# Income, Electoral Turnout, and Partisan Voting in Taiwan

## Wen-Chun Chang

Using data drawn from the Taiwan Social Change Survey, I investigate how citizens' incomes affect turnout and partisan voting. In contrast to studies of other countries, I find that lower-income voters are not less likely to turn out in Taiwan. Moreover, although income does not have strong effects on patterns of partisan voting in Taiwan, there is some evidence that people with income levels just below the middle-income group are less likely to vote for the left-wing party. Keywords: income, electoral turnout, partisan voting, Taiwan

RISING INCOME INEQUALITY OVER THE PAST DECADES IN MANY ADVANCED and newly industrialized democracies has led to many discussions about political participation across different income groups. Participation and patterns of partisan voting are critical for shaping redistribution and social policies. Along with the fast-paced development of globalization and the high-tech knowledge economy, increasing income inequality seems to result in the political failure to provide necessary social and welfare assistance to the poor. Despite theoretical arguments based on the median-voter model (Meltzer and Richard 1981) predicting a greater degree of redistribution, growing empirical evidence (Alesina and Glaeser 2004; Corneo and Grüner 2000) suggests that governments in more free-market countries tend to offer less redistribution. This leads to the importance of understanding the pattern of political participation across different income groups in reflecting their preferences for redistribution.

Previous studies suggest that higher levels of income inequality are strongly associated with lower electoral turnout and depression of the political engagements of the poor. For example, several cross-country studies using data from more than twenty countries, including the United States and European countries, show that greater eco-

nomic inequality leads to greater political disparity between rich and poor (Bartels 2008; Brady 2004; Dahl 2006; Gilens 2005; Oliver and Ha 2007; Schattschneider 1960; Solt 2008, 2010). In contrast, a few studies on European, Asian, and Latin American democracies indicate that income inequality does not have a significant impact on voter turnout (Horn 2011; Stockemer and Scruggs 2012) and that there is no systematic difference in the effect of income inequality on electoral turnout between Western and non-Western countries (Stockemer and Scruggs 2012).

However, these results mostly take the overall rates of electoral turnout to reflect citizens' political participation in advanced industrialized democracies and little is known about how individuals' political participation and partisan voting vary with their economic positions. In particular, partisan voting (voting for left-wing or right-wing parties) across different income groups remains largely unexplored for East Asian newly industrialized democracies. It is possible that there are important societal differences between advanced Western democracies and contemporary East Asian democracies that shape political institutions and people's attitudes toward their democratic systems (Blais 2006). Thus, the socioeconomic structure and voters' political behaviors in an East Asian democracy may substantially differ from those in advanced industrialized democracies.

This study investigates electoral turnout and partisan voting across different income groups, with data drawn from the 2009 Taiwan Social Change Survey (TSCS). I further examine the structural relationship between political participation and citizens' economic positions as measured by their income levels relative to the median income. The results from this study provide further insights into political participation as well as partisan voting in regard to shaping the redistribution policies in a newly industrialized democracy when income inequality continues to rise sharply.

## **Related Literature**

Previous studies have identified several factors for explaining the cross-country variations in electoral turnout, such as the designs of political institutions (Gallego, Rico, and Anduiza 2012; Iversen and Soskice 2006; Norris 2004; Powell 1986), mobilization of political parties and social groups (Gray and Caul 2000; Radcliff and Davis 2000), political efficacy and trust in government (Dalton 2004), and partisan effects (Citrin, Schickler, and Sides 2003; Pacek and Radcliff 1995). However, the disparity in electoral participation between

the rich and the poor has been the central concern among recent studies on the political outcomes of democratic societies (Anderson and Beramendi 2012; Bartels 2008; Brady 2004; Galbraith and Hale 2008; Leighly and Nagler 1992; Lijphart 1997; Mahler 2008; Solt 2008, 2010; Soss and Jacob 2009).

Aside from the median-voter model developed by Alan Meltzer and Scott Richard (1981) predicting that a lower level of median income relative to the average income leads to a higher level of redistribution, there are several theoretical arguments to explain the inequality of political engagement across different income groups. Relative power theory argues that income inequality leads to a lower level of political engagement among poor individuals, because the rich have more money as a source of political power to shape the political process in their own favor (Bachrach and Baratz 1970; Gaventa 1980; Goodin and Dryzek 1980; Lukes 2005; Schattschneider 1960). Moreover, resource theory also suggests that political engagement requires resources, and wealthy individuals have more resources to participate in political activities than the poor (Ansolabehere, de Figueiredo, and Snyder 2003; Verba, Schlozman, and Brady 1995). This also implies a strong connection between income inequality and the political inequality between the rich and the poor. Conflict theory, in contrast, argues that a greater level of income inequality causes people to participate more in politics since more inequality causes greater divergences in political preferences among citizens, especially for the poor and the rich who are the respective potential beneficiaries and cost-bearers of the redistribution policies (Brady 2004; Meltzer and Richard 1981; Milanovic 2000: Oliver 2001).

While some empirical studies test theoretical arguments for the issue of unequal political participation, the literature has not extensively examined the relationship between income, electoral turnout, and vote choice. Recently, three main theories have emerged to explain the relationship between income and electoral participation. Among these arguments, Robert Goodin and John Dryzek (1980) argue that when economic power is skewed, political "success" is also likely to be skewed, and this excludes the relatively poor from political participation. This leaves the political process and outcomes to be dominated by the competing interests of those who are better off.

A second view of the electoral effects of inequality takes the exact opposite position. It suggests that higher social inequality increases participation, because inequality polarizes the policy pref-

erences of the poor and the rich, leading both groups to mobilize to higher degrees (Brady 2004; Oliver and Ha 2007).

Moreover, a third explanation suggests that there is no effect of inequality on average turnout. Any effects occur only within income groups in a country, as the relatively rich participate more and the poor less with higher inequality. This argument suggests that inequality may impart biases in representation, but should not impact overall turnout (Ansolabehere, de Figueiredo, and Snyder 2003).

In contrast, some other studies have emphasized the effect of the structure of inequality on electoral turnout (Kenworthy and Pontusson 2005; Mahler 2008; Galbraith and Hale 2008; Pontusson and Rueda 2010; Lupu and Pontusson 2011; and Jaime-Castillo 2009). These studies have found that the most important link between income inequality and the degree of redistribution can be better explained by the correlation between electoral turnout and the structure of inequality characterized by income skew; the interaction between income inequality and political mobilization of low-income voters and the likelihood of middle-income voters to ally with lowincome voters are critical factors for supporting redistributive policies. In particular, Noam Lupu and Jonas Pontusson (2011) show that when the distance between the middle-income group and the poor is smaller relative to the distance between the middle and the rich, the middle-income voters are more likely to support redistributive policies for the poor. Because, as it is argued, electoral turnout is positively related to the extent of government redistribution and there is a strong negative relationship between turnout and the skew of income distribution, both the median-voter model and the power resource theory can coexist with theoretical and empirical support.

Despite these significant contributions from the previous literature, little is known about the variations in political participation and partisan voting among citizens across different income groups, as measured by their relative positions along the income spectrum. Given the possibility that voters with income levels near the median income are not the main beneficiaries of redistribution, knowing the preferences and political attitudes of these voters may indeed provide a complementary explanation for redistributive politics caused by rising income inequality. Most previous studies on the factors explaining individuals' voting behaviors argue that the economic outcomes of government policies have strong effects on voters' choices (Alesina, Londregan, and Rosenthal 1993; Duch and Stevenson 2005; Franko, Tolbert, and Witko 2013; Gerber and Huber 2009;

Gomez and Wilson 2006; Hibbs 1987; Kayser and Wlezien 2011; Kramer 1971, 1983; Lewis-Beck 1988), and consequently, highincome and low-income voters will be affected differently by leftwing or right-wing government. From the perspective of the redistribution policy, the theories of Meltzer and Richard (1981) and Roland Benabou (2000) predict that people with incomes below the median level will be more likely to vote for the left-wing party because they can benefit from the redistribution policies of the left-wing government. However, Michael Lewis-Beck's (1988) study on five European countries shows that there is no significant relationship between personal economic conditions and vote choice, while some comparative studies, such as David Sanders (1999) and Peter Nannestad and Martin Paldam (1997), indicate that citizens in certain democracies are more likely to make their vote choices based on personal economic considerations. More recently, Andrew Leigh's (2005) analysis of Australian data shows that poor and younger voters are more likely to be left-wing; his result is consistent with the argument that the political outcome under a left-wing government is more favorable for the poor and younger voters. In addition, Simon Jackman (2003) finds a nonlinear relationship between electorate median income and left-wing party support. The mixed evidence on individual vote choice can partially be explained by the arguments of institutional arrangements (Powell and Whitten 1993), political culture (Feldman 1982; Kinder and Mebane 1983), voters' intrinsic ideological attachments to political parties (Campbell et al. 1960, 1966), and differences in political information held by voters (Conover, Feldman, and Knight 1986; Krause 1997; Weatherford 1983).

Based on the studies at the individual level of Western established democracies, the existing literature suggests that citizens with a higher level of socioeconomic status are more likely to turn out to vote and have a lower probability of voting for the left-wing party than those with a lower socioeconomic status in elections (Anderson and Beramendi 2008, 2012; De Koster, Achterberg, and van der Waal 2013; Leigh 2005; Lewis-Beck and Nadeau 2011; Lewis-Beck, Nadeau, and Foucault 2013; Verba, Schlozman, and Brady 1995). In contrast, the empirical evidence from comparative studies on established and new democracies at the individual level (Gijsberts and Nieuwbeerta 2000; Gomez and Wilson 2006; Jou 2011; van der Brug, Franklin, and Tóka 2008) indicates that differences in culture, as well as in historical and institutional contexts, can have strong influences on citizens' voting behaviors. However, among the vari-

ables of socioeconomic status, there are mixed results on the relationship between income and partisan choice. For example, examining cases from Canada, Hungary, Mexico, and Taiwan with significant differences in social and cultural contexts, Brad Gomez and J. Matthew Wilson (2006) show that cognitive heterogeneity is important, while income is insignificant for explaining vote choice in both established and new democracies. Moreover, comparing four East Asian democracies (Japan, South Korea, the Philippines, and Taiwan) with two Western democracies (Australia and New Zealand), Willy Jou (2011) shows that income is important for explaining partisan orientation only for New Zealand, not for the Asian democracies. Given the findings from previous empirical studies using individual-level data, the relationship between relative income and voting behavior remains largely unclear.

Taiwan, as an East Asian new democracy, is distinct from Western established democracies as its political system has been recently transformed from authoritarianism to a multiparty democracy, subsequent to the lifting of martial law in 1987, which allowed for more intense competition from different political parties. During this process of democratic solidification, liberalization and globalization of the economy have caused income inequality to increase, which might lead to greater disparity between the rich and the poor in political representation. These political and economic transformations can potentially enhance the political interests, political awareness, and political efficacy of citizens during the process of forming their political preferences. The case of Taiwan provides an excellent opportunity for us to further examine the relationship between income and voting behavior from the perspective of political effects caused by democratic and economic developments for an East Asian country. This study will explore not only the relationship between electoral turnout and relative income, but also whether voters' partisan choices can be explained by economic position relative to the middle-income group.

## **Empirical Framework and Data**

Based on the theoretical arguments discussed above, we describe our empirical framework for estimating the relationship between voting turnout and relative income as the following equation:

$$Vote_i = \beta_0 + \beta_1 Y_i + \beta_2 X_i + \varepsilon_i$$
,

where  $Vote_i$  is measured as having voted (or partisan voting) in the previous general election,  $Y_i$  is individual i's relative family income (measured as the respondent's family monthly income divided by the median level of monthly family income,  $RFY_i$ , or the income percentile),  $X_i$  is a set of control variables including socioeconomic characteristics (gender, age, marital status, education, employment status, religious affiliation and attendance), and  $\varepsilon_i$  is the error term.

This study uses data from the 2009 Taiwan Social Change Survey (TSCS) to examine the relationships among voting turnout, partisan voting, and income. Since 1984, the TSCS has been conducted annually, with different main topics, by the Institute of Sociology at Academia Sinica. Starting in 2002, the TSCS joined the International Social Survey Programme (ISSP) and became part of an East Asian survey team that initiated the East Asian Social Survey (EASS) in 2003. The 2009 TSCS was conducted from July 19 to August 23 and consisted of two modules: Social Inequality and Religion and Culture. We utilize the Social Inequality Module, which contains information about respondents' perceptions on social inequality, attitudes toward social equality, the importance of various factors being prerequisites for success in society, respondents' political participation and partisanship, along with respondents' socioeconomic characteristics. After excluding the samples of those who were ineligible to vote or could not remember voting or did not vote in the last presidential election (held in March 2007), there are 1,637 observations used in this study. Appendixes 1 and 2 provide the definitions and descriptive statistics of the variables used in this study. The text of the questions for constructing the key variables (vote choice, income, and party) is provided in Appendix 3. The Appendixes offer more details about the definitions of the variables and how they are constructed according to the respondents' answers to the questions asked in the TSCS.

The dependent variable  $Vote_i$  takes the value of 1 if the respondent has voted (or partisan choice: voting for the Pan-Blue camp or the Pan-Green camp<sup>1</sup>) in the previous general election held in Taiwan (otherwise,  $Vote_i = 0$ ). To construct the key variable of income level, we use four dummy variables of the respondent's family income percentiles (20th percentile, 40th percentile, 80th percentile, and 100th percentile) with the middle-income group as the baseline category (60th percentile) as well as the value of  $RFY_i$ , the respondent's family monthly income divided by the median level of the monthly family income in NT\$ (New Taiwan dollars). For defining the dummy variables of income percentile and calculating the value of  $RFY_i$ , we

first conduct the ranking of each respondent's monthly family income as well as identify the median value of the monthly family income. With the ranking of the monthly family income, the respondents are divided into five groups of different income percentiles and, therefore, four dummy variables of income percentiles (20th percentile, 40th percentile, 80th percentile, and 100th percentile) can be defined with the 60th percentile (middle-income group) employed as the baseline reference group. Meanwhile, the value of  $RFY_i$  for each respondent also can be calculated.

As shown in Table 1, the turnout rate for the full sample is 83 percent. Among the five income groups, the turnout rate is the lowest at 79.5 percent for the groups at the 40th income percentile. On average, high-income people are more likely to vote than are low-income individuals. Moreover, the mean value of *RFY* is 1.36, indicating that the distribution of income is somewhat skewed toward the right with a higher level of average family income for people positioned above the median income.

Since we are aiming to examine the relationship between political participation reflected by voter turnout and income, it is useful to have a brief discussion about the differences in partisan choice by income percentile. Divided into five different income percentiles, as also shown in Table 1, the Pan-Blue camp traditionally consists of the right-wing political parties, including the Nationalist Party (Kuomintang [KMT]), the People First Party (PFP), and the New Party (NP); the percentage of people voting for the Pan-Blue political camp is generally increasing in income percentile after the income level reaches the 60th income percentile. The percentage of

Table 1 Percentages of Voter Turnout, Partisan Voting, Family Income (FY), and Relative Family Income (RFY) by Income Percentile

Variable	20th	40th	60th	80th	100th	All
Voter turnout	0.81	0.80	0.83	0.84	0.84	0.83
Vote for Blue	0.56	0.55	0.57	0.60	0.60	0.57
Vote for Green	0.24	0.22	0.23	0.22	0.21	0.23
Abstaina	0.20	0.24	0.19	0.19	0.19	0.20
FY (NT\$)	18,455	38,394	56,981	85,091	174,174	74,615
RFY	0.34	0.69	1.04	1.55	3.17	1.36

Note: a. Includes those who did not cast a vote or cast an invalid ballot.

people voting for the Pan-Blue camp is the lowest at 54.7 percent for the 40th income percentile, but it increases to 57.3 percent, 59.8 percent, and 59.9 percent for the 60th, 80th, and 100th percentiles, respectively. Not surprisingly, compared with the Pan-Blue camp, the percentage of people voting for the Pan-Green political camp, which includes the Democratic Progressive Party (DDP) and Taiwan Solidarity Union (TSU), is lower for each of the five income percentiles. In addition, it also has the lowest percentage at 21.4 percent for the 100th percentile, and it is 24.5 percent for the 20th percentile, 21.7 percent for the 40th percentile, 23.5 percent for the 60th percentile, and 21.7 percent for the 80th percentile. In contrast, the group at the 40th income percentile has the highest percentage of abstention at 23.6 percent and people at the 80th income percentile are least likely to abstain with 18.6 percent, while the percentage of abstention is 19.9 percent, 19.2 percent, and 18.7 percent for the 20th, 60th, and 100th income percentiles, respectively.

Considering the relative family income (RFY) for different income percentiles, the mean value of RFY is 0.34 for the lowest 20th percentile and then it increases gradually. There is a drastic increase from 1.55 for the 80th percentile to 3.17 for the 100th percentile. Apparently, the gap between the percentages of people voting for the Pan-Blue and Pan-Green camps becomes larger as the income percentile and the relative family income (RFY) reach higher levels. Generally speaking, the percentage of people voting for the Pan-Blue camp increases as the income level rises. However, the percentage of people voting for the Pan-Green camp does not monotonically increase as the income level declines, and it has the lowest percentage at the 40th income percentile, which is just below the median income level.

For the lowest 20th income percentile, there is a gap between the percentages of people voting for the Pan-Blue camp and the Pan-Green camp at 55.7 percent and 24.5 percent, respectively. However, this gap is larger for the group at the 40th income percentile with 54.7 percent of people voting for the Pan-Blue camp and 21.7 percent voting for the Pan-Green camp. It appears that the Pan-Green camp does not win a significant share of votes among people within the 40th income percentile. This may suggest that people with an income level close to, but below, the median income are less likely to vote for the Pan-Green camp. Since the turnout rate is also lowest for people with an income level at the 40th percentile and it becomes higher for people with their income levels ranked at the 60th per-

centile or higher, the dominance of high-income individuals in political participation in Taiwan through voting to affect public policies may well be expected. In other words, as the number of Pan-Blue supporters increases with the income level while the number of Pan-Green supporters does not substantially and monotonically increase as the income level declines, low-income people may be disproportionately underrepresented in politics.

## **Empirical Results**

To examine the relationships among income, voter turnout, and partisan choice in Taiwan, we conduct multinomial logit estimations, which consider that every voter has three possible choices in the election (vote for the Pan-Blue camp, vote for the Pan-Green camp, or abstain), to determine whether there is a strong relationship between electoral choice and income. For the sake of simplicity, in explaining the estimation results, we only report the marginal effects for the explanatory variables. Tables 2 and 3 present the estimation results without and with the party identifications (Blue and Green) as explanatory variables. Excluding party identifications from explanatory variables, as shown in Table 2, people at the 40th income percentile are 3.6 percent less likely to vote for the Pan-Blue camp than the group at the 60th income percentile (baseline group), but more importantly, they are also 4.8 percent more likely to abstain and 1.2 percent less likely to vote for the Pan-Green camp in the election. In contrast, people at the 80th income percentile are 1.2 percent less likely to vote for the Pan-Green camp, but only 0.8 percent more likely to abstain in the election than the group at the 60th income percentile. When party identification is included as an explanatory variable, the estimation results further confirm the similar voting behaviors for the group at the 40th income percentile. As shown in Table 3, people at the 40th income percentile are 1.9 percent more likely to vote for the Pan-Blue camp than those at the 60th income percentile. More importantly, people at the 40th income percentile are also 4.1 percent more likely to abstain and 6 percent less likely to vote for the Pan-Green camp in the election. In other words, the 40th income percentile as the group of people with income ranked just below the median group (60th income percentile) not only are more likely to abstain, but are also less likely to vote for the left-wing Pan-Green camp in the election.

Table 2	Marginal Effects from Multinomial Logit Estimation:
	Income Level Categorized by Income Percentile

Variable	Vote for Blue (Vote = 0)	Abstain (Vote = 1)	Vote for Green (Vote = 2)
Constant	-0.18 (0.14)	0.04 (0.01)	0.13 (0.12)
Gender	-0.08 (0.03)***	0.04 (0.02)**	0.04 (0.02)*
Age	0.01 (0.54D-2)	-0.01D-2 (0.42D-2)	-0.77D-2 (0.45D-2)*
$Age^2$	-0.09D-4 (0.05D-3)	-0.04D-3 (0.04D-3)	0.53 (0.04D-3)
Married	-0.28D-2 (0.03)	-0.05 (0.02)**	0.05 (0.03)
Education	0.02 (0.38D-2)***	-0.57D-2 (0.29D-2)*	-0.01 (0.32D-2)***
Employed	0.02D-2 (0.03)	-0.01 (0.02)	0.01 (0.03)
Buddha	0.09D-2 (0.04)	-0.02 (0.03)	0.02 (0.03)
Tao	-0.13 (0.04)***	-0.01 (0.03)	0.14 (0.03)***
Folk	-0.06 (0.03)*	-0.28D-2 (0.02)	0.06 (0.03)**
Catholic	0.19 (0.11)*	-0.05 (0.08)	-0.14 (0.11)
Protestant	-0.08 (0.08)	0.02 (0.06)	0.06 (0.07)
Attend1	-0.57D-2 (0.03)	0.01 (0.02)	-0.42D-2 (0.02)
Attend2	0.07 (0.06)	-0.01 (0.04)	-0.06 (0.05)
Attend3	-0.01 (0.07)	0.06D-2 (0.05)	0.01 (0.06)
20th percentile	-0.07 (0.04)*	0.06 (0.03)*	0.01 (0.03)
40th percentile	-0.04 (0.04)	0.05 (0.03)*	-0.01 (0.03)
80th percentile	0.32D-2 (0.04)	0.83D-2 (0.03)	-0.01 (0.03)
100th percentile N 1,637	-0.47D-2 (0.04)	-0.40 (0.03)	0.87D-2 (0.03)

*Notes:* Numbers in parentheses are standard errors. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01. D-n indicates that the number is multiplied by  $10^{-n}$ .

According to the estimation results of Tables 2 and 3 using a multinomial logit model, the predicted probabilities and 95 percent confidence intervals of voting for Pan-Blue, Pan-Green, and abstaining for different groups of income percentile are calculated and presented in Figures 1 and 2. Whether or not party identifications are included, the predicted tendency of voting behaviors for the 40th income percentile group indicates that the number of Pan-Green supporters does not systematically increase as the income level declines. Considering the estimated results at conventional p < .05 levels, income has no statistically significant effect on turnout or vote choice. It appears that in Taiwan income has little effect. But to the extent there is a weakly statistically significant effect, it is with respect to the lower-middle class. It is interesting to note that the

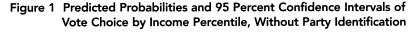
Table 3	Marginal Effects from Multinomial Logit Estimation: Income Level
	Categorized by Income Percentile, Including Party Identification

Variable	Vote for Blue (Vote = 0)	Abstain (Vote = 1)	Vote for Green (Vote = 2)
Constant	-0.19 (0.15)	0.06 (0.12)	0.13 (0.11)
Gender	-0.08 (0.03)***	0.05 (0.02)**	0.03 (0.02)
Age	0.01 (0.01)*	-0.10D-2 (0.48D-2)	-0.01 (0.42D-2)**
Age <sup>2</sup>	-0.05D-3 (0.05D-3)	-0.03D-3 (0.04D-3)	0.08D-3 (0.04D-3)**
Married	0.36D-2 (0.03)	-0.05 (0.03)*	0.05 (0.02)*
Education	0.43D-2 (0.44D-2)	-0.19D-2 (0.34D-2)	-0.24D-2 (0.30D-2)
Employed	0.03 (0.03)	-0.02 (0.02)	-0.01 (0.0 <del>2</del> )
Buddha	-0.53D-2 (0.04)	0.48D-2 (0.03)	0.05D-2 (0.03)
Tao	-0.02 (0.05)	-0.01 (0.04)	0.03 (0.03)
Folk	-0.02 (0.04)	-0.01 (0.03)	0.02(0.03)
Catholic	0.12 (0.13)	-0.27D-2 (0.09)	-0.12(0.10)
Protestant	-0.10 (0.10)	0.07 (0.07)	0.03 (0.07)
Attend1	-0.01 (0.03)	0.02 (0.02)	-0.69D-2 (0.02)
Attend2	0.03 (0.07)	-0.01 (0.05)	-0.02 (0.05)
Attend3	0.05 (0.08)	-0.01 (0.06)	-0.04 (0.06)
20th percentile	-0.04 (0.05)	0.04 (0.04)	0.10D-2 (0.03)
40th percentile	0.02 (0.04)	0.04 (0.03)	-0.06 (0.03)*
80th percentile	0.01 (0.04)	0.01 (0.03)	-0.02(0.03)
100th percentile	0.04 (0.05)	-0.01 (0.04)	-0.03 (0.03)
Blue	0.55 (0.04)***	-0.23 (0.03)***	-0.31 (0.03)***
Green N 1,637	-0.49 (0.08)***	0.06 (0.05)	0.43 (0.05)***

*Notes:* Numbers in parentheses are standard errors. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01. D-n indicates that the number is multiplied by  $10^{-n}$ .

poor do appear to behave "correctly" but that the lower-middle class does not; they appear most alienated and do not vote "correctly."

Among the socioeconomic variables, male individuals are less likely to vote for the Pan-Blue camp, more likely to abstain, and more likely to vote for the Pan-Green camp than female individuals. Age has an inverted U-shape relationship with the probability of voting for the Pan-Blue camp or for the Pan-Green camp. Married people are less likely to abstain than are unmarried individuals, while education tends to increase the probability of voting for the Pan-Blue camp and decrease the probabilities of abstention and voting for the Pan-Green camp. As for the religious variables, Taoists and believers in folk religions are less likely to vote for the Pan-Blue camp and more likely to vote for the Pan-Green camp than are nonreligious people.



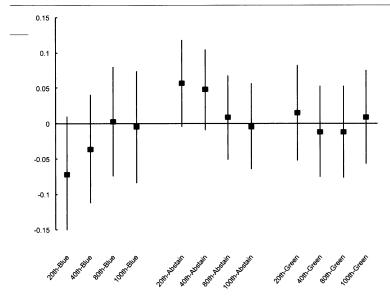
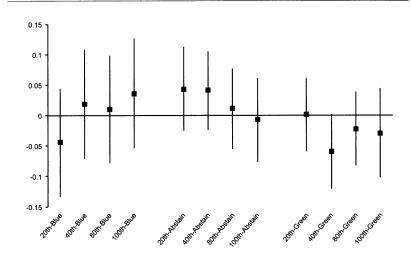


Figure 2 Predicted Probabilities and 95 Percent Confidence Intervals of Vote Choice by Income Percentile, with Party Identification



As a robustness check on the shape of the relations between income and voting behavior, we also conducted two successive probit estimations regarding the decision of an individual on whether to vote and which political camp to support among voters. As shown in the first two columns of Appendix 4, the coefficient of income variable (RFY), measured as family monthly income divided by median level of family monthly income, is positively and significantly associated with the probability of turning out to vote. This indicates that an increase in RFY leads to a higher probability of turning out to vote. In contrast, the probability of voting for the Pan-Green camp decreases as RFY increases, but the coefficient of RFY is insignificant. To further examine whether there is a quadratic form of relationship between income and voting behavior, we also added a squared term of RFY as an explanatory variable to conduct the estimations. As reported in the third and fourth columns of Appendix 4, both the RFY and  $RFY^2$  have positive coefficients for the probability of turning out to vote and negative coefficients for voting for the Pan-Green camp, but the coefficients are insignificant. These results indicate that there is no quadratic form of the relationship between income and voting behavior. These tests tend to suggest that an increase in income leads to a higher probability of turning out to vote and a lower probability of voting for the Pan-Green camp. As a result, it is plausible that using dummy variables of different income percentiles as measures of income levels could appropriately capture the shape of the relationship between income and voting behavior, similar to the estimation results reported in Tables 2 and 3.

With four dummy variables of different income percentiles as the measures of income levels, we also conducted two successive probit estimations for the probability of turning out to vote and the probability of voting for the Pan-Green camp among voters. As reported in Appendix 5, compared with the middle-income group (60th income percentile), the coefficients of the 20th income percentile and the 40th income percentile are negative and significant for explaining the probability of turning out to vote. This indicates that people belonging to the groups at the 20th and 40th income percentiles are more likely to abstain in the election. However, the variables of income percentiles are insignificant for explaining the probability of voting for the Pan-Green camp. These outcomes are consistent with the results from multinomial logit estimations as reported in Appendixes 6 and 7 with the income level measured as *RFY*, that is, an individual with a higher level of *RFY* is more likely to vote for the Pan-Blue

camp and less likely to abstain, and income is insignificant for explaining the probability of voting for the Pan-Green camp. Moreover, using the multinomial logit model, there is no strong evidence for the existence of a quadratic form of the relationship between income and voting behavior.

The estimation results of Tables 2 and 3 as well as Appendixes 4, 5, 6, and 7 tend to suggest that people at the 40th income percentile are more likely to abstain or are less likely to vote for the Pan-Green camp. This further confirms the nonsystematic relationship between income and voting behavior. Moreover, people at the 40th income percentile also appear to be critical in explaining the political disparity between the poor and the rich because of the effects of their abstention or the lower probability of voting for the left-wing Pan-Green camp. In comparing the results from the multinomial logit estimations with the middle-income percentile (60th percentile), people at the 40th income percentile could have a more than 4 percent higher probability of abstention and a 6 percent lower probability of voting for the Pan-Green camp.

Consistent with the findings from the previous literature, low-income people are more likely to abstain in the election than are high-income individuals; education has a strong positive effect on voting for the right-wing party (Pan-Blue camp) and leads to a lower probability of abstention. The results from this study more importantly provide some distinct findings, suggesting that people with income levels at the 40th income percentile just below the middle-income group have a higher tendency to abstain in an election and probably are also less likely to be left-wing (Pan-Green camp) supporters than people in the middle-income group.

## Conclusion

As income inequality continues to rise sharply, political outcomes that result in redistribution policies to provide a social safety net have become increasingly important in many countries. It has been argued in recent studies that the political disparity between the rich and the poor that grows with income inequality has been the main reason why policy responses to poor people's needs are lacking under the political outcomes of many advanced industrialized democracies. However, the effects of citizens' economic positions on electoral turnout as well as partisan voting have not been particularly emphasized in the literature on the political economy of redistribu-

tion. The relationships between income, electoral turnout, and vote choice may be important for explaining the political disparity between the rich and the poor.

Using data drawn from the 2009 TSCS, this study investigates how electoral turnout and partisan voting vary with the changes in citizens' economic positions for a newly industrialized democracy. Specifically, this study examines the effects of citizens' income levels on electoral turnout as well as partisan voting. It further extends our understanding about the shape of the relationship between income and people's electoral participation and vote choice in reflecting their preferences for governments' redistribution policies. Distinct from studies of other countries, we find that lower income voters are not less likely to turnout in Taiwan. Although income does not have strong effects on patterns of partisan voting in Taiwan, there is some evidence that people with income levels just below the middle-income group are *less*—not more—likely to vote for the leftwing party. Moreover, gender and religious affiliations are important factors for explaining electoral turnout and partisan voting.

This study also illustrates some important results distinct from the previous literature on advanced industrialized democracies. The empirical results from this study suggest that in Taiwan income has little effect. But to the extent there is a weakly statistically significant effect, it is with respect to the lower-middle class. It is interesting to note that the poor do appear to behave "correctly" but that the lowermiddle class does not; they appear most alienated and do not vote "correctly." In other words, people in the lowest (20th) income percentile are not those who have the lowest turnout and the lowest likelihood of voting for the Pan-Blue (right-wing) political camp. Indeed, people in the 40th income percentile, just below the middle-income group, are those voters who have the lowest turnout rate and are most unlikely to vote for the Pan-Green (left-wing) political camp. Moreover, people in the 40th income percentile have the highest likelihood of abstaining in an election. The results from this study provide some empirical evidence for the differences in political participation across different income groups as measured by their income levels relative to the middle-income group. These results contribute to the literature on the political economy on redistribution for explaining the political disparity caused by variations in electoral turnout and partisan voting along the income spectrum. In future research it will be interesting to further investigate how citizens' perceptions about

redistribution policies vary with their relative economic positions and whether this variation leads to changes in political engagements.

Wen-Chun Chang is professor of public finance at the National Taipei University. Chang received his PhD in economics from the University of Maryland, College Park. His research interests include charitable giving, religious economics, happiness studies in economics, social capital, and political economy in Taiwan. Contact him at wchang@mail.ntpu.edu.tw.

## Appendix 1 Definitions of Variables

Variable	Definition
Gender	Gender of the respondent. If male, then Gender = 1; if female, then Gender = 0.
Age	Age of the respondent
Age <sup>2</sup>	Square of age of the respondent
Married	If the respondent is married, then Married = 1; otherwise Married = 0. (baseline category: single, divorced, or widowed)
Education	Years of education
Employed	Employment status. If the respondent is employed, then Employed = 1; otherwise Employed = 0. (baseline category: unemployed or not in the labor force)
Buddha	Religious affiliation. If Buddhist, then Buddha = 1; otherwise Buddha = 0. (baseline category: no religion or others)
Tao	Religious affiliation. If Taoist, then Tao = 1; otherwise Tao = 0. (baseline category: no religion or others)
Folk	Religious affiliation. If Folk religionist, then Folk = 1; otherwise Folk = 0. (baseline category: no religion or others)
Catholic	Religious affiliation. If Catholic, then Catholic = 1; otherwise Catholic = 0. (baseline category: no religion or others)
Protestant	Religious affiliation. If Protestant, then Protestant = 1; otherwise Protestant = 0. (baseline category: no religion or others)
Attend1	How frequently have you participated in religious activities?  If a few times per year, then Attend1 = 1; otherwise Attend1 = 0.  (baseline category: no attendance)
Attend2	How frequently have you participated in religious activities? If a few times per month, then Attend2 = 1; otherwise Attend2 = 0. (baseline category: no attendance)
Attend3	How frequently have you participated in religious activities? If a few times per week, then Attend3 = 1; otherwise Attend3 = 0. (baseline category: no attendance)
RFY	The level of relative family income measured by the respondent's family monthly income divided by the median level of monthly family income.

(continues)

## Appendix 1 Continued

Variable	Definition
20th percentile	20th income percentile. If the respondent's family monthly income is ranked at 20th percentile = 1; otherwise 20th percentile = 0. (baseline category: 60th percentile)
40th percentile	40th income percentile. If the respondent's family monthly income is ranked at 40th percentile = 1; otherwise 40th percentile = 0. (baseline category: 60th percentile)
80th percentile	80th income percentile. If the respondent's family monthly income is ranked at 80th percentile = 1; otherwise 80th percentile = 0. (baseline category: 60th percentile)
100th percentile	100th income percentile. If the respondent's family monthly income is ranked at 100th percentile = 1; otherwise 100th percentile = 0. (baseline category: 60th percentile)
Vote	In the probit estimations, if the respondent has voted in the previous general election, then Vote = 1; otherwise Vote = 0. In the multinomial logit estimations, if the respondent voted for the Pan-Blue camp, then Vote = 0; if abstained, then Vote = 1; if voted for the Pan-Green camp, then Vote = 2.
Vote for Blue (Green)	If the respondent voted for the Pan-Blue (Pan-Green) camp in the previous general election, then Vote for Blue (Vote for Green) = 1; otherwise Vote for Blue (Vote for Green) = 0.
Blue	Partisanship. Do you think of yourself as leaning to the Pan-Blue political camp (Nationalist Party [KMT], People First Party [PFP], and New Party [NP]) or the Pan-Green political camp (Democratic Progressive Party [DDP] and Taiwan Solidarity Union [TSU])? If leaning to Pan-Blue political camp, then Blue = 1; otherwise Blue = 0. (baseline category: no partisanship)
Green	Partisanship. Do you think of yourself as leaning to the Pan-Blue political camp (Nationalist Party [KMT], People First Party [PFP], and New Party [NP]) or the Pan-Green political camp (Democratic Progressive Party [DDP] and Taiwan Solidarity Union [TSU])? If leaning to Pan-Green political camp, then Green = 1; otherwise Green = 0. (baseline category: no partisanship)

## **Appendix 2 Descriptive Statistics**

Variable	Mean	S.D.
Gender	0.53	0.50
Age	46.96	15.64
$Age^2$	2449.44	1604.19
Married	0.62	0.48
Education	11.65	4.58
Employed	0.63	0.48
Buddha	0.23	0.42
Тао	0.13	0.34
Folk	0.30	0.46
Catholic	0.02	0.14
Protestant	0.04	0.20
Attend1	0.27	0.45
Attend2	0.05	0.23
Attend3	0.05	0.22
RFY	1.36	1.41
Vote	0.82	0.38
Vote for Blue	0.57	0.49
Vote for Green	0.23	0.42
Abstain N 1,637	0.20	0.40

## Appendix 3 Text of the Important Questions in 2009 Taiwan Social Change Survey

#### Q: Vote choice

Did you vote in the last presidential election (March 2008)?

- (01) Yes, voted for Ma, Ying-jeou and Hsiao, Wan-chang
- (02) Yes, voted for Hsieh, Chang-ting and Su, Tseng-chan
- (03) Cast an invalid ballot
- (04) No
- (97) Can't remember
- (99) Not eligible to vote

#### O: Income

What is your average monthly household income before taxes, including all your family income (e.g., income from work or part-time jobs, rewards, interest, bonus or dividends, government subsides, rent and other income, pension, etc.)?

(01) None	(02) NT\$10,000 or less
(03) NT\$10,001-NT\$20,000	(04) NT\$20,001-NT\$30,000
(05) NT\$30,001-NT\$40,000	(06) NT\$40,001-NT\$50,000
(07) NT\$50,001-NT\$60,000	(08) NT\$60,001-NT\$70,000
(09) NT\$70,001-NT\$80,000	(10) NT\$80,001-NT\$90,000
(11) NT\$90,001-NT\$100,000	(12) NT\$100,001-NT\$110,000
(13) NT\$110,001-NT\$120,000	(14) NT\$120,001-NT\$130,000
(15) NT\$130,001-NT\$140,000	(16) NT\$140,001–NT\$150,000
(17) NT\$150,001–NT\$160,000	(18) NT\$160,001–NT\$170,000
(19) NT\$170,001-NT\$180,000	(20) NT\$180,001-NT\$190,000
(21) NT\$190,001-NT\$200,000	(22) NT\$200,001-NT\$300,000
(23) NT\$300,001-NT\$400,000	(24) NT\$400,001-NT\$500,000
(25) NT\$500,001-NT\$1,000,000	(26) More than NT\$1,000,000

#### Q: Party

Among these political parties in Taiwan, the KMT, the DPP, the PFP, the NP, and the TSU, which one do you support the most?

- (01) KMT (Kuomintang)
- (02) DPP (Democratic Progressive Party)
- (03) PFP (People First Party)
- (04) TSU (Taiwan Solidarity Union)
- (05) NP (New Party)
- (06) Other (please specify)
- (07) None of them
- (08) Only support the candidate regardless of his/her political party affiliation

Appendix 4 Results from Probit Estimations (income measured as RFY)

	Vote	Vote for Green (among voters)	Vote	Vote for Green (among voters)
Variable	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
Constant Gender Age Age Age Married Education Employed Buddha Tao Folk Catholic Protestant Attend1 Attend2 Attend3 RFY RFY L-likelihood N	0.0408 (0.4039) -0.1518 (0.0755)** 0.0010 (0.0162) 0.0002 (0.0002) 0.2146 (0.0889)** 0.0710 (0.0873) 0.0712 (0.1109) 0.0979 (0.1273) 0.0184 (0.1002) 0.2343 (0.3046) -0.1230 (0.2304) -0.0480 (0.0883) 0.0411 (0.1723) 0.0947 (0.0402)** -734.6824	0.5659 (0.4152) 0.2017 (0.0769)*** 0.0022 (0.0164)* 0.0002 (0.0002) 0.1231 (0.0939) 0.0446 (0.0112)*** 0.0522 (0.0891) 0.0515 (0.1141) 0.0515 (0.1141) 0.0518 (0.1240)*** 0.2259 (0.1024)** 0.3029 (0.2399) 0.3029 (0.2399) 0.0081 (0.0873) 0.0344 (0.11794) 0.0344 (0.2107) 0.0344 (0.2107)	0.0639 (0.0474) -0.1518 (0.0755)** 0.0006 (0.0162) 0.0002 (0.0002) 0.2188 (0.0894)** 0.0217 (0.0116)* 0.0698 (0.1110) 0.0973 (0.1274) 0.0173 (0.1003) 0.2305 (0.3047) -0.1279 (0.2307) -0.0477 (0.0883) 0.0436 (0.1124) 0.0632 (0.0826) 0.0632 (0.0826) 0.0054 (0.0135) -734.5707 1,637	0.5482 (0.4164) 0.2024 (0.0770)*** -0.0288 (0.0164)* 0.0002 (0.0002) 0.1187 (0.0942) 0.0449 (0.0899) 0.0542 (0.1142) 0.4985 (0.1240)*** 0.2279 (0.1025)** -0.4854 (0.3365) 0.3101 (0.2405) -0.0080 (0.0872) -0.0390 (0.0110) -0.0081 (0.0624) -0.0098 (0.0624)

Note: \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

Appendix 5 Results from Probit Estimations

Vote		Vote for Green (among voters)		
Variable	Coefficient	S.E.	Coefficient	S.E.
Constant	0.2004	0.0471	0.5285	0.4187
Gender	-0.1544**	0.0756	0.2036***	0.0771
Age	0.0027	0.0162	-0.0294*	0.0164
Age <sup>2</sup>	0.0001	0.0001	0.0002	0.0002
Married	0.2001**	0.0899	0.1340	0.0949
Education	0.0217*	0.0116	-0.0467***	0.0114
Employed	0.0644	0.0884	0.0542	0.0901
Buddha	0.0695	0.1111	0.0556	0.1142
Tao	0.0889	0.1275	0.5058***	0.1241
Folk	0.0132	0.1006	0.2268**	0.1027
Catholic	0.2299	0.3036	-0.4837	0.3350
Protestant	-0.1057	0.2301	0.2879	0.2401
Attend1	-0.0439	0.0883	-0.0051	0.0874
Attend2	0.0380	0.1723	-0.2380	0.1796
Attend3	-0.0002	0.2112	0.0342	0.2107
20th percentile	-0.2234*	0.1258	0.1241	0.1246
40th percentile	-0.1951*	0.1171	0.0146	0.1188
80th percentile	-0.0371	0.1195	-0.0330	0.1186
100th percentile	0.0247	0.1229	0.0503	0.1217
L-likelihood	-735.0318		-759.9848	
N	1,637		1,347	

*Note:* \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

Appendix 6 Marginal Effects from Multinomial Logit Estimation (income measured as RFY)

Variable	Vote for Blue (Vote = 0)	Abstain (Vote = 1)	Vote for Green (Vote = 2)
Constant	-0.2066 (0.1366)	0.0741 (0.1021)	0.1325 (0.1155)
Gender	-0.0807 (0.0252)***	0.0383 (0.0188)**	0.0424 (0.0214)**
Age	0.0076 (0.0054)	0.0003 (0.0041)	-0.0079 (0.0045)*
$Age^2$	-0.1D-4 (0.5D-4)	-0.4D-4 (0.4D-4)	0.5D-4 (0.4D-4)
Married	0.0023 (0.0302)	-0.0525 (0.0220)**	0.0503 (0.0259)*
Education	0.0155 (0.0038)***	-0.0054 (0.0029)*	-0.0102 (0.0031)***
Employed	0.0009 (0.0293)	-0.0158 (0.0215)	0.0149 (0.0249)
Buddha	0.0024 (0.0372)	-0.0167 (0.0276)	0.0143 (0.0326)
Tao	-0.1227 (0.0418)***	-0.0150 (0.0315)	0.1377 (0.0336)***
Folk	0.0573 (0.0336)*	-0.0043 (0.0247)	0.0616 (0.0288)**
Catholic	0.1849 (0.1114)*	-0.0461 (0.0807)	-0.1388 (0.1096)
Protestant	-0.0893 (0.0786)	0.0272(0.0571)	0.0621 (0.0672)
Attend1	-0.0062 (0.0290)	0.0110 (0.0219)	-0.0048 (0.0242)
Attend2	0.0701 (0.0589)	-0.0119 (0.0438)	-0.0581 (0.0522)
Attend3	-0.0165 (0.0700)	0.0013 (0.0532)	0.0152 (0.0600)
RFY	0.0269 (0.0115)**	-0.0228 (0.0103)**	-0.0042 (0.0093)
N 1,637	, ,	` '	

*Notes:* Numbers in parentheses are standard errors. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01. D-n indicates that the number is multiplied by  $10^{-n}$ .

Appendix 7 Marginal Effects from Multinomial Logit Estimation (income measured as RFY)

Variable	Vote for Blue (Vote = 0)	Abstain (Vote = 1)	Vote for Green (Vote = 2)
Constant	-0.1950 (0.1372)	0.0670 (0.1026)	0.1280 (0.1162)
Gender	-0.0808 (0.0252)***	0.0382 (0.0187)**	0.0426 (0.0214)**
Age	0.0073 (0.0054)	0.0004 (0.0041)	-0.0078 (0.0045)*
Age <sup>2</sup>	-0.8D-5 (0.5D-4)	-0.4D-4 (0.4D-4)	0.5D-4 (0.4D-4)
Married	0.0040 (0.0302)	-0.0534 (0.0219)**	0.0493 (0.0260)*
Education	0.0160 (0.0038)***	-0.0056 (0.0029)*	-0.0105 (0.0032)***
Employed	0.0036 (0.0295)	-0.0171 (0.0216)	0.0135 (0.0251)
Buddha	0.0016 (0.0372)	-0.0162 (0.0274)	0.0147 (0.0326)
Tao	-0.1229 (0.0418)***	-0.0148 (0.0313)	0.1377 (0.0336)***
Folk	-0.0578 (0.0336)*	-0.0041 (0.0246)	0.0618 (0.0288)**
Catholic	0.1826 (0.1114)*	-0.0450 (0.0803)	-0.1377 (0.1096)
Protestant	-0.0921 (0.0786)	0.0283 (0.0569)	0.0638 (0.0673)
Attend1	-0.0060 (0.0290)	0.0109 (0.0218)	-0.0048 (0.0243)
Attend2	0.0713 (0.0588)	-0.0125 (0.0436)	-0.0588 (0.0522)
Attend3	-0.0149 (0.0699)	0.0008 (0.0530)	0.0141 (0.0600)
RFY	0.0015 (0.0234)	-0.0137 (0.0213)	0.0022 (0.0183)
$RFY^2$	0.0022(0.0032)	-0.0016 (0.0037)	-0.0005 (0.0020)
N 1,637	,	, ,	,

*Notes:* Numbers in parentheses are standard errors. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01. D-n indicates that the number is multiplied by  $10^{-n}$ .

#### Note

1. In Taiwan, partisanship is traditionally divided into two political camps: (1) the (right-wing) Pan-Blue camp (*Blue*) of the Nationalist Party (Kuomingtang [KMT]), the People First Party (PFP), the New Party (NP), and (2) the (leftwing) Pan-Green camp (*Green*) consisting of the Democratic Progressive Party (DPP) and the Taiwan Solidarity Union (TSU).

## References

- Alesina, Alberto, and Edward L. Glaeser. 2004. Fighting Poverty in the U.S. and Europe: A World of Difference. New York: Oxford University Press.
- Alesina, Alberto, John Londregan, and Howard Rosenthal. 1993. "A Model of the Political Economy of the United States." *American Political Science Review* 87: 12–33.
- Anderson, Christopher J., and Pablo Beramendi. 2008. "Income, Inequality, and Electoral Participation." In *Democracy, Inequality, and Representa-*

- tion: A Comparative Perspective, ed. Pablo Beramendi and Christopher J. Anderson, 278–311. New York: Russell Sage Foundation.
- ——. 2012. "Left Parties, Poor Voters, and Electoral Participation in Advanced Industrial Societies." *Comparative Political Studies* 45, 6: 714–746.
- Ansolabehere, Stephen, John M. de Figueiredo, and James M. Snyder Jr. 2003. "Why Is There So Little Money in U.S. Politics?" *Journal of Economic Perspectives* 17, 1: 105–130.
- Bachrach, Peter, and Morton S. Baratz. 1970. Power and Poverty: Theory and Practice. London: Oxford University Press.
- Bartels, Larry M. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton, NJ: Russell Sage Foundation and Princeton University Press.
- Benabou, Roland. 2000. "Unequal Societies: Income Distribution and the Social Contract." *American Economic Review* 90, 1: 96–129.
- Blais, Andre. 2006. "What Affects Voter Turnout?" *Annual Review of Political Science* 9, 1: 111–125.
- Bradley, David, Evelyne Huber, Stephanie Moller, François Nielsen, and John D. Stephens. 2003. "Distribution and Redistribution in Postindustrial Democracies." *World Politics* 55, 2: 193–228.
- Brady, Henry. 2004. "An Analytical Perspective on Participatory Inequality and Income Inequality." In *Social Inequality*, ed. K. M. Neckerman. New York: Russell Sage Foundation.
- Brunner, Eric J., and Stephen L. Ross. 2010. "Is the Median Voter Decisive? Evidence from Referenda Voting Patterns." *Journal of Public Economics* 94: 898–910.
- Brunner, Eric J., Stephen L. Ross, and Ebonya L. Washington. 2011. "Does Less Income Mean Less Representation?" NBER Working Paper No. 16835.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, Donald E. Strokes. 1960. *The American Voter*. New York: Wiley.
- ——. 1966. *Elections and the Political Order*. New York: Wiley.
- Citrin, Jack, Eric Schickler, and John Sides. 2003. "What if Everyone Votes? Simulating the Impact of Increased Turnout in Senate Elections." *American Journal of Political Science* 47, 1: 75–90.
- Clark, Andrew, and Emanuela D'Angelo. 2010. "Upward Social Mobility, Well-Being, and Political Preferences: Evidence from the BHPS." Working Paper, Paris School of Economics.
- Conover, Pamela Johnston, Stanley Feldman, and Kathleen Knight. 1986. "Judging Inflation and Unemployment: The Origins of Retrospective Evaluations." *Journal of Politics* 48: 565–588.
- Corcoran, Sean, and William N. Evans. 2010. "Income Inequality, the Median Voter, and the Support for Public Education." NBER Working Paper No. 16097.
- Corneo, Giacomo, and Hans Peter Grüner. 2000. "Social Limits to Redistribution." *American Economic Review* 90, 5: 1491–1507.

- Dahl, Robert A. 2006. On Political Equality. New Haven, CT: Yale University Press.
- Dalton, Russell J. 2004. Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies. New York: Oxford University Press.
- De Graaf, Nan Dirk, Paul Nieuwbeerta, and Anthony Heath. 1995. "Class Mobility and Political Preferences: Individual and Contextual Effects." *American Journal of Sociology* 100, 4: 997–1027.
- De Koster, Willem, Peter Achterberg, and Jeroen van der Waal. 2013. "The New Right and the Welfare State: The Electoral Relevance of Welfare Chauvinism and Welfare Populism in the Netherlands." *International Political Science Review* 34, 1: 3–20.
- Duch, Raymond M., and Randy Stevenson. 2005. "Context and the Economic Vote: A Multilevel Analysis." *Political Analysis* 13, 4: 387–409.
- Feldman, Stanley. 1982. "Economic Self-Interest and Political Behavior." American Journal of Political Science 26: 446–466.
- Franko, William, Caroline J. Tolbert, and Christopher Witko. 2013. "Inequality, Self-Interest, and Public Support for 'Robin Hood' Tax Policies." *Political Research Quarterly* 66, 4: 923–937.
- Galbraith, James K., and J. Travis Hale. 2008. "State Income Inequality and Presidential Election Turnout and Outcomes." *Social Science Quarterly* 89, 4: 887–901.
- Gallego, Aina. 2007. "Unequal Political Participation in Europe." *International Journal of Sociology* 37, 4: 10–25.
- ——. 2010. "Understanding Unequal Turnout: Education and Voting in Comparative Perspective." *Electoral Studies* 29: 239–248.
- Gallego, Aina, Guillem Rico, and Eva Anduiza. 2012. "Disproportionality and Voter Turnout in New and Old Democracies." *Electoral Studies* 31: 159–169.
- Gaventa, John. 1980. Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley. Urbana: University of Illinois Press.
- Gelman, Andrew, Lane Kenworthy, and Yu-Sung Su. 2010. "Income Inequality and Partisan Voting in the United States." *Social Science Quarterly* 91, 5: 1203–1219.
- Gerber, Alan S., and Gregory A. Huber. 2009. "Partisanship and Economic Behavior: Do Partisan Differences in Economic Forecasts Predict Real Economic Behavior?" *American Political Science Review* 103, 3: 407–426.
- Gijsberts, Mérove, and Paul Nieuwbeerta. 2000. "Class Cleavages in Party Preferences in the New Democracies in Eastern Europe: A Comparison with Western Democracies." *European Societies* 2, 4: 397–430.
- Gilens, Martin. 2005. "Inequality and Democratic Responsiveness." *Public Opinion Quarterly* 69, 5: 778–796.
- Gomez, Brad T., and J. Matthew Wilson. 2006. "Cognitive Heterogeneity and Economic Voting: A Comparative Analysis of Four Democratic Electorates." *American Journal of Political Science* 50, 1: 127–145.

- Goodin, Robert, and John Dryzek. 1980. "Rational Participation: The Politics of Relative Power." *British Journal of Political Science* 10, 3: 273–292.
- Gray, Mark, and Miki Caul. 2000. "Declining Voter Turnout in Advanced Industrial Democracies, 1950–1997." *Comparative Political Studies* 33, 9: 1091–1122.
- Hacker, Jacob S., and Paul Pierson. 2010. "Winner-Take-All Politics: Public Policy, Political Organization, and the Precipitous Rise of Top Incomes in the United States." *Politics and Society* 38, 2: 152–204.
- Hibbs, Douglas A., Jr. 1987. *The American Political Economy*. Cambridge, MA: Harvard University Press.
- Horn, Daniel. 2011. "Income Inequality and Voter Turnout." Gini Discussion Paper 16.
- Iversen, Torben, and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More than Others." *American Political Science Review* 100, 2: 165–181.
- Jackman, Simon. 2003. "Political Parties and Electoral Behavior." In Cambridge Handbook of the Social Sciences in Australia, ed. I. McAllister,
   S. Dowrick, and R. Hassan. Melbourne: Cambridge University Press.
- Jaime-Castillo, Antonio M. 2009. "Economic Inequality and Electoral Participation: A Cross-Country Evaluation." Comparative Study of Electoral Systems (CSES) Conference and Plenary Session. Toronto, September 6.
- Jou, Willy. 2011. "How Do Citizens in East Asian Democracies Understand Left and Right?" *Japanese Journal of Political Science* 12, 1: 33–55.
- Kayser, Mark A., and Christopher Wlezien. 2011. "Performance Pressure: Patterns of Partisanship and the Economic Vote." *European Journal of Political Research* 50: 365–394.
- Kelly, Nathan J., and Peter K. Enns. 2010. "Inequality and the Dynamics of Public Opinion: The Self-Reinforcing Link Between Economic Inequality and Mass Preferences." *American Journal of Political Science* 54, 4: 855–870.
- Kenworthy, Lane, and Jonas Pontusson. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics* 3: 449–471.
- Kinder, Donald R., and Walter R. Mebane. 1983. "Politics and Economics in Everyday Life." In *The Political Process and Economic Change*, ed. Kristen Monroe, 141–180. New York: Agathon.
- Kramer, Gerald H. 1971. "Short-Term Fluctuations in U.S. Voting Behavior, 1896–1964." *American Political Science Review* 65: 131–143.
- ——. 1983. "The Ecological Fallacy Revisited: Aggregate Versus Individual-Level Evidence on Economics and Elections and Sociotropic Voting." *American Political Science Review* 77: 92–111.
- Krause, George A. 1997. "Voters, Information Heterogeneity, and the Dynamics of Aggregate Economic Expectations." *American Journal of Political Science* 41, 4: 1170–1200.

- Leigh, Andrew. 2005. "Economic Voting and Electoral Behavior: How Do Individual, Local, and National Factors Affect the Partisan Choice?" *Economics and Politics* 17, 2: 265–296.
- Leighly, Jan E., and Jonathan Nagler. 1992. "Socioeconomic Class Bias in Turnout, 1964–1988: The Voters Remain the Same." *American Political Science Review* 86, 3: 725–736.
- ——. 2007. "Unions, Voter Turnout, and Class Bias in the U.S. Electorate, 1964–2004." *Journal of Politics* 69, 2: 430–441.
- Lewis-Beck, Michael S. 1988. *Economics and Elections*. Ann Arbor: University of Michigan Press.
- Lewis-Beck, Michael S., and Richard Nadeau. 2011. "Economic Voting Theory: Testing New Dimensions." *Electoral Studies* 30: 288–294.
- Lewis-Beck, Michael S., Richard Nadeau, and Martial Foucault. 2013. "The Compleat Economic Voter: New Theory and British Evidence." *British Journal of Political Science* 43, 2: 241–261.
- Lijphart, Arend. 1997. "Unequal Participation: Democracy's Unresolved Dilemma." *American Political Science Review* 91, 1: 1–14.
- Lukes, Steven. 2005. *Power: A Radical View*. 2nd ed. New York: Palgrave Macmillan.
- Lupu, Noam, and Jonas Pontusson. 2010. "Inequality, Mobility, and Social Affinity in the Politics of Redistribution." Working Paper, Princeton University.
- ———. 2011. "The Structure of Inequality and Politics of Redistribution." American Political Science Review 105, 2: 316–336.
- Mahler, Vincent A. 2008. "Electoral Turnout and Income Redistribution by the State: A Cross-National Analysis of the Developed Democracies." *European Journal of Political Research* 47: 161–183.
- Mankowska, Ksenia. 2011. "Income Inequality and Political Engagement in Post-Communist Eastern Europe." Paper prepared for the Annual Meeting of the American Political Science Association in Seattle, WA, September 1–4.
- Meltzer, Alan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89, 5: 914–927.
- Milanovic, Branko. 2000. "The Median-Voter Hypothesis, Income Inequality, and Income Redistribution: An Empirical Test with the Required Data." European Journal of Political Economy 16: 367–410.
- Moene, Karl Ove, and Michael Wallerstein. 2003. "Earning Inequality and Welfare Spending: A Disaggregated Analysis." *World Politics* 55, 4: 485–516.
- Nannestad, Peter, and Martin Paldam. 1997. "The Grievance Asymmetry Revisited: A Micro Study of Economic Voting in Denmark, 1986–92." European Journal of Political Economy 13: 81–99.
- Norris, Pippa. 2004. Electoral Engineering: Voting Rules and Political Behavior. New York: Cambridge University Press.
- Oliver, J. Eric. 2001. *Democracy in Suburbia*. Princeton, NJ: Princeton University Press.

- Oliver, J. Eric, and Shang E. Ha. 2007. "Vote Choice in Suburban Elections." *American Political Science Review* 101, 3: 393–408.
- Pacek, Alexander, and Benjamin Radcliff. 1995. "Turnout and the Vote for the Left-of-Center Party: A Cross-National Analysis." *British Journal of Political Science* 25, 1: 137–143.
- Pontusson, Jonas, and David Rueda. 2010. "The Politics of Inequality: Voter Mobilization and Left Parties in Advanced Industrial States." *Comparative Political Studies* 43: 675–705.
- Powell, G. Bingham, Jr. 1986. "American Voter Turnout in Comparative Perspective." *American Political Science Review* 80, 1: 17–43.
- Powell, G. Bingham, Jr., and Guy D. Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37: 391–414.
- Radcliff, Benjamin, and Patricia Davis. 2000. "Labor Organization and Electoral Participation in Industrial Democracies." American Journal of Political Science 44, 1: 132–141.
- Sanders, David. 1999. "Conservative Incompetence, Labour Responsibility and the Feelgood Factor: Why the Economy Failed to Save the Conservatives in 1997." *Electoral Studies* 18: 251–270.
- Schattschneider, Elmer E. 1960. *The Semisovereign People: A Realist's View of Democracy in America*. New York: Holt, Reinhart, and Winston.
- Schlozman, Kay L., Benjamin I. Page, Sidney Verba, and Morris Fiorina. 2004. "Inequality of Political Voice." Washington, DC: Task Force on Inequality and American Democracy, American Political Science Association.
- Seeber, Gilg U. H., and Markus Steinbrecher. 2011. "Inequality and Turnout in Europe." Paper prepared for the Annual Meeting of the American Political Science Association in Seattle, WA, September 1–4.
- Shield, Todd G., and Robert K. Goidel. 1997. "Participation Rate, Socioeconomic Class Bias, and Congressional Elections: A Crossvalidation." American Journal of Political Science 41, 2: 683–691.
- Solt, Frederick. 2004. "Civics or Structure? Revisiting the Origins of Democratic Quality in the Italian Regions." *British Journal of Political Science* 34: 123–135.
- ——. 2008. "Economic Inequality and Democratic Political Engagement." *American Journal of Political Science* 51, 1: 48–60.
- ——. 2010. "Does Economic Inequality Depress Electoral Participation? Testing the Schattschneider Hypothesis." *Political Behavior* 32: 285–301.
- Soss, Joe, and Lawrence R. Jacob. 2009. "The Place of Inequality: Non-Participation in the American Polity." *Political Science Quarterly* 124, 1: 95–125.
- Stockemer, Daniel, and Lyle Scruggs. 2012. "The Impact of Inequality on Turnout—New Evidence on a Burgeoning Debate." *Electoral Studies* 31, 4: 764–773.
- van der Brug, Wouter, Mark Franklin, and Gábor Tóka. 2008. "One Electorate or Many? Differences in Party Preference Formation Between

- New and Established European Democracies." *Electoral Studies* 27, 4: 589-600.
- Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.
- Weatherford, M. Stephen. 1983. "Economic Voting and the 'Symbolic Politics' Argument: A Reinterpretation and Synthesis." *American Political Science Review* 77: 158–174.
- Yanai, Yuki. 2011. "Economic Inequality and Voters' Attitudes Toward Inequality and Redistribution: A Study of Turnout." Paper prepared for the 61st Political Studies Association Annual Conference, Novtotel London West, April 19–21.