

LWS

Working Paper Series

No. 19

Wealth Distribution and Individual Voting Preferences: A Comparative Perspective

Piotr Paradowski and Lindsay Flynn

April 2015



CROSS-NATIONAL
DATA CENTER
in Luxembourg

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

Wealth Distribution and Individual Voting Preferences: A Comparative Perspective

Abstract

The political science literature has neglected the role that economic wealth may play in shaping voting preferences during national elections, most likely because of a lack of data on wealth. This paper examines the influence of household net worth on voting preferences in the United States, with reference to Sweden and Germany. This paper employs individual-level data from the American National Election Studies (ANES), the Comparative Study of Electoral Systems (CSES), and the Luxembourg Wealth Study Database (LWS). Statistical matching methods are used to integrate the electoral and wealth surveys, and probit regression models are used to quantitatively analyze relationships. Wealth, which serves as a strong conceptual proxy to social class, is found to influence voting behavior – especially in the United States. This effect exists over and above the effect of income, indicating that the discipline should incorporate wealth more fully into studies of voting behavior.

Piotr Paradowski
LIS Cross-National Data Center
paradowski@lisdatacenter.org

Lindsay Flynn
LIS Cross-National Data Center
lbe3f@virginia.edu

Introduction

Warren Buffett, CEO of one of the top 25 Fortune 500 companies and one of the wealthiest men in America, donates the maximum amount allowed by the Federal Election Commission to the Democratic National Committee. Is he an anomaly? Do those with wealth typically vote for the conservative party rather than liberals? Does wealth have an effect on vote choice over and above the effect of income? There is a small but growing literature exploring the distribution of wealth (on its own and *vis-à-vis* income), but the possible links between wealth and voting are under-theorized and under-analyzed. Wealth data – severely lacking until recently – may serve as a truer measure of social class than income measures. This paper contributes to the literatures on wealth and voting behavior to highlight the current availability status of wealth data, to conceptualize the role of wealth in shaping vote choice, and to conduct a preliminary quantitative analysis. The United States is used as the primary case study. The results are compared to two additional reference countries: Germany and Sweden.

The paper is organized as follows: first, two distinct literatures are identified. The literature on determinants of voting behavior is used to construct the hypothesized relationship between wealth and vote choice. The small literature on wealth distribution is used to highlight the theoretical and empirical differences between wealth and income, and to develop the reasons why wealth is expected to influence vote choice. Second, the paper introduces datasets that contain information on wealth accumulation in the first case, and information on vote choice in the second. The data are merged using statistical matching, and the relationship between wealth and vote choice is assessed using probit regression analysis. Several post-estimation techniques are used to interpret the findings of the quantitative models, which show that wealth does indeed have an effect on vote choice. The wealthy – and especially the ultra-wealthy – are much more likely to vote for conservative parties. This effect is independent of the effect of income on vote choice. The paper concludes by emphasizing the importance of including wealth, previously unexplored, into models of vote choice.

Wealth and Voter Choice

There have traditionally been three popular schools of thought in regards to voter turnout and vote choice. While there are various formulations of each, the Columbia school (also known as the sociological model) of thought emphasizes the role of social class, the Michigan school of thought emphasizes the role of partisan identification and political attitudes, and the economic model emphasizes the role of income and economic self-interest. From these schools, a number of determinants have been found to be important in vote choice. Because these schools have been compared in numerous studies, they are only discussed in broad conceptual strokes here (for initial formulations, see Campbell et al. 1960; Downs 1957; and Lazarsfeld et al. 1948. For a review of the three schools, see Manza & Brooks 1999) *vis-à-vis* how they relate to a theory of wealth and voting behavior.

The Columbia school and the Michigan school both highlight the importance of demographic variables in understanding vote choice, including socio-economic status, class, age, race, and gender. The focus of the Columbia school is often on social class and socio-economic status, while the Michigan school emphasizes the role of partisanship, while still controlling for demographic variables. The economic model emphasizes the role of income and how it influences policy and performance evaluations, which in turn influence voting behavior. Across the three schools, a deep literature exists linking demographic,

social, and economic variables to vote choice (Miller et al. 1996; Powell & Whitten 1993; Verba et al. 1995; Whitten and Palmer; Wolfinger and Rosenstone 1980).

While wealth has been neglected in previous studies, it can be incorporated into the voting behavior framework in several ways. On the one hand, it can be thought of as operating in similar ways as income. On the other hand, it can be contrasted with income to serve as a truer measure of social class. Thus research from both the economic and sociological models of voting behavior can inform theories of wealth and voting behavior.

Income has been related to both voter turnout and voter choice. Higher levels of income lead to an increased likelihood of voting in the first place, and an increased likelihood of voting for conservative parties in the second. Brooks and Brady (1999) provide the logic and the empirical evidence linking income to conservative vote choice. They find that across the 1952-1996 national election cycles in the United States, those with income one standard deviation lower than the average were 13% more likely to vote for the Democratic candidate than those with an income one standard deviation above the average. In other words, at least in the United States, income creates a cleavage in the voting population – citizens with lower income are more likely to vote for Democrats and citizens with higher income to vote for Republicans. The mechanisms at work here, Brooks and Brady find (contrary to Hibbs 1987), rest in voters' views of governmental responsibility. As they state, “[h]ousehold income shapes voters' preferences about the proper size and social-welfare responsibilities of government, in turn leading to contrasting patterns of vote choice among voters at different income levels “ (Brooks and Brady 1999, p. 1361). Wealth can similarly be expected to shape voters' preferences for political party by influencing their policy preferences.

For instance, in most countries there are specific tax regulations for various types of assets – housing consumption is taxed differently than other types of consumption, real estate assets are taxed differently than capital gains from mutual funds. This leads to a huge set of policies surrounding wealth and taxation. Previous research links voting behavior to views on federal taxation (Kiewiet 1983). It is likely that those with wealth and without may have different tax policy preferences. Since wealth and income are taxed differently, those with varying wealth-to-income ratios may be expected to vote differently as well. Party platforms are often based around taxation issues, linking wealth to voting behavior: as Sven Steinmo stated, “[t]axation is at the center of ideological debate between left and right in every modern welfare state “ (Steinmo 1989, p. 500). Because the accumulation of wealth is tied to market factors, it is also expected that wealth influences voters' views on the role of government regulation of the economy. Because this is another typical policy area where parties diverge (Pierson 1994), wealth and vote choice are expected to relate here as well.

In these ways, wealth can theoretically influence voting through both egocentric means – where a voter's self-interest based on individual wealth influences the vote, and sociotropic means – where general views of the economy, tempered by wealth, influence the vote. No claims are made here, though, linking wealth to either retrospective or prospective voting behavior (see Fiorina 1981 for a discussion of egocentric, sociotropic, retrospective, and prospective voting.) Wealth should not be expected to relate merely to policy preferences, though. It is additionally expected to relate to social class.

Class voting has a long but varied history in explanations of voting behavior. Early research linked working class status to support of economic liberalism and middle class status to more conservative

political preferences, but also identified the possibility of a younger generation who grew up in middle class prosperity to associate more with the left (Inglehart 1971; Lipset 1959). While the direction of the relationship was unclear, social class as a vote determinant was not questioned. The research paradigm has shifted in recent decades, prompted even by some of the initial scholars, arguing that social class as a determinant of vote choice has declined during the post-war period (Clark and Lipset 2001; Franklin et al. 1992). But even more recently, this research has been questioned, indicating that class still matters (Van der Waal et al. 2007).

In each case, class is operationalized as some combination of occupation, income, and education. The inclusion of wealth into the conceptual framework of class leads to a more complete picture of class, and its absence may partly explain the divergent results when it comes to class and voting behavior. Wealth factors into social class in a number of ways. It is not necessary for occupation and wealth, or even wealth and income, to operate in tandem. Those in working or middle class jobs may have accumulated housing wealth, for instance, which might influence their voting preferences more than their occupation. Certain occupations (e.g. farmers or others who are self-employed) may tie up much of their income in assets, meaning that neither occupation nor income would serve as full measure of class. In these cases, the inclusion of wealth-based measures may more accurately predict voting behavior. Conceptually, wealth logically corresponds with traditional measures of social class.

There are at least two distinct ways, then, that wealth may influence the vote and political preferences. First, wealth (or lack thereof) may influence the rational economic calculations that form political preferences. Second, the presence or accumulation of wealth may lead some voters to consider themselves part of a certain social class, which in turn influences voting behavior. But what exactly is wealth, conceptually? How is it distributed, and how is it different from income?

A person's wealth is equivalent to a person's net worth, and is a measure of economic well-being. It is typically (though not always) measured at the household level. Some researchers will use the term "wealthy" to refer to one's income status, but wealth and income are different concepts. While income refers to both wages and income received from various assets, wealth refers to the assets themselves. Wealth can, for instance, generate income. Income, in turn, can be used to purchase assets that may lead to the accumulation of wealth. Wealth is measured by calculating both sides of a 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) to calculate net worth. Income not spent on consumption at time t becomes wealth at time $t+1$.

Conceptually, wealth can serve as a tool to smooth consumption during times of lower income (e.g. economic downturns) by cashing out assets to generate income. Or, wealth can serve to smooth consumption later in the life course, such as during retirement (Jäntti et al. 2012). In each case, the presence of wealth helps to ensure economic stability, where the lack of wealth indicates greater instability. In terms of voting, greater economic instability should lead to left-leaning political tendencies. However, some assets are more liquid than others, and households can have different asset portfolios (though Sierminska et al. (forthcoming) find that much wealth accumulation is in the form of owned homes). Different wealth portfolios may lead to different voting behavior.

Wealth and income should serve as supplementary concepts, not as substitutes for each other. Wealth and income do tend to co-vary (in a positive direction), but the relationship is not linear – there is variation in

the correlation at the tails (e.g. there are low-income households who have high levels of net worth). Wealth inequality is also larger (on average two to three times larger) than income inequality (Jäntti et al. 2002). Thus, the inclusion of wealth in studies on voting behavior should introduce an additional layer of depth, on both theoretical and empirical grounds.

Methods

Voting and wealth may be related, but as with many hypothesized relationships, there are currently no surveys that collect data on both voting behavior and wealth. As such, data from the electoral surveys and wealth surveys were combined through use of statistical matching procedures.¹ Demographic variables, including education level, labor force status, and income quintile were used to match the datasets. The datasets were originally very different sample sizes. In order for statistical matches to work more reliably, it is best to use similarly sized datasets (D'Orazio 2012). Therefore, a random sample was selected from each of the electoral databases to match with the observations in the LWS datasets.

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 case of the United States. 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. But more practically, wealth data are largely unavailable for many countries. The United States is the only country where wealth data are available for a range of years. Germany and Sweden are chosen as comparison cases for similar practical reasons (availability of data), but also because between them, they represent different political regimes and different party settings as compared to the U.S. 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. Data is drawn from the American National Election Studies (ANES) for the U.S. and the Comparative Study of Electoral Systems (CSES) for Sweden and Germany. For each country, LWS data generally corresponds to a year *near* the election year, but wealth data are not consistently available for the year before the election year.

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 1 lists vote shares in the sample and in the actual popular vote for each country.² Voting behavior is captured – in all cases but two – in the year following the wealth reference year.

Table 1. Vote Choice

	Wealth reference year	Election year	Share left in sample (actual popular vote)	Share non-left in sample (actual popular vote)
United States	1995	1996	58% (50%)*	42% (41%)
	2001	2000	51% (48%)	49% (48%)*
	2004	2004	49% (48%)	51% (51%)*
	2007	2008	68% (53%)*	33% (46%)
Germany	2001	2002	60% (51%)*	40% (49%)
Sweden	2001	2002	52% (53%)*	48% (47%)

Source: ANES, CSES, U.S. National Archives and Records Administration, electionresources.org

*winner

The primary independent variable of interest is a measure of wealth. All 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 data are harmonized and hosted by the LIS Cross-National Data Center; LWS was the first comparative wealth database established for research use. The wealth of an individual is measured as the net worth of the household in which the person lives – the household assets less the household debts. 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 and some assets like pension assets and life insurance.³ Table 2 provides an overview of wealth portfolios by country. It lists the average values by asset in national currencies, with the percent of households holding that asset in parentheses. In the quantitative models, the independent variable, net worth, is measured in quintiles. This is done 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.

Table 2. Wealth Portfolios by Country

	1995	United States		2007	Germany	Sweden
		2001	2004		2002	2002
Financial assets					36,023 (76%)	
Deposit accounts	20,751 (89%)	24,566 (93%)	26,709 (91%)	36,645 (92%)	--	111,099 (63%)
Risky assets	30,685 (41%)	65,854 (43%)	88,018 (40%)	61,026 (35%)	--	145,030 (75%)
Non-financial assets						
Principle residence	78,045 (67%)	139,631 (72%)	181,128 (73%)	225,797 (72%)	95,973 (44%)	651,030 (61%)
Investment real estate	30,791 (19%)	71,594 (19%)	57,763 (18%)	84,407 (19%)	48,400 (14%)	138,437 (16%)
Total debt						413,911 (82%)
Housing debt	34,895 (45%)	55,403 (50%)	81,163 (53%)	99,604 (53%)	31,920 (26%)	--
Non-housing debt	9,335 (64%)	11,105 (66%)	12,537 (69%)	16,837 (69%)	4,408 (15%)	--
Net Worth	116,042 (78%)	235,136 (78%)	259,919 (78%)	291,432 (77%)	172,861 (79%)	631,684 (70%)

Source: LWS

A number of covariates are included in the model to incorporate the findings of previous research on vote choice. These include partisanship, education, gender, and age, as well as employment status, retirement

status, whether the individual owns a business, and income. 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.

Findings

Table 3 below lists two models for each country. In Model 1, only wealth is included as an independent variable. In Model 2, all covariates are included. The data show that wealth is a predictor of vote choice in each country in Model 1. When additional covariates are included, wealth remains a significant predictor only in the case of the United States.

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

	United States		Sweden		Germany	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Wealth	-0.103*** (0.01)	-0.060*** (0.02)	-.054* (.03)	-0.013 (0.03)	-0.048** (0.40)	0.019 (.03)
Income		-0.060*** (.020)		-0.025 (0.03)		-0.086*** (0.03)
Partisanship (base category independent): Left		1.394*** (0.06)		0.407*** (0.10)		0.146* (0.08)
Partisanship (base category independent): Center				-0.120 (0.18)		-0.196** (0.09)
Partisanship (base category independent): Right		-1.445*** (0.06)		-0.257* (0.14)		-0.088 (0.20)
Business owner		0.131* (0.07)		0.019 (0.15)		-0.007 (0.16)
Age		-0.145*** (0.04)		-0.146** (0.07)		-0.022 (0.06)
Gender (female=1)		0.054 (0.05)		0.012 (0.09)		0.046 (0.07)
Employment status (employed=1)		-0.068 (0.07)		-0.067 (0.19)		-0.241*** (.09)
Retirement status (retired=1)		0.027 (0.10)		0.054 (0.23)		-0.331** (0.13)
Year (base category 1996): 2000		-0.303*** (0.07)				
Year (base category 1996): 2004		-.353*** (0.07)				
Year (base category 1996): 2008		0.041 (0.07)				
Intercept	0.507*** (0.04)	0.938*** (0.16)	0.213** (0.10)	0.462* (0.26)	0.397*** (0.74)	0.602** (0.20)
N	4355	4355	904	904	1627	1609

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

Source: LWS Database; ANES; CSES

In each of the base models (Model 1), wealth is a predictor of vote choice. Those with higher levels of wealth accumulation are less likely to vote for a party on the left. This provides initial support for the inclusion of wealth in studies on voting behavior. Model 2 includes the covariates identified in the literature that have been found to influence vote choice. A different set of variables is important in each country. Wealth maintains statistical significance in the case of the United States, but in Sweden and Germany, wealth does not reach the level of statistical significance. In Germany, those with higher incomes are less likely to vote for parties on the left.⁴ In the U.S. and Sweden, older age cohorts are less likely to vote for a left-leaning candidate. Business owners are more likely to vote for a left party in the U.S. (contrary to common wisdom). In Germany, both being employed and being retired lead to a lower likelihood of supporting the left candidates.

Partisanship is a strong determinant of vote choice in the United States (and to some extent in Sweden and Germany), with an effect size larger than any other variable. Especially for the case of the U.S., this verifies much research of the Michigan school variant of voting behavior. Self-identified Democrats tend to vote for Democrats, and self-identified Republicans tend to vote for Republicans. The model compares party affiliation with each of the major groups to those who self-identify. While partisanship is important, wealth accumulation influences vote choice among each group of self-identified voters. Simulated probabilities can be used to assess the likelihood of a vote for a particular party given a set of values for each of the independent variables.⁵ Table 4 provides simulated probabilities for a vote for the Republican candidate in the United States given various scenarios.

Table 4. Simulated Probabilities, Likelihood to vote for the Republican Candidate, United States

	Self-identified Republican			Self-identified Democrat			Self-identified Independent		
	Low wealth, low income	High wealth, high income	Probability change	Low wealth, low income	High wealth, high income	Probability change	Low wealth, low income	High wealth, high income	Probability change
Male business owner, not retired but aged 65+	.86	.94	.08	.04	.10	.06	.36	.55	.19
Male business owner aged 50-64	.83	.92	.09	.03	.08	.05	.31	.49	.18
Male business owner aged 25-49	.79	.90	.11	.02	.06	.04	.26	.43	.17
Employed male aged 50-64	.86	.94	.08	.04	.10	.06	.36	.55	.19
Retired male aged 65+	.87	.95	.08	.04	.11	.07	.38	.57	.19
	Low wealth, moderate income	High wealth, moderate income	Probability change	Low wealth, moderate income	High wealth, moderate income	Probability change	Low wealth, moderate income	High wealth, moderate income	Probability change
Employed male aged 25-49	.85	.90	.05	.04	.06	.02	.35	.44	.09
Male business owner aged 50-64	.86	.90	.04	.04	.06	.02	.35	.44	.09

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. Predicted probabilities for women are similar to that of men.

When both wealth and income vary from their low to high points, there is anywhere from a five to a nineteen point difference in the likelihood to vote for the Republican candidate. When income is held constant at a moderate level and wealth accumulation varies from its low to high point, there is anywhere from a two point to nine point difference. Changes in wealth have the largest impact on those who do not self-identify with a political party. There is nearly a twenty point difference in the likelihood a voter with low wealth and income accumulation will vote for the Republican candidate compared to a voter with high wealth and income accumulation.

Discussion

Wealth is a determinant of vote choice, and should be included in future voting behavior research. This paper has provided some initial empirical evidence to support this claim. However, it is clear that additional research is needed. For instance, while most variables operate as expected in the case of the United States, the model specification of Sweden and Germany could be improved. This involves collecting data on additional years, if possible, and considering whether theoretically, the variables found

in the literature on American voting behavior actually apply to other countries. The models here only provided limited support that they do.

Moving forward, there are a number of different research agendas that could be considered, especially in relation to voting behavior in the United States. Two will be discussed here. First are questions relating to the mechanisms at work within the wealth-vote relationship. Second are questions of selecting appropriate dependent variables.

Since wealth is found to influence vote choice, at least in the case of the United States, the next step is to consider *how* wealth influences vote choice. In this paper, overall net worth is used as a measure. But as discussed, there are many subcomponents of wealth. These can be financial or non-financial in nature, and one's wealth is determined by both sides of the budget sheet. In this sense, there are two strains of thought that can be followed. First, is the presence or absence of any particular asset more important than others, or do all assets operate in the same way? 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? Second, is one side of the balance sheet more important? Are assets more important than debts, or does debt drive behavior? These questions can be considered using the data sources identified in this paper.

It is also useful to consider how wealth might be related to other types of political behavior. 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, perhaps wealth accumulation also influences 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.⁶

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.

Wealth has been ignored in the literature on voting behavior, primarily because of a severe lack of data on wealth. This paper begins to fill this gap by combining wealth data and voting behavior data – something not achieved in previous research. In doing so, this paper has argued that there are theoretical and empirical reasons to consider the role of wealth in shaping vote choice. In conjunction with income, wealth provides additional information on one's economic well-being. Economic well-being likely influences many types of behavior of interest to social scientists, providing an area ripe for future research.

Notes

¹ The R statmatch program was used to conduct the statistical match.

² In the 2000 U.S. election, Al Gore (the Democratic candidate) won the popular vote but George W. Bush (the Republican candidate) won the Electoral College vote and thus won the election. In all other elections the winner of the popular vote carried the election.

³ Data for other assets is often not available for all countries. The most comparable measure of wealth (because of data availability) is chosen for this paper.

⁴ In Germany, the measures of wealth and income are correlated at the .5 level, so there may be some level of multicollinearity between the two variables. However, wealth is still not statistically significant if income is removed from the model.

⁵ Simulated probabilities are calculated using Gary King's *clarify* program.

⁶ Panel data would be better, however there currently are no available panel wealth datasets.

References

- Álvarez-Rivera, Manuel. "Election resources". Access at: <http://www.electionresources.org/>
- Armingeon, Klaus, David Weisstanner, Sarah Engler, Panajotis Potosidis, and Marlène Gerber. 2012. "Comparative Political Data Set I 1960-2010". *Bern: Institute of Political Science*, University of Bern.
- Brooks, Clem, and David Brady. "Income, economic voting, and long-term political change in the US, 1952–1996." *Social Forces* 77, no. 4 (1999): 1339-1374.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. *The American voter*. University of Chicago Press, 1980.
- Clark, Terry Nichols, and Seymour Martin Lipset, eds. *The breakdown of class politics: A debate on post-industrial stratification*. Johns Hopkins University Press, 2001.
- D’Orazio, Marcello. "Statistical Matching and Imputation of Survey Data with StatMatch." (2012) Access at: http://cran.r-project.org/web/packages/StatMatch/vignettes/Statistical_Matching_with_StatMatch.pdf.
- Downs, Anthony. "An economic theory of political action in a democracy." *The Journal of Political Economy* 65, no. 2 (1957): 135-150.
- Fiorina, Morris P. *Retrospective voting in American national elections*, Yale University Press, 1981.
- Franklin, Mark N., Thomas T. Mackie, and Henry. Valen. *Electoral change*. ECPR Press, 1992.
- Hibbs, Douglas A. *The political economy of industrial democracies*. Cambridge: Harvard University Press, 1987.
- Jäntti, Markus, Eva Sierminska, and Philippe Van Kerm. "Modeling the joint distribution of income and wealth." Paper at the 32nd IARIW General Conference. August 5-11, 2012. Boston, Massachusetts.
- Kiewiet, Roderick D. *Macroeconomics and Micropolitics: The Electoral Effects of Economic Issues*. Chicago, IL: Chicago University Press, 1983.
- Inglehart, Ronald. "The silent revolution in Europe: Intergenerational change in post-industrial societies". *American political science review* 65, no. 04 (1971): 991-1017.
- Lazarsfeld, Paul Felix, Bernard Berelson, and Hazel Gaudet. *The people’s choice: how the voter makes up his mind in a presidential campaign*, by Paul F. Lazarsfeld [et al.]. Columbia Univ. Press, 1948.
- Lipset, Seymour Martin. "Democracy and working-class authoritarianism". *American Sociological Review* (1959): 482-501.

Luxembourg Wealth Study (LWS) Database, <http://www.lisdatacenter.org> (United States, Sweden, Germany; runs completed between 12/2013 and 06/2014). Luxembourg: LIS.

Manza, Jeff, and Clem Brooks. *Social cleavages and political change: Voter alignments and US party coalitions*. Oxford University Press on Demand, 1999.

Miller, Warren Edward, and J. Merrill Shanks. *The new American voter*. Cambridge, MA: Harvard University Press, 1996.

Pierson, Paul, and David Dolowitz. *Dismantling the welfare state?: Reagan, Thatcher, and the politics of retrenchment*. Cambridge: Cambridge University Press, 1994.

Powell Jr, G. Bingham, and Guy D. Whitten. "A cross-national analysis of economic voting: taking account of the political context". *American Journal of Political Science* (1993): 391-414.

U.S. National Archives and Records Administration. *Historical Election Results*. Accessed at: <http://www.archives.gov/federal-register/electoral-college/historical.html>

Van der Waal, Jeroen, Peter Achterberg, and Dick Houtman. "Class is not dead – it has been buried alive: class voting and cultural voting in postwar western societies (1956–1990)". *Politics & Society* 35, no. 3 (2007): 403-426.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. *Voice and equality: Civic voluntarism in American politics*. Harvard University Press, 1995.

Whitten, Guy D., and Harvey D. Palmer. "Cross-national analyses of economic voting". *Electoral Studies* 18, no. 1 (1999): 49-67.

Wolfinger, Raymond E., and Steven J. Rosenstone. *Who votes?* Vol. 22. Yale University Press, 1980.