Why do the poor support right-wing parties? A cross-national analysis

John D. Huber
Piero Stanig

Department of Political Science
Columbia University
New York, NY 10027

Prepared for the RSF Inequality Conference, UCLA, January 2007. We are grateful to Kate Baldwin and Rebecca Weitz-Shapiro for reseach assistance, and to Dawn Brancati, Randy Stevenson and seminar participants at Washington University, St. Louis and Princeton for comments on an earlier version. A previous draft of this paper was presented at the 2006 Annual Meetings of the American Political Science Association, Philadelphia, PA.

I. Introduction

Why do poor people, who would benefit from redistribution, often vote for parties that oppose it? Democratic elections can serve to diminish inequality by enabling a country's poorest members to receive resources from wealthier ones. The poor can obtain these resources by helping to elect parties that pledge to tax the rich and transfer the proceeds to the poor. But if the poor do not vote for parties that are committed to redistribution, elections are unlikely to play this role of raising the economic well-being of the poor. Why, then, would some poor individuals use their vote to advance the electoral success of right-wing parties that oppose redistribution?

A bedrock assumption of many studies of democracy and redistribution is that the poor do not support such right-wing parties. Scholars have long recognized a relationship between income and voting, with poor voters more likely to support left-wing parties that advocate redistribution from rich to poor. The belief that poor voters will support leftist tax-and-transfer parties (and that non-poor voters will oppose them) has been a mainstay of the political science literature for many years (e.g., Lipset et al. 1954, 1334), and it has allowed scholars to explore a wide range of important issues. In their classic work, Meltzer and Richard (1981) use it to study the relationship between income distributions and taxes. Scholars have built on this framework to study an array of other questions, such as transitions between democracy and authoritarianism (Acemoglu and Robinson 2006, Boix 2003), the effect of income inequality on economic growth (Alesina and Rodrik 1994), the impact of "skill specificity" on preferences for social protections (Iversen 2005), the effects of religion (Scheve and Stasavage 2006, Benabou and Tirole 2006), social mobility (Benabou and Ok 2001) and geographic mobility (Epple and Romer 1991) on preferences for redistribution, the impact of electoral laws and separation of powers on economic performance (Persson and Tabellini 1999; 2000), and the impact of electoral laws on left-party dominance and redistribution (Iversen and Soskice 2006).

But is this assumption reasonable? We present evidence that the answer to this question varies a great deal from one country to the next. On the one hand, in many countries, poor people

vote in relatively large numbers for right-wing parties that oppose redistribution. On the other hand, in many countries, non-poor individuals vote in relatively large numbers for left-wing parties that favor redistribution. We therefore find that the degree to which voting is polarized by income groups also varies a great deal across countries.

Our goal is to illuminate country-specific factors that underlie these cross-national differences in electoral support for right-wing parties. We are particularly interested in differences between voting by poor individuals and voting by middle-income or rich individuals. The theoretical foundation for our analysis is the well-rehearsed argument about the salience of a second political dimension: some policy issue other than redistribution trumps a poor voter's preferences for redistribution. Second-dimension arguments have commonly been applied at the individual level. In US politics, for instance, moral conservatism is often held up as a second dimension that encourages poor voters with conservative values to vote against their redistributive interests. If poor voters have conservative values on issues pertaining to individual liberty — such as abortion, gay rights, or separation of church and state — then they may vote for Republican candidates, even if these candidates are known to advance redistributive policies that are not in the interest of the poor voters. In other countries, second-dimension arguments have typically been applied to ethnic groups. In Basque Spain, for example, poor voters may vote based not on the issue of redistribution, but rather on the issue of constitutional preferences regarding Basque autonomy.

We apply this simple intuition about a second dimension not at the individual level, but rather at the macro level. That is, we identify elements of the social and institutional context that vary across countries and that affect the salience of a second dimension to poor and non-poor voters. We pay special attention to the role of religion in shaping the relationship of income to support for right-wing parties. We do so by exploring macro factors that affect the relationship between the states and organized religion, on one hand, an by when an individual's religiosity mediates the impact of income on vote choice. Our analysis therefore enables us to shed light on

the circumstances under which poor voters are more or less likely to support parties that oppose redistribution.

The paper is organized as follows. We begin with a brief literature review, arguing that previous research has not examined how context affects the relationship between income and vote choice. Section III provides summary data about patterns of support for right-wing parties in 19 countries across 28 elections . Section IV provides our theoretical arguments about how the macro context should affect voting for right-wing parties by the poor, which are tested in sections V and VI. We conclude with a summary of our results and reflections on their implications.

II. The existing literature

There is a long tradition of research demonstrating that both income and religion affect vote choice. With respect to income, scholars of American politics have demonstrated a clear effect of income on voting, even controlling for class (e.g., Brooks and Brady 1999). The impact of income on the vote has been increasing over time (McCarty, Poole and Rosenthal 2006), and the size of the effect varies across states, with income playing a stronger role in poorer states (Gelman et al 2005).

In cross-national studies, much less attention has been devoted to how income affects the vote. Instead, scholars have focused on the role of class, with the central question motivating recent research being to understand whether there has been a decline in class voting. While there remains disagreement in the literature, many studies argue that class is a less reliable predictor of the vote than was the case thirty years ago (e.g., Heath et al 1991, Nieuwbeerta and de Graaf 1999, Erikson and Goldthorpe 1992). This decline in class voting is believed to be linked to a number of factors, including increased social mobility, cognitive mobilization leading to issue rather than group oriented voters, and "post-materialism."

Religion also has a strong place in the voting literature. In American politics, recent studies show a strong effect of various religion variables on partisanship or vote choice (e.g., McCarty, Poole and Rosenthal 2006, Gelman et al 2006, Manza and Brooks 1997). Similarly, in a

recent cross-national study, Norris (2004) argues that religiosity is more important than income, sex, age and ethnicity in predicting support for the right. A variety of reasons have been given for the relationship between religiosity and voting. Lipset and Rokkan (1967) argue that party systems themselves are affected by history, with right-wing religious parties that appeal to religious voters most likely to emerge in countries where church-state conflict was settled relatively recently, as in many Catholic countries. Others argue that religiosity affects issue attitudes, which in turn affect voting behavior (e.g., Lopatto 1985). Of particular note for our study is recent research that links religiosity to attitudes about redistribution. Using cross-national survey data, Scheve and Stasavage (2006) argue that religious individuals are more likely to oppose redistribution. Benabou and Tirole (2006) develop a formal model to argue that investment in religion is a way of manipulating one's beliefs in order to motivate continued effort in the face of signals indicating that the world does not fully reward effort. Thus, there should be a link between attitudes toward state assistance and religiosity. And Guiso, Sapienza and Zingales (2002) use survey data to argue that regular service attenders are more willing to trade-off equality for incentives and are more favorable towards private property.

Although the literature is vast and we do not attempt a full summary here, we would like to make two points about previous studies. First, studies of the impact of religion on preferences and vote choice have important implications for how one should study the impact of income on vote choice. Obviously, it is important to control for religiosity when attempting to evaluate voting by the poor and non-poor. It also makes good sense to examine whether support for right-wing parties by voters from a given income group – such as poor voters – is affected by their religiosity. Second, although much scholarly effort has been expended trying to understand the impact of income and religion on voting in particular countries, such as the U.S., or in understanding the effect of these variables across a range of countries, no arguments or evidence exist about cross-national differences in the effects of these variables. It is to this task that we turn, focusing primarily on how the macro context affects voting by the poor.

III. Patterns of support for anti-redistributive parties

To examine voting for right-wing parties across countries, we utilize survey data from the Comparative Study of Electoral Systems ("CSES"). The CSES is coordinated set of election surveys across a wide range of countries. It began in the 1990s, and some countries have conducted more than one election survey. We include countries

- that are clearly democratic (thereby excluding countries like Ukraine and Russia in the 1990s);
- that have western religions (thereby excluding countries like Japan and Taiwan);
- that have survey results for legislative elections (thereby excluding countries with only presidential election surveys);
- and that have comparable income and religious attendance variables.

This leaves us with 19 countries and 28 elections.

Income is reported in quintiles, and we focus on the poor (bottom quintile), middle class (middle quintile) and rich (top quintile). Religiosity is measured using religious service attendance. We code individuals as religious if they report attending services once a week or more, and secular otherwise. We impute missing income data within each country.

Our specific goal is to understand the propensity of voters in each income group to vote for parties that favor lower taxes and less redistribution. It is important to recognize that "voting right" in this narrow tax-and-transfer sense can be quite different than "voting right" on some general left-right dimension. The problem with using a general left-right variables is that the substantive meaning of "left-right" varies a great deal across countries, and often has little to do with economic redistribution. We use "Dimension 1" from Benoit and Laver (2006) to place parties on a 20-point economic left-right scale. This dimension is the best measure we have found for positioning parties on the tax-and-transfer scale. *For this variable, country experts place parties on a scale ranging from 1 (party "Promotes raising taxes to increase public services") to 20 (party "Promotes*

cutting public services to cut taxes"). We code a voter as having voted for a right-wing party if he or she casts a vote for any party with a score of 10.5 or greater on this 20 point scale.

Using the Benoit and Laver data, it is easy to show that the general left-right scale, while clearly related to the redistribution scale, is not the same thing. In Figure 1, we plot the party positions on the redistribution dimension against their placement in the Benoit and Laver data set on the general left-right dimension. There is considerable variation in how close the parties are to the 45-degree line, which marks perfect congruence of the two scales. And there are a large number of parties that are in the wrong quadrant, i.e. they are right of center on a general left-right dimension but left of center on the redistribution dimension, or vice versa. It is clear, then, that it is better to use a specific redistribution scale than a general left-right scale if one wishes to understand the propensity of poor voters to support parties that are against taxes and redistribution.

Figure 2 presents the proportions of all voting respondents in each of our nineteen countries that support right-wing parties on the redistribution issue. The average country has 45 percent of voting respondents supporting right-wing parties. The main conclusion one can draw from Figure 2, however, is that there is an extraordinary range in right-wing support across countries. Less than 25 percent vote right in Poland, Romania, and Hungary (where only eight percent voted right-wing in 1998), and at least 80 percent vote right in two elections, Ireland and Bulgaria. The U.S. is a bit above the mean, with 52 percent (1996) and 47 percent (2004) supporting the right.

Our primary interest is not in aggregate right-wing voting, but rather in right-wing voting by the poor. There are two dimensions of this question that are important. On one hand, it is useful to understand levels of right-wing support among the poor. What macro factors lead to greater or small proportions of poor voters supporting the right? Addressing this question by itself, however, will leave an incomplete picture of the electoral politics of poor voters because it excludes reference to other income groups. If we wish to understand how macro factors might

influence electoral outcomes, we need to understand whether these factors contribute to an income-based cleavage.

It may be the case, for example, that an increase in some macro factor has the effect of (a) making voters from all income groups more right-wing, effectively moving the median voter to the right, or (b) driving a wedge between different income groups, making the poor relatively more or less likely than the wealthy to support right-wing parties. In the first case, the main effect on party competition should be to move all parties to the right, with little effect on the ability of the poor to form a coalition against the rich for the purpose of enhancing redistribution. In the second case, the main effect on party competition will be to influence the propensity of the poor to form a coalition with non-poor voters on the redistribution issue. In this case, we are mainly concerned with voting differences between the poor and the middle-income voters, as voting similarities between these two groups are crucial for building electoral coalitions. We will call differences in the propensity of poor and middle-class voters to support right-wing parties "income polarization."

Figure 3 presents the voting data by income levels. The first three bars for each country are voting proportions for the poor, middle class and rich. The right-most bar presents the polarization between the middle class and the poor (proportion of middle class voting right minus proportion of poor voting right, or the distance between the first and second bars). In seven of 28 elections, the poor are actually more likely to support the right than are the middle class. (This is true for six elections when we compare the poor to the rich.) The biggest anomaly is Switzerland, where in both elections, the proportion of poor supporting right-wing parties was roughly 10 percent higher than the proportion of middle-class voters supporting right-wing parties. In the countries where the poor support the right in smaller proportions than the middle class, there is a substantial variation, ranging from a one percent difference in the Swedish 2002 election to an 18 percent different in the U.S, 1996 election. Two of the three elections with the highest levels of polarization are from the U.S.

It is useful to note that polarization between poor and rich voters is much higher than polarization between poor and middle-income voters. The differences between rich and poor support for right-wing parties exceeds 20 points in eight elections, and reaches a maximum of 47 points in the Czech Republic (2002). The 1996 U.S. election has the second highest polarization between rich and poor voters, at 35 points. It is clearly the case, then, that levels of support for right-wing parties among different income groups varies across countries, as does voting polarization.

But income is not the only factor that polarizes voters. Figure 4 presents data on right-wing voting in each country by religious service attendance. The leftmost bar depicts the proportion of religious voters (i.e., those who report attending services weekly) who vote right. The middle bar is the proportion of secular voters (i.e., those who do not attend services weekly) who vote right, and the rightmost bar depicts the difference between the two (the voting polarization by religious practice). There are nine elections where the regular attenders are actually less likely than the others to vote right. In the other elections, polarization is greater than 25 points in six elections, with the maximum polarization found in Slovenia (36 points). Thus, as with income, there is no consistent pattern across countries in how religious practice is related to support for right-wing parties.

Finally, Figure 5 examines how the interaction of income and religious practice affect voting for the right. If we consider the poor voters only (the two leftmost bars, with the weekly attenders on the far left), the difference between the voting behavior of the religious poor and the secular poor varies a great deal across countries. In 11 of 28 elections, the religious poor are actually less supportive of right-wing parties than are the nonreligious poor, though in all but two elections, the differences between these two groups is modest (less than 10 points). In some countries, however, there is a substantial cleavage between the religious poor and the nonreligious poor. In Germany (1998) and Sweden (1998), the proportion of religious poor who support right-wing parties is 39 points higher than the proportion of nonreligious poor who support such parties.

In addition to these two countries, the difference between the religious poor and the nonreligious poor is greater than 15 points in Switzerland, Ireland, Slovenia, and the Netherlands.

Among middle-income voters, there is also a great deal of variation in how polarized voting is along religious lines. The difference between the religious middle class and the secular middle class is at least 15 points in nine countries, with the Netherlands, Germany and Slovenia all having a difference of greater than 30 points between the proportion of religious middle class and secular middle class who support the right. It is worth noting that in some countries -- like the U.S. -- the difference between the religious and secular middle-income groups is much greater than the difference between the religious and secular poor (see also Hungary 2002 and the Czech Republic 2002). In other countries, religious polarization is greater among the poor than among the middle class (e.g., Switzerland, Britain and Sweden).

Summaries of these data are found in Table 1. The data in the table are averages of proportions across the 28 elections. The average proportion of right-wing support increases as income increases, regardless of whether we include all voters or classify voters by religiosity. And the average proportion of right-wing support is higher among religious than among secular voters, regardless of whether we include all voters or classify by income. If we consider polarization scores, there are greater differences between rich and poor proportions than between middle income and poor proportions, and religious polarization is typically as high as income polarization. But one interesting interaction emerges from these summaries of aggregate proportions. When we consider income polarization between the middle class and the poor, it is higher among religious than secular voters. Among secular voters, the country with the median difference between the proportion of poor and middle-income individuals voting right has a difference of 4.7 percent. Among the weekly attenders, the difference is 7.7 percent. This seems to be due to differences between the religious and secular middle-income voters. Among middle-income voters, the religious support the right by 11 more points than the nonreligious, whereas among the poor voters, the religious support the right by eight points more than the nonreligious.

Together Figures 2 to 5 and Table 1 make clear several points. First, if one wishes to examine poor support for anti-redistributive parties, it is important to consider the relevant baseline. Considering raw proportions of the poor who vote for right-wing parties is quite different from examining whether income creates a voting cleavage. To the extent that we want to understand how democracy resolves redistributive conflict between income groups, voting polarization may be most important. Second, it clearly is not true that we find high levels of polarization by income across all democracies. In some countries, the poor are more likely than the middle class or the rich to support right-wing parties. In other countries, there are huge levels of voting polarization by income in the expected direction. And there is considerable variation between these two extremes. Third, if we wish to understand support for anti-redistributive parties, it is very useful to consider religion in interaction with income. The poor are not monolithic. Across all income groups, religious individuals are more likely than secular ones to support right-wing parties. But there are interesting differences that exist in how important religion is in different income groups, and it seems to be more important among middle-income voters than among poor voters.

IV. The macro context, "second dimensions" and right-wing voting

To better understand the source of the cross-national differences described above, we rely on second-dimension arguments, which provide a powerful and well-developed framework for thinking about why poor voters might support anti-redistributive parties. The general idea is well-known: politics is multi-dimensional, and voters are often forced to make trade-offs across the dimensions. Thus, if the preferences of poor voters on economic policy are less important to them than are their preferences on some other dimension — such as race or religion — the poor voters might vote against their economic preferences in favor of these second-dimension preferences.[1]

[1] For a recent formalization, see Roemer (1998; see also 2001)

Put differently, poor voters might prefer the left-wing party based on their redistributive preferences, but nonetheless vote right wing because of preferences on another policy.

Second-dimension arguments are typically developed at the individual level. Scholars seek to identify issues such as race, religion or moral conservatism that can trump economic attitudes toward redistribution. Our goal, however, is to explore the standard second-dimension argument from a different perspective. Specifically, we wish to understand if the countries where second-dimension pressures are most salient are also the countries where right-wing voting by poor individuals is most prevalent. To this end, we focus on (a) two attributes of the social context that have received the lion's share of attention in second-dimension arguments, (b) two features of the party system that should affect the salience of second dimensions, and (c) the state's institutional penetration of religious organizations, a factor that has not been previously explored.

The first social factor we consider is ethnic heterogeneity. In American politics, scholars have carefully studied how racial attitudes affect vote choice. The relationship between race and redistributive voting has been linked theoretically to a "negative exposure effect." The idea is that preferences regarding redistribution have an interpersonal component. Members may not mind if expenses are expended on their own group, but they dislike it when benefits are provided to members of another group (Luttmer 2001; see also Alesina et al. 2001). The poor should be more likely to support parties that oppose redistribution in countries where redistribution benefits members of other ethnic or racial groups. We should therefore expect poor support for right-wing parties to be highest in countries that are divided along racial or ethnic lines.

The second social factor we consider is modernization. Inglehart (1990 and elsewhere) argues that as societies develop, traditional concerns with material needs recede and are replaced by "new values" issues. These values include individual participation, women's rights, and the environment, among others. The salience of issues related to these parties forces them to compete with each other on dimensions other than economic security. If individual attitudes toward theses new issues are uncorrelated with income, then the relative propensity of the poor to support right-

wing parties should increase as development increases, and similarly, the propensity of the non-poor should decrease.

Two elements of the party system can also affect the propensity of poor voters to support right-wing parties. The first is the polarization of left and right parties on economic issues, which affects the salience of the economic dimension when voters are deciding which party to support. McCarty et al.'s (2006) study of the United States underlines the importance of the ideological polarization of the party system. As America's two main parties diverge from each other, the differences between them in expected tax-and-transfer policies will increase. This makes it more attractive for poor voters to support the Democrats and non-poor voters to support the Republicans. We should expect to observe more voting polarization by income in countries where the party system is most polarized (i.e., where the distance from the left to right is greatest), and the costs of voting for the "wrong" party on the economic dimension are higher.

The second element of the party system is related to the fact that in addition to preferences regarding redistribution, individuals often have preferences on policies related to individual freedoms, such as abortion, gay rights, euthanasia, and separation of church and state. In some countries, the party system forces poor voters to choose their party based on one of these dimensions or another because there does not exist a party that espouses their preferred position on both. Such "forced choice" is present in the US, for example, where the Democrats are liberal on economic policy and on policies that affect individual rights and liberties, while the Republicans are conservative on both dimensions. Poor voters must therefore vote right if they wish to limit individual rights in issue areas like abortion or gay marriage, and if they care more about such issues than economic ones. The same dynamic could affect cross-over voting by non-poor voters, who must vote left if they want to protect individual rights and care more about these individual rights issues than their tax rate.

By contrast, if an electoral arena allows a voter to choose among parties with any combination of positions on the most salient dimensions, the income-based voting polarization

should increase because poor voters will not need to vote against tax-and-transfer parties. If the U.S., for example, had a viable party that was to the left on the economic dimension but to the right on the issues related to individual rights, the question of "crossing over" would not confront poor voters. As a consequence, if we assume (a) that poor voters prefer left parties on economic issues and that non-poor voters prefer right parties, and (b) that some dimension other than economic redistribution is most salient for some poor and non-poor voters, then there should be large voting polarization by income when the party system allows all types of parties to form. In such situations, voters can always vote according to their preferences on the economic dimension, independent of the salience of other dimensions.[2]

The institutional entanglement of politics and religion provides a final pathway by which second-dimension considerations can affect voting by poor individuals. Across political systems, the degree to which the state can and does become involved in the affairs of organized religion varies, as does the impact of such involvement on religious and non-religious individuals. The entanglement of politics and organized religion can take a number of forms. One is the regulation of religious practice, which often affects minority religions most directly. Politicians can place restrictions on what types of places can be used for worship, how these must be maintained, and whether there are special requirements that places of worship be registered with the government. Another concerns the political sphere. Politicians can place restrictions on whether political parties can be affiliated with organized religions. They also can determine whether there exists an official government department that is charged with religious affairs, and with whom organized religions must interact to press their concerns. Politics also affects the funding of religious organizations. Politicians may establish direct government funding of organized religion, and they might also establish indirect funding, such as supporting charitable organizations that are operated by organized religion. And if they choose to provide such funds to religious organizations, they may choose to do so through general government revenues, or through religious taxes that are collected

[2] For a related argument about electoral systems, see Rodden and de la O (2006).

on behalf of religious organizations. Finally, politicians often play a central role in establishing the place of religion in education. Politicians can determine whether religious education is offered in public schools, and whether such education is mandatory or optional. They also decide whether to provide funds for religious schools.

Clearly, then, if the political system allows state involvement in religious matters — and particularly in the rights of organized religion — then a variety of second-dimension issues related to religion should become more salient, diminishing the polarizing effect of income on vote choice. If the political system does not invite political involvement in religious organizations, then second-dimension issues related to religion should remain less salient during political competition, increasing the polarizing affect of income on vote choice.

The arguments above suggest a number of different types of variables that should be related to the propensity of poor voters to support right-wing parties across countries. In our tests below, *Ethnic fractionalization* measures how likely it is that two individuals are from different ethnic groups, where ethnicity can be either language or race. The data are from Alesina et al. (2003), and the variables should have a positive coefficient. *GDP/capita (ln)* is the log of GDP per capita, and should be positive if modernization decreases the salience of the redistribution issue, while making other issues more important to voters. Similarly, *Urbanization* is the percent of the total population that lives in urban areas, and should have a negative coefficient if modernization decreases the salience of the redistribution issue.[3]

For the party system variables, *Polarization* is the distance between the left-most right party and the right-most left party on the redistribution dimension, using the Benoit and Laver data. The variable measures the "emptiness" of the center. As *Polarization* increases, voters on the left (right) must travel a greater ideological distance to support a party on the right (left). We should therefore expect this variable to have a negative coefficient. *Forced choice* is an indicator variable that takes the value of 1 if a country's party system has no parties that are at once to the left on the

[3] See Rodden (2005) for an interesting analysis of how urbanization affects left-wing support.

redistribution dimension and to the right on Benoit and Laver's social dimension. The social dimension ranges from 1 (party "favors liberal policies on matters such as abortion, homosexuality and euthanasia") to 20 (party opposes liberal policies on these issues). The variable should have a positive coefficient because for poor voters to vote conservatively on issues of individual liberty, they must support parties that are also right-wing on redistribution.

We use three different variables as proxies for the institutional entanglement of politics in religion, all of which should have a positive coefficient. Our first measure is *Religious Tax*, which takes the value 1 if the state collects a tax that is used to fund religious organizations. The data are taken from the *lfn* variable in Fox (2004). In Germany, for example, individuals who belong to a church must pay a tax of almost 10 percent of their income. The existence of such a tax indicates an institutional role of politics in religion because religious organizations are dependent on state political decisions for funding.

The second measure is *Constitutional Regulation of Religion*. The variable takes the value 1 if the country's constitution explicitly invites the government to regulate religious organizations. Codings is based on our reading and coding of the constitutions in each country. We found language inviting such regulation in eight of 19 countries. The specific language we found is given in Table A1, and it ranges from very specific (e.g., Germany's constitution states that "Religious bodies acquire legal capacity according to the general provisions of civil law") to more indirect (e.g., Iceland's constitution states "All persons have the right to form religious associations and to practice their religion in conformity with their individual convictions. Nothing may however be preached or practiced which is prejudicial to good morals or public order.")

Finally, we consider religious education. If the state requires that religious education be offered in public schools, one would expect a high level of entanglement of the state with religion. *Religious education* takes the value 1 if the government requires that public schools offer religious education. The variable is from the *lei* and *lej* variable in Fox (2004).

Summary information about each of these macro variables is found in Table A1 of the Appendix.

V. Testing the arguments

To estimate how the macro, country-specific factors affect voting for right-wing parties, we follow the two-stage estimation techniques described in Huber, Kernell and Leoni (2005). In the first-stage, we estimate a separate probit model in each country, where the dependent variables take the value 1 if the voter voted for a right-wing party. In our first analysis, we ignore interactions between individual income and religiosity. The independent variables therefore include dummy variables for each income quintile (with middle class being the omitted category), *Weekly attender* (which takes the value 1 if the respondent reports attending religious services at least once a week), and a number of control variables (age, age^2, education, an indicator for female, and a number of indicator variables for occupational status (housewife, student, unemployed, retired, and "other employment", with the omitted category being full-time employment)). The independent variable of central interest is the *Poor* dummy variable, which describes the probability that a poor person will vote for a right-wing party relative to a middle-class person.

In the second-stage regressions, we use the *Poor* coefficients as the dependent variable, and attempt to explain cross-national differences in these coefficients as a function of the macro variables. The second-stage regressions are weighted using the standard errors on the *Poor* coefficients from the first-stage regression. The weighting strategy we employ is taken from Borjas and Sueyoshi (1994). Leoni (2005) uses Monte Carlo simulations to demonstrate that this two-stage approach to the analysis of survey data with probit has desirable properties when sample size in the first stage is relatively large (as is the case for our country surveys).

It is impractical to report all of the results from the 28 country-specific regressions, but the coefficients and standard errors for *Poor* are given in the first column of Table A2. The coefficients range from -.69 in Britain (1997 election) to .43 in Switzerland (1999 election). The mean is -.19, and the two U.S. elections are -.34 (2004) and -.25 (1996 election). The coefficient is

negative in all but five elections, implying that in most countries, the poor are more likely to support left parties than are middle-class voters, controlling for other variables, including religiosity.

We now turn to the second-level regressions, where the dependent variable is the coefficient on *Poor* from the first-level regressions in each country. Column 1 of Table 2 presents a model where the religious variable is *Religious tax.* All the variables are in the expected direction, and all are estimated precisely. When we control for religiosity and other individual-level variables, poor individuals are more likely to support right-wing parties in countries that have high levels of ethnic fractionalization, high GDP per capita, low levels of urbanization, low levels of party polarization, forced choice on the social dimension, and strong entanglement of the state in religious organizations (measured by religious tax).

Column 2 provides the results from the same model, but with *Constitutional Regulation of Religion* (rather than *Religious tax)*, as the religion variable. The results are virtually identical to column 1. Finally, column 3 presents the results when *Religious Education* is used as the dependent variable. Again, the results are robust. In results not reported, we estimated models where we attempt to control for economic voting by including variables measuring economic performance (and interactions of this performance with right-wing incumbency). The economic voting variables are never significant, and their inclusion does not affect the results in Table 2. To control for the possibility that post-communist countries will have different levels of redistribution, different debates about it, and different types of parties on the redistribution issue (because state versus market control is often the central issue), we estimated the model with an ex-communist dummy variable. It was not significant, and inclusion of this variable had little impact on the other variables in Table 2, except for *GDP (ln)*, which is not significant when *Ex-communist* is included.

The second-stage regression results describe how increases in the macro variables are related to the size of the probit coefficients on *Poor* in the first-stage models. Given the non-linear probit model, the effect of any change in a given macro variable depends on the values of other

macro variables, and on the values of the first-level coefficients (other than *Poor*). We therefore cannot discuss the substantive effect of any macro variable on voting polarization without identifying a "baseline individual," and without making assumptions about the values of other macro variables.

In what follows, we graphically illustrate the effects of the macro variables on voting by depicting the expected probabilities of supporting right-wing parties for poor and middle-income voters. The graphs are based on the specification in Column 1 of Table 2. We assume that the individual is a 40-year old male with a high-school education who does not attend religious services weekly. For our analysis of each macro variable, we assume that the other macro variables take their median values. The figures for each of the variables are given in Figure 6.

The figures allow us to examine both trends in right-wing support and trends in polarization between the middle-income and poor voters. Consider *Ethnic Heterogeneity.* Our results suggest that countries that are more heterogeneous have more right-wing voting by poor and middle-income voters. But the proportion of poor predicted to vote right is more sensitive to the level of ethnic heterogeneity than is the proportion of middle-income respondents predicted to vote right. Thus, the poor voter becomes more like the middle class voter, and polarization decreases, in countries that are more heterogeneous. As national wealth increases, the proportion of respondents who vote right increases by about 15 points as we go from the poorest to the richest country in the sample. But the effect is the same for middle-income and poor voters, so there is little effect on polarization. *Urbanization*, by contrast, has a strong impact on polarization. Poor voters are much more likely to vote left in countries that are highly urbanized, whereas the effect of urbanization on middle-income voters is rather small. Polarization therefore increases by about 15 percent as one moves from the least urban to the most urban country. Party-system polarization decreases right-wing support among middle-income and poor voters, and thus has only a modest impact on voting polarization. Forced choice on individual liberty issues leads to more right-wing voting among both income groups, but the effect of the variable is stronger for the poor, and thus forced choice

decreases polarization. Finally, the religious tax decreases middle-income support for right wing parties and increases poor support for right-wing parties, thereby decreasing polarization (by about 10 points).

VI. Results with income-religion interaction

The results in the previous section are based on first-stage models that assume the effect of religion does not depend on income. That is, in our first-level regressions, we included only one dummy variable for whether an individual was a regular service attender. But there are reasons to believe that the effect of religiosity on voting may depend on an individual's income. Poor religious voters, for example, even if they favor redistribution, may "cross over" and vote for the right against their economic interest if the right-wing parties have more attractive positions on issues like abortion, which are unrelated to redistribution. Non-poor religious voters do not face this tradeoff because they should prefer the right-wing anti-redistributive party on both dimensions. Similarly, non-poor secular poor voters may have an incentive to vote in favor of a redistributive party if that party proposes second-dimension policies that appeal to their secular worldview. But poor secular voters do not face this tradeoff because they prefer the left-wing party on redistributive and second-dimension grounds.

It is useful, then, to explore how the macro context affects the behavior of different income groups, dividing such groups by their religiosity. This will allow us to understand not only the effect of income with a more accurate control for religiosity, it will also allow us to examine whether macro issues drive a wedge between religious and secular voters. Our clearest expectations in this regard concern the state entanglement with religion variables. We should expect the existence of institutions like the religious tax or the constitutional regulation of religion to affect the religious poor and the secular poor differently, with the religious poor becoming more likely to support right-wing parties and the secular poor less likely. The same may be true for the middle class, with the religious middle class and secular middle class diverging in their vote choice when state entanglement with religion is high.

For other variables, our expectations should be related to the degree to which the macro context influences second-dimension arguments differently for religious and secular individuals in the same income group. That is, if religiosity has the general effect of encouraging voting on a second dimension, then the voting behavior of religious and secular voters should diverge as second-dimension considerations become more salient. If party polarization is high, for example, we have argued that this makes it more difficult for voters to vote against their redistributive interests. We might therefore expect the religious and secular poor to vote in roughly the same proportions for right-wing parties. But when party polarization is low, second dimension considerations become more salient, and to the extent that such considerations encourage religious voters to support right-wing parties, we should expect a divergence between the vote of the religious and secular poor. The same considerations should also apply to the middle-class voters, with religious middle-class and secular middle-class voters diverging as party polarization decreases. By contrast, we might not expect ethnic heterogeneity to affect religious and secular voters differently. If ethnic heterogeneity creates a negative exposure effect for all individuals, then unless this effect is stronger or weaker among the religious individuals, this variable should have little effect on polarization between religious and secular voters. In general, then, it makes sense to explore religious-based differences between poor and middle-class voters.

To test how the macro context affects the interaction of religion and income on vote choice, we estimated four different first-level models. For each model, we included the same controls as previously (age, gender, education and occupational dummies), but rather than including (four of) five income dummy variables and one religious attendance variable, we interacted each of the 5 income dummy variables with religious attendance. This yields 10 income-religion dummy variables, and in each of the four first- level regressions, we omit the dummy variable for one of the four substantive groups of interest: religious poor, secular poor, religious middle class and secular middle class. The first-level regression results for these variables are given in Table A2, columns 2 to 5.

The second-level results for each first-level regression are given in Table 3. The first two columns examine the impact of income for the two different religious groups, and the second two columns examine the impact of religion for the two different income groups. There are clear differences across the models, and to gain a sense of the substantive nature of these results, it is useful to examine them graphically, as above.

Figure 7 depicts the results from the four regressions graphically. Each row presents four graphs for one of the independent variables. Each column presents a comparison of the effects for two different groups. The two leftmost columns depict differences between poor and middle income respondents, controlling for religiosity -- the first column compares the secular poor with the secular middle (the same comparison that was made in Figure 6), and the second column compares the religious poor with the religious middle. The two rightmost columns depict the effect of religiosity, controlling for income -- the third column compares the secular poor with the religious poor, and the fourth column compares the secular middle-income with the religious middle-income respondents.

Consider the first row of figures, concerning ethnic heterogeneity. Respondents of all types are more likely to support right-wing parties in countries that are more heterogeneous. But heterogeneity is associated with decreased polarization on income: in the two leftmost figures, the difference between the poor and middle class declines by about 10 points as we move from the most homogenous to the most heterogeneous country. Heterogeneity does not, however, affect religious polarization (the graphs in the two rightmost figures are roughly parallel lines).

The level of income polarization is also affected by three of the other five macro variables. As urbanization increases, the secular poor are much less supportive of right-wing parties, increasing polarization with the secular middle class. The same is true in comparing the religious poor and the religious middle class, although the effect is smaller. When no forced choice exists, the poor and middle-income voters diverge in their support for right-wing parties by more than 10 points, whereas income polarization is near zero (and is zero for religious voters) when forced

choice exists. And the existence of a religious tax decreases middle-class secular support for right-wing parties while increasing poor religious support for right-wing parties. The effect is for income polarization among the religious and secular voters to be much smaller when a religious tax exists than when it does not.

If we consider the affect of religion, controlling for income, ethnic heterogeneity turns out to be an anomaly in that it is the only macro variable that has no effect on religious polarization. Two variables have particularly interesting results. In more urbanized countries, the religious poor are much less likely to support right-wing parties than in less urbanized countries. Consequently, among the poor, there are great differences between the religious and secular poor in countries with low urbanization, whereas there are few differences based on religion in countries that are more urbanized. A similar trend exists for the middle class. The religious tax also has a large effect on polarization between religious and secular voters. Among the poor, if there is no such tax, the difference between the religious and secular poor is around five points. When the religious tax exists, there is little effect on the voting by the secular poor, but the religious poor become much more likely to support right-wing parties, increasing polarization between the religious and nonreligious poor to over 20 points. A similar trend exists for the middle class, where the religious tax makes the secular voters less likely and the religious voters more likely to support the right, increasing polarization.

The propensity to support the right is increasing in GDP for the four social groups of interest. The increase in probability in each income group is faster for the religious voters than for the secular ones. This suggests that economic development diminishes redistributive pressures from the political system, and it lowers in particular the cost of voting based on one's religious preferences. At a per-capita income of less than 15,000 dollars, the poor religious voters support the left more so than do their secular counterparts, while at per-capita incomes greater than 25,000 dollars, the proportion of religious poor

supporting the right exceeds that of the proportion of non-religious poor by more than 20 points. The same relationship between GDP and the religious cleavage also exists among the middle class.

VII. Summary and implications

Why do the poor support parties that oppose distribution? The analysis presented provides some answers to several dimensions of this question. We found, for example, that (as summarized in Figure 6), that the propensity of the poor to support right-wing parties varies in systematic ways across countries. The poor have a greater propensity to support right-wing parties in countries that are ethnically heterogeneous, rich, low in urbanization, low in party-system polarization, and that have no parties that are at once left wing on redistribution and right wing on issues related to individual liberty. But we also found that none of these variables distinguish the poor from the middle class. Indeed, the middle class have a greater propensity to support right-wing parties under the same conditions as the poor.

We also found, however, that these macro variables do not affect poor and middle class voting equally. Income-based voting polarization increases when countries are ethnically homogenous and urbanized, when voters can choose to vote for a left-wing redistributive party that is conservative on individual liberty issues, and when there is no religious tax. When these variables take their opposite values –and voting polarization is low – then with one exception, the poor and middle class coalesce in their support for anti-redistributive parties, rather than left-wing parties. For example, when urbanization is high, voting polarization by income is high, with poor voters much more likely to support left parties than are middle-class voters. When urbanization is low, convergence in poor and middle-class voting occurs, and it occurs on a relatively high level of support for right-wing parties. Put somewhat differently, it is relatively difficult to find the poor and the middle-class coalescing in support for left-wing parties. This is true because middle-class voters are typically less likely than poor voters to support left-wing parties – typically at least 10

points less likely. They do, however, form coalitions in support for the right when country conditions are conducive.

The interesting exception is political entanglement of the state with organized religion. For example, when a religious tax exists, the secular middle class and the secular poor coalesce in support for the left, primarily because the middle class are less likely to vote for right-wing parties when such a tax exists. State entanglement with organized religion therefore has the effect of driving secular middle-class voters to left-wing parties. The same is not true for religious voters: the poor, and especially the middle class religious voters support the right in greater proportions when a religious tax exists.

The analysis also suggests that one will not obtain a complete story about poor support for right-wing parties if one treats the poor as a monolithic group. Differences between poor religious voters and poor secular voters can be large, and they are greatest when countries are rich, low in urbanization, low in party polarization, and have religious taxes (see the third column of Figure 7). These same variables also drive a wedge between the behavior of religious and secular middle-class voters (see the fourth column of Figure 7). . In both cases, the effect is due largely to the impact on religious voters. Thus, in countries that are relatively religious, one should find that wealth, urbanization and state entanglement with organized religion should have a large impact on levels of support for right-wing parties. In countries that are relatively secular, these variables should have a less important impact.

How does the analysis help us situate right-wing voting in the U.S. in comparative context? Voters in the U.S. are only slightly above average in their level of support for right-wing parties. Three factors should drive U.S. voters to the right: the relatively high level of ethnic heterogeneity, the U.S.'s wealth, and the "forced choice" feature of the party system. Working against these variables, however, is the very high level of party-system polarization, which drives poor and middle-class voters to the left, and the relatively high level of urbanization, which drives poor

voters to the left. Thus, it is perhaps unsurprising that the level of support in the U.S. is only slightly above average.

Although the level of right-wing support is relatively average, the level of polarization in the U.S. is not. Perhaps contrary to the standard wisdom, voting polarization on income is much higher in the U.S. that in most other countries. That is, poor voters are relatively more likely than middle-class voters to support left-wing parties in the U.S. than in other countries. The analysis were would lead one to expect high levels of such polarization in the U.S. because urbanization is high, and there is no entanglement of the state in organized religion. But one could argue that the U.S. voting patterns should be less polarized than they are because of the US's high level of ethnic heterogeneity and the presence of "forced choice" in the party system. The findings is this study therefore only scratch the surface in efforts to interpret political behavior in the U.S. We hope our efforts will encourage additional comparative work that helps study electoral politics in the U.S. through a comparative lens.

References

Acemoglu, Daron and James A. Robinson, 2006. *Economic Origins of Dictatorship and Democracy.* New York: Cambridge University Press.

Alesina, Alberto and Dani Rodrik. 1994. "Redistributive Politics and Economic Growth." *Quarterly Journal of Economics* 109 (2): 465-90.

Alberto Alesina, Edward Glaeser and Bruce Sacerdote. 2001. "Why Doesn't the US have a European Style Welfare State?" *Harvard Institute of Economic Research Discussion Paper* No. 1933 (November).

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003. "Fractionalization." *Journal of Economic Growth* 8 (2): 155-194.

Benabou, Roland, and Efe Ok. 2001. "Social Mobility and the Demand for Redistribution: The POUM Hypothesis." *Quarterly Journal of Economics* 116 (2): 447-487.

Benabou, Roland and Jean Tirole. 2006. "Belief in a Just World and Redistributive Politics." *Quarterly Journal of Economics* 121 (2): 699-745.

Benoit, Kenneth and Michael Laver. 2006. Party Policy in Modern Democracies Data Set. Available from http://www.politics.tcd.ie/ppmd

Boix, Carles. 2003. *Democracy and Redistribution*. New York: Cambridge University Press.

Borjas, George and Glenn Sueyoshi. 1994. "A Two-Stage Estimator for Probit Models with Structural Group Effects." *Journal of Econometrics* 64 (1-2): 165-182.

Brooks, Clem and David Brady. 1999. "Income, Economic Voting and Long-Term Political Change in the U.S., 1952-1996." *Social Forces* 77 (4): 1339-1375.

de la O, Ana Lorena and Jonathan A. Rodden. 2006 **"**Does Religion Distract the Poor? Income and Issue Voting Around the World.**"** Paper presented at the 2006 annual meeting of the Midwest Political Science Association, Chicago, IL .

Epple, Dennis and Thomas Romer. 1991. "Mobility and Redistribution." *Journal of Political Economy* 99 (4): 828-858.

Erikson, Robert and John H. Goldthorpe. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.

Fox, Jonathan. 2004. *Religion, Civilization and Civil War Since 1945: The Empirical Study*. Lanham, MD: Lexington.

Gelman, Andrew, Boris Shor, Joseph Bafumi, David Park. 2005. "Rich State, Poor State, Red State, Blue State: What's the matter with Connecticut?" Unpublished Paper.

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2001. "People's Opium? Religion and Economic Attitudes." NBER Working Paper 9237.

Heath, Anthony, John Curtice, Roger Jowell, Geoff Evans, Julia Field and Sharon Witherspoon. 1991. *Understanding Political Change: The British Voter, 1964–1987*. Oxford, UK: Pergamon.

Huber, John , Georgia Kernell and Eduardo Leoni. 2005. "Institutional Context, Cognitive Resources and Party Attachments Across Democracies." *Political Analysis* 13 (4): 365-386.

Inglehart, Ronald. 1990. *Culture Shift in Advanced Industrial Society.* Princeton, N.J.: Princeton University Press.

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.

Leoni, Eduardo. 2005. "How to Analyze Multi-Country Survey Data: Result from Monte Carlo Experiments." Paper presented at the annual meeting of the Midwest Political Science Association, Chicago, IL.

Lipset, Seymour M., Paul F. Lazarsfeld, Allen H. Barton, and Juan Linz. 1954. "The Psychology of Voting: An Analysis of Political Behavior." In *Handbook of Social Psychology*, ed. Gardner Lindzey (Cambridge, MA: Addison-Wesley): 1124-75.

Lipset, Seymour M. and Stein Rokkan. 1967. "Cleavage Structures, Party Systems, and Voter Alignments." In *Party Systems and Voter Alignments: Cross-National Perspectives*, ed. Seymour M. Lipset and Stein Rokkan. New York, The Free Press.

Lopatto, Paul. 1985. *Religion and the Presidential Election.* New York: Praeger,

Luttmer, Erzo F.P. 2001. "Group Loyalty and the Taste for Redistribution." *Journal of Political Economy* 109 (3): 500-528.

Manza, Jeff and Clem Brooks. 1997. "The Religious Factor in U.S. Presidential Elections, 1960-1992." *American Journal of Sociology* 103 (1): 38-81.

McCarthy, Nolan, Keith T. Poole, and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, MA: MIT Press.

Meltzer, Allan and Scott F. Richard. 1981. "A Rational Theory of the Size of Government," *Journal of Political Economy* 89 (5): 914-927.

Nieuwbeerta, Paul and Nan Dirk de Graaf. 1999. "Traditional class voting in 20 postwar societies." In *The End of Class Politics? Class Voting in Comparative Context*, ed. Geoff Evans. Oxford, UK: Oxford Univ. Press.

Norris, Pippa. 2004. *Electoral Engineering: Voting Rules and Political Behavior.* New York: Cambridge University Press.

Persson, Torsten and Guido Tabellini. 1999. “The Size and Scope of Government: Comparative Politics with Rational Politicians.” *European Economic Review* 43 (4-6): 699-735.

Persson, Torsten and Guido Tabellini. 2000. *Political Economics: Explaining Economic Policy*. Cambridge, MA.: MIT Press.

Rodden, Jonathan. 2005. “Red States, Blue States, and the Welfare State: Political Geography, Representation, and Government Policy around the World.” Typescript, MIT.

Roemer, John E. 1998. “Why the Poor do not Expropriate the Rich: An Old Argument in New Garb.” *Journal of Public Economics* 70 (3): 399-24.

Roemer, John. E. 2001. *Political Competition: Theory and Applications.* Cambridge, MA: Harvard University Press.

Scheve, Kenneth and David Stasavage. 2006. Religion and Preferences for Social Insurance. *Quarterly Journal of Political Science* 1 (3): 255-286.

.

Table 1. Voting for right-wing parties.

Income	**All**	**Religiosity Secular**	**Religious**	**Median Religious Polarization**
All	45	43	52	**10.6**
Poor	39	38	46	**6.3**
Middle income	44	42	51	**6.1**
Rich	51	49	61	**9.8**
Median income polarization (middle-poor)	**4.8**	**4.7**	**7.7**	
Median income polarization (rich-poor)	**14.1**	**10.5**	**10.9**	

Except for the polarization scores, the figures in each cell are the averages proportions in all 28 countries. Polarization in a given country is the difference between one group's proportion and another group's proportion. The Median income polarization scores are the medians of these differences.

Table 2. Second-stage regression results

	(1)	(2)	(3)
Ethnic fractionalization	0.993***	1.057***	0.959***
	(0.204)	(0.230)	(0.228)
GDP (ln)	0.206**	0.247**	0.207*
	(0.089)	(0.098)	(0.101)
Urbanization	-0.011***	-0.009***	-0.006**
	(0.003)	(0.003)	(0.003)
Polarization	-0.074***	-0.085***	-0.083***
	(0.019)	(0.021)	(0.021)
Forced choice	0.278***	0.323***	0.269**
	(0.098)	(0.110)	(0.110)
Religious tax	0.234***		
	(0.068)		
Constitutional regulation of religion		0.164**	
		(0.066)	
Religious education			0.141**
			(0.062)
Constant	-1.565*	-2.094**	-1.899**
	(0.802)	(0.870)	(0.889)
N	28	28	28
Adjusted r-squared	.609	.530	.509

Dependent variable: First level coefficient on *Poor* (with Middle class omitted)
*significant at the 10% level **significant at the 5% level ***significant at the 1% level

Table 3. Second-stage regression results

Independent variable	(1)	(2)	(3)	(4)
	DV: Poor secular *Omitted*: Middle Secular	*DV:* Poor religious *Omitted*: Middle religious	*DV*: Poor secular *Omitted*: Poor religious	*DV*: Middle secular *Omitted*: middle religious
Ethnic fractionalization	1.038*** (0.228)	0.922* (0.487)	0.125 (0.650)	-0.139 (0.585)
GDP (ln)	0.236** (0.109)	0.209 (0.175)	-0.632** (0.246)	-0.409* (0.233)
Urbanization	-0.011*** (0.003)	-0.008 (0.006)	0.016* (0.008)	0.017** (0.007)
Polarization	-0.072*** (0.022)	-0.088** (0.041)	0.048 (0.058)	0.032 (0.050)
Forced choice	0.286** (0.109)	0.287 (0.231)	-0.109 (0.327)	-0.125 (0.270)
Religious tax	0.243*** (0.074)	0.202 (0.176)	-0.383 (0.227)	-0.350 (0.206)
Constant	-1.857* (0.996)	-1.668 (1.505)	4.645** (2.150)	2.536 (2.028)
N	28	28	28	28
Adjusted r-squared	.565	.133	.156	.096

*significant at the 10% level **significant at the 5% level ***significant at the 1% level

Table A1. Independent variables

	Ethnic fractionalization	GDP (ln)	Urbanization	Party-system polarization	Forced choice	Religious tax	Religious education	Constitutional regulation of religion	Notes on constitutional regulation of religion
Australia	0.09	9.99	88.40	2.40	1	0	0	0	
Belgium	0.56	10.00	96.83	1.54	0	1	1	1	The State does not have the right to intervene either in the nomination or in the installation of ministers of any religion whatsoever . . . Except … Taking into consideration normal responsibilities in matters of press and publication.
Bulgaria	0.40	8.63	67.95	1.29	0	0	1	1	The freedom of conscience . . . The state shall assist the maintenance of tolerance and respect among the believers from different denominations, and among believers and non-believers.
Czech Republic	0.32	9.39	74.57	1.77	0	0	0	0	
Germany	0.17	10.02	86.68	1.25	0	1	1	1	State [Land] contributions to religious bodies, based on law or contract or special legal title, are redeemed by means of State [Land] legislation. The principles for such redemption are established by the Reich. … Religious bodies acquire legal capacity according to the general provisions of civil law.
Hungary	0.15	9.20	63.21	0.74	0	1	1	0	
Iceland	0.08	10.06	91.73	2.47	1	1	1	1	All persons have the right to form religious associations and to practice their religion in conformity with their individual convictions. Nothing may however be preached or practiced which is prejudicial to good morals or public order
Ireland	0.12	9.91	58.20	5.86	1	0	1	0	
Netherlands	0.11	10.02	62.44	3.06	0	0	0	1	Rules concerning the exercise of this right [to free practice by individuals and groups] other than in buildings and enclosed places may be laid down by Act of Parliament for the protection of health, in the interest of traffic and to combat or prevent disorders.
New Zealand	0.40	9.74	85.36	2.75	0	0	0	0	
Norway	0.06	10.27	74.07	2.52	0	0	1	0	

Table A1 continues on next page

Table A1, continued

	Ethnic fractionalization	GDP (ln)	Urbanization	Party-system polarization	Forced choice	Religious tax	Religious education	Constitutional regulation of religion	Notes on constitutional regulation of religion
Poland	0.12	8.92	61.33	1.25	0	0	1	1	(5) The relations between the Republic of Poland and other churches and religious organizations shall be determined by statutes adopted pursuant to agreements concluded between their appropriate representatives and the Council of Ministers
Portugal	0.05	9.54	50.73	5.85	1	0	1	1	
Romania	0.31	8.58	54.49	0.93	0	0	0	1	Parliament passes constitutional, organic, and ordinary laws. . . . (3) Organic laws shall regulate: . . .n) general statutory rules of religious cults;….Any forms, means, acts, or actions of religious enmity shall be prohibited in the relationships among the cults…...All religions shall be free and organized in accordance with their own statutes, under the terms laid down by law.
Slovenia	0.22	9.51	50.77	0.58	0	0	1	0	
Sweden	0.06	9.92	83.21	4.28	1	1	1	1	Provisions concerning religious communities are laid down in law……..Administrative functions may be delegated to . . .registered religious community or any part of its organization, or to a private person. If such a function involves the exercise of public authority, delegation shall be made by virtue of law.
Switzerland	0.53	10.15	67.80	2.27	0	0	1	1	
United Kingdom	0.12	9.93	88.81	7.23	1	0	1	0	
USA	0.49	10.26	77.60	10.48	1	0	0	0	

Table A2. First-level coefficients.

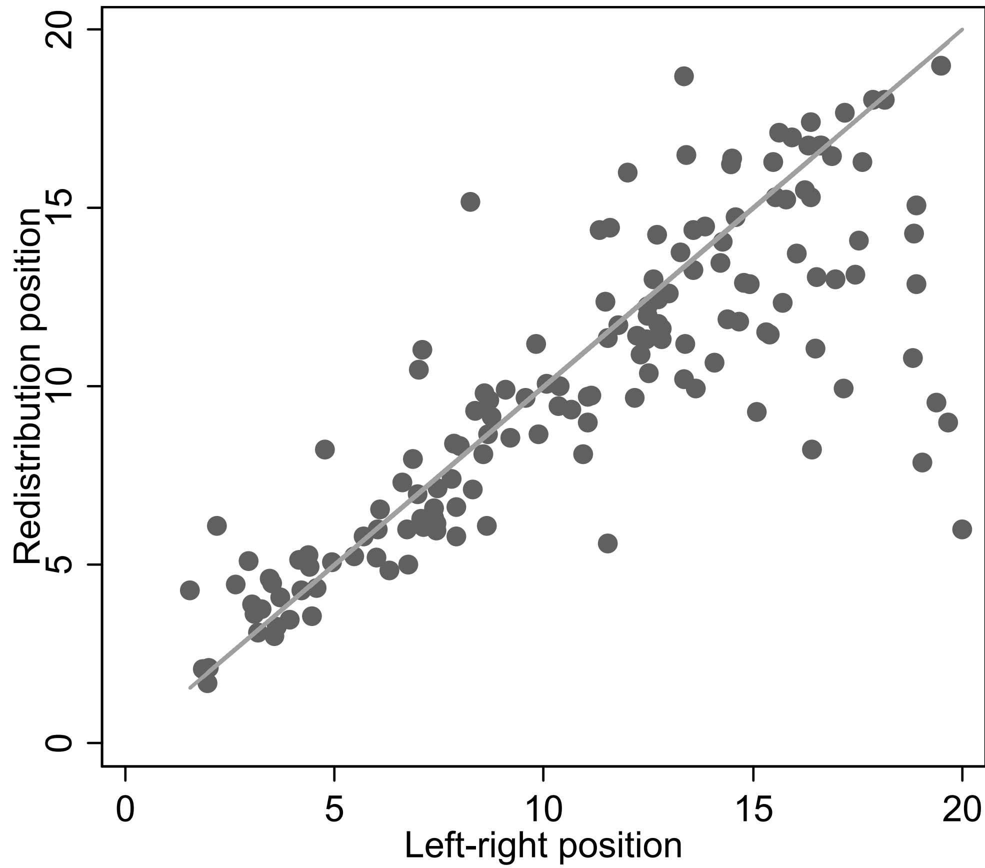
	Income with one variable for religion	*Income-religion interactions*			
	Coefficient: Poor *Omitted:* Middle class	*Coefficient*: Poor secular *Omitted*: Middle Secular	*Coefficient:* Poor religious *Omitted*: Middle religious	*Coefficient*: Poor secular *Omitted*: Poor religious	*Coefficient* Middle secular *Omitted*: middle religious
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Australia 1996	-0.22 (0.12)	-0.20 (0.13)	-0.37 (0.30)	-0.20 (0.25)	-0.37 (0.20)
Australia 2004	-0.30 (0.12)	-0.35 (0.13)	-0.04 (0.28)	-0.21 (0.21)	0.10 (0.22)
Belgium 1999	0.05 (0.10)	0.05 (0.10)	0.09 (0.28)	-0.23 (0.21)	-0.19 (0.20)
Bulgaria 2001	-0.38 (0.26)	-0.47 (0.30)	-0.11 (0.51)	0.42 (0.40)	0.78 (0.42)
Czech Republic 1996	-0.36 (0.16)	-0.38 (0.17)	-0.22 (0.48)	0.18 (0.32)	0.34 (0.37)
Czech Republic 2002	-0.60 (0.28)	-0.79 (0.32)	0.32 (0.80)	-1.02 (0.51)	0.09 (0.65)
Germany 1998	-0.05 (0.13)	-0.09 (0.14)	0.32 (0.39)	-1.05 (0.31)	-0.64 (0.27)
Germany 2002	-0.12 (0.11)	-0.16 (0.12)	0.11 (0.32)	-0.83 (0.21)	-0.56 (0.27)
Hungary 1998	0.00 (0.20)	0.05 (0.22)	-0.29 (0.41)	0.12 (0.34)	-0.22 (0.31)
Hungary 2002	-0.36 (0.30)	-0.33 (0.33)	-0.35 (0.69)	-0.47 (0.60)	-0.49 (0.46)
Iceland 2003	-0.15 (0.15)	-0.14 (0.16)	-0.42 (0.51)	0.12 (0.40)	-0.16 (0.35)
Ireland 2002	-0.27 (0.16)	-0.49 (0.26)	-0.16 (0.20)	-0.79 (0.25)	-0.46 (0.20)
Netherlands 1998	-0.39 (0.12)	-0.38 (0.13)	-0.42 (0.26)	-0.85 (0.22)	-0.89 (0.19)
New Zealand 1996	-0.23 (0.08)	-0.25 (0.09)	-0.11 (0.19)	0.05 (0.15)	0.19 (0.14)
New Zealand 2002	-0.27 (0.15)	-0.13 (0.16)	-0.91 (0.36)	0.31 (0.30)	-0.48 (0.23)
Norway 1997	-0.34 (0.13)	-0.34 (0.14)	-0.44 (0.42)	0.76 (0.38)	0.66 (0.24)
Poland 1997	-0.07 (0.22)	0.19 (0.51)	-0.15 (0.25)	0.25 (0.48)	-0.10 (0.29)
Poland 2001	-0.26 (0.16)	-0.30 (0.33)	-0.23 (0.18)	0.001 (0.29)	0.07 (0.23)
Portugal 2002	-0.15 (0.21)	-0.01 (0.29)	-0.24 (0.26)	-0.03 (0.30)	-0.26 (0.18)

Table continues on next page

Table A2, continued

	Income with one variable for religion	***Income-religion interactions***			
	Coefficient: Poor *Omitted:* Middle class	*Coefficient*: Poor secular *Omitted*: Middle Secular	*Coefficient:* Poor religious *Omitted*: Middle religious	*Coefficient*: Poor secular *Omitted*: Poor religious	*Coefficient:* Middle secular *Omitted*: middle religious
Romania 1996	0.12 (0.32)	0.27 (0.35)	-0.34 (0.59)	0.29 (0.48)	-0.33 (0.47)
Slovenia 1996	-0.22 (0.17)	-0.18 (0.18)	-0.52 (0.39)	-0.77 (0.29)	-1.11 (0.30)
Sweden 1998	0.11 (0.17)	0.09 (0.17)	0.66 (0.84)	-1.19 (.54)	-0.62 (0.65)
Sweden 2002	-0.11 (0.18)	-0.15 (0.19)	0.41 (0.60)	-0.87 (.47)	-0.30 (0.40)
Switzerland 1999	0.43 (0.15)	0.35 (0.16)	0.96 (0.36)	-0.74 (0.24)	-0.13 (0.30)
Switzerland 2003	0.13 (0.18)	0.10 (0.20)	0.31 (0.43)	-0.42 (0.30)	-0.21 (0.34)
United Kingdom 1997	-0.70 (0.12)	-0.76 (0.13)	-0.43 (0.26)	-0.26 (0.19)	0.07 (0.21)
USA 1996	-0.25 (0.19)	-0.16 (0.27)	-0.36 (0.27)	-0.14 (.32)	-0.34 (0.20)
USA 2004	-0.34 (0.20)	-0.29 (0.25)	-0.50 (0.30)	0.20 (.32)	-0.01 (0.21)

Figure 1: Party positions on the left-right and redistribution scales



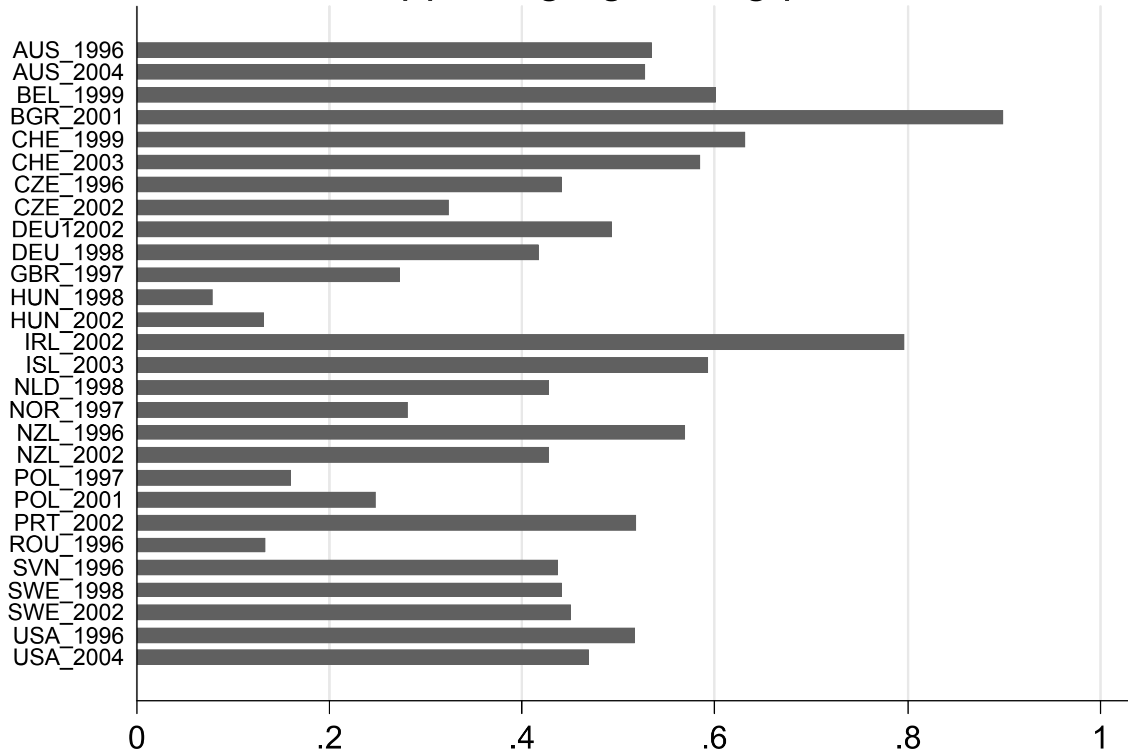


Figure 2. Proportion of all voters
supporting right-wing parties
AUS_1996
AUS_2004
BEL_1999
BGR_2001
CHE_1999
CHE_2003
CZE_1996
CZE_2002
DEU12002
DEU_1998
GBR_1997
HUN_1998
HUN_2002
IRL_2002
ISL_2003
NLD_1998
NOR_1997
NZL_1996
NZL_2002
POL_1997
POL_2001
PRT_2002
ROU_1996
SVN_1996
SWE_1998
SWE_2002
USA_1996
USA_2004
0
.2
.4
.6
.8
1

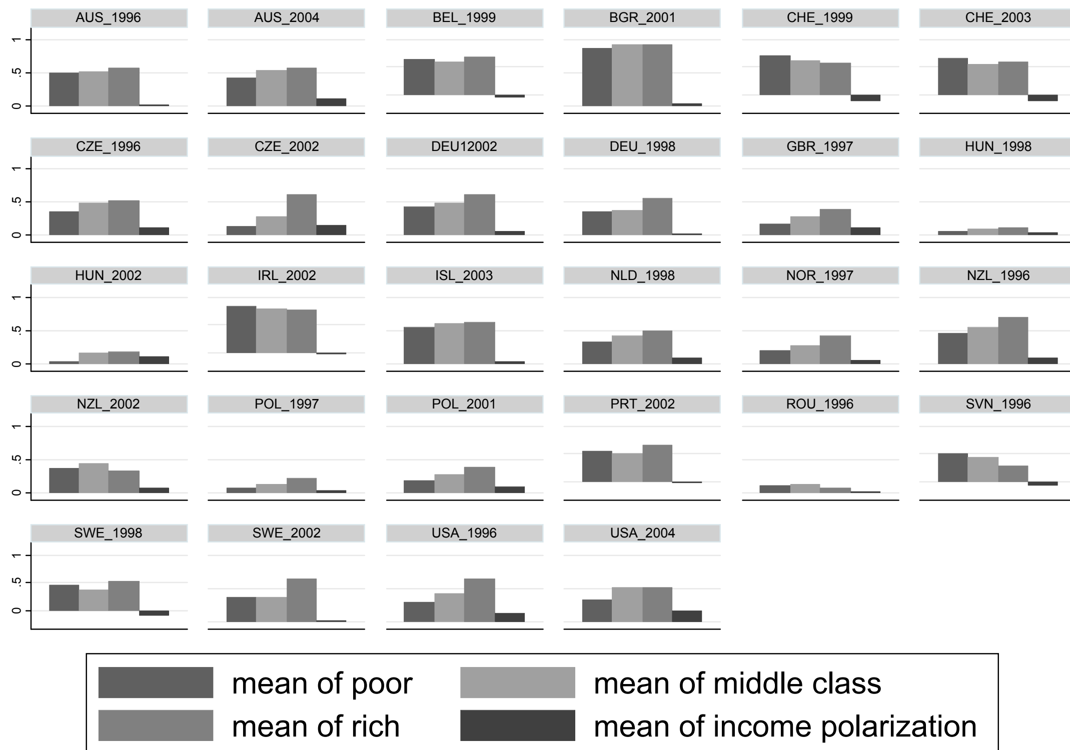


Figure 3. Right-wing voting by income
AUS_1996
AUS_2004
BEL_1999
BGR_2001
CHE_1999
CHE_2003
CZE_1996
CZE_2002
DEU12002
DEU_1998
GBR_1997
HUN_1998
HUN_2002
IRL_2002
ISL_2003
NLD_1998
NOR_1997
NZL_1996
NZL_2002
POL_1997
POL_2001
PRT_2002
ROU_1996
SVN_1996
SWE_1998
SWE_2002
USA_1996
USA_2004
0
.5
1
mean of poor
mean of middle class
mean of rich
mean of income polarization

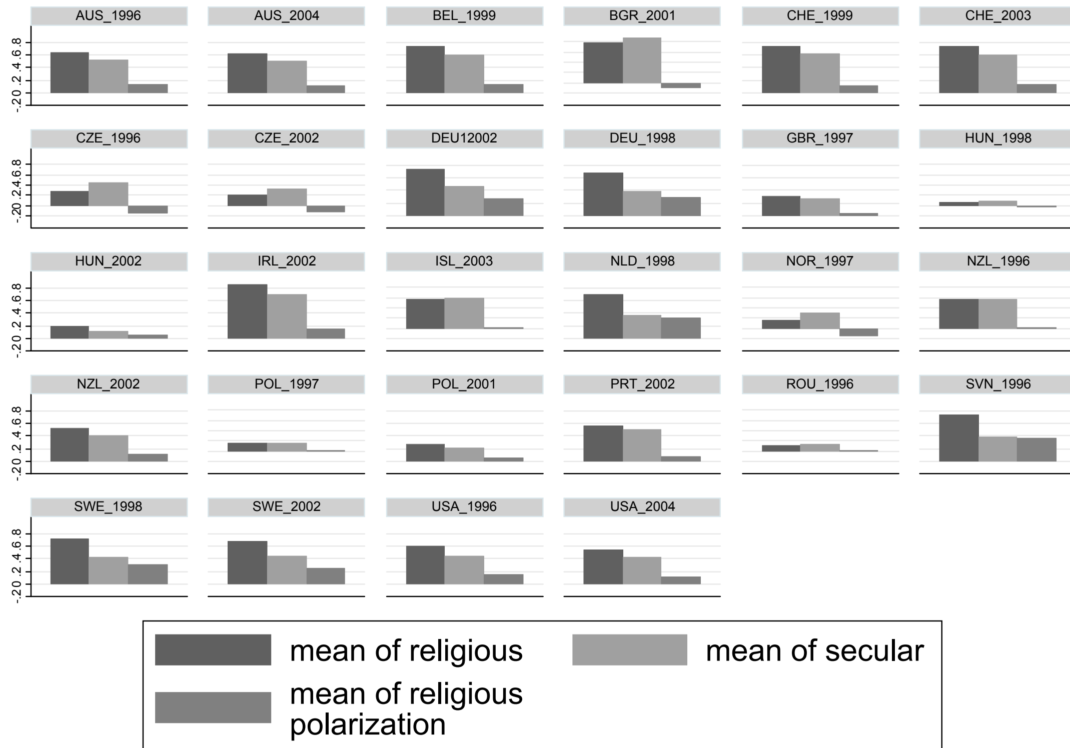


Figure 4. Right-wing voting by religiosity
AUS_1996
AUS_2004
BEL_1999
BGR_2001
CHE_1999
CHE_2003
CZE_1996
CZE_2002
DEU12002
DEU_1998
GBR_1997
HUN_1998
HUN_2002
IRL_2002
ISL_2003
NLD_1998
NOR_1997
NZL_1996
NZL_2002
POL_1997
POL_2001
PRT_2002
ROU_1996
SVN_1996
SWE_1998
SWE_2002
USA_1996
USA_2004
-.2 0 .2 .4 .6 .8
mean of religious
mean of secular
mean of religious polarization

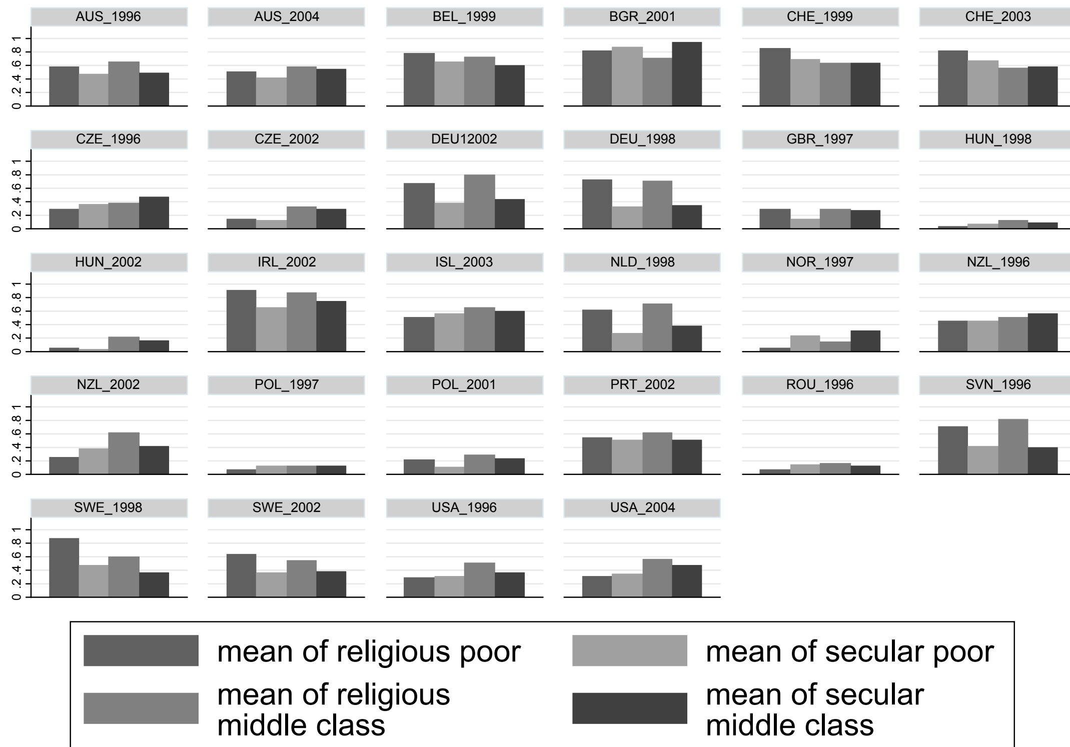
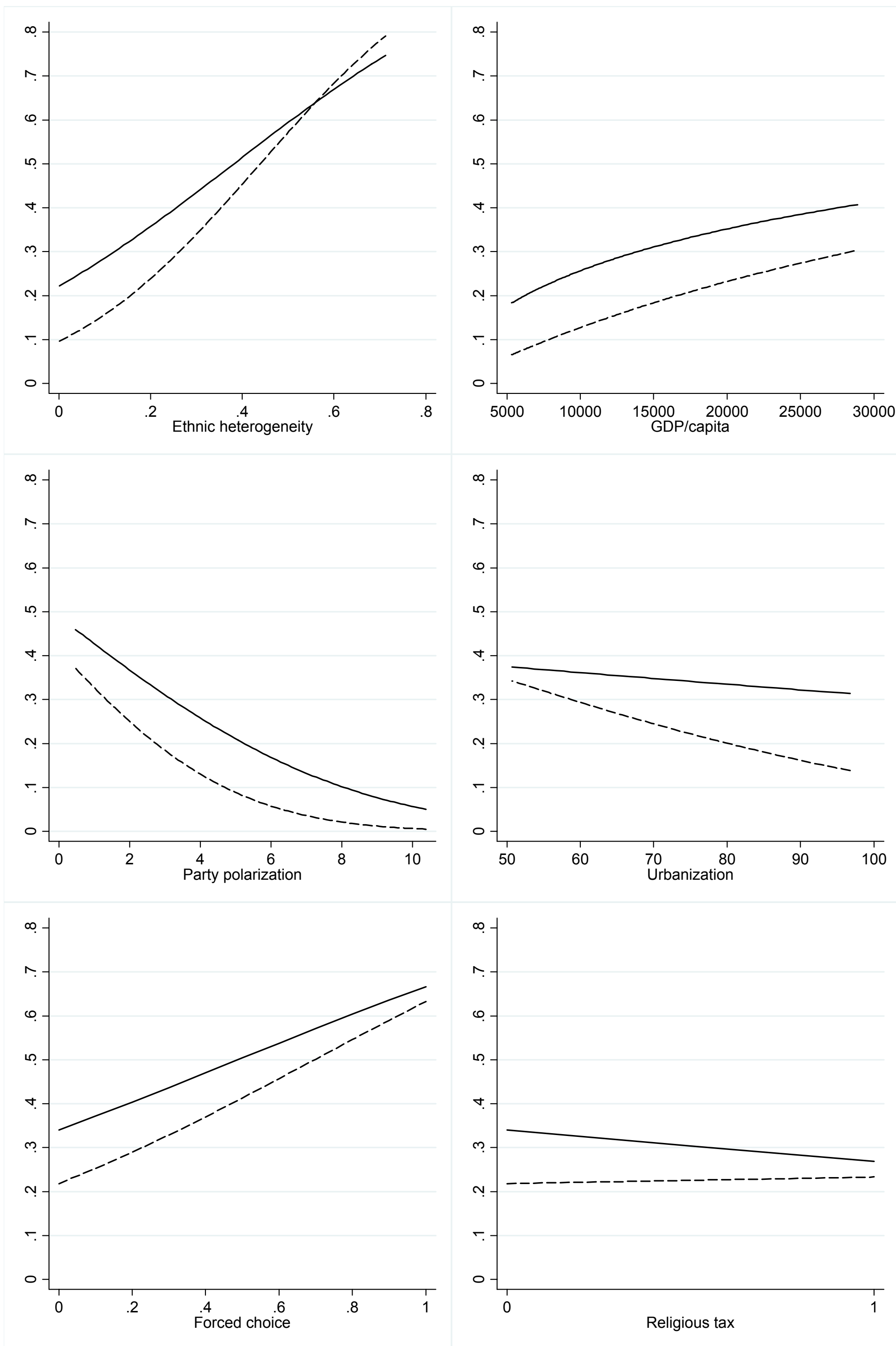


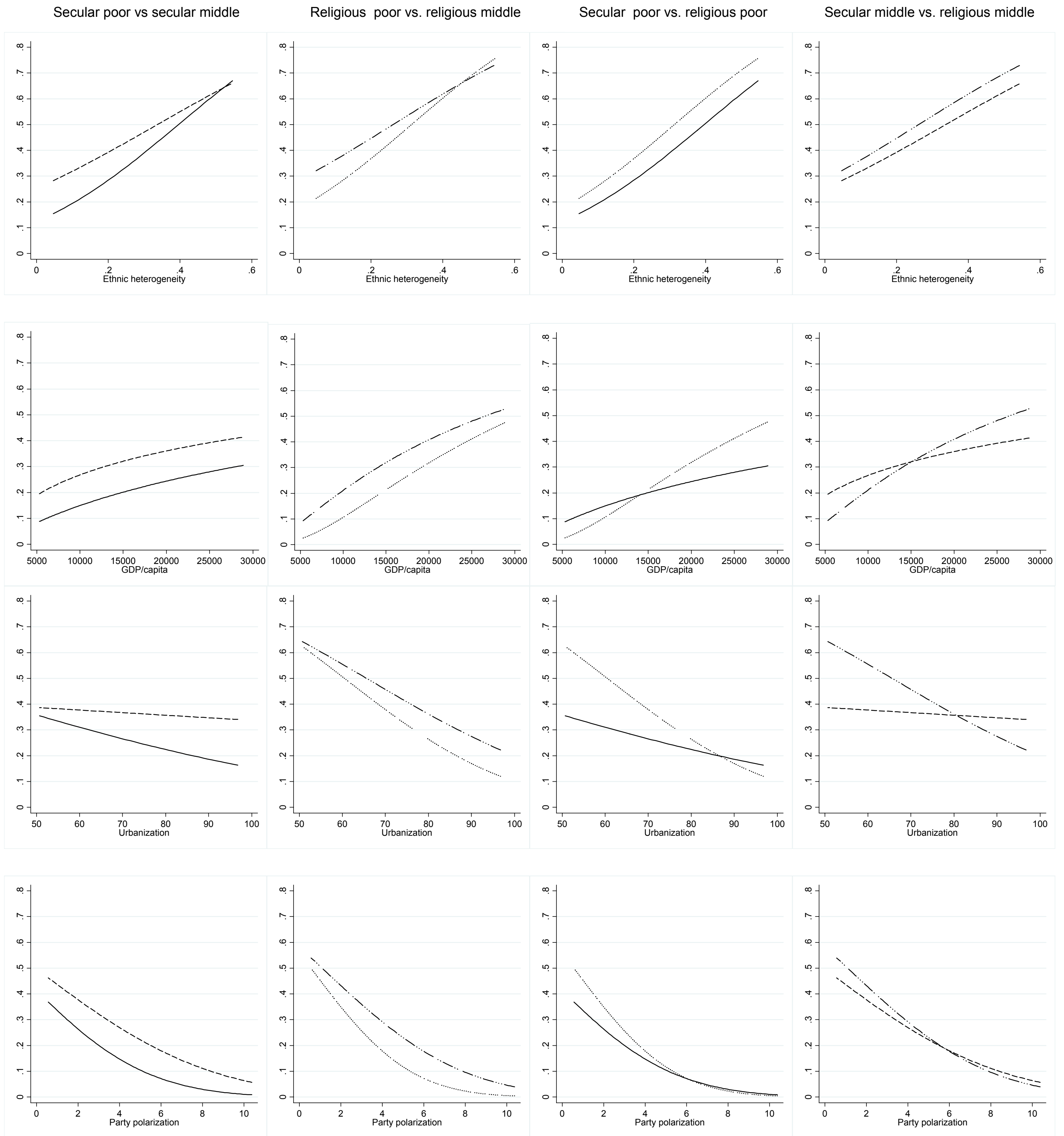
Figure 5. Right-wing voting by religion and income
AUS_1996
AUS_2004
BEL_1999
BGR_2001
CHE_1999
CHE_2003
CZE_1996
CZE_2002
DEU12002
DEU_1998
GBR_1997
HUN_1998
HUN_2002
IRL_2002
ISL_2003
NLD_1998
NOR_1997
NZL_1996
NZL_2002
POL_1997
POL_2001
PRT_2002
ROU_1996
SVN_1996
SWE_1998
SWE_2002
USA_1996
USA_2004
0 .2 .4 .6 .8 1
mean of religious poor
mean of secular poor
mean of religious middle class
mean of secular middle class

Figure 6. Predicted probabilities of right-wing support, poor and middle class



Key: —— Middle class — — — Poor

Figure 7: Right-wing voting with income-religion interactions

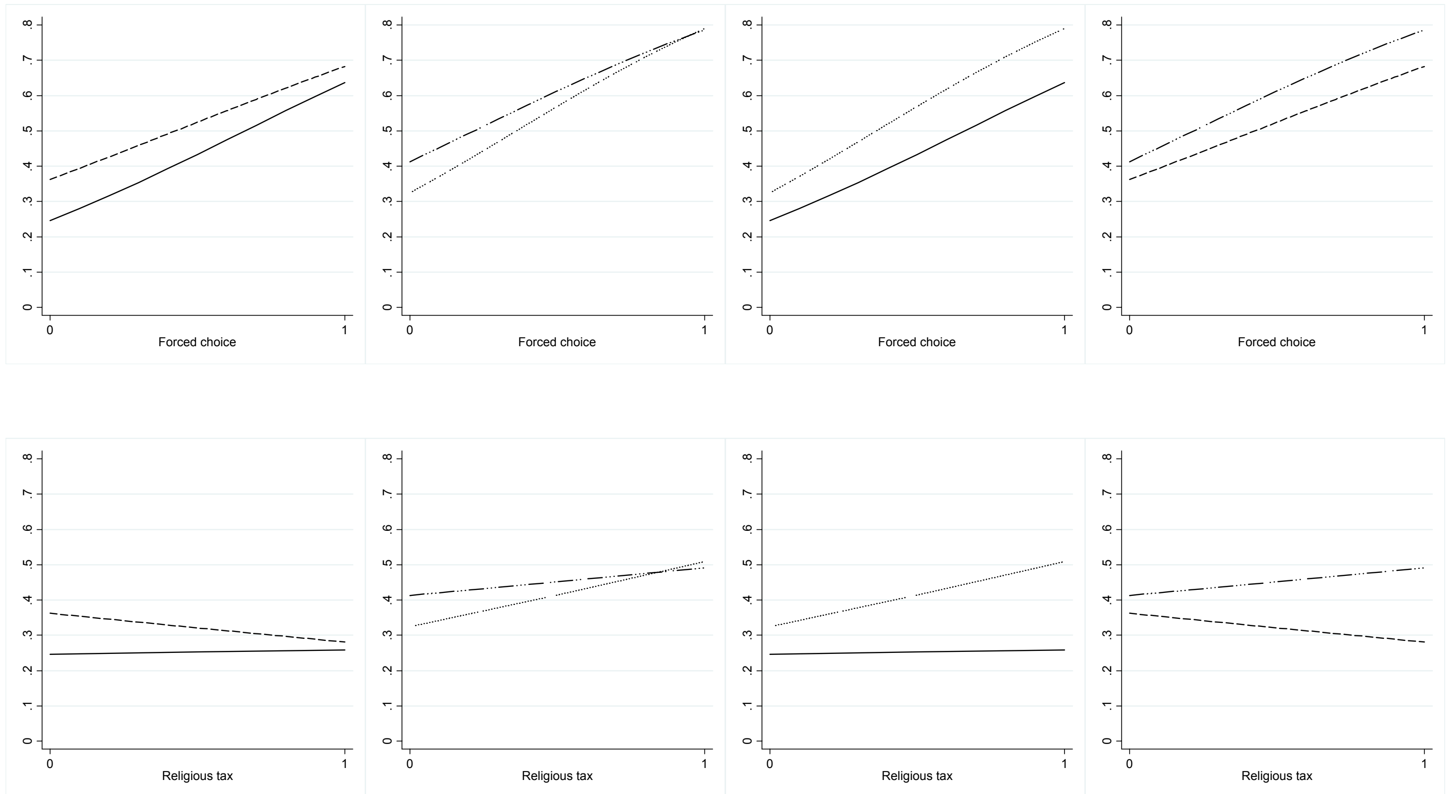


Key: —— Secular poor ······ Religious poor — — — Secular middle —··— Religious middle income

(continued next page)

Figure 7. Right-wing voting with income-religion interactions, continued

Secular poor vs. secular middle | Religious poor vs. religious middle | Secular poor vs. religious poor | Secular middle vs. religious middle



Key: —— Secular poor ····· Religious poor — — — Secular middle —·‧·— Religious middle income