Yet this political resource is inseparable from economic resources. Those with similar economic resources tend to vote in similar ways (Brooks & Brady, 1999; Rehm, 2011). To date, economic resources have been operationalized almost exclusively through income as a measure, and links tested with data mostly from the United States. Yet in United States and Europe too, wealth is more unequally distributed than income (Davies & Shorrocks, 2000; Piketty & Saez, 2014). This paper argues that conceptually, a voter's position in the wealth distribution should affect voting behavior independent from the effect of income. Using probit regressions, it shows that wealth correlates with vote choice in a base model of the United States, Germany, and Sweden. But it only has an effect above and beyond the effect of income in the United States. In Germany, income and employment patterns correlate most strongly. In Sweden, economic resources do not correlate with voting behavior when the model includes other potential determinants. Since the effect of wealth is not consistent across the case countries, the paper provides an additional analysis assessing the salience of economic issues during three election cycles. Citizens in Sweden are more likely to identify the importance of social policies as compared to Germany and especially the United States, where economic issues dominate.

The country-specific findings in this paper lead to different conclusions with respect to political polarization. Growing levels of inequality may serve to further polarize politics in cases where economic resources correlate with vote choice. This is especially true when wealth influences vote choice beyond the effect of income. Those with more resources can shape policy through monetary contributions to candidates directly and to organizations that hold lobbying power. While each eligible voter only has one vote, the consolidated block of votes at the upper end of the distribution hold more power. Put simply, a stronger relationship between economic resources and vote choice enables elected officials to adopt narrower political and policy positions. Those at the top of the distribution will benefit most from this polarization because of their economic position. Thus, in countries like the United States, where both wealth and income influence vote choice, growing inequality is poised to have the greatest effect on polarization, whereas in countries like Sweden, where neither independently influence vote choice, growing inequality is poised to have a smaller effect. However, it is unclear whether a tipping point exists, where inequality reaches a point at which it is more or less likely to lead to greater polarization.

This paper proceeds as follows. First, it outlines the link between wealth, vote choice, and political polarization. Next, it describes wealth distributions in each of the three countries and justifies why some key conceptual and empirical differences between income and wealth warrant the analysis of these two economic resources separately. It then presents an empirical analysis that assesses the role of wealth as a determinant of vote choice in three case countries chosen to represent a range of political and social histories. It concludes with a discussion of these empirical findings in relation to political polarization. Because no studies to date link wealth, vote choice, and political polarization, most of the territory covered is new. As such, the claims made in this paper are meant to prompt further conceptual discussion and empirical analysis.

Wealth, Vote Choice, and Political Polarization

The term wealth is often used in a colloquial sense, but here it is used to reference a very specific concept: net worth. Net worth is comprised of the assets held by an individual, household, or firm, less

the debts held by that entity. Wealth, like income, is a measure of economic well-being. Wealth can, for instance, generate income, and income saved at time t becomes wealth at time $t+1$. Wealth can also serve as a tool to smooth consumption during times of lower income, such as unemployment, continuing education, or retirement. But, unlike income, wealth is measured by considering both sides of a household balance sheet. Various types of debt (e.g. mortgages, vehicle loans, educational loans) are subtracted from assets (e.g. one's residence, savings accounts, stocks and bonds).

Studies on the role of wealth on voting behavior are largely nonexistent. To date, scholars have developed and tested the link between economic resources and voting with income rather than wealth. This is likely due to a lack of data on wealth holdings rather than an argument against the use of wealth as a measure. In this section, studies on income and voting behavior are used to develop the conceptual scaffolding linking wealth to voting behavior. It identifies three related mechanisms – partisanship, class, and policy preferences – that could link wealth to voting behavior, specifically to vote choice. In a second step it discusses what this dynamic means for political polarization.

Partisanship has been identified as one of the strongest predictors of vote choice (Campbell, 1980). If only one fact is known about a person, the party with which they identify, that person's vote can be guessed correctly nine times out of ten (Flanigan, Zingale, Theiss-Morse, and Wagner 2014). Income differences reveal clear trends in partisan voting in the United States. Those with higher incomes are more likely to vote for the Republican party and those with lower incomes the Democratic party (Gelman et al., 2010; Brooks & Brady, 1999). The effect of income is weaker, however, in Europe (Huber and Stanig, 2007). Huber and Stanig attribute this to the strong welfare state in Europe that makes it more difficult for parties on the left and right to polarize on economic issues to the extent that the two parties in the United States can. As an economic resource, wealth may shape voting behavior through its influence on partisanship, just as income has been found to. In this case, those with larger stores of wealth should be more likely to support parties on the right. Additionally, the effect may be more pronounced in the United States.

A related set of studies look beyond income to consider the existence of class-based voting more generally, the presence of which has been both confirmed (Evans, 2000; Inglehart, 1971; Lipset, 1959; Manza & Brooks, 1999) and questioned (Clark & Lipset, 2001; Franklin, Mackie, & Valen, 2009). In these studies, class is measured in different ways, ranging from a dichotomous conception of blue-collar and white-collar workers, to a division across income categories, to divisions across educational and occupational categories. Most research using more refined measures of class has found it to shape voting behavior. Wealth has not yet been included in such analyses. Yet the existence of different types of wealth, especially one of its most tangible measures – property – is arguably an important component of class-based voting. After all, class conflicts throughout history have been rooted in a struggle between the propertied classes and the unpropertied.

Policy preferences may serve as the key mechanism that link class-based and partisan voting behavior, on the one hand, to wealth levels on the other hand. In particular, wealth may mediate voters' views of governmental responsibility and regulation in redistributing resources. Previous research links partisan voting behavior to views on federal taxation in the United States (Kiewiet, 1984; Pierson, 1994; Steinmo, 1989). Specific regulations exist for various types of assets - housing consumption is taxed differently than other types of consumption, and capital gains from real estate are taxed differently than capital gains from mutual funds. Those with wealth and without may have different policy preferences, as might those with varying types of assets. This dynamic should hold in Europe as well. One recent study links housing wealth to social policy preferences in the United States, the United Kingdom, and a broader group of 29 industrialized countries (Ansell, 2014). Those with increasing wealth through the appreciation of their home lower their support for spending on social security (in the United States), full employment (in the United Kingdom), and reducing income differences (the broader group of 29 countries). Ultimately, policy preferences culminate in one main form of political activity – the vote.

What do high levels of economic inequality mean for politics, and in particular political polarization? Polarization refers to the siloing of parties or people into distinct camps, with little ideological overlap, and less willingness to compromise. The vast majority of research on polarization is

focused on the United States, and takes two forms: elite polarization and mass polarization. Much of the literature is focused on ideology, and as with the literature on economic voting, those studies that do focus on economic polarization highlight the impact of income rather than wealth. Evidence of party polarization began in the 1960s and 1970s as Southern Democrats aligned with the Republican Party (Black & Black, 2009). By the 2000 and 2004 elections, the term polarization began to appear prominently in political commentary, both to reflect a divergence between party candidates, and to describe a supposed ‘culture war’ between citizens. There is consistent evidence for party polarization (Layman, Carsey, & Horowitz, 2006), but mixed evidence that voters have increasingly divided along ideological lines (Abramowitz, 2012; Fiorina and Abrams, 2008; Fiorina, Abrams, and Pope, 2005).

An exaggeration of an ideological culture war among citizens, however, does not preclude economic inequality among citizens leading to a polarization of elites. Indeed, findings indicate that income inequality of citizens correlates strongly with the elite polarization of elected officials. For instance, elite polarization (measured by voting behavior of Democrats and Republicans in the U.S. House of Representatives) and the share of income held by the ultra-rich (i.e. the top 1%) both declined through the 1930s, stabilized mid-century, and increased substantially from the late 1970s to present (McCarty, Poole, & Rosenthal, 2006). While correlation does not mean causation, the long historic relationship between income inequality and elite polarization is noteworthy.

Could increases in wealth inequality also be driving this relationship? Greater wealth inequality is expected to exacerbate political polarization in two ways. First, larger disparities among the haves and the have-nots will lead to the polarization of voters. A polarized electorate is more likely to breed polarized party politics, and one may even reinforce the other. Second, more extreme concentrations of wealth will lead to pandering. At the top, those commanding more resources can more effectively lobby for their interests. At the bottom, proponents of social justice and equity will be armed with more extreme visualizations of inequality. At both extremes, this will prompt elected officials to toe the party line, and take more extreme positions to reflect narrow constituencies. The next section outlines contemporary wealth distributions. It does so in relation to income distributions since income has disproportionately been studied in the literature. The section advances the argument that studies must be supplemented with measures of wealth in addition to income.

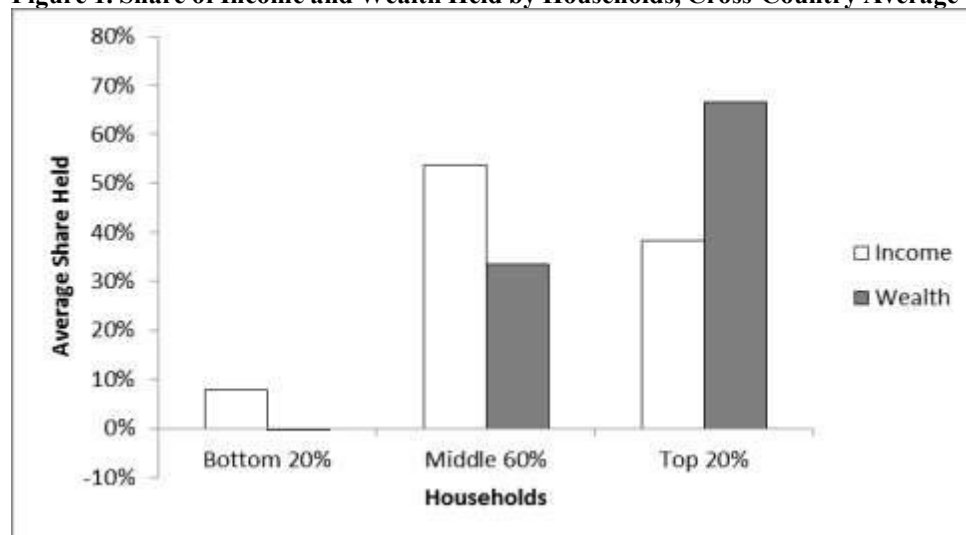
Economic Resources: Wealth versus Income

Should wealth be included in analyses of voting behavior, or can income serve as the sole indicator of economic well-being? This section argues that, while related, wealth and income should not serve as substitutes for two reasons. First, the relationship between wealth and income varies depending on which part of the distribution is considered. Second, the dispersion of wealth and income varies substantially. Trends in the relationship between wealth and income exist in the middle of the distribution, the tails of the distribution, and the extreme portions of each tail. Generally, the accumulation of one facilitates accumulation of the other. But the tails of the distribution exhibit variation. For instance, fewer than half of households fall in the top (or bottom) quintile of both income and wealth distributions (Jäntti, Sierminska, & Van Kerm, 2012). In other words, the richest households are not always the wealthiest, and those who are income-poor are not always wealth-poor. However, at the very top and bottom of the distribution income and wealth remain tightly linked (Kennickell, 2009). Put simply, for the share of households that have both or neither, inequalities are felt more intensely than might be expected if one considers only income, or only wealth. For the share of households who have more of one relative to the other, models and estimates will include unaccounted for noise, unless both wealth and income are included.

Wealth is distributed more unequally than income – upwards of twice as unequally in some cases – primarily because financial assets are more unequally distributed (Murtin & d’Ercole, 2015; Jäntti et al., 2012). For most people, the majority of the wealth they hold is contained within their home. Because most home owners also hold a mortgage, their asset is offset by a liability. For those with housing wealth, then, the amount of equity in the home matters. For those with other forms of wealth, debts are offset by a

number of assets in the financial sector, such as stocks and bonds, leading to, in relative and absolute terms, greater levels of wealth. Figure 1 highlights the difference in income and wealth levels across a group of 18 OECD countries. In a scenario of household equality, the bottom 20% of households would hold 20% of the share of income (or wealth). In actuality, the bottom 20% holds less than 10% of income and has negative net wealth. Conversely, the top 20% enjoys a far larger share relative to size, commanding nearly 40% of income and almost 70% of wealth. That leaves the middle 60% of households with about half of the income and a third of the wealth. Wealth is distributed particularly unequally in four countries: Austria, Germany, the Netherlands and the United States, where 60% or more of household wealth is held by the top 10% (OECD, 2015).

Figure 1. Share of Income and Wealth Held by Households, Cross-Country Average



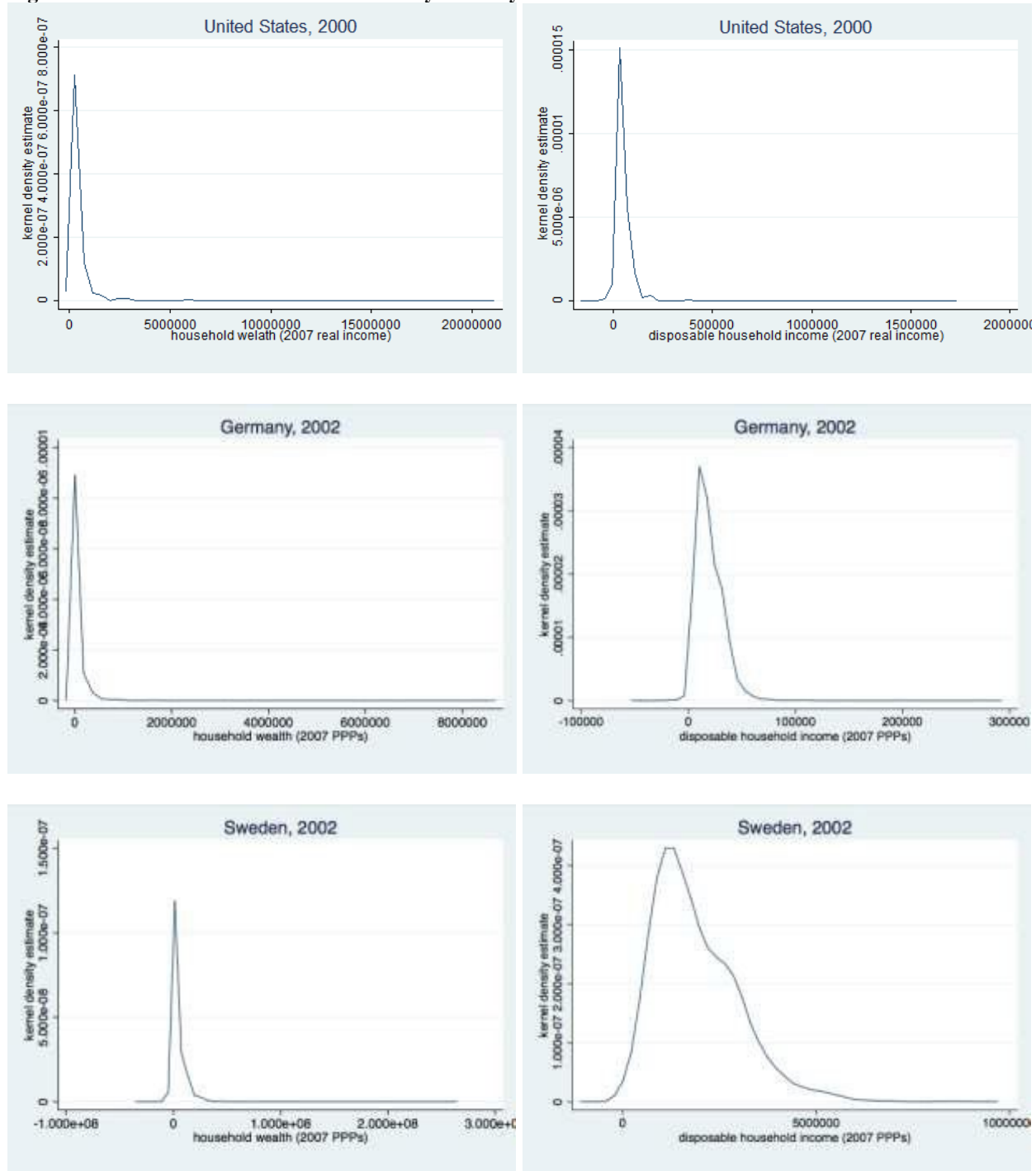
Notes: Cross-country average for 18 countries, 2010 or latest available year: Australia, Austria, Belgium, Canada, Germany, Spain, Finland, France, Great Britain, Greece, Italy, South Korea, Luxembourg, the Netherlands, Norway, Portugal, the Slovak Republic, and the United States.

Source: OECD 2015

Furthermore, the concentration of income and wealth in the hands of the few has increased over time: since 1970, the share of income held by the top 10% has increased 17% in Europe and 43% in the United States. The share of wealth has increased 6% and 11%, respectively (author's calculations, from Piketty, 2014). Aggregate data from the OECD and Piketty (2014) indicate that wealth disparities exist in all types of countries – liberal countries like the United States, corporatist countries like Germany, and even quasi-social democratic countries like the Netherlands. What do the data show for the three case countries of this paper? Figure 2 contrasts wealth and income distributions in the United States, Germany and Sweden.

In Figure 2, countries are ordered by increasing differences between wealth and income – in the United States the distributions are most similar, and Sweden the least. Both wealth and income distributions are very narrow in the United States, with a long right tail. This corresponds to a society where the rich and the ultra-rich hold substantially more wealth and income than the middle class. One way to measure the effect of the tail on the distribution is to compare the mean to the median, since the

Figure 2. Wealth and Income Distributions by Country

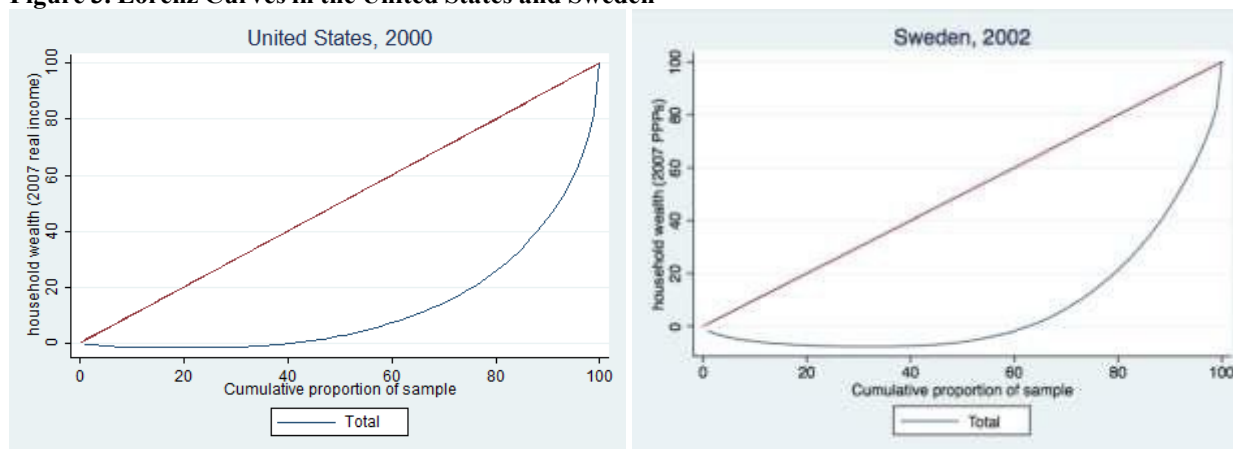


Source: Luxembourg Wealth Study (LWS) Database (accessed February 9, 2016)

mean is more sensitive to extreme values. Larger ratios indicate greater dispersion. In the United States, average wealth is 4.5 times that of median wealth and average income is 1.4 times that of median income. In other words, those with high wealth distort the distribution much more than those with high incomes. The case is similar but less pronounced in Germany. Wealth inequalities are high (a wealth mean to median ratio of 3.5) and income distributed more equally (a ratio of 1.2).

In Sweden, income is more equally distributed than in the United States or Germany. The ratio of the mean to the median is only 1.1, meaning that the income of the rich does not substantially pull up the average. Sweden is known for a welfare system that pulls in the tails of the income distribution, imposing greater equality through taxes and transfers. This does not extend to wealth. The right tail of the distribution is not as long as in the United States or Germany (with a mean to median ratio of 2.7), but the differences between wealth and income are much more pronounced here than in the other two countries. Another way to compare country-level wealth profiles is through the plotting of a Lorenz Curve. Figure 3 contrasts the Lorenz curves of Sweden and the United States. The Lorenz Curve shows how wealth is cumulatively held across a society. The line at 45° is the line of perfect equality. The poorest 20% hold 20% of wealth, the poorest 40% hold 40% of wealth, etc. The curved line represents the actual cumulative wealth holdings in each country. Curves further from the 45° line represent societies where wealth is more unequally held. In both countries, the vast majority of wealth is held by a minority of households. In the United States, the poorest 22% of households have more liabilities than assets. In Sweden, the bottom 30% do. In fact, it takes the wealth of the next 30% of households to average out to zero, which is why the portion of the Lorenz Curve representing the poorest 60% of households is comparatively more concave in Sweden. On the one hand, this can be interpreted as a somewhat equal distribution of wealth among the majority of Swedish households. But put another way, 92% of the wealth held by those with positive net worth is captured by 40% of households. The latter describes a very unequal distribution, especially for a society known for economic equality. The wealth at the very top, however, remains more unequally distributed in the United States. Those in the top 5% have 15 times the wealth of the median household, calculated as a share of median wealth. In Sweden, the figure is 9%. Not as unequal, but not evenly distributed either.

Figure 3. Lorenz Curves in the United States and Sweden



Source: Luxembourg Wealth Study (LWS) Database (accessed February 9, 2016)

The figures above paint a picture of the overall wealth distributions in a country, but say nothing about the composition of wealth in each country. Table 1 provides an overview of wealth portfolios by country. It lists the median value of assets and debts in 2007 real dollars for those households who hold each asset or debt. The numbers reflect the nominal medians of wealth components multiplied by a measure of the relative prices, namely Purchasing Power Parity (PPP) and adjusted for the level of Consumer Price Index (CPI) and exchange rates. In particular, the values for 1995, 2001 and 2005 were brought to 2007 real dollars by multiplying the wealth figures by the appropriate CPI. CPI, PPP, and exchange rates were used to convert wealth components in Sweden and Germany to 2007 real dollars. The percentage of households holding each asset or debt is listed in parentheses.

Table 1. Wealth Portfolios by Country, Median Holdings in Real 2007 Dollars

	United States				Germany	Sweden
	1995	2001	2004	2007	2001	2001
Financial assets					20,933 (78%)	
Deposit accounts	3,515 (91%)	5,731 (93%)	4,975 (92%)	5,100 (93%)	--	76,402 (64%)
Risky assets	8,179 (51%)	17,543 (52%)	13,179 (49%)	13,000 (48%)	--	65,557 (71%)
Non-financial assets						
Principle residence	120,317 (73%)	143,860 (71%)	175,725 (73%)	200,000 (75%)	205,098 (48%)	890,171 (59%)
Investment real estate	67,594 (33%)	93,586 (29%)	104,336 (32%)	130,000 (34%)	133,488 (16%)	410,922 (17%)
Total debt						261,612 (73%)
Housing debt	70,974 (50%)	55,403 (50%)	81,163 (53%)	99,604 (53%)	43,746 (26%)	--
Non-housing debt	7,706 (60%)	11,105 (66%)	12,537 (69%)	16,837 (69%)	6,041 (15%)	--
Net Worth						
Mean	152,428	248,192	275,093	295,917	182,009	699,255
Median	35,149	50,421	52,140	60,300	72,742	250,732

Notes: Median holdings calculated only for those with holdings in that category. Values in parentheses indicate the percent of households included (i.e. the percent holding that asset or debt).

Source: Luxembourg Wealth Study (LWS) Database (accessed February 9, 2016)

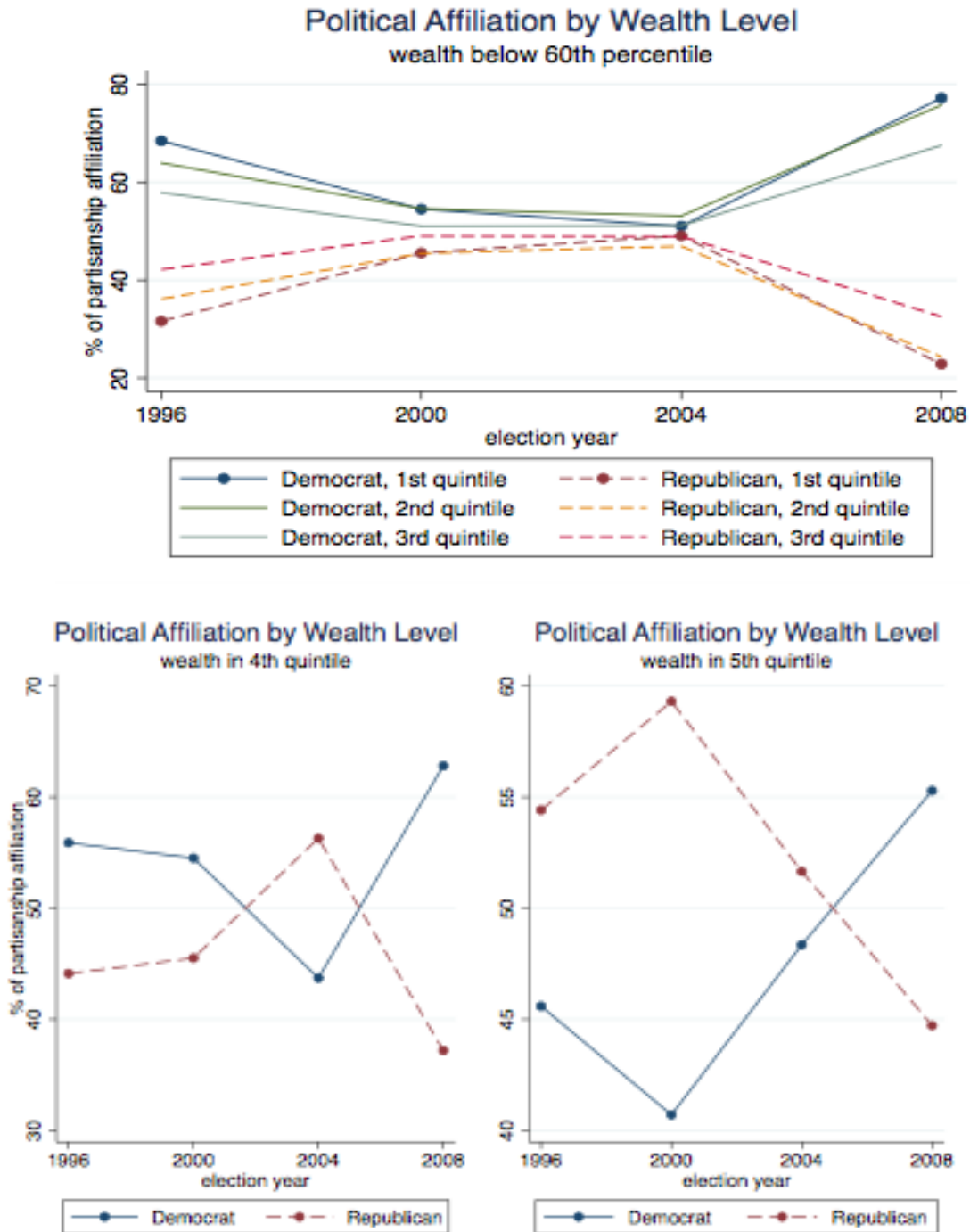
Wealth inequality exists in all three countries. The United States stands out as the most unequal when considering income and wealth jointly. Sweden stands out as having a very unequal wealth distribution compared to income. The patterns in Germany align more closely to the United States, though less extreme.

Methods and Case Selection

Polling data on voting behavior has long existed. Wealth data is harder to collect. Recent efforts by the LIS Cross-National Data Center provide researchers much-needed access to wealth data. Despite strong theoretical reasons to expect links between voting and wealth, no surveys collect data on both. Election data are drawn from the American National Election Studies (ANES) for the U.S. and the Comparative Study of Electoral Systems (CSES) for Sweden and Germany. Wealth data are drawn from the Luxembourg Wealth Study (LWS), one of the few databases available with comparable wealth data for multiple years and multiple countries. LWS was the first comparative wealth database established for public use.

Statistical matching procedures were employed to combine electoral and wealth data into one database. The data were statistically matched on labor force status, income quintile, home ownership, and education level with age groups serving as a donation class. These matching variables were standardized to common framework and the nearest neighbor distance hot deck technique was conducted via the StatMatch package in R. The wealth surveys have larger sample sizes than the election surveys, and statistical matches work more reliably when datasets are similarly sized (D’Orazio, 2012). Therefore, a random sample (without replacements) was selected from each of LWS datasets to match with the observations in the electoral databases. Such data fusion allows for the joint analysis of wealth and voting, which is in itself a significant contribution to our understanding of voting behavior, but it does not come without any caveats. The conclusions regarding the very rich voters are likely to be biased due to the fact that wealth surveys usually oversample the wealthy while electoral surveys do not. This also holds even when survey sample weights are used in statistical matching.

Figure 4. Political Affiliation by Wealth Level



Source: LWS and ANES data

The United States was chosen as the primary case study for both theoretical and empirical reasons. Much of the literature on vote choice revolves around the United States. It is also known as a liberal country where citizens' economic well-being is most directly tied to their behavior in the market. Since this paper argues for the integration of an additional concept into the voting behavior models, it is

logical to situate the analysis in the United States. The primary test case is compared to two additional countries, which are chosen to represent different political and social regimes. Germany represents a European case with similarly high levels of wealth inequality, a history of a strong center-right parties, and a corporatist welfare state where citizens' economic well-being is tied to occupation. Sweden represents a European case of lower income inequality but high wealth inequality, a strong history of left party domination, and a social-democratic welfare regime where citizens' well-being is less reliant on their behavior in the market. In the United States, data from the 1996, 2000, 2004, and 2008 presidential election cycles are used, and pooled together for the analysis. Data from the 2002 elections are used in Sweden and Germany. For each country, wealth data corresponds to the year before the election year, except in two cases where wealth data corresponds to the election year (the U.S. in 2004) or the year after the election (the U.S. in 2001).

In the United States, the presidential terms since Bill Clinton are seen as the most politically polarizing years in over a half-century. From Dwight Eisenhower's term in the 1950s through George H.W. Bush's term in the 1990s, gaps in Gallup-reported presidential approval ratings between Democrats and Republicans fluctuated from a low of 30 points during the Johnson administration in the 1960s to a high of 52 points under Reagan in the 1980s. Beginning with Bill Clinton's term, gaps between party supporters widened from 56 points (Clinton) to 61 points (George W. Bush) to 70 points under Barack Obama (Jones, 2015). Disparities in wealth accumulation were on an upward march by this time. What about partisan affiliation by wealth? As Figure 4 indicates, the self-identified partisans who belong to the wealth group that falls into first three quintiles (the bottom 60%) are quite polarized in 1996 and 2008 elections, but not so much in 2000 and 2004 elections. The polarization between partisans who belong to the top 40% of wealth group seems to be different. What is striking is that only about 45% of partisans in the top 20% of wealth distribution affiliate with the Republican party in 2008. There are even fewer wealthy people who identify themselves with the Republican Party at the fourth quintile. The data presents no doubt that in 2008 elections the Democratic Party attachment was on the rise among the rich. Yet, for the reasons mentioned above, the conclusions about those with a very high wealth share should be treated with caution.

In Germany, the 2002 election between incumbent Gerhard Schröder of the leftist Social Democrats (SPD) and Edmund Stoiber of the center-right Christian Democrats (CDU) was one of the closest in history. Stoiber conceded the election, but only after mistakenly declaring victory on the night of the election. Each party received 38.5% of the vote. Class as measured by occupation declined in importance as a cleavage among voters (Conradt, Kleinfeld, & Søre, 2004), however the decade before the election saw an increase in wealth inequality, after two decades of decreasing inequality (Hauser & Stein, 2003).

The story in Sweden is one of left-party domination for over a half century. The Prime Minister of Sweden hailed from the Social Democratic Party (SAP) for fifteen of eighteen terms, almost continuously between the post-war period and 2002. In the 2002 election, parties on the right received only 29% of the vote, while parties on the left secured 53%. The politics of Sweden are overwhelmingly left leaning compared to Germany and the United States. Sweden is known for its generous and universal welfare state, and somewhat lower levels of income inequality. Wealth inequalities, however, are high. The case of Sweden serves as a particularly challenging test of the primary independent variables.

The dependent variable in the models is a dichotomous variable measuring the party for which the respondent voted. In the United States, the conservative party (Republicans) is coded 0, and the liberal party (Democrats) is coded 1. In Germany and Sweden, votes for parties on the left are coded 1 while parties in the center and right are coded as 0. Parties were coded left, center, or right based on the Comparative Political Data Set developed by Armingeon et al (2012). Only voters who voted for one of the major parties are included in the model. Table 2 lists vote shares for each party.

Table 2. Vote Choice

	Left	Right	Center
United States 1996 (Bill Clinton)	Democrats (49.2%)*	Republicans (40.7%)	Reform Party (8.4%)
United States 2000 (George Bush)	Democrats (48.4%) Green Party (2.7%)	Republicans (47.9%)*	
United States 2004 (George Bush)	Democrats (48.3%)	Republicans (50.7%)*	
United States 2008 (Barack Obama)	Democrats (52.9%)*	Republicans (45.5%)	
Germany 2002 (Gerhard Schröder)	Social Democratic Party (38.5%)* Alliance 90/Greens (8.6%) Party of Democratic Socialism (4.0%)	Free Democratic Party (7.4%)	Christian Democratic Union (29.5%) Christian Social Union (9.0%)
Sweden 2002 (Göran Persson)	Social Democrats (39.9%)* Left Party (8.4%) Green Party (4.6%)	Liberal People's Party (13.4%) Moderate Party (15.3%)	Christian Democrats (9.1%) Centre Party (6.2%)

*Winning Party

Notes: Only parties receiving at least 2% of the vote listed. Inaugurated Head of Government listed in parentheses in column 1. In the 2000 election in the United States, Al Gore (the Democratic candidate) won the popular vote but George W. Bush (the Republican candidate) won the Electoral College and thus won the election.

Sources: Federal Election Commission; Office of the Federal Register; The Federal Returning Officer (Der Bundeswahlleiter); Statistics Sweden

The primary independent variable of interest is a measure of wealth that captures the net worth of the household in which the person lives – the household assets less the household debts. Net worth is measured in quintiles to emphasize that absolute net worth is less important than the wealth position of an individual in respect to the society in which they live. It includes most of a household's financial and non-financial assets, including deposit accounts, bonds, stocks, mutual funds, principal residence and investment real estate, and all of the primary debt, including home-secured debt and non-housing debt like vehicle loans, educational loans, and other loans from financial institutions. The measure used here excludes business equity, pension assets and life insurance because these types of assets are not always present in the wealth data and we believe it is better to use most comparable net worth across countries that we analyze.¹ In part to account for this omission, age and retirement status are included in the model, which serve as partial proxies to the likelihood of holding pension assets. A number of covariates are included in the model to incorporate the findings of previous research on vote choice. These include income, partisanship, gender and age, as well as employment status, retirement status and whether the individual owns a business. Separate probit regression models are run for each country. In the United States, data from all election years are pooled together, and a series of year dummies are included in the model. Models are interpreted using predicted probabilities.

Findings

Table 3 lists two models for each country. In Model 1, only wealth is included as an independent variable, and it is significant in all three countries. In Model 2, additional covariates are included that can generally be categorized in three groups: political, demographic, and economic. The political variables identify partisan affiliation, and are included in the model as a series of dummy variables. The comparison group holds no party affiliation. Partisanship is significant in each country, as expected, but especially in the United States. Two demographic factors often identified in the literature, age and gender, are also included. Gender is not associated with vote choice in any country, but age is associated with vote choice in both the United States and Sweden. Economic variables capture the tangible resources available to people, wealth and income, as well as conditions of

¹ We also run our analysis of the US with assets that were excluded here, and the results are essentially do not change our conclusions. They are available upon request.

employment, such as employment and retirement status. In the United States and Germany, economic variables explain variation in vote choice. For the United States, economic resources play a dominant role, where in Germany, employment variables are key. In Sweden, on the other hand, neither set of economic variables is significant in the full model.

Table 3. Determinants of Vote Choice for Left Party, Probit Regression

	United States		Germany		Sweden	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Wealth	-0.103*** (0.01)	-0.072*** (0.02)	-0.048** (0.40)	0.019 (.03)	-.054* (.03)	-0.013 (0.03)
Income		-0.055*** (.020)		-0.086*** (0.03)		-0.025 (0.03)
Partisanship (base category independent): Left		1.384*** (0.06)		0.146* (0.08)		0.407*** (0.10)
Partisanship (base category independent): Center				-0.196** (0.09)		-0.120 (0.18)
Partisanship (base category independent): Right		-1.447*** (0.06)		-0.088 (0.20)		-0.257* (0.14)
Business owner		0.134* (0.08)		-0.007 (0.16)		0.019 (0.15)
Age		-0.202*** (0.07)		-0.022 (0.06)		-0.146** (0.07)
Gender (female=1)		0.056 (0.05)		0.046 (0.07)		0.012 (0.09)
Employment status (employed=1)		-0.059 (0.07)		-0.241*** (.09)		-0.067 (0.19)
Retirement status (retired=1)		-0.002 (0.10)		-0.331** (0.13)		0.054 (0.23)
Year (base category 1996): 2000		-0.305*** (0.07)				
Year (base category 1996): 2004		-.355*** (0.07)				
Year (base category 1996): 2008		0.035 (0.07)				
Intercept	0.507*** (0.04)	1.019*** (0.18)	0.397*** (0.74)	0.602** (0.20)	0.213** (0.10)	0.462* (0.26)
N	4355	4355	1627	1609	904	904

*p<.1; ** p<.05; *** p<.01; Robust standard errors in parentheses.

Sources: LWS; ANES; CSES

Partisanship

Self-identified partisanship is a strong determinant of vote choice in the United States, but less so in Germany and Sweden. In the United States, those who affiliate with a party overwhelmingly vote for their party's nominee. In the 2000 election, the model predicts self-identified Democrats vote for the Democratic candidate with a 91% probability, but self-identified Republicans with only a 6% probability. Contrast this to Germany and Sweden, where the patterns are less stark. Self-identified left-leaning voters are more likely to cast a ballot for a candidate on the left, but only with a 62% probability in Germany and a 66% probability in Sweden. Moreover, self-identified right-leaning voters are also somewhat likely to vote for a left party, with a 52% probability in Germany and a 40% probability in Sweden.

The multi-party system in Germany and Sweden complicates questions of partisan identification. Over 60% of voters in the United States maintain a party affiliation. Over 60% of voters in Germany, and half of voters in Sweden, do not. The two party system of the United States, while offering fewer choices, captures more party supporters than in Germany or Sweden. Especially for the United States, all other variables in the model should be considered in the context of a strong partisan divide.

Economic Voting: Wealth, Income and Employment

Many scholars have found that those who are better off – as measured by income – are more likely to vote for right-leaning candidates. Does wealth also influence voting behavior? As argued above, wealth provides a more complete picture of economic well-being as a current and future income stream that needs protected, but also as a form of well-being that is not explicitly linked to wage employment. As such, wealth may have an effect on vote choice over and above any income effect. Because the voting literature has been developed in the American political and social context, the United States is the most important test case of the three countries. Indeed, it is the case where both wealth and income relate to vote choice. But wealth inequalities are growing across Europe, so it is worthwhile to assess the possibility of an increased salience of economic voting. Evidence is found in the affirmative for Germany, but not Sweden.

In the United States, both wealth and income are predictors of the vote. Those with higher levels of each are less likely to vote for the Democratic candidate. Not only is wealth a determinant of vote choice independent from income, but the magnitude of the relationship is larger. Table 4 offers a look at the magnitude through use of predicted probabilities. Because partisanship is particularly important in the United States, the effect of wealth is assessed within partisan groupings. Two details deserve note. First, even holding income constant, wealth holdings have the power to nudge partisans on both sides of the aisle. While self-identified Republicans are likely to vote for the Republican candidate regardless of wealth level, each quintile of wealth is expected to increase the probability by over one percent. If income and wealth are both allowed to vary from low to high, the change among Republicans is ten points. Wealth levels provide one possible explanation for those atypical voters whose partisanship and vote choice do not align. Second, changes in wealth have the largest impact on those who do not self-identify with a political party. There is over a ten-point difference in the likelihood that a voter with low wealth will vote for a Republican as compared to a voter with high wealth, holding income levels constant. When both income and wealth vary, there is nearly a twenty-point difference. In other words, wealth and income can help explain voters who do not follow their identified partisan preferences, and those voters who are ‘up for grabs’ in a given election.

Table 4. Simulated Probabilities, Likelihood to vote for the Republican Candidate, Prime-aged Employed Men in the United States

	Wealth / Income Distribution		Change
	Low wealth/Moderate income	High wealth/Moderate income	Probability Change
Self-identified Republican	.856 (.02)	.911 (.01)	.055
Self-identified Democrat	.039 (.01)	.071 (.01)	.032
Self-Identified Independent	.354 (.03)	.464 (.03)	.110
	Low wealth/Low income	High wealth/High income	Probability Change
Self-identified Republican	.829 (.02)	.927 (.01)	.098
Self-identified Democrat	.031 (.01)	.087 (.01)	.056
Self-Identified Independent	.314 (.03)	.508 (.03)	.194

Notes: Low wealth/income corresponds to values falling in the 1st quintile, moderate to values in the 3rd quintile, and high to values in the 5th quintile. Probabilities are calculated for prime-aged (25-54) employed men. The probabilities for women are similar. One thousand simulations were performed using *Clarify* by Gary King.

Sources: LWS; ANES; CSES

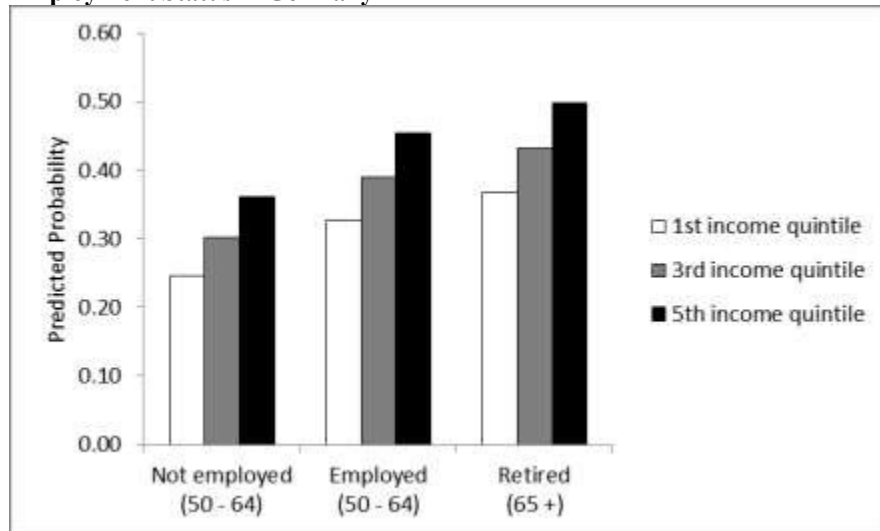
Another way to assess the relationship between wealth and vote choice is to look across age groups. Older voters are more likely to vote for the Republican candidate and younger voters the Democratic candidate. This is accepted wisdom on the campaign trail, and conforms to the adage generally but falsely attributed to Churchill – if you are not a liberal when young you have no heart, but if you are not a conservative when old, no brain. Wealth holdings offer an alternative account. The young, especially those who are very early in their employment careers, have little to no savings. Median net worth is less than \$5,000 (in 2007 real dollars) for those aged 25-34. Young home buyers have mortgages, but have not built equity in the home. Increasingly, they have high student loan debt. In other words, not only is their primary – and likely only – income stream from wages, but they are likely to have any assets offset by debt. The typical wealth profile of a young person can be juxtaposed against the typical wealth profile of an older person, particularly a retiree. Here, income streams are not primarily from wages, rather from pensions, equity built in a home (which can take many forms, from reverse mortgages, downsizing, or living rent free), and other sources of savings. Median net worth for those over 65 is \$130,000 (in 2007 real dollars). The median young person is almost completely reliant on current income streams. The median retiree has savings in one form or another, and is presumably drawing down on that wealth. Correspondingly, older voters are more likely to lend their vote to the Republican Party, known for policies that protect wealth, and young voters to the Democratic Party, known for policies supporting wage workers and those on the lower parts of the income distribution (though not necessarily only low income).

One additional economic variable – whether one owns an unincorporated business, is a significant predictor of vote choice. In the model, business owners are more likely to vote for a party on the left (with marginal significance), perhaps contrary to common wisdom. In the United States, there are 28 million small businesses accounting for over half of sales and jobs in the country (U.S. Small Business Administration, 2016). They range in size from less than five employees to up to 500, and are located in all sectors of the economy. In other words, small business owners are a diverse group. Among business owners, partisanship is still a strong predictor of vote choice. Self-identified Democrats remain unlikely to vote for the Republican candidate regardless of whether they are business owners. Predicted probabilities are 4% and 5%, respectively. The difference is greatest among Independents, who are predicted to vote for the Republican candidate with a probability of 41% if a business owner and 36% if not.

In sum, in the most important test case of economic voting, the United States, wealth is a significant predictor of vote choice. The effect persists independent of income. But while wealth holdings are unequally shared in Europe, increasingly so, wealth does not predict vote choice in either Germany or Sweden in anything beyond the base model. In Germany, holding other variables constant, income does. For instance, left-identified voters in the bottom income quintile are only predicted to vote for a left party candidate with a 55% probability, whereas similar voters in the top income quintile have a 68% probability of casting a ballot for the left. Wealth and income in Germany are more highly correlated than in the United States (a correlation of 0.45 compared to 0.36), but the model does not exhibit multicollinearity. Additionally in Germany, employment and retirement status influence the vote.

Germany is considered the quintessential corporatist welfare state. Benefits are linked to occupation and industry, stemming from Bismarck's policies in the 1880s that developed insurance schemes for old-age, sickness, and accidents that were financed and implemented jointly through a collaboration of employers and workers. Still today, a majority of workers (62%) are covered by collective agreements regarding pay and work conditions at either the industry or company level. The number is even larger when considering those companies who do not participate in collective bargaining, but nonetheless take account of the agreements when setting terms and conditions (Fulton, 2011). In the quantitative model, employment status and retirement status are significant predictors of the vote in Germany. Figure 5 illustrates the magnitude of the effect across the income distribution, holding all else constant.

Figure 5. Simulated Probabilities, Likelihood to Vote for a Party on the Right, by Income Quintile and Employment Status in Germany



Sources: LWS; ANES; CSES

Those who are not in the market, but not yet retired, are the least likely to vote for a party on the right – only a 25% probability for those in the bottom income quintile and a 36% probability for those in the top quintile. Those who are employed or retired are most likely to vote for a party on the right. For instance, the model predicts that those who are retired with income in the bottom quintile are about as likely (37%) to vote for a party on the right as those in the top quintile who are not employed (36%). Retirees in the top income quintile are predicted to vote for the right with a 50% probability.

In both Germany and the United States, economic factors are strong predictors of vote choice. Economic resources are important in the United States. Employment factors are key in Germany. Neither type is significant in Sweden. If economic factors do not explain vote choice in Sweden, what might? Just as Germany is the archetypal corporatist welfare state, Sweden is the classic social-democratic welfare state. Is vote choice instead moderated by non-economic factors?

Economic vs. Noneconomic Factors: The Case of Sweden

The variables included in the quantitative models were chosen to assess the impact of economic voting given increasing levels of wealth and income inequality. But perhaps Swedes base their vote decisions on social elements instead? An additional set of survey questions on the CSES provides some preliminary evidence of this possibility. The CSES survey identifies five of the most salient issues in each election year in Sweden and Germany, as well as the United States. The issues are identified through the expert judgment of CSES collaborators using open-ended and follow-up questions for each country, and are then aggregated to the country level. In other words, all respondents in a given country are coded with the same response. These variables cannot be included in the quantitative model since they do not vary by country, but it is possible to look across the three countries to consider differences in issue salience. For each country, Table 5 lists the most salient issues in each of three election cycles. Issues range from economic and social, to domestic and international, to assessments of leadership and concerns of safety and security. Within each country, clear differences emerge in the types of issues that citizens identify as important.

Table 5. Most Salient Issue Areas

	Election Cycle 1 (1996-1998)	Election Cycle 2 (2002-2004)	Election Cycle 3 (2005-2008)
United States (1996; 2004; 2008)	Economic factors Taxes Health care Presence of 'new' party candidates Finance	Terrorism, 9/11 War in Iraq Economy and unemployment Moral/Cultural issues Health issues	State of the economy Wars (Terror, Iraq, Afghanistan) Performance of incumbent Size of welfare state/economic fairness/inequality 'Social' issues (abortion, religion, race, immigration)
Germany (1998; 2002; 2005)	Party performance Unemployment Leadership, 'Personalization' Media issues	Leadership of the Chancellor Economy and unemployment War on Iraq Social justice Flood in East Germany	Reform of social security (Hartz IV, unemployment benefits) Economy and unemployment Tax reform (goods and service tax) Snap elections Health system
Sweden (1998; 2002; 2006)	Worker's protection/Rights Support/Opposition for EU Taxes Promises/Trust of leadership Economic factors	Social welfare Health issues Education Childcare Taxes	Employment/Unemployment Social welfare/Health issues Education Pensions/Elderly care Taxes

Notes: In Germany, the 2005 election was a snap election – called before expected.
Sources: CSES

Economic issues – either identified broadly as 'economic factors' or more specifically as taxes, unemployment, and finance – dominate discourse in the United States (except in 2004, the first post 9/11 national election). Social issues are based in moral debates, like abortion. In contrast, social issues in Sweden dominate, and are more squarely linked to social policy - welfare, health, education, pensions, etc. – especially in the 2002 election (the election year used in the quantitative model). Notably, in a follow-up question about whether there would be a general consensus on the salience of issues, only Swedes stated that other Swedes would agree. Those in the United States said their fellow Americans would not agree with the issues they individually identified as important. Not only are the issues that Swedish respondents identified more social in nature, but they tend to think their views are similar to the whole.

The story in Germany is less clear. Views regarding the economy share the top spots with views on performance of the party and Chancellor. It is unclear whether performance is based on economic or social issues. If 2005 is an indication, where the top issue is the reform of unemployment benefits within the social security system, then it is a mix of both. In any case, all social issues are funded by taxes, and are fundamentally economic in nature. Distinctions between social and economic issues are undeniably fuzzy. However, this does not minimize the role that a difference in focus can have on political discourse. For instance, the data indicate Americans are focused on issues based on funding sources, like taxes, where Swedes are focused on the policy or policy outcome itself. A focus on funding sources may prompt a more individualistic political dialogue – should my tax dollars go to help the poor. A focus on social outcomes may be more likely to prompt collectively framed dialogues – should we address poverty, and if so how. The issues that respondents in Sweden find politically salient are arguably more social in nature than in either Germany or the United States.

As in the United States, younger voters are more likely to vote for a party on the left in Sweden. Given the use of cross-sectional data, it is impossible to know whether this is an age effect (with voting behavior changing with age) or a cohort effect (where younger cohorts will continue to support the left as they age), but young people will experience wealth inequality in ways that older generations did not. Is it possible that the changing nature of wealth disparities will gain increased salience in the voting calculations of Swedes? After all, Sweden's long history of social democratic politics and solidaristic wage policy has not prevented inequalities in income and wealth from deepening. In fact, wealth inequalities are quite high, even compared to the United States, a country well-known for its unequal wealth distribution.

Discussion

The United States, Germany and Sweden represent three countries with diverse political and social histories. They are commonly used to represent three distinct regime types, liberal, corporatist and social democratic respectively. The role of economic voting is different in each. Individual level resources, wealth and income, influence vote choice in the United States. There, individuals are almost entirely reliant on market forces to secure their well-being; it is perhaps no wonder that economic position and voting behavior are linked. However, studies typically use only income to assess the link. The findings in this paper demonstrate that wealth should be included as well. In Germany, where social stratification occurs through occupation, income matters, and employment status does too. Wealth is significant only in the base model. In Germany, income and wealth are more highly correlated than in the United States, and income may serve as a proxy for wealth. No economic variables included in the model relate to vote choice in Sweden, where political discourse is framed by social issues and left-party dominance.

By choosing three very different countries to assess explanatory power, this paper has attempted to define the scope of the relationship of wealth to vote choice. Next steps in the research agenda include extending the outcome of interest to include other aspects of voting behavior, using more detailed measures of wealth, and employing a most-similar research design to identify cases where wealth is most likely to hold explanatory power.

Is vote choice the variable with the closest link to wealth accumulation? While there is empirical support to link wealth to vote choice, partisanship operates very strongly in the models. In addition to the direct effect, wealth accumulation might influence partisanship. Rather than wealth at one point in time influencing vote choice in the next election, wealth accumulation in early adulthood may shape partisan preferences, which are typically relatively stable across time. These claims could be assessed with similar strategies and data sources as used in this paper; however, panel data would be better suited to tracking behavior and preferences over time.

Wealth may also be linked to policy attitudes, as mentioned in the theory development section. Surveys collecting information on voting behavior often also collect information on policy preferences. Future research might consider the role of wealth in influencing policy preferences. One logical place to begin is to assess the link between wealth and knowledge of policies – with the hypothesis that those who have more at stake (i.e. are wealthier) will follow public policy more closely. Another possibility is that policy areas that are likely to affect wealth (e.g. taxation and macroeconomic policies) will be of interest to those with wealth, and the accumulation of wealth will be linked to views on tax treatment and fiscal policy.

In this paper, overall net worth is used as the measure of wealth. There are many subcomponents which make up one's wealth. These can be financial or non-financial in nature, and one's wealth is determined by both sides of the budget sheet. Furthermore, countries vary not just in the distribution of wealth, but in whether wealth is offset by debts and where assets are held. In looking at wealth subcomponents, multiple questions can be considered. For instance, will two people with a similar level of assets, but one with equity primarily in housing and the other with assets primarily in stocks and bonds still act the same way? Are assets a better predictor of vote choice, or does debt drive behavior?

The models indicate that wealth and other economic variables operate differently in the United States, Germany and Sweden. The inclusion of additional countries could help determine whether voting behavior is mediated by regime type, since each country is representative of a particular regime. In selecting countries, a most-similar design could be fruitfully employed, selecting countries with broadly similar political and economic dialogues. For instance Australia, Canada, Ireland, New Zealand and the United Kingdom are commonly categorized as having liberal welfare regimes where citizens secure well-being primarily through the market. The link between economic resources and voting should be stronger in these countries as compared to social democratic countries like Denmark, Norway and Sweden.

Heightened wealth and income inequalities lead voters to make decisions within an increasingly polarized arena. Likewise, heightened disagreements between parties and elites offer voters more polarized choices. This dual polarization can lead to less political compromise among elected officials, and greater disparities in the voting behavior of citizens. Politicians' actions, in their campaigns and in their support of particular policies, are based in part on who they represent. In an increasingly polarized world, the haves and the have-nots command different levels of resources, and may contribute to an increasingly polarized political discourse. The political salience of wealth disparities is surely part of this story.

References

- Abramowitz, A. (2012). Forecasting in a polarized era: The time for change model and the 2012 presidential election. *PS: Political Science & Politics*, 45(04), 618-619.
- Ansell, B. (2014). The Political Economy of Ownership: Housing Markets and the Welfare State. *American Political Science Review*, 1-20.
- Black, E., & Black, M. (2009). *The rise of southern Republicans*: Harvard University Press.
- Brooks, C., & Brady, D. (1999). Income, economic voting, and long-term political change in the US, 1952–1996. *Social Forces*, 77(4), 1339-1374.
- Campbell, A. (1980). *The American voter*. Chicago: University of Chicago Press.
- Clark, T. N., & Lipset, S. M. (2001). *The breakdown of class politics: A debate on post-industrial stratification*: Woodrow Wilson Center Press.
- Comparative Study of Electoral Systems. (2015). CSES Module 1–3 Full Release.
- The Federal Returning Officer (Der Bundeswahlleiter). (2002). Wahl zum 15. Deutschen Bundestag am 22. September 2002. Available at www.bundeswahlleiter.de/en/index.html (accessed March 30, 2017).
- Conradt, D. P., Kleinfeld, G. R., & S e, C. (2004). *A Precarious Victory: Shroeder and the German Elections of 2002*: Berghahn.
- Davies, James B. and Anthony B. Shorrocks (2000). "The distribution of wealth". In *Handbook of Income Distribution*. Edited by A.B. Atkinson and F. Bourguignon. Vol. 1, chap. 11, 605–675: North Holland.
- D'Ambrosio, C. & Wolff, E. (2001). Is wealth becoming more polarized in the United States? Unpublished Technical Paper.
- Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton, N.J.: Princeton University Press.
- Evans, G. (2000). The continued significance of class voting. *Annual review of political science*, 3(1), 401-417.
- Federal Election Commission. Election Results. Retrieved January 25, 2016, from <http://www.fec.gov/pubrec/fe2000/cover.htm>
- Fiorina, M. P., & Abrams, S. J. (2008). Political polarization in the American public. *Annu. Rev. Polit. Sci.*, 11, 563-588.
- Fiorina, M. P., Abrams, S. J., & Pope, J. C. (2005). *Culture war? : Pearson Longman* New York.
- Flanigan, W. H., Zingale, N. H., Theiss-Morse, E. A., & Wagner, M. W. (2014). *Political behavior of the American electorate*: Cq Press.
- Franklin, M. N., Mackie, T. T., & Valen, H. (2009). *Electoral change: Responses to evolving social and attitudinal structures in Western countries*: ECPR Press.
- Fulton, L. (2011). Worker representation in Europe. *Labour Research Department and ETUI (online publication)*.
- Gelman, A., Kenworthy, L., Su, Y. (2010). Income Inequality and Partisan Voting in the United States. *Social Science Quarterly.*, 91(5), 1203-1219.
- Hauser, R., & Stein, H. (2003). Inequality of the Distribution of Personal Wealth in Germany 1973-1998. *The Levy Economics Institute working paper*, 398.
- Huber, J.D., & Stanig, P. (2007). *Why Do the Poor Support Right-Wing Parties? A Cross-National Analysis*. Technical Report. Department of Political Science, Columbia University

- Inglehart, R. (1971). The silent revolution in Europe: Intergenerational change in post-industrial societies. *American Political Science Review*, 65(04), 991-1017.
- Jääntti, M., Sierminska, E., & Van Kerm, P. (2012). *Modelling the joint distribution of income and wealth*. Paper presented at the 32nd General Conference of The International Association for Research in Income and Wealth, Boston, USA.
- Jones, J. M. (2015). Obama Approval Ratings Still Historically Polarized. Retrieved January 25, 2016, from <http://www.gallup.com/poll/181490/obama-approval-ratings-historically-polarized.aspx>
- Kennickell, A. B. (2009). *Ponds and Streams: Wealth and Income in the US, 1989 to 2007*: Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board.
- Kiewiet, D. R. (1984). Macroeconomics and micropolitics: The electoral effects of economic issues. *Business Horizons*, 27(5), 85-86.
- Layman, G. C., Carsey, T. M., & Horowitz, J. M. (2006). Party polarization in American politics: Characteristics, causes, and consequences. *Annu. Rev. Polit. Sci.*, 9, 83-110.
- Lipset, S. M. (1959). Democracy and working-class authoritarianism. *American Sociological Review*, 482-501.
- Luxembourg Wealth Study (LWS) Database, <http://www.lisdatacenter.org> (multiple countries; February 9, 2016). Luxembourg: LIS.
- Manza, J., & Brooks, C. (1999). *Social Cleavages and Political Change: Voter Alignments and US Party Coalitions: Voter Alignments and US Party Coalitions*: OUP Oxford.
- McCarty, N., Poole, K. T., & Rosenthal, H. (1997). Income redistribution and the realignment of American politics.
- McCarty, N., Poole, K. T., & Rosenthal, H. (2006). *Polarized America: The dance of ideology and unequal riches* (Vol. 5): MIT Press.
- Murtin, F., & d'Ercole, M. M. (2015). Household wealth inequality across OECD countries: new OECD evidence. *OECD Statistics Brief, No. 21*.
- OECD. (2015). *In It Together: Why Less Inequality Benefits All*. Paris: OECD Publishing.
- Office of the Federal Register. Historical Election Results. Retrieved January 25, 2016, from <http://www.archives.gov/federal-register/electoral-college/historical.html>
- Pierson, P. (1994). *Dismantling the welfare state? : Reagan, Thatcher, and the politics of retrenchment*. Cambridge, England ; New York: Cambridge University Press.
- Piketty, T. (2014). *Capital in the 21st Century*. Cambridge.
- Piketty, T. Saez, E. (2014) Inequality in the long run. *Science*, 334 (6186), 838-843.
- Rehm, Philipp (2011). "Risk Inequality and the Polarized American Electorate." *British Journal of Political Science* 41, 363–387.
- Statistics Sweden. Historical statistics of elections 1910-2014 Retrieved January 25, 2016, from <http://www.scb.se/en/Finding-statistics/Statistics-by-subject-area/Democracy/General-elections/General-elections-results/Aktuell-Pong/12275/Historical-statistics-of-election-results/32065/>
- Steinmo, S. (1989). Political institutions and tax policy in the United States, Sweden, and Britain. *World Politics*, 41(04), 500-535.
- The American National Election Studies. (2010). Time Series Cumulative Data File. from Stanford University and the University of Michigan www.electionstudies.org
- U.S. Small Business Administration. (2016). Small Business Trends. Retrieved January 25, 2016, from <https://www.sba.gov/content/small-business-trends-impact>