

Church-state separation and redistribution*

John D. Huber[†]
and Piero Stanig[‡]

March 5, 2009

Abstract

We analyze how religion affects voting and redistribution. Our model directs attention away from the particular faith, belief or risk attitudes of religious individuals, and emphasizes instead how organized religion opens the door to standard group-based distributive politics. We argue that organized religion makes it possible for the rich and the religious poor to form electoral coalitions in favor of low taxes and limited redistribution. Such electoral coalitions form out of simple material self-interest, and they occur at the expense of the secular poor. However, the material reward to the religious poor from supporting such electoral coalitions depends on the institutional context. As state support for religion increases, poor religious voters have greater incentives to vote with poor secular voters in favor of parties that support high taxes. The analysis therefore highlights the possibilities of understanding how religion affects politics without asserting that religious individuals differ systematically from secular ones in their values or preferences.

*We are grateful for helpful comments from Massimo Morelli, Mike Ting, and seminar participants at Columbia University, NYU, Wisconsin and University of Rochester. An earlier version of this paper was presented at the 2007 Annual Meetings of the American Political Science Association.

[†]Professor, Department of Political Science, Columbia University. 7th floor IAB, 420 W 118th Street, New York, NY 10027. Email: jdh39@columbia.edu. Phone: 212-854-7208. Corresponding author.

[‡]Ph.D. candidate, Department of Political Science, Columbia University and Visiting Fellow, Alexander Hamilton Center, New York University. 19 W 4th Street, New York, NY 10012. Email: ps2025@columbia.edu. Phone: 212-992-8085.

Recent studies emphasize that religion has an important influence on the politics of redistribution in democracies. The arguments take a number of forms, but they often share in common a premise that religious individuals differ from secular ones in some fundamental attribute or trait. One argument, squarely in the Weberian tradition, posits that fear regarding the afterlife causes religious individuals to place greater emphasis on hard work and individualism, creating opposition among religious individuals to welfare programs that decouple work and reward (e.g., Benabou and Tirole 2006).¹ A second line of argument posits that religious individuals feel insured by their faith against adverse life events, and this psychological insurance substitutes for state insurance (e.g., Dehejia, DeLeire and Luttmer 2007 and Scheve and Stasavage 2006). Such a psychological insurance leads to conservative economic values, such as beliefs that spending on social programs should be low (Scheve and Stasavage 2006). A third argument, from the social psychology literature, is that political conservatism and religiosity are correlated because both are affected by underlying stable psychological traits like ambiguity intolerance, need for order and structure, and low openness (Jost 2007, 1079; Napier and Jost 2006). These various premises about the nature of religious individuals undergird the argument that more religious societies should have smaller welfare states.

This paper develops a theoretical argument about religion and redistribution, but unlike existing research, the argument does not rest on an assumption that religious individuals have values, risk preferences, or psychological traits that differ from secular individuals. Instead, we argue that religion shapes redistribution through the opportunities it creates for standard *group-based* distributive politics. When rich individuals can make charitable contributions to a religious organization that supports social programs for the religious poor, electoral coalitions should emerge between the rich and the religious poor. The electoral coalition is based on an exchange, where the rich make charitable contributions to the religious organization, which provides benefits to the religious but not the secular poor. The religious poor prefer financial support from religious organizations to financial support from the state because support chan-

¹Gill and Lundsgaarde 2004 suggest that large welfare states reduce religiosity.

neled through religious organizations is not shared with the secular poor. The religious poor therefore support parties that advocate low taxes in order to increase the after-tax income that the rich can donate to the religious organization. Since the low taxes obviously benefit the rich, the losers in this exchange are the secular poor, who receive less redistribution from the government (because taxes are lower), and who do not receive the redistribution that occurs through religious organizations.

In our model, then, the “poor” are not a homogenous group that are in competition with the rich. Instead, religion opens the possibility of dividing poor against poor, with the religious poor preferring lower taxes and less redistribution than the secular poor for reasons having nothing to do with the fundamental values or ideologies of these groups. Instead, the preferences of the religious poor for a smaller welfare states are instrumental to making the religious poor better off economically.

The degree to which the electoral preferences of the religious and secular poor diverge depends in our argument, however, on church-state separation. Previous research on church-state separation typically examines state regulation of religion. Some consider how state regulation affects religious activity (e.g., Iannaccone 1991 and Finke and Stark 1992), while others examine state incentives to regulate religion (e.g., Barro and McCleary 2005 and Cosgel and Miceli 2008). Our focus is on how a specific form of church-state separation — the *financial* separation of church and state, and in particular the level of government financial support for churches — affects the political economy of redistribution. There is substantial variation in state support for religion among the world’s democracies. In Europe, there is a strong tradition of operating state-funded social services through church organization and local parishes, and in a number of countries, the funding for such activities is quite large (Dübeck and Overgaard 2003, Fix 2002). In Latin America, there is considerable variation in the role that the Catholic church has played in providing social services (Gill 1998). In the US, there is a strong tradition of church-state financial separation, although this has begun to erode slightly with President George W. Bush’s January 29, 2001 executive order creating the White House Office

of Faith-Based and Community Initiatives (“OFBCI”). The OFBCI channels government tax revenues to religious organizations to operate social programs, primarily for the poor.

The model presented below suggests that the level of state support for religion should have an important effect on the electoral preferences of the religious poor. The preferred tax rate of the religious poor balances the expected gain from higher taxes against the expected loss that higher taxes imply for charitable giving. As separation of church and state increases, fewer resources are transferred by the government to religious organizations that provide services to the religious poor. The value to the religious poor of tax revenues therefore decreases because fewer tax dollars are shared exclusively among the religious poor. This makes it more desirable for the religious poor to keep taxes low to allow more charitable giving. Conversely, as state financial support for churches increases, with more tax dollars going to the religious organization, the religious poor support parties that advocate higher taxes. As a consequence, the degree to which the religious and secular poor have congruent electoral preferences depends on the the level of church-state separation.

In what follows, we argue that there exist conceptual and empirical reasons to develop a theory of religion and redistribution that does not rely on the assumption that religious and secular individuals have systematically different core values. We then develop a model of religion and redistribution that examines the effect of church-state separation on the electoral preferences of religious and secular poor voters, and how these electoral effects in turn shape outcomes regarding charitable giving and redistribution. To test the causal mechanism in our model, we examine the effect of church-state financial separation on voting behavior by the religious and secular poor. We also draw on existing research by economists to demonstrate that the scope of church-based social programs occurs at a sufficiently large scale to make it relevant to the voting calculations of poor religious voters.

Religiosity and economic attitudes

If the connection between religiosity and redistribution operates through the core economic

values of religious individuals, then we should observe a consistent relationship between religiosity and such values. Several recent studies provide evidence that such a relationship exists empirically (Guiso, Sapienza and Zingales 2003, Norris and Inglehart 2004, and Scheve and Stasavage 2006), with religious individuals having more economically conservative attitudes than secular individuals. These studies, however, pool attitudinal data across a large number of countries, making it difficult to draw inferences about how economic attitudes and religiosity are related within specific countries.² This section presents country-level evidence that the link between religiosity and conservative economic attitudes, while clearly present in some cases, is usually absent, and often runs in a liberal rather than a conservative direction. This empirical evidence, coupled with some conceptual issues discussed below, underlines the desirability of crafting a theory of religion and redistribution that does not depend on the assumption that religious individuals differ systematically from secular ones in their core economic values.

The analysis examines 36 countries included in the World Values Survey. We consider only countries that are clearly democratic (Polity 2 score of 8 or higher), that are majority-Christian, and that have included in their surveys the religion and economic conservatism survey questions that are relevant to our study.³ We take economic conservatism to imply a conviction that there should be a strong link between individual effort and reward, and thus a corresponding belief in limited government, including limited efforts to redistribute income. While religion could affect other attitudes that affect economic behavior, such as trust, we focus on these traditional core conservative values related to work and reward that are prominent in the literature.

There are a number of useful questions in the World Values Survey, but only five are included in surveys across a significant number of countries. These are :

- *Competition*: “Competition is good. It stimulates people to work hard and develop new

²Although Scheve and Stasavage provide country-specific results in their replication data file, their analysis pools data across countries to create their measure of economic conservatism. We find that when such measures are created within each country, the results change considerably, with only 2 of 10 Christian countries having a significant coefficient (at the .10 level) in the conservative direction.

³The countries are Argentina, Australia, Austria, Belgium, Brazil, Britain, Bulgaria, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Philippines, Poland, Portugal, South Africa, Slovakia, Slovenia, Spain, Sweden, Switzerland, Uruguay, and the United States. The data for Australia, New Zealand, Switzerland and Uruguay are from wave 3 of the WVS (1995-97), and the remaining countries are from wave 4 (1999-2000)

ideas” vs. “Competition is harmful. It brings out the worst in people.” (A favorable view of competition is coded as the more conservative attitude.)

- *Individual responsibility*: “People should take more responsibility to provide for themselves” vs. “The government should take more responsibility.” (Individual responsibility is coded as the more conservative answer.)
- *Pay without work*: “It is humiliating to receive money without having to work for it.” (Agreeing is coded as the more conservative answer)
- *Merit*: “In order to be considered just, what should a society provide? Please tell me for each statement if it is important or unimportant to you: Recognizing Merit.” (Important is coded as the more conservative answer.)
- *Inequality*: “Eliminating inequality is very important” vs. “Eliminating inequality is not important at all.” (Assigning less importance to eliminating inequality is coded as the more conservative answer.)

The first four of these questions relate to an individual's beliefs about the link between work and reward, whereas the fifth, Inequality, is the one question most directly related to redistribution. We also construct a sixth variable, called *Economic conservatism scale*. This variable is constructed by doing a factor analysis in each country on the five variables discussed above, and then using the factor scores to generate the economic values scale (using Bartlett scoring with varimax rotation). The variable, then, captures the underlying economic ideology of respondents as reflected by their responses to all five economic conservatism questions.⁴

With respect to individual religiosity, we examine two measures. The first, *Importance of God*, is the response to a single question that is commonly used in the literature to measure the importance of religion in an individual's life: “How important is God in your life?” The responses range from 1 (not at all important) to 10 (very important). The second measure of religiosity, *Religious scale*, is obtained by including six measures of religiosity that are included in the World Values Survey in a factor analysis, and then obtaining factor scores to

⁴For this variable, we include only countries that asked at least four of the five questions.

create the variable (again using Bartlett scoring technique based on varimax rotation).⁵ This variable is intended to capture a respondent's underlying religiosity based on responses to the six core questions about belief and practice.

In each country, we regress each of the measures of economic conservatism on each of the measures of religiosity, yielding at most 12 separate regressions in each country (each of six measures of conservatism regressed on either Importance of god or Religious scale). The regressions also include a number of demographic variables that may be related to conservatism — age, age-squared, female, size of city in which respondent lives, income and education.

Our simple purpose here is to summarize what the surveys tell us about the the relationship between religiosity and economic conservatism. There are 364 total regressions (because not all of the questions are asked in each of the countries). We do not report the results for the controls, or even the 364 coefficients on the religious variables. Instead, Table 1 summarizes the direction and statistical significance of the religion coefficients. We adopt a relatively undemanding 10 percent threshold for statistical significance, and classify the religion coefficients according to whether they are statistically significant in a liberal direction, statistically significant in the conservative direction, or neither.

[Table 1 about here.]

Panel A at the top of Table 1 summarizes the results for the six dependent variables when Importance of God is the measure of religiosity. Each cell lists the number of countries (with the percent of countries in parentheses). The column marked “Competition” indicates that in 2 countries, the coefficient on Importance of God was statistically significant in the liberal direction (.10 level), in 28 countries the coefficient was not statistically significant, and in 7 countries the coefficient was statistically significant in the conservative direction. The variable Pay without work provides the strongest support for the argument that religious individuals are economically conservative. We also find, however, that for three of the questions, more

⁵The six variables include church attendance, belief in heaven, belief in hell, importance of religion, belief in life after death, and importance of god.

countries have a liberal coefficient on religion than have a conservative coefficient, including Inequality and Economic conservatism scale. The column marked “All” summarizes the totals in each row, and demonstrates that in a sizable majority of regressions (61 percent), religiosity is not associated with either liberal or conservative economic attitudes. It also shows that the number of regressions with conservative coefficients is only slightly larger than the number of regressions with liberal coefficients. And if one did not consider the Pay without work variable, quite a few more regressions have a liberal coefficient on religion (n=30) than a conservative one (n=24).

Panel B in the bottom half of Table 1 summarizes the results for the religion coefficients when Religion scale, based on the factor analysis, is the measure of religiosity. The main difference with Panel A is that a larger proportion of coefficients are not statistically different from zero at the undemanding 10 percent level (71.4 percent compared with 61 percent in Panel A). Again, we find differences across the measures of economic conservatism, with Pay without work generating the highest proportion of conservative coefficients and Inequality generating the highest proportion of liberal coefficients. We also find, as in panel A, that the total number of religiosity coefficients that are liberal is greater than the number that are conservative if we exclude the Pay without work variable.

It is not our purpose here to lay out a rigorous theory of religious attitudes, which the data suggest would be a complex undertaking. Instead, we simply wish to underline that general theories of how the religiosity of predominantly Christian societies affects economic policy cannot be reliably based on the assumption that religious individuals are fundamentally more conservative than secular ones in their economic values. Using a variety of measures of economic conservatism, and two measures of religiosity, we find that across measures and across countries, there is no clear relationship between religiosity and economic conservatism.

Of course, there may be other values or attitudes among the religious that we have not considered and that could affect the political economy of redistribution. But we would underline that there would be major challenges associated with testing any political economy of religion

argument based on the underlying values of religious and secular individuals as expressed in surveys across different countries. One problem is that individual attitudes reflected in surveys are known to be unstable, often contradictory, and difficult to compare across countries. We see that in the data presented here, where the results for seemingly similar questions can be quite different. But even if this problem could be overcome, two additional challenges remain. The first is that it can be very difficult to understand when attitudes expressed in surveys reflect genuine core values and when such expressions are instrumental for the achievement of some other goal. Religious voters, for instance, may embrace inequality because they believe fundamentally in individual responsibility and market forces, or they may do so because embracing inequality is in their economic self-interest. The second problem is that individual attitudes expressed in surveys may be only weakly related to voting behavior. Scholars are well aware, after all, that it is often difficult to draw the link between survey attitudes and vote choices.

We would not argue that the problems are insurmountable, or that we cannot learn from attitudinal surveys. But a simple strategy to avoid these problems is to avoid making cross-national comparisons of attitudes, examining instead the “revealed preference” of voters expressed through their vote choices. The theory we develop below provides predictions about the types of parties religious and secular individuals should support, and how their partisan preferences should be shaped by church-state separation. We can test these predictions directly, thereby largely avoiding the thorny difficulties associated with attitudinal comparisons across countries.

The “religious poor” in our model

Our argument about religion and redistribution focuses attention away from the nature of religious beliefs, attitudes and values, and toward the group-based benefits of “belonging” to a religious organization, such as a church. In our model, individuals are “poor” if they can benefit from redistributive social programs operated by the government, and poor individuals are “religious” if they can benefit from social programs provided by religious organizations.

This narrow definition of “religious” assumes neither that religious individuals have common values that are distinct from secular individuals, nor that “religious” and “secular” individuals are in some sense the same. Rather, we believe that religion is multi-faceted, and there are many different reasons that some individuals will turn to religious organizations for support and others will not. The reason could be related to underlying economic values for some, but they are also likely due to the nature of individual spiritual beliefs, to the emotional effect of religious participation on spiritual beliefs, to moral values, to the desire to be part of a close-knit social community, and even to information. We do not, then, assume that “religiosity” implies specific attitudes or values among the religious. But religiosity, whatever its basis, can create a group membership that allows access to resources that are unavailable to outsiders. We feel useful progress can be made by being open and agnostic about the origin of these differences between religious and secular individuals, and to explore the implications of “group-based” politics grounded in material self-interest.

There are two important points about these assumptions that we wish to underline. The first is that “poor” in our argument *does not imply destitute* — many social programs operated by churches in fact benefit individuals who have jobs, but who are not wealthy. In the discussion of the implications of our analysis below, we go into more detail about the scope and magnitude of these programs in an effort to assess whether the scale of religiously provided social services could be large enough to shape voting incentives of religious individuals. Here, however, we wish to simply point out the fact that while churches may operate programs like soup kitchens and emergency shelters that benefit the genuinely down-trodden, they also spend much more on programs that benefit a wide range of lower income individuals. These include various forms of counseling, medical care, substance abuse treatment, employment training, and housing assistance. And perhaps most importantly, in many European countries, and in a non-trivial number of neighborhoods in the US, private religious schools and day care centers are of crucial importance to members of religious organizations.

The second point is that there are good reasons to expect that religious organizations will be

biased in their provision of social services towards individuals who are part of their religious community. If every “poor” individual had equal access to services provided by religious organizations, then there would not exist the division between “religious” and “secular” individuals that we posit in our model. But this is not the case. Research has shown that those who access social services provided by churches are overwhelmingly religious, and that churches tend to cater to their own members (see e.g., Wuthnow 2004, Livezey 2000, p.20, Laudarji and Livezey 2000; and McRoberts, 2003).

There are a number of sources of this bias. One is information. Individuals who participate in a church or congregation are most likely to be aware of the religiously-operated social programs. Another may be ideological — even if poor individuals who are not religious are aware of church-based social programs, they may avoid such programs in order to avoid being subjected to religious proselytizing. Research shows that social services provided by religious organizations have a strong religious orientation, are staffed by religious individuals, and have a commitment to a “holistic” approach to care that teaches and reinforces religious values (e.g., DiJulio 2004, Sider and Unruh 2004, and Smith et al. 2006). Non-religious parents might not want to send their children to a religious school, even if heavily subsidized and higher in quality than public schools, because of the religious components of the curriculum. At the extreme, there are certainly some individuals with sufficiently negative attitudes toward religion that they will simply refuse to accept any aid from a church or other religious organization. Some scholars in fact argue that religious organizations impose costs on religious participation precisely because they want to limit access to the benefits that religious organizations provide (e.g., Iannaccone 1992 and Berman 2000).

In what follows, then, we assume that the “religious poor” are lower income individuals who have access to social services provided by religious organizations, and that for a myriad of reasons, not all lower income individuals are religious.

The Model

The game examines the interactions of two political parties (a left party and a right party) and individuals from four groups: the religious and secular rich, and the religious and secular poor. The rich pay taxes and (may) make contributions to a religious organization, the proceeds of which may fund redistribution to the religious poor. The rich wish to limit their total taxes and religious contributions. The poor have no income, other than that which occurs through transfers. They can receive transfers from the government, and (possibly) from the religious organization. We assume that within each group, individual agents have identical preferences and adopt identical strategies.

Interactions occur in three stages. In the first stage, the religious rich pledge a proportion of their after-tax income to the religious organization. This contribution can be zero or positive, and we assume that the pledge is credible and that the actors solve any collective action problems. Although we recognize that these assumptions are strong, there is ample evidence that religious individuals do make strong contributions to religious organizations (Brooks 2006). In addition, by making these strong assumptions, we are able to examine the scenario whereby the rich give charity only to advance their own material interest. In an alternative version of the model, we show that the model's results hold if we assume that the rich are altruistic, and that they choose charitable giving levels after the tax rate is chosen. In such a case, commitment issues and collective action problems are not present.

In the second stage, the two parties each announce the tax rate that they will enact if they are elected to office. We also assume that these announcements are credible, so if a party is elected, it enacts the tax rate that it promised.

In the third stage, individuals vote. The winning party then implements the tax rate that it promised, the rich make the contribution they pledged to the religious organization, and income is redistributed by both the government and the religious organization.

Let P_k represent party k , and let t_k represent the tax rate promised by k , where $k \in L, R$. We assume that all else equal, the left party, P_L , prefers that t_L maximizes the income of the

secular poor voters, and the right party, P_R , prefers that t_R maximize the income of rich voters. But parties have to win the election to set tax rates, so Downsian party competition prevails.

Rich individuals have a pre-tax income of 1, and $\beta \in (0, 1)$ is the proportion of rich individuals (so that $1 - \beta$ is the proportion of poor individuals). The cost of taxation in our model is θt_k^2 , where $\theta > \frac{1}{2}$. Thus, if party k wins the election, total government revenues are $\beta(t_k - \theta t_k^2)$

A parameter of central interest in our analysis is the degree of financial separation of church and state. As noted above, religious organizations may receive government revenues to redistribute to the poor. The degree to which religious organizations can rely on the government to help fund redistribution programs varies across time and place. To capture the effect of separation of church and state on behavior, the parameter $\alpha \in [0, 1]$ is the proportion of government revenue that is used for general redistribution to all of the poor, with the remaining $1 - \alpha$ of government revenue given to the religious organization. Separation of church and state therefore increases as α increases.

As discussed in the previous section, there are many reasons to believe that distributing social services through religious organizations may result in some bias towards religious individuals. To capture the effect of such bias, we define the “religious poor” as those individuals who have access to redistribution through the religious organization. The “secular poor,” by contrast, are individuals who do not have access to the redistribution that occurs through the religious organization. The proportion of poor who are religious is $\delta \in (0, 1)$.

Poor individuals have a pre-transfer income of 0, and government revenues that do not go to the religious organization are shared equally among all poor. Thus, the amount of government redistribution realized by each poor individual if party k wins is $\frac{\beta}{1-\beta}\alpha(t_k - \theta t_k^2)$. This is the only income realized by secular poor agents.

In addition to the possibility of receiving tax dollars to fund social programs, the religious organization may receive charitable contributions. We assume that the rich are divided into religious and secular groups. The religious rich are agents who are willing to pledge part of their after-tax income to the religious organization. The secular rich are unwilling to make such

a pledge. The proportion of rich who are religious is π . Again, we are agnostic about where these predispositions come from. The propensity to give (or not) to a religious organization may be due to faith, spirituality, other values, or may be done for instrumental reasons. But $1 - \pi$ of the rich are unwilling to support the religious organization for any reason.

Let g be the proportion of after-tax income that the religious rich pledge to the religious organization to support the poor. Not all contributions may find their way to the poor, either because they may be used for purposes unrelated to the poor, or because there are inefficiencies in the process by which the religious organization uses its charitable contributions to operate social programs. The parameter $\gamma \in [0, 1]$ is the proportion of charitable giving that goes to the poor.

Platform preferences of the voters

What are the preferred platforms of the four types of voters, and how is the relationship between these preferred platforms affected by church-state separation? For the secular rich, the expected utility from t is simply $1 - t$, and for the religious rich, the expected utility is $(1 - t)(1 - g)$. For any level of church-state separation, then, the rich obviously have a preferred tax rate of zero, regardless of whether the rich are religious or secular.

Unlike for the rich, for the poor, the preferred party platform is affected by religiosity, and the effect of religiosity depends on the level of church-state separation. First consider the secular poor. Since the secular poor only receive income from the government, the expected utility to the secular poor from any tax rate t is

$$EU_{SP}(t) = \frac{\beta}{1 - \beta} \alpha(t - \theta t^2),$$

which is concave in t (because $\frac{\partial^2 EU_{SP}}{\partial t^2} = \frac{2\alpha\beta z}{\beta-1} < 0$), and which yields a most preferred platform of

$$t_{SP}^* = \frac{1}{2\theta}. \tag{1}$$

Thus, the preferred party platform for the secular poor is unaffected by any factor other than the cost of taxation.

The religious poor receive three different types of redistribution. First, they receive the same transfers as the secular poor from the government. Second, they receive tax revenues that are redistributed through the churches, which, given that a portion δ of the poor population is religious, is equal to $\frac{\beta}{(1-\beta)\delta}(1-\alpha)(t-\theta t^2)$. Finally, the charitable donations of the religious rich are redistributed to the religious poor. The value of this third component is equal to $\frac{\beta\pi}{(1-\beta)\delta}g\gamma(1-t)$. Thus, given tax rate t and charitable giving g , the expected utility of the religious poor is

$$EU_{RP}(t, g) = \frac{\beta}{1-\beta}\alpha(t - \theta t^2) + \frac{\beta}{(1-\beta)\delta}(1-\alpha)(t - \theta t^2) + \frac{\beta\pi}{(1-\beta)\delta}g\gamma(1-t).$$

This function is also concave ($\frac{\partial^2 EU_{RP}}{\partial t^2} = \frac{2\beta\theta(1-\alpha(1-\delta))}{\delta(\beta-1)} < 0$), and it yields a most preferred platform of

$$t_{RP}^* = \frac{1}{2\theta} - \frac{g\pi\gamma}{2\theta(1-\alpha(1-\delta))}. \quad (2)$$

Several important points should be underscored about the relationship between the platforms most-preferred by the religious and secular poor. First, the preferred platform of the religious poor is the same as the preferred platform of the secular poor if g, π , or γ is 0. Consequently, if for some reason charitable giving to support the poor did not occur, there would be no divergence between the tax preferences of the religious and the secular poor, regardless of the degree of separation of church and state. Whenever charitable contributions are positive, the preferred platform of the religious poor has lower taxes than the preferred platform of the secular poor.

Second, the reason that the religious poor prefer parties that pledge lower taxes is that lower taxes yield more after-tax income, leading to an increase in charitable contributions that benefit only the religious poor. The religious rich make charitable contributions as a share of their

after-tax income, and as taxes increase, the religious rich have less money to contribute. Given that redistribution through the religious organization has a higher value to the religious poor than redistribution through the government (because the former is shared with fewer people), the religious poor can receive a larger absolute amount if they keep taxes low — so doing frees up more money for contributions by the religious rich to the religious organization.

Third, as long as the equilibrium level of charitable contributions by the rich is not zero, Eq. (2) indicates that as state support for the church increases (α declines), the religious poor like bigger government.⁶ Why does this occur? As noted above, the poor have an incentive to keep taxes low in order to obtain charitable contributions, which are consumed only by the religious poor. But this incentive decreases as more tax dollars are channeled directly to the religious poor through the religious organization. Thus, the religious poor prefer higher taxes as state support for the church increases (α declines).

Finally, it is important to bear in mind that the preferred tax platform of the religious poor is a function of charitable giving, which of course is endogenous in the model. To understand fully how the preferred platform of the religious poor changes with government support for the religious organization, we must consider equilibrium charitable giving strategies.

Equilibrium charitable contributions and equilibrium tax rates. If the rich constitute a majority, they can ensure zero taxes and transfers, because it is in the interest of P_R to pledge zero taxes, which will win against any other proposal. In this case, charitable giving will be zero and the partisan preferences of the religious and secular poor will converge on $\frac{1}{2\theta}$. Similarly, if the secular poor have a majority, they can ensure a tax rate of $\frac{1}{2\theta}$ (because it is in the interest of the left party to pledge this tax rate, and it will win). The religious rich will therefore make no contribution to the religious organization and again the tax preferences of the religious and secular poor will be identical. In what follows, then, we focus on the strategically interesting case where neither the secular poor nor the rich have a majority ($1 - \beta\delta < .5$ and $\beta < .5$). As Lemma 1 demonstrates, when these conditions are met, the religious poor are

⁶Note that $\frac{\partial t_{RP}^*}{\partial \alpha} = \frac{g\pi\gamma(\delta-1)}{2\theta(1+\alpha(\delta-1))^2} < 0$.

pivotal and the equilibrium tax rate must equal t_{RP}^* .

Lemma 1. *If neither the secular poor nor the rich constitute a majority, then the equilibrium tax rate must be t_{RP}^* .*

Proof of Lemma 1. If neither the secular poor nor the rich constitute a majority, the religious poor must be pivotal because they have the median preferences on tax policy: $t_{SP}^* \geq t_{RP}^* \geq t_{RR}^* = t_{SR}^*$. \square

Lemma 1 plays a crucial role in solving for any equilibria in the game. The religious rich understand that the dynamics of electoral competition ensure that the tax preferences of the religious poor will shape final policy outcomes. This fact, however, gives considerable influence to the religious rich, because t_{RP}^* is a function of g , and the religious rich choose g . By using charitable contributions to selectively transfer income to the religious poor, the rich are able to keep more of their income for themselves than if they were forced to pay higher taxes in support of higher levels of government-based redistribution.

Since for any $g^* > 0$, the induced tax policy will be t_{RP}^* , the religious rich will choose g to maximize

$$EU_{RR}(g) = (1 - t_{RP}^*)(1 - g).$$

The utility is concave in g (note $\frac{\partial^2 EU_{RR}}{\partial g^2} = -\frac{\pi\gamma}{\theta(1-\alpha)(1-\delta)} < 0$) and is maximized if

$$\tilde{g} = \frac{1 + \pi\gamma - 2\theta - \alpha(\delta - 1)(2\theta - 1)}{2\pi\gamma}.$$

To determine whether \tilde{g} is optimal, one must consider two issues. First, t_{RP}^* is decreasing in g , which implies a ceiling on g because the tax rate cannot be negative. Note that $t_{RP}^* = 0$ if

$$g \geq \hat{g} = \frac{1 + \alpha(\delta - 1)}{\pi\gamma}.$$

Therefore, \hat{g} is the maximum contribution that the religious rich will ever make. This implies that \tilde{g} is optimal only if $\tilde{g} < \hat{g}$, which is true only if $\alpha < \frac{1-\pi\gamma+2\theta}{(1-\delta)(1+2\theta)}$. Define $\bar{\alpha} = \frac{1-\pi\gamma+2\theta}{(1-\delta)(1+2\theta)}$. If

$\alpha \geq \bar{\alpha}$, the religious rich prefer \hat{g} to \tilde{g} , and to any $g < \hat{g}$.

Second, the religious rich cannot give “negative charity.” The pledge \tilde{g} cannot therefore be optimal unless $\tilde{g} > 0$, which is true only if $\alpha > \frac{1+\pi\gamma-2\theta}{(\delta-1)(2\theta-1)}$. Define $\underline{\alpha} = \frac{1+\pi\gamma-2\theta}{(\delta-1)(2\theta-1)}$. The pledge \tilde{g} cannot be optimal unless $\alpha > \underline{\alpha}$. When this condition is not satisfied, the utility of the rich is decreasing in g for all $g \in [0, \hat{g}]$. Therefore, the optimal strategy of the religious rich is to give zero charitable contributions.

The best response of the religious rich is summarized below:

$$BR_{RR} = \begin{cases} 0 & \text{if } \alpha \leq \underline{\alpha}, \\ \tilde{g} & \text{if } \underline{\alpha} < \alpha < \bar{\alpha}, \\ \hat{g} & \text{if } \alpha \geq \bar{\alpha}. \end{cases}$$

The optimal g as described above can be used to derive the equilibrium tax rate, t^* . Since this tax rate must equal t_{RP}^* by Lemma 1, one can substitute the optimal g into the formula for t_{RP}^* in Eq. (2) to determine t^* . The equilibrium tax rates for different levels of separation of church and state are summarized in Proposition 1.

Proposition 1. *When neither the secular poor nor the rich constitute a majority, the equilibrium tax rate, t^* , is as follows:*

- If $\alpha \leq \underline{\alpha}$, then $t^* = \frac{1}{2\theta}$.
- If $\underline{\alpha} < \alpha < \bar{\alpha}$, then $t^* = \frac{1}{2\theta} - \frac{1+\pi\gamma-2\theta-\alpha(\delta-1)(2\theta-1)}{4\theta(1+\alpha(\delta-1))}$.
- If $\alpha \geq \bar{\alpha}$, then $t^* = 0$.

Proposition 1 describes three different equilibrium regions as a function of state support for the religious organization. If state support for religion is moderate ($\underline{\alpha} < \alpha < \bar{\alpha}$), there exists a “government and charity” redistribution regime, where taxes for government redistribution and charitable giving are both positive. At extreme values of α , by contrast, either charity or government-based social programs can be crowded out completely. When state support for religion is very large ($\alpha < \underline{\alpha}$), the equilibrium is a “government only” redistribution regime,

where no charitable giving occurs and all transfer occur through the government. This regime can only exist if $\pi\gamma < 2\theta - 1$. That is, it can exist only when there are few religious rich or when the poor receive a relatively small proportion of the charity given to the religious organization. At the other extreme, when separation of church and state is high ($\alpha > \bar{\alpha}$), there exists a “charity only” redistribution regime, where taxes are zero and all redistribution occurs through the religious organization. For the “charity only” regime to exist, it must be true that $\pi\gamma > \delta(1 + 2\theta)$. That is, this regime could only exist when there are many religious rich, the poor receive a relatively large proportion of the charity given to the religious organization, and the poor are few in number. As an empirical matter, it obviously seems rare that these conditions could be satisfied. Figure 1 depicts the relationship between the equilibrium charity pledge and the equilibrium tax rate described by Proposition 1 across the range of α and assuming that the parameters are such that all three redistribution regimes exist.

[Figure 1 about here.]

To understand the intuition underlying the impact of church-state separation on the tax preferences of the religious poor in the full equilibrium of the model, it is important to recall from Eq. (2) that as the rich increase their charitable contributions, the preferred tax platform of the religious poor decreases (i.e., $\frac{\partial t_{RP}^*}{\partial g} < 0$). The religious rich must therefore consider the value in tax reduction of any marginal increase in charitable contributions. From 2, it is clear this value depends in straightforward ways on the parameters $\alpha, \gamma, \pi, \theta$ and δ . The religious poor value charitable contributions more (and thus value taxes less) when the proportion of religious rich is large, when the commitment of the religious organization to the poor is strong, and when there is strong separation of church and state. Consequently, the marginal decrease in taxes obtained from a marginal increase in charitable contributions is highest when π, γ and α take high values.⁷ By contrast, when the number of poor individuals increases, the value of charitable contributions declines for the religious poor: this drives down the reduction in taxes

⁷That is, $\frac{\partial^2 t_{RP}^*}{\partial g \partial \pi} < 0$, $\frac{\partial^2 t_{RP}^*}{\partial g \partial \gamma} < 0$ and $\frac{\partial^2 t_{RP}^*}{\partial g \partial \alpha} < 0$.

that follows a marginal increase in charitable giving.⁸

What are the consequences of this logic for the impact of church-state separation on the tax preferences of the religious poor, and hence on equilibrium levels of redistribution? Returning to Figure 1, when there is strong state support ($\alpha < \underline{\alpha}$), the maximum tax rate occurs and thus is not affected by α . When there is strong separation of church and state ($\alpha > \bar{\alpha}$), the equilibrium tax rate is zero and again is unaffected by α . In the “government and charity” regime ($\alpha \in [\underline{\alpha}, \bar{\alpha}]$), taxes are decreasing in church-state separation because

$$\frac{\partial t^*}{\partial \alpha} = \frac{\pi\gamma(\delta - 1)}{4\theta(1 - \alpha(1 - \delta))^2} < 0.$$

Given the tax rate is decreasing with church-state separation in the “government and charity” regime, when one looks across these three equilibrium regimes, taxes are (weakly) decreasing in α across the entire range of α .

The intuition is due, as noted above, to how church-state separation affects the amount of tax reduction that the rich can buy with a marginal increase in their charitable giving. As α increases, the marginal value to the religious poor of taxes declines, and the marginal value of additional charity increases. Thus, as α increases, the religious rich get a larger reduction in the equilibrium tax rate for each dollar they give to charity, increasing their incentive to make charitable contributions, and thereby driving a wedge between the party preferences of the religious poor and the party preferences of the secular poor. Of course, since the religious poor are pivotal, there are clear implications for the welfare state. As state support for religion declines, the size of the welfare state should decline as well because the religious poor moderate their tax demands, encouraging more charity.

This same logic also helps illuminate the model’s implications for the relationship between state support for religion and charitable giving. As the example in Figure 1 illustrates, if church-state separation is sufficiently low, the equilibrium lies in the “government only” redistribution regime, and there is no charity at all. If separation of church and state is in the

⁸That is, $\frac{\partial^2 t_{RP}^*}{\partial g \partial \delta} > 0$.

intermediate range so that the “government and charity” redistribution regime exists, then $\frac{\partial \hat{g}}{\partial \alpha} = \frac{(1-\delta)(2\theta-1)}{2\pi\gamma}$, which is always positive. This happens because the marginal reduction in taxes that the religious rich obtain with a marginal increase in charitable contributions increases as separation of church and state increases. (Recall that $\frac{\partial t_{RP}^*}{\partial g} < 0$ and note that $\frac{\partial^2 t_{RP}^*}{\partial g \partial \alpha} = \frac{\pi\gamma(\delta-1)}{2\theta(1+\alpha(\delta-1))^2}$.) If for some reason the “charity only” region does exist, then the rich pledge \hat{g} , inducing the poor to prefer a tax rate of 0. In this regime, charity is declining in the separation of church and state ($\frac{\partial \hat{g}}{\partial \alpha} = \frac{\delta-1}{\pi\gamma} < 0$). The equilibrium charity pledge, \hat{g} , is just large enough to make the religious poor prefer a tax rate of 0. The cost of this pledge to the religious rich declines as church and state separation increases because such separation reduces the opportunity cost for the religious poor to forsake government financing of the church organization.

More generally, the model suggests that charitable giving should be inversely related to tax rates. That is, the winning party platform is t_{RP}^* , which is declining in g . While scholars have examined whether charitable contributions will respond positively to exogenous government cuts in welfare spending (see below), the existing research implicitly assumes that one should expect such a response out of altruism. The argument presented here suggests an equilibrium explanation for the relationship between welfare state size and charitable giving that is grounded in the economic interest of the rich and the religious poor, and that is mediated by church-state separation and other variables in the model.

Partisan preferences when the religious rich are altruistic

The model suggest that redistribution through religious organizations can drive a wedge between the partisan preferences of the religious and secular poor: as state support for religion increases, the partisan preferences of the religious and secular poor should converge on support for parties that advocate higher taxes and higher levels of redistribution. This effect of church-state separation on the partisan preferences of the religious poor represents the central causal mechanism in our argument about how church-state separation should affect redistribution and

charitable giving. Given its central importance, before testing this argument, it is useful to probe its theoretical robustness.

The argument rests on the assumption that the religious rich make charitable contributions to maximize their disposable income. By credibly committing to contribute a portion of their after-tax income to the religious organization, the religious rich are able to purchase a lower tax rate. Two possible objections are worth noting. The first concerns the credibility of the commitment to charity. Although one could easily imagine that reputational concerns in a repeated play context could ensure the credibility of charitable commitments, it is useful to explore whether this pre-commitment assumption is necessary. The second concerns the implicit cynicism about the motivations of the religious rich. In the analysis above, the religious rich make charitable contributions for economic gain when in fact many religious rich might make charitable contributions because they are altruistic, with a genuine compassion and concern for the welfare of the religious poor (e.g. Brooks 2006). Does church-state separation have the same effect on the partisan preferences of the religious and secular poor when we assume that the rich are motivated by altruism, and that they do not precommit to giving?

Suppose that rather than making contributions solely to minimize their taxes, the religious rich receive some “warm glow” utility from the contributions that they make to the religious organization. To capture this utility, we assume that the religious rich can use their after-tax income to purchase “material goods,” x , or to make charitable contributions to the religious organization, \bar{g} . Note that \bar{g} is the total amount that the religious rich give to charity, rather than the proportion of the income they give (as g was previously defined). The religious rich’s utility is therefore

$$EU_{RR}(x, \bar{g}|t) = \ln[(1+x)^\phi(1+\bar{g})^\omega].$$

The parameter $\omega > 0$ describes the religious rich’s altruism level (with $\phi > 0$ describing the value of other material goods that the religious rich consume). We assume that the prices of \bar{g} and x are both one. Therefore, after the election determines a tax rate, the religious rich

maximize $\ln((1+x)^\phi(1+\bar{g})^\omega)$ subject to the constraint that $x + \bar{g} = 1 - t$. Solving this constrained optimization problem, the optimal level of \bar{g} as a function of t is

$$g^+ = \frac{\omega(2-t)-\phi}{\omega+\phi}.$$

Charitable giving will be zero if the religious rich are not sufficiently altruistic ($\omega \leq \frac{\phi}{2-t}$). And the religious rich will give all their money to charity if they are sufficiently altruistic ($\omega \geq \frac{2\phi}{1-t}$). If we assume an altruism level that does not drive charitable giving to zero or one (i.e., $\omega \in (\frac{\phi}{2-t}, \frac{2\phi}{1-t})$), then the level of charitable giving decreases as taxes go up ($\frac{\partial g^+}{\partial t} = -\frac{\omega}{\omega+\phi}$), and the negative effect of taxes on giving is highest when altruism is large (i.e., $\frac{\partial^2 g^+}{\partial t \partial \omega} = -\frac{\phi}{(\omega+\phi)^2}$). Also note that charitable giving increases with the level of altruism (i.e., $\frac{\partial g^+}{\partial \omega} = \frac{(3-t)\phi}{(\phi+\omega)^2}$).

When the religious poor evaluate their optimal tax rate, they must take into consideration the negative effect that taxes have on charity. Since g^+ now represents the total amount (rather than the proportion of income) that the religious rich give to the religious organization, the religious poor wish to maximize

$$EU_{RP}(t|\bar{g}(t)) = \frac{\beta}{1-\beta}\alpha(t - \theta t^2) + \frac{\beta}{(1-\beta)\delta}(1-\alpha)(t - \theta t^2) + \frac{\beta\pi}{(1-\beta)\delta}g^+\gamma. \quad (3)$$

Solving the religious poor's optimization problem yields

$$t_{RP}^* = \frac{1}{2\theta} - \frac{\gamma\pi\omega}{2(1+\alpha(\delta-1))\theta(\omega+\phi)}. \quad (4)$$

Since taxes drive down charitable giving, it remains the case that the optimal tax rate of the religious poor is less than the optimal tax rate of the secular poor. Consequently, under the same conditions as in Lemma 1, the religious poor will be pivotal. Since the religious rich are altruistic, they do not set charitable giving to make themselves rich, but instead simply choose g^+ . As a consequence (ignoring boundary cases where $t^* < 0$ or $t^* > 1$), the equilibrium tax rate, t^* equals t_{RP}^* , as defined by (4).

This altruism model yields the expected relationship between altruism and equilibrium tax

rates. As the religious rich become more altruistic (i.e., ω increases), the preferred tax rate of the religious poor decreases ($\frac{\partial t^*}{\partial \omega} = -\frac{\gamma\pi\phi}{2(1+\alpha(-1+\delta))\theta(\omega+\phi)^2} < 0$). More importantly, however, we find the same relationship between state support for the religious organization and the partisan preferences of the religious poor. As separation of church and state increases, the value of taxes to the religious poor decreases, giving them greater incentives to moderate their tax demands (so that more charitable giving can occur) ($\frac{\partial t^*}{\partial \alpha} = \frac{(-1+\delta)\pi\gamma\omega}{2(1+\alpha(-1+\delta))^2\theta(\omega+\phi)}$).

In sum, as in the model without altruism, separation of church and state creates divergence in the platform preferences of the religious and secular poor. When church-state separation is high, the religious poor prefer parties that advocate lower taxes than the parties preferred by the secular poor. When church-state separation is low, by contrast, the religious poor prefer parties that advocate higher taxes, and thus their partisan preferences converge toward those of the secular poor.

Testing the model

In the model, state support for religion affects the political economy of redistribution through its impact on the voting behavior of the religious poor. When religious organizations depend primarily on charity to fund their programs, the religious poor will favor right-wing parties that advocate low taxes and small government redistribution programs. As state support for religion increases, the partisan preferences of the religious poor will converge towards those of the secular poor, on parties that prefer higher taxes and redistribution. Next, we test this argument by examining whether state support for religion affects the types of parties supported by secular and religious poor voters.

The Comparative Study of Electoral Systems (“CSES”) survey, which contains a set of core questions asked in election surveys across many countries, provides data to test the effect of state support on voting. The survey provides information on voting choices, income, religiosity, as well as other demographic factors that affect voting. We argue that religious poor voters will support more left-wing parties (on the tax and redistribution dimension) as state support

for religion increases. The CSES data identify the party that each voter supports, and Benoit and Laver (2006) provide data on ideological positions of the parties on the dimension that is most relevant to our argument. Specifically, they ask country experts to 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”). Combining these two sources allows us to measure the ideology of the party that each voter supports.

The sample is comprised of all CSES countries that (a) include the individual level information we need to identify voters by income and religiosity (b) are included in Benoit and Laver (2006), (c) are sufficiently democratic (with a Polity score of at least 8 in the year of the survey, and (d) are majority Christian.⁹ We define voters as “poor” if they are in the bottom 40% of the income distribution, and we define voters as “religious” if they declare that they attend church weekly (otherwise they are “secular”).

Our goal is to estimate the effect of state support for religion on vote choice by the different income-based religious groups. To measure state support, we use data from Grim and Finke (2006), who draw on the *International Religious Freedom Report* compiled by the US State Department. Since adoption of the 1998 International Religious Freedom Act, US embassies must prepare an annual report that describes the government’s role in religious life. Grim and Finke argue that the data is the best that exists on church-state relations because the reports rely on a wide range of sources, adhere to a common set of guidelines, and are not biased by political agendas (see pp. 10-11). We examine two variables from the data set. The variable *Favor01* ranks countries on a continuous 10-point scale based on the extent to which “the state provide[s] a select religion or small group of religions with privileges, financial support, or favorable sanctions.” This variable is attractive as a proxy for α because it places countries on a 10-point scale based on aggregate state support. The variable *Fundexs* is a “Government Funding of Religion Index” and places countries on a scale that ranges between 0 and 12. The

⁹The countries included are Australia, Belgium, Bulgaria, Canada, Czech Republic, Finland, France, Germany, Hungary, Iceland, Ireland, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Switzerland, Sweden, the United Kingdom, and the United States. As we discuss below, Canada, Finland and Spain have a different measure of religiosity than the rest of the countries.

scale is based on funding scores for six categories — schools, buildings, the clergy, religious media, charity, and overseas religious work. For each category, countries are scored 0 (no support), 1 (support exists), or 2 (support exists and privileges one religion). Since the levels of support across categories likely varies considerably, by weighting each category identically, this variable may give a less clear relative position of countries than does Favor01. But both variables capture the many ways in which governments support religious organizations. Since any such support frees up other resources for the religious organization to use as it sees fit, it is appropriate to include such support in our measure.¹⁰

Our data structure is hierarchical, with a set of individual characteristics that affect vote choice, and country-specific variables that predict differences in the effect of the individual-level variables across countries. In each country, controlling for other individual-level factors that affect vote choice, we estimate the association between vote choice and (a) being poor and secular (b) being poor and religious. If our argument is supported, the difference between the vote choices of these two subgroups, which we call the “wedge” between religious and secular poor voters, should decline as state support increases, controlling for other country-specific factors that could influence the size of the wedge.

We therefore estimate hierarchical linear models in which the first-level response variable is a measure of the redistribution platform of the party supported by the respondent using the Benoit and Laver (2006) variable described above. The first level includes indicators for group membership (secular poor, religious poor, secular non-poor, and religious non-poor), as well as controls for individual characteristics that might affect vote choice. These controls include two indicator variables, one for respondents that are employed full time and one for those who are unemployed. The omitted category includes respondents that are not in the labor force and respondents employed part-time. They also include two indicator variables, one for respondents that completed secondary education (including trade training) and one for respondents with at least some university-level education. The omitted category includes

¹⁰The data for Favor01 can be found at <http://www.thearda.com/Archive/Files/Descriptions/IRF2001.asp>, and the data for Fundexs can be found at <http://www.thearda.com/Archive/Files/Descriptions/INTL2003.asp>.

all respondents that have less education than a high-school diploma. Finally, the individual level controls include an indicator for female respondents, and for the age (in decades) of the respondent. The second level includes predictors at the country level — variables that measure the level of state support, and controls for potential macro-level confounders.

We are aware of no previous research that explores the country-specific factors that drive a wedge between the voting behavior of the religious and secular poor. But one country-level control variable that seems of obvious potential importance concerns party positions on so-called “social issues” related to individual liberty on issues like abortion, homosexuality, euthanasia, and gay marriage. We wish to control for the potential confounding effects of such issues by including party system variables that could affect voting on these issues. We consider two such measures, both based on the information provided by Benoit and Laver (2006), which uses expert ratings to place parties on a scale that 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 first variable, *Polarization_social*, is the difference in the score of the most conservative and the most liberal party on this dimension. We expect that as polarization increases, these “social” issues will have the greatest potential to drive a wedge between the religious and secular poor voters because the policy stakes on these issues will be largest. That is, as such polarization increases, the wedge should increase. The second variable, *Forced_choice*, attempts to capture the potential for cross-pressures on religious voters. The variable equals 1 if there exists no party that is liberal on the redistributive issue and conservative on the “social” issues (and zero otherwise). When this variable equals 1, pressures for religious and secular poor voters to diverge based on preferences on the “social” issues should be greatest.

We estimate a model of the form :

$$\text{Vote}_i = \beta_{0j(i)} + \beta_{1j(i)} \text{Poor}_i + \beta_{2j(i)} \text{Religious_poor}_i + \beta_{3j(i)} \text{Religious_non_poor}_i + \sum_{k=4}^K \beta_k X_{ik} + \epsilon_i,$$

where *Vote* is the ideological score of the party voted for by the respondent (on the size of

government scale). Higher values indicate a more conservative redistribution platform. X_i is a matrix of controls for individual characteristics.¹¹ The intercept, β_{0j} , gives the expected ideological location of voters in the omitted category, the secular non-poor, in country j , when all the individual-level variables are equal to 0. The coefficient β_{3j} estimates the divergence in the ideology of the religious and secular non-poor in country j . The coefficient β_{1j} estimates the difference between the ideology of secular poor and the secular non-poor in county j . Finally, our primary interest lies in the estimates of β_{2j} , the coefficient on the indicator variable for the religious poor, which captures the wedge between the religious poor and the secular poor in country j . The theoretical prediction we wish to test is that β_{2j} should be positive if state support is relatively low, and that the size of this coefficient should decline as state support for religion increases.

Since our goal is to estimate whether the wedge between religious and secular poor voters declines as state support increases, controlling for party-system factors related to “social” issues like abortion, the second-level model for the religious-poor coefficient is

$$\beta_{2j} = \gamma_0 + \gamma_1 \text{State_support}_j + \gamma_2 \text{Party_system(social)}_j + \eta_j, \quad (5)$$

where *State_support* is a country-level variable measuring state support for religion (i.e., *Favor01* or *Fundexs*), *Party_system(social)* is a measure of the party system configuration on issues like abortion and gay rights (i.e., *Polarization_social* or *Forced_choice*), and η_j is a country-level error. The continuous macro-level predictors are centered at 0, hence γ_0 captures the wedge in a country with the average degree of state support. Our theory is supported if γ_0 is positive (i.e., the religious poor vote more conservatively than the secular poor in countries with an average or less than average degree of state support) and γ_1 is negative (i.e., the wedge between religious and secular poor voters declines as state support increases).

Table 2 report the coefficient estimates and standard errors for a set of random coefficient

¹¹ Respondents are indexed by i , countries by j , and the notation $j(i)$ represents a mapping from respondent i to the country j in which the respondent lives.

models, estimated via restricted maximum likelihood as implemented in the R function `lmer` (Bates 2008). The continuous macro-level variables are standardized by dividing by two standard deviations so that the coefficients (including that on the dummy `Forced_choice`) are all approximately on the same scale (Gelman 2008).

[Table 2 about here.]

Our main interest lies in the coefficients on the religious and secular poor, so we will not comment on the other individual-level control variables, other than to point out that they are stable across models and consistent with standard arguments about how age, gender, education, and employment status affect vote choice. Our focus is not on the differences between voting by the religious and secular non-poor, although we would note that a 40 year old secular non-poor male with high-school education and employed full-time is expected to vote for a party with a score of 11, half a point to the right of the center, and a religious non-poor respondent is expected to support parties that are about six-tenths of a point more conservative than the parties supported by a secular non-poor respondent with the same background characteristics. A secular poor respondent is expected to support parties three-tenths of a point more liberal on the tax dimension than a secular non-poor respondent with the same characteristics. The differences across these social groups are highly statistically significant.

Consider the results for the variables that test our model. In model 1, the measure of state support is `Favor01`, the model includes only the 19 countries for which data exist on church attendance, and the measure of `Party_system(social)` is `Polarization_social`. The results show that the coefficient on `Religious_poor` (the estimate of γ_0 , or the expected β_2 in a country with average state support and average polarization on social issues) is positive and very precisely estimated: in the average country, religious poor voters support parties that are more conservative on the tax dimension than parties supported by secular poor voters with similar background characteristics.

Does the wedge between the voting of religious and secular poor voters change with levels of state support? Our estimate of γ_1 is the coefficient on the variable `Favor01`. The point

estimate is -1.12 and is very precise, providing strong support for our argument. That is, as state support increases, the ideology of the parties supported by religious poor voters becomes more left-wing, converging to the ideology of parties supported by secular poor voters.

Finally, note that the results for the control variable, *Polarization_social*, suggest that when the party system is polarized on issues like abortion and gay marriage, the voting wedge on tax issues also increases. The coefficient is precisely estimated, but the size of the effect is smaller than the effect of state support.

Next we estimate four additional models to test the robustness of the results in model 1. Model 2 makes one change to model 1: it uses *Forced_choice* instead of *Polarization_social* as the measure of how social issues like abortion affect vote choice. The coefficient has a negative sign, but is estimated with considerable error, and no inference can be made regarding the relationship between this variable and the voting wedge. The results for the other variables, however, are robust to the inclusion of this variable.

Model 3 uses the same specification as model 1, but with three additional countries. Canada, Finland and Spain are not included in model 1 because the church attendance question was not asked. But a survey question about religiosity, which places respondents on a scale that ranges from 1 (“Have no religious beliefs”) to 4 (“very religious”) is available. For these three countries, we have coded individuals as “religious” if they answer that they are “very religious”. We are aware that this is an imperfect proxy for attendance. There are well-known differences between religious belief and religious attendance: in the countries where both attendance and religiosity are included in the survey, their correlation is .53, strongly positive, but far from perfect. The sole purpose for including these three countries is to estimate the model on a sample of countries that is as large as possible. Column 3 in the table shows that the results when these countries are included are essentially identical to the results in column 1.

Models 4 and 5 estimate the specification of models 1 and 3 using *Fundexs* instead of *Favor01* as the measure of state support. Model 4 includes only the 19 countries with survey measures of church attendance, and model 5 adds the three countries that only have the reli-

giosity question. In column 4, the estimates are qualitatively analogous to those in column 1 for the main variables in our argument. The coefficient on Poor is statistically significant and positive. The coefficient for State_support is statistically significant and negative, but somewhat smaller than in column 1. In column 5, where the three additional countries are added, the qualitative results are very similar to column 4. The main difference between the models that use Fundexs as the measure of state support is that the control variable, Polarization_social, does not seem to have a robust relationship with vote choice: in columns 4 and 5 this variable has a much smaller coefficient, which is now estimated with substantial error.

How large are the effects of state support on vote choice? The left panel of Figure 2 depicts the expected size of the wedge (i.e., the expected β_{2j}) as a function of State_support, holding Party_system(social) constant at its mean, and using the estimates from model 3. The 95-percent confidence intervals are computed via the delta method for a thousand points in the range of Favor01. When state support is at its lowest level, a religious poor voter is expected to support parties that are about 1.5 points to the right of the parties supported by a secular poor voter with the same individual characteristics, and this difference is highly statistically significant. To put this number in perspective, the difference between the economic policy platforms of the Labor Party and the Christian Union in the Netherlands is 1.59. As state support increases, the wedge shrinks, and at the highest level of state support, the religious poor are expected to support parties that are substantively indistinguishable from those supported by the secular poor. The right panel in the figure depicts this same relationship when Fundexs is the measure of state support. The qualitative findings are quite similar.

[Figure 2 about here.]

The empirical tests therefore provide evidence of the causal mechanism that links religion and redistribution in our model. Using two different measures of state support, and controlling for how the party system affects voting on “social” issues, we find that when state support for religion is at its weakest level, poor religious voters support parties that are more right wing on taxes than are the parties supported by poor secular voters. But as state support for

religion increases, the religious poor support parties that are more left-wing on taxes, and when state support reaches its maximum, the voting behavior of the religious and secular poor are essentially identical.

Discussion

Our analysis suggest that providing social services through religious organizations opens up the possibility of a group-based distributive politics that can pit the religious and secular poor against each other. The opportunity to exclude the secular poor from redistribution that occurs through religious organizations has implications for individual partisan preferences, for charitable giving, and for the scale of government-run redistribution programs. Our model therefore illuminates an avenue by which religion can influence the political economy of redistribution, even without positing that religious and secular individuals have distinctive core values.

The argument is consistent with a number of stylized facts. The model, for example, provides an alternative explanation for why we should see charitable giving increase with decreases in the welfare state, an argument that does not turn on the altruism of the rich, but rather their material interest. The analysis also suggests an explanation regarding the lower propensity to contribute to the funding of religious organizations in countries with relatively high degrees of church-state entanglement like those of continental Europe. It might be that the lower propensity to give to charity in Europe than in the United States, documented for instance by Alesina et al. (2004) and Brooks (2006), should not be explained simply by assuming different fundamental values in Europe versus the US. Instead, the analysis here suggests that differences in the historic relationship between church and state may be an important part of the story. Since Europe has a long history of state support for churches (see below), often buttressed by strong Christian Democratic parties that have ensured a continued role of churches in social service provision, our model suggests that charitable giving in Europe should be low. In the US, by contrast, there is long history of strong separation of church and state, which our model suggests should lead to high levels of charitable giving. The same logic, of course,

might help explain differences in the size of the welfare state in the US and Europe. Just as state support for religion drives down charitable giving, it drives up government funded social programs.

Some readers, however, might remain skeptical. Is it really possible that the scale of social programs operated by organized religion could ever be large enough to compete with the large welfare states of today? One response might be that our argument here is most applicable in countries or time periods where the scale of social programs operated by the state is small, as in Europe in the early 20th century or perhaps in Latin America today. Indeed, as noted above, the rise of Christian Democracy and state support for church-run social programs unfolded historically in a manner consistent with our theory. If in fact the model is most applicable to countries with less developed welfare states, the empirical tests presented above represent a particularly hard case for our model.

But we believe that even in advanced democracies, our theoretical model is applicable. In a number of European countries, there is a long history of social assistance being provided almost completely through churches, and there remains a very high level of state support for church-run social programs (see essays in Dübeck and Overgaard 2003, as well as Fix 2002 and Fox 2006). In Belgium, for example, the church's role dates back to 650 AD when a hospital was created in the monastery in Nivelles. Today, more than half the major health care providers (hospitals, centers for the handicapped, and centers for the mentally ill) are operated by the Catholic church, and these centers are almost fully supported by tax monies. Moreover, these health centers compete with secular ones for clients, and the government allows the religion-based institutions to take substantial efforts to preserve their Catholic character, including granting management authority to individual congregations (Stockman 2003, 17-18). In addition, the state heavily subsidizes Catholic schools, which are operated by dioceses, parishes, and congregations.

In Finland, to take another example, there is a tremendous presence by the Evangelical Lutheran Church of Finland in the provision of social services, one which persists even after

Finland eliminated the “official state religion” status of this church in the early 1990s. Churches provide a range of services, including substance abuse, mental illness support, family crisis counseling, food aid, direct financial aid, and support for over 95,000 children in day care. They receive almost all of their financial support from the federal government’s church tax and from the Finland Slot Machine Association (Niskanen and Seppo 2003).

And in Spain, to take a third example, the general law of religious liberty ensures church autonomy in provision of social services, and the decentralization of the state implies that this role can vary with local laws. Tirapu’s (2003) case study of social service provision in Andalusia lead him to conclude that in “Spain, social services provided by Faiths and particularly by entities of the Catholic Church are very important in terms of numbers” (71). He found that the church in Andalusia has established 694 centers for provision of social services, including services for the elderly, children and families, the handicapped, youth, the unemployed, the homeless, drug addicts and women. And Spain has a long tradition of state support for Catholic preschools and primary schools.

These European examples remind us that there are many countries where state support for social services run by churches are often quite large, which according to our model should diminish incentives to support right-wing parties and increase the size of the welfare state in these countries. The more difficult question for our theory, however, is whether charitable giving could be strong enough to have an impact on individual voting in countries where financial separation of church and state is large, and charitable giving thus important. The US is a country with very high separation of church and state, where government financial support for religion is quite limited (despite the creation of the Office of Faith-Based Initiatives), and where social programs are therefore funded almost entirely by charitable giving. Consistent with our theory, charitable giving is very high in the US, but could it be large enough to affect the incentives of voters? Two studies provide evidence that indeed the scale is quite large.

Dehejia, De Leire and Luttmer (2007) consider the effect of an income shock on household consumption, and compare this effect for religious and non-religious individuals. Their study

is based on the Consumer Expenditure Survey in the US, which provides panel data on household consumption. They find a consistent, robust, and large “insurance effect” of religiosity. Individuals involved with a church have an implied degree of income insurance of forty percent. That is, they find that if an individual receives a negative income shock, his decline in consumption will be 40 percent less if he participates in religion than if he does not. Given the large magnitude of the effect, they conclude that “even when church and state are officially separated, governments providing less social insurance will indirectly stimulate the demand for insurance from religious organizations. . .” (p. 277).

Hungerman (2005) provides the second careful empirical study that is relevant to understanding the magnitude of church-based social programs. His paper estimates to what extent church-based charity could be a substitute for state-based welfare in the US. Using data on charitable giving and social policy expenditures from Presbyterian churches, Hungerman uses the 1996 Welfare Reform to estimate the effect of decreases in government welfare support on the level of provision of social services by churches. He finds that a one dollar decrease in welfare spending per capita in a community leads to a 40 cent increase in per member spending on local community projects.

Is this a big number? The key to answering this question depends, as in our model, on the number of poor individuals who receive church-based assistance. Assume that $1 - \beta$ is the proportion of all citizens who are poor, that δ is the proportion of poor who are religious (i.e., who receive assistance from the church) and that m is the proportion of all community members who belong to a church. Then per Hungerman’s study, a 1 dollar per capita decrease in state welfare leads to a decrease in state-based benefits for each poor person of $\frac{1}{1-\beta}$, and an increase in charity from the church for the religious poor of $\frac{.4m}{\delta(1-\beta)}$. So a religious poor person prefers lower welfare spending if $\delta < .4m$.

If 50 percent of the population are church members (as Hungerman estimates), the religious poor actually prefer that state welfare spending decrease if the religious poor constitute less than 20 percent of all poor. That is, if church-based social assistance is concentrating benefits

on 20 percent of the poor in a community, then these 20 percent of the poor prefer decreased state-welfare because lower state welfare nets them more money. Although we have found no data on the percent of all poor that are served by churches, we suspect that in most communities, it is unlikely that religious organizations reach out to more than 20 percent of the poor population. In the CSES data, for instance, 19 percent of individuals in the bottom 35 percent of the income distribution in the US report that they attend services once per week, and 14 percent attend occasionally (once a month, but less than once a week). Hadaway, Marler, and Chaves (1993) and Chaves and Cavendish (1994) present evidence that self-reported attendance in surveys is roughly double the actual attendance. Consequently, based on these numbers, the percent of all poor that are at least somewhat religious is less than 17 percent. Since those that access social services are overwhelmingly religious in the US (see e.g., Wuthnow 2004, Livezey 2000, p.20; Laudarji and Livezey 2000 and McRoberts, 2003), there is a strong case to be made that the effects that we identify are relevant to a non-trivial proportion of the poor. And the electoral consequences can be substantial. If the Republicans can count on support from twenty percent of the bottom third of the income distribution, this can have a significant effect on electoral outcomes (and on Republican strategies for reaching out to poor religious voters).

Moreover, even though this estimated effect is large, it likely understates the importance of church-based social programs. First, there are good reasons to believe that religious individuals will often value a dollar that is distributed through churches more highly than a dollar distributed by state-run agencies (e.g., Wuthnow 2004). This is due to the “holistic” (i.e., religious) approach to service delivery that is inherent to church-run programs, and that is appealing to church members (Smith et al. 2006). Second, if these effects we describe are real, then politicians have an incentive to become involved in church-based efforts to provide social programs (as the Republicans obviously have in the US), and in particular to target these efforts towards geographic areas that are electorally important. Finally, the estimates presented are primarily for social assistance programs and do not include child care or primary

and secondary schools. We feel that these programs are especially valuable to lower income individuals.

There is good reason to believe, then, that useful progress can be made by thinking about religion's role in the political economy of redistribution through the lens of standard group-based distributive politics. The "religious" agents in our model do not form preferences about redistribution based on their religious values or beliefs. They are simply looking for ways to redistribute income that advantages them by excluding others. The emphasis of our analysis therefore has more in common with arguments that focus on targeted redistribution than on models that explore the possible effects of systematic differences in the core make-up of religious individuals. The argument shares much with Levy (2005; see also Fernàndez and Levy 2008), for example, who examines group-based redistribution in a model of education policy. Her argument describes when we should expect to see the formation of electoral coalitions between the rich (who receive low taxes) and those poor who value education (who receive higher educational spending). Also related is Austen-Smith and Wallerstein (2006; see also Moene and Wallerstein 2001), who examine how the ability to target transfers based on race affects redistribution. In their model, individuals are color-blind — they do not form preferences regarding redistribution based on racial preference. Nonetheless, when it is possible to redistribute to a specific racial group (through, say, affirmative action), equilibrium levels of redistribution decline.

Like these existing studies, our analysis emphasizes the fact that redistribution programs are often more complicated than the standard "rich to poor" median voter models in the style of Romer (1975) and Meltzer and Richards (1981) that have been so influential. There may be targeted redistribution in the government programs themselves, and, there may be extra-governmental social programs, such as when church-based programs are financed by charity. When such programs exist, there are important effects not simply in the scale of government-run social programs, but also for who wins and loses under these programs.

References

Alesina, Alberto, and Edward Glaser. 2004. *Fighting Poverty in the US and Europe: A World of Difference*. Oxford: Oxford University Press.

Austen-Smith, David, and Michael Wallerstein. 2006. "Redistribution and Affirmative Action." *Journal of Public Economics* 90: 1789-1823.

Barro, Robert J., and Rachel M. McCleary. 2005. "Which Countries Have State Religions?" *Quarterly Journal of Economics* 120(4): 1331-70.

Bates, Douglas. 2008. "Computational Methods for Mixed Models." Technical report, Department of Statistics, University of Wisconsin-Madison.

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*. London: Routledge.

Berman, Eli. 2000. "Sect, Subsidy and Sacrifice: An Economist's View of Ultra-orthodox Jews." *Quarterly Journal of Economics* 115(3):905-53.

Brooks, Arthur C. 2006. *Who Really Cares: The Surprising Truth about Compassionate Conservatism*. New York: Basic Books.

Chaves, Mark, and James Cavendish. 1994 "More Evidence on U.S. Catholic Church Attendance." *Journal for the Scientific Study of Religion* 33:382-387.

Cosgel, Metin, and Thomas Miceli. 2008. "Church and State." University of Connecticut Economics Working Papers. Paper 200804.

Dehejia, Rajeev, Thomas DeLeire, and Erzo Luttmer. 2007. "Insuring Consumption and Happiness Through Religious Organizations." *Journal of Public Economics* 91(1-2): 259-79.

DiIulio, John J. Jr. 2004. "Getting Faith-based Programs Right." *Public Interest*, Spring Issue:75-89.

Dübeck, Inger, and Ole Overgaard, eds. 2003. *Social Welfare, Religious Organizations and the State*. Milano: Dott. A. Giuffrè Editore.

Finke, Roger, and Rodney Stark. 1992. *The Churching of America 1776-1990*. New Brunswick, NJ: Rutgers University Press.

Fernández, Raquel, and Gilat Levy. 2008. "Diversity and Redistribution." *Journal of Public Economics* 92(June): 925-43.

Fix, Birgit. 2002. "Social Work of Religious Welfare Associations in Western Europe." *EURODATA Newsletter* 16/17 (Autumn/Spring 2002/2003).

Fox, Jonathan. 2006. "World Separation of Religion and State Into the 21st Century." *Comparative Political Studies* 39(5):537-69.

Gelman, Andrew. 2008. "Scaling Regression Inputs by Dividing by Two Standard Deviations." *Statistics in Medicine* 27:2865-73.

Gill, Anthony. 1998. "Rendering unto Caesar: The Catholic Church and the State in Latin America." Chicago: University of Chicago Press.

Gill, Anthony, and Erik Lundsgaarde. 2004. "State Welfare Spending and Religiosity: A Cross-National Analysis." *Rationality and Society* 16(4):399-436.

Grim, Brian J., and Roger Finke. 2006. "International Religion Indexes: Government Regulation, Government Favoritism, and Social Regulation of Religion." *Interdisciplinary Journal of Research on Religion* 2(1):1-40.

Guiso, Luigi, Paola Sapienza and Luigi Zingales. 2003. "People's Opium? Religion and Economic Attitudes." *Journal of Monetary Economics* 50 (2003) 225-82.

Hadaway, C. Kirk, Penny Long Marler, and Mark Chaves. 1993. "What the Polls Don't Show: A Closer Look at U.S. Church Attendance." *American Sociological Review* 58:741-52.

Hungerman, Daniel. 2005. "Are State and Church Substitutes? Evidence from the 1996 Welfare Reform." *Journal of Public Economics* 89:2245-67.

Iannaccone, Laurence R. 1991. "The Consequences of Religious Market Structures: Adam Smith and the Economics of Religion." *Rationality and Society* 3(2):156-77.

Iannaccone. Laurence R. 1992. "Sacrifice and Stigma: Reducing Free-riding in Cults, Communes and Collectives." *Journal of Political Economy* 100(2):271-91.

Inglehart, Ronald, and Pippa Norris. *Sacred and Secular: Religion and Politics Worldwide*. New York: Cambridge University Press.

Jost, John T. 2007. "Coda —After 'The End of the End of Ideology.' " *American Psychologist* 62(9):1077-80.

Laudarji, Issac B., and Lawrence W. Livezey. 2000 . "The Churches and the Poor in a 'Ghetto Underclass' Neighborhood." In *Public Religion and Urban Transformation*, ed. Lawrence W. Livezey. New York: New York University Press, 83-105.

Levy, Gilat. 2005. "The Politics of Public Provision of Education." *The Quarterly Journal of Economics*. 120(4):1507-34.

Livezey, Lawrence. (Ed.) 2000. *Faith in the City: Public Religion and Urban Transformation*. New York: New York University Press.

McRoberts, Omar M. 2003. *Streets of Glory: Church and Community in a Black Urban Neighborhood*. Chicago: University of Chicago Press.

Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89(5): 914-27.

Moene, Kark Ove, and Michael Wallerstein. 2001. "Inequality, Social Insurance, and Redistribution." *American Political Science Review* 95(4):859-74.

Napier, Jaime L., and John T. Jost. 2006. "The Psychological Bases of Religiosity and Political Conservatism." Paper presented at the meeting of the Society of Experimental Social Psychology, Philadelphia, PA.

Niskanen, Markku, and Juha Seppo. 2003. "The Evangelical Lutheran Church and Christian Organizations as Providers of Social and Health Care Services in Finland." In *Social Welfare, Religious Organizations and the State*, ed. Inger Dübeck and Ole Overgaard. Milano: Dott. A. Giuffrè Editore, 189-208.

Persson, Torsten, and Guido Tabellini. 2003. *The Economic Effects of Constitutions*. Cambridge, MA: MIT Press.

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.

Romer, Thomas. 1975. “Individual Welfare, Majority Voting, and the Properties of a Linear Income Tax.” *Journal of Public Economics* 4 (February 1975): 163-85.

Scheve, Kenneth, and David Stasavage. 2006. “Religion and Preferences for Social Insurance.” *Quarterly Journal of Political Science* 1(3).

Sider, Ronald J., and Heidi Rolland Unruh. 2004. “Typology of Religious Characteristics of Social Service and Educational Organizations and Programs.” *Nonprofit and Voluntary Sector Quarterly* 33(1):109-134.

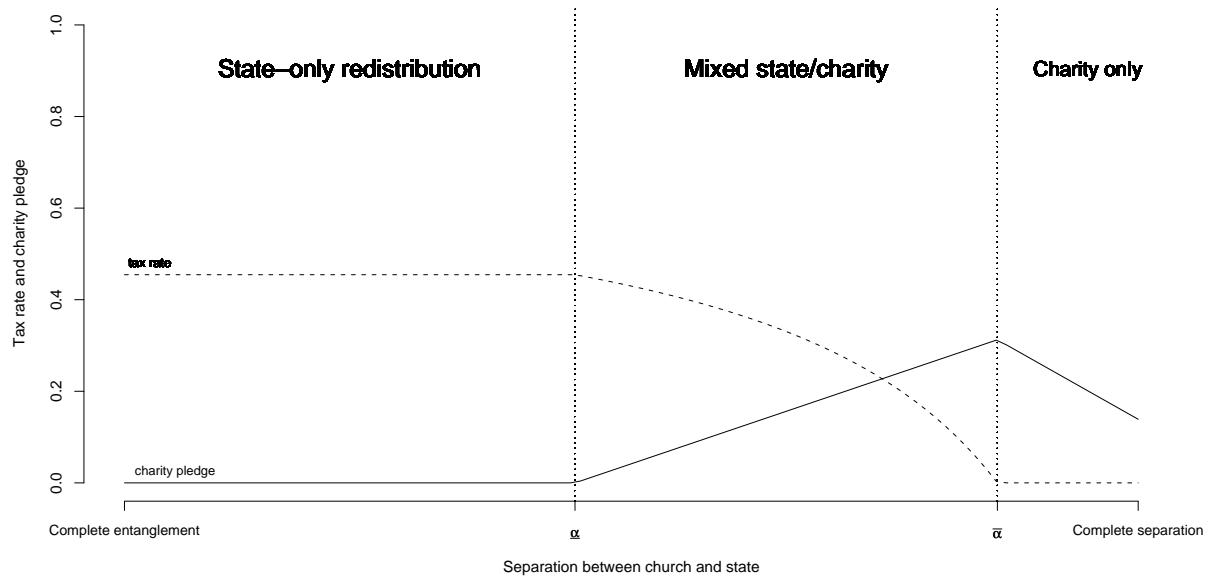
Smith, Steven Rathgeb, John P. Bartkowski, and Susan Grettenberger. 2006. “Comparative Views on the Role and Effect of Faith in Social Services.” Report from the Rockefeller Institute of Government.

Stockman, Réne. 2003. “Les institutions ou organisations à but non lucratif et leurs relations avec l’Église, l’État et la société en Belgique.” In *Social Welfare, Religious Organizations and the State*, ed. Inger Dübeck and Ole Overgaard. Milano: Dott. A. Giuffré Editore, 3-32.

Tirapu, Daniel. 2003. “Social Services and Religious Entities in Spain.” In *Social Welfare, Religious Organizations and the State*, ed. Inger Dübeck and Ole Overgaard. Milano: Dott. A. Giuffré Editore, 61-72.

Wuthnow, Robert. 2004. *Saving America? Faith-Based Services and the Future of Civil Society*. Princeton and Oxford: Princeton University Press.

Figure 1: Equilibrium charity pledge and equilibrium party platforms under different levels of church and state separation.



Note: Figure assumes that $\pi = .6, \gamma = .9, \delta = .1, \theta = 1.1$.

Figure 2: Estimated wedge between secular and religious lower income voters

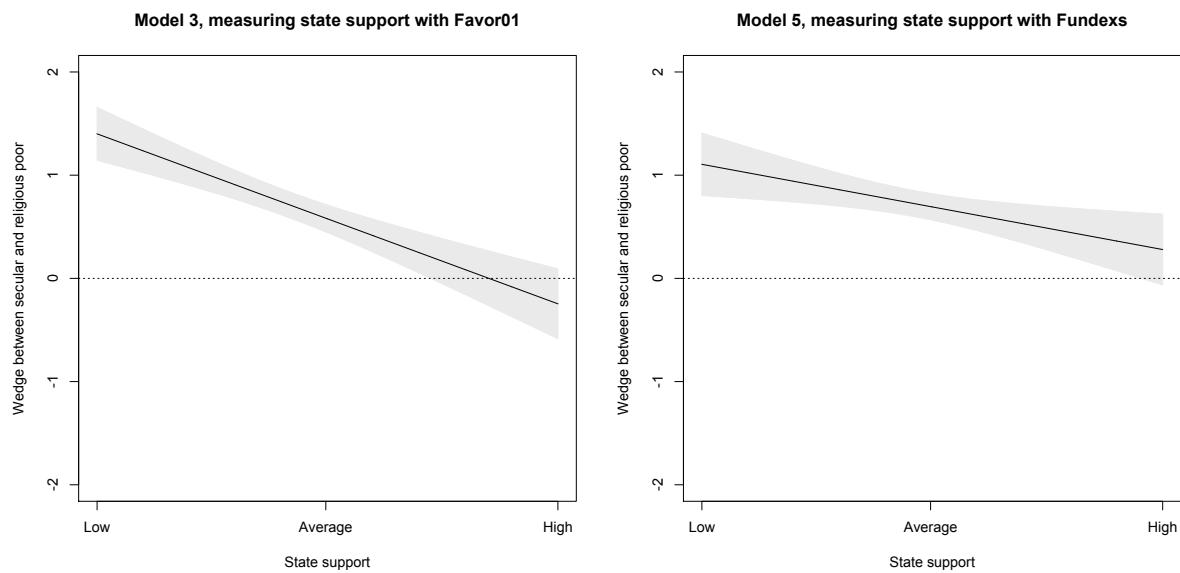


Table 1: Religiosity and Economic Conservatism

	<i>Panel A: Economic conservatism measures when "Importance of God" is measure of religiosity</i>						
	<i>Competition</i>	<i>Individual Responsibility</i>	<i>Pay without work</i>	<i>Merit</i>	<i>Inequality</i>	<i>Economic conservatism scale</i>	<i>All</i>
Liberal religious coefficients	2 (5.4)	11 (29.7)	0	2 (7.7)	8 (30.8)	7 (28.0)	30 (16.5)
Non-significant religious coefficients	28 (75.7)	22 (59.5)	14 (45.2)	19 (73.1)	16 (61.5)	12 (48.0)	111 (61.0)
Conservative religious coefficients	7 (18.9)	4 (10.8)	17 (54.8)	5 (19.2)	2 (7.7)	6 (24.0)	41 (22.5)
	<i>Panel B: Economic conservatism measures when "Religious scale" is measure of religiosity</i>						
	<i>Competition</i>	<i>Individual Responsibility</i>	<i>Pay without work</i>	<i>Merit</i>	<i>Inequality</i>	<i>Economic conservatism scale</i>	<i>All</i>
Liberal religious coefficients	6 (16.2)	5 (13.5)	0	2 (7.7)	6 (23.1)	5 (20.0)	24 (13.1)
Non-significant religious coefficients	26 (70.3)	27 (73.0)	22 (71.0)	22 (84.6)	18 (69.2)	15 (60.0)	130 (71.4)
Conservative religious coefficients	5 (13.5)	5 (13.5)	9 (29.0)	2 (7.7)	2 (7.7)	5 (20.0)	28 (15.4)

The number in each cell is the number of countries that had a statistically significant coefficient at the .10 level. The number in parentheses is the percentage of countries in the column. See text for details.

Table 2: Two-level regression estimates.

Outcome: Vote choice	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	9.94 (0.04)	9.94 (0.04)	9.9 (0.04)	9.94 (0.04)	9.9 (0.04)
Education (Mid)	-0.11 (0.01)				
Education (High)	-1.04 (0.01)				
Poor	-0.31 (0.01)	-0.3 (0.01)	-0.36 (0.02)	-0.33 (0.01)	-0.37 (0.02)
Religious_Rich	0.59 (0.01)				
Age	0.2 (0)				
Female	-0.06 (0.01)				
Unemployed	-0.49 (0.01)	-0.49 (0.01)	-0.48 (0.01)	-0.49 (0.01)	-0.48 (0.01)
Fulltime	0.25 (0.01)				
<i>Second Level: Religious Poor</i>					
Religious_poor (γ_0)	0.49 (0.07)	0.49 (0.11)	0.58 (0.07)	0.59 (0.07)	0.7 (0.07)
State_support (γ_1)	-1.12 (0.18)	-1.01 (0.22)	-1 (0.17)	-0.59 (0.21)	-0.5 (0.18)
Polarization_social (γ_2)	0.3 (0.1)		0.35 (0.1)	0.03 (0.09)	0.12 (0.09)
Forced_choice(γ_2)		-0.21 (0.17)			
N	31726	31726	35176	31726	35176
J	19	19	22	19	22