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Church-state separation and redistribution

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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. The losers are the secular poor. However, the material reward to the religious poor from supporting such electoral coalitions depends on the institutional context. As state financial support for religion increases, the ideological preferences of the religious poor become aligned with those of the secular poor in favor of parties that support high taxes. The analysis therefore shows that the redistributive preferences of religious individuals should vary with the institutional context, and that we can understand these preferences without assuming that religious individuals have specific core traits that differ from those of secular individuals.

1. Introduction

Recent studies emphasize that religion has an important influence on the politics of redistribution in democracies. A common premise in such studies is that religious individuals have specific traits that diminish their preferences for redistribution; thus the more religious individuals that exist in a society, the lower should be the level of redistribution. The preferences against redistribution may be due to the fact that religious individuals place greater emphasis on hard work and individualism (e.g., Benabou and Tirole, 2006), or because they feel insured by their faith against adverse life events, with this psychological insurance substituting for state insurance and thus leading to conservative economic values (e.g., Scheve and Stasavage, 2006; Dehejia et al., 2007).

This paper develops a theoretical argument about religion and redistribution that does not assume that religious individuals have specific psychological traits or dispositions that diminish their taste for redistribution. Instead, individuals differ in their taste for religion, which allows organized religion to shape redistribution through the networks it creates for standard *group-based* distributive politics. In many communities, religiously based social programs provide crucial resources for religious individuals, especially those individuals who have relatively low income. Such programs include soup kitchens and emergency shelters that benefit the genuinely downtrodden, but they also include many programs that benefit a wide range of lower income individuals, such as various forms of counseling, medical care, substance abuse treatment, employment training, and housing assistance. Perhaps most importantly, private religious schools and day care centers are of crucial importance to members of religious organizations. In some societies, these social programs are heavily subsidized by the state while in others they are not. We explore how such religiously based social programs affect the political economy of redistribution, and how the effects of such programs on the political preferences of the religious poor are mediated by state financial support for religion.

The key assumption in our argument is that some lower-income individuals (whom we call "religious poor") receive social benefits from religious organizations and other lower-income individuals (whom we call "secular poor") do not. This narrow definition of "religious" – which makes no assumptions about the core values or traits of the religious individuals (other than that they will go to a religious organization to receive an economic benefit) – assumes that religious organizations will be biased in their provision of social services towards low-income individuals who are part of their religious community. 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; McRoberts, 2003). 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; Berman, 2000).

There are a number of reasons that some individuals will not consume social benefits provided by religious organizations like

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churches. One is information. Individuals who participate in a church or congregation are most likely to be aware of the church-operated social programs. Another is ideological. 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., DiIulio, 2004; Sider and Unruh, 2004; Smith et al., 2006). Individuals who do not share these values may steer clear of church-provided programs to avoid being subjected to religious proselytizing. This may be particularly true in education, where non-religious parents (or parents of a different faith) may not send their children to the local religious school, even if it is 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.

This assumption of unequal access by the poor to social services provided by religious entities leads to an argument about religion and redistribution that is based on the material self-interest of the religious poor. The religious poor prefer financial support provided by religious organizations to financial support provided directly by the state because support channeled through religious organizations is not shared with the secular poor. If the social programs operated by religious organizations are largely funded by charitable giving by the rich, the religious poor will 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 also 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 the model, then, the "poor" are not a homogenous group that is 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 state are instrumental to making the religious poor better off economically.

The degree to which the political preferences of the religious and secular poor diverge depends, however, on church-state separation, which in our model corresponds to the level of government financial support for church-based social programs. There is substantial variation in state financial support for religion among the world's democracies. In Europe, there is a strong tradition of operating state-funded social services through church organizations and local parishes, and in a number of countries, the funding for such activities is quite large (Dubeck and Overgaard, 2003). 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 began to erode slightly when President George W. Bush's created the White House Office of Faith-Based and Community Initiatives, which channels government tax revenues to religious organizations to operate social programs, primarily for low-income individuals.

State support for the religious organization affects the tax preferences of the religious poor in our model. 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 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 higher taxes. The ideological preferences of the religious poor, then, vary with the institutional context, and in particular with the level of church-state separation.

The paper is organized as follows. Section 2 presents the formal model. Section 3 reports an empirical test of the model's implication that as state support for religion increases, voting behavior of the religious and secular poor should converge towards parties on the left. Section 4 discusses the implications of the model and explores whether the scale of church-based social programs could be sufficient to affect voting calculations of religious voters. Section 5 concludes.

2. The model

The model examines the interactions of two political parties and individuals from three groups: the rich, the religious poor, and the secular poor. The rich pay taxes and may make contributions to the religious poor through a religious organization. The poor have no income other than that which occurs through transfers. All poor agents can receive transfers from the government, and the religious poor can also receive transfers from the religious organization. Within each group, individual agents have identical preferences and adopt identical strategies.

Interactions occur in three stages. In the first stage, two parties announce the tax rate (t_k for party k) they will enact if elected to office. These announcements are credible, so if a party is elected, it enacts the tax rate it promised. In the second stage, individuals vote, determining the winning party, and thus the tax rate. In the third stage, the rich may make contributions to the religious organization, with the proceeds going to the religious poor.

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). To capture the idea that there are decreasing returns in government revenues with higher taxes (because, for example, individuals may work less or may work harder to evade taxes), and to ensure concavity in the agents' utility functions, we assume that if t_k is the tax rate promised by the winning party, government revenues are $\beta(t_k - \theta t_k^2)$, where $\theta > \frac{1}{2}$.

A parameter of central interest is financial separation of church and state. Let $\alpha \in [0,1]$ be 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. Financial separation of church and state increases as α increases.

2.1. The voters' utility functions

The rich may receive "warm glow" utility from the contributions they make to the religious poor through the religious organization. To capture this, we assume the rich can use after-tax income to purchase "material goods," x, or to make charitable contributions, g, to the religious poor through the religious organization. The rich's utility is therefore given by

$$EU_R(x,g) = ln\left[(1+x)^{\phi}(1+g)^{\omega}\right].$$

We assume that the prices of g and x are both one, so after the election determines a tax rate, the rich maximize $ln((1+x)^{\phi}(1+g)^{\omega})$ subject to the constraint that $x+g=1-t$. The parameter $\omega>0$ describes the rich's level of religious-based altruism (with $\phi>0$ describing the value of material goods that the rich consume). One can interpret ω as the overall level of religious altruism among the rich.

We define the "religious poor" as 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 received by each poor individual if party k wins is $\frac{\beta}{1-\beta}\alpha\left(t_k-\theta t_k^2\right)$. This is the only income of secular poor agents, whose expected utility from any tax rate t is

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

which is strictly concave in t.

The religious poor receive three different types of transfers: (1) from the government, (2) tax revenues distributed to the religious organization ($\frac{\beta}{(1-\beta)\delta}(1-\alpha)\left(t-\theta t^2\right)$) and (3) charitable donations by the rich ($\frac{\beta}{(1-\beta)\delta}g\gamma$, where $\gamma\in(0,1)$ represents inefficiencies in the use of charitable contributions by the religious organization). The second two terms in the utility function therefore represent the myriad ways that religious organizations provide social benefits to the religious poor. Thus, given tax rate t and equilibrium charitable giving g^*, the expected utility of the religious poor is

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

2.2. Equilibrium

The ideal tax rate of the rich, t_R^*, is 0, so if the rich constitute a majority, the equilibrium tax rate will be 0. The ideal tax rate implied by Eq. (1) for the secular poor is $t_{SP}^*=\frac{1}{2\theta}$, which will will be the equilibrium tax rate if the secular poor constitute a majority. We focus on the strategically interesting case where neither the secular poor nor the rich have a majority.

Consider the equilibrium charitable contributions by the rich. Solving max $ln((1+x)^{\phi}(1+g)^{\omega})$ subject to the constraint that $x+g=1-t$ yields

$$g^* = \frac{\omega(2-t)-\phi}{\omega+\phi}. \tag{3}$$

Thus, equilibrium levels of charitable giving are linearly decreasing in taxes, a fact which the religious poor must take into consideration when establishing their optimal tax rate. Note that since g^* is linear in t and the first two terms of Eq. (2) are strictly concave in t, $EU_{\mathrm{RP}}(t|g(t))$ is strictly concave in t. Solving the religious poor's optimization problem using Eqs. (2) and (3) yields

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

If no charitable contributions reach the poor, the preferred platform of the religious poor is $\frac{1}{2\theta}$, the same as the preferred platform of the secular poor. This occurs if the rich have zero altruism ($\omega=0$) or if all charitable contributions are wasted ($\gamma=0$). Whenever the religious poor receive charitable contributions, the optimal tax rate of the religious poor is lower than the optimal tax rate of the secular poor.[2] The religious poor prefer lower taxes because the amount the rich contribute to the religious organization is a share of their after-tax income. 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 taxes are low.

Since $t_R^*\le t_{RP}^*\le t_{SP}^*$ and the preferences of the religious poor are concave in t, the median voter is a religious poor agent. Consequently, the equilibrium party platform of both parties will be t_{RP}^*, and we can gain insights from the model about the effect of church-state separation on voting behavior by the religious poor by examining the comparative statics on t_{RP}^*.

There are two substantive implications we wish to highlight. First, as separation of church and state increases, the relative value of taxes to the religious poor decreases, giving them greater incentives to moderate their tax demands so that more charitable giving can occur (note that $\frac{\partial t^*}{\partial\alpha} = \frac{(\delta-1)\gamma\omega}{2(1+\alpha(\delta-1))^2\theta(\omega+\phi)} < 0$). Thus, the model suggests that the ideological profiles of religious voters should not be the same across political systems. Instead, the tax preferences of the religious poor should converge towards those of the secular poor as state support for religion increases. Second, since the religious poor are pivotal, as state support for religion increases, the equilibrium tax rate increases, which in turn drives down charitable giving. Thus, the model suggest that we should observe higher taxes and less charitable giving in countries that have the highest levels of state support for religion.

3. Church-state separation and voting behavior

A central implication of the model is that voting behavior by lower-income religious individuals should be more left-wing – and thus more like the secular poor – in countries that have higher levels of state support for religion. This section tests this implication.

3.1. The data

We use the Comparative Study of Electoral Systems ("CSES"), a collection of cross-national post-election surveys conducted from 1996 to 2006 in a wide range of countries.[3] The surveys contain information on vote choices, household income (measured in quintiles), religiosity, and other demographic factors. The surveys identify the party that each voter supports, and Benoit and Laver (2006) provide data on the ideological positions of the parties on the dimension that is most relevant to our argument. Specifically, country experts place parties on a scale ranging from 1 (party "Promotes raising taxes to increase public services") to 20 (party "Promotes cutting public services to cut taxes"). Combining these two sources allows us to measure the economic ideology of the party that each voter supports.

The sample includes all countries in CSES which have the relevant variables (including the Benoit and Laver scores) and which are sufficiently democratic, with a Polity score of at least 8 in the year of the survey. 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"). In Canada, Finland, and Spain, the church attendance question was not asked but respondents were asked to place themselves on a scale that ranges from 1 ("Have no religious beliefs") to 4 ("very religious"). For these three countries, we code as "religious" respondents who self-describe as "very religious" on the 4-point scale.[4] To measure state support, we use data from Grim and Finke (2006), who code reports from the International Religious Freedom Report compiled by the US State Department. 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

[2] For sufficient conditions for an interior solution, note that g^* is decreasing in t. Thus, the maximum possible g occurs when $t=0$, and if $t=0$, $g^*<1-t$ if $\omega<2\phi$. The minimum g occurs when $t^*=\frac{1}{2\theta}$, which implies that $g^*>0$ if $\omega>\frac{2\theta\phi}{4\theta-1}$. A sufficient condition for $g^*\in(0,1-t)$ is therefore $\omega\in\left(\frac{2\theta\phi}{4\theta-1},2\phi\right)$. Finally, t^* is obviously less than 1, and $t^*>0$ if $\frac{1}{2\theta}>\frac{\gamma\omega}{2(1+\alpha(\delta-1))\theta(\omega+\phi)}$.

[3] When more than one election survey exists for a country, we have pooled these surveys.

[4] Below we show that the results are robust when we exclude the three countries that have no church attendance question.

favorable sanctions."[5] Details regarding the countries in the sample and summary information for the micro and macro variables are found in Tables A1 and A2.

3.2. Estimation

Our goal is to understand whether the voting patterns by the religious and secular poor are associated with state support of religion, as predicted by the model. The 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.

We estimate hierarchical linear models in which the first-level dependent 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 individual-level data we analyze is clustered in countries, and ignoring this clustering would lead to incorrect estimates of the standard errors and overconfident inferences. Importantly for our purposes, the bias of the standard error estimates is increasing in cluster size, which here is the number of respondents per country (Moulton, 1986, 1990; Arceneaux and Nickerson, 2009). A solution sometimes adopted in the analysis of cross-national survey data (e.g., Leeson, 2008) estimates linear regression models without accounting for the nested nature of the data, and then corrects the standard errors to account for clustering using a sandwich estimator (Liang and Zeger, 1986; Arellano, 1987). The sandwich estimator for clustered standard errors is consistent, but the asymptotics are in the number of clusters, which in our case is small.[6]

The hierarchical model estimated here takes into account the country-level clustering by directly modeling it. We divide respondents into four groups – the secular poor, the secular rich, the religious poor, and the religious rich – and estimate the relationship between group membership and the ideology of the party supported by the respondent (the dependent variable). Of central interest is how these estimates vary with the macro political context, and in particular with the level of state support for religion. The model therefore examines interactions between individual and country-specific variables, and also includes random errors at the country level that account for the fact that the errors for respondents from a given country are correlated.[7] The errors for individual observations, ω_i, are not independent across observations within the same country, but in the hierarchical model they are decomposed as $\omega_i = \epsilon_i + \eta_{j(i)}$ where ε_i is an individual-specific random shock and $\eta_{j(i)}$ is a country-level shock.

Formally, let i index survey respondents, j index countries, and $j(i)$ represent a mapping from respondent i to the country j in which the respondent lives. We estimate:

$$\begin{aligned}\text{Vote}_i = {} & \beta_{0j(i)} + \beta_{1j(i)}\text{Rich}_i + \beta_{2j(i)}\text{Religious\_poor}_i \\ & + \beta_{3j(i)}\text{Religious\_rich}_i + \xi' X_i + \epsilon_i, \end{aligned} \quad (5)$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01}\text{State\_support}_j + \delta_0' Z_j + \eta_{0j} \quad (6)$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}\text{State\_support}_j + \delta_1' Z_j + \eta_{1j} \quad (7)$$

$$\beta_{2j} = \gamma_{20} + \gamma_{21}\text{State\_support}_j + \delta_2' Z_j + \eta_{2j} \quad (8)$$

$$\beta_{3j} = \gamma_{30} + \gamma_{31}\text{State\_support}_j + \delta_3' Z_j + \eta_{3j}, \quad (9)$$

where

- Vote_i is the ideological score of the party voted for by the respondent (on the size of government scale);
- X_i is a vector of controls for individual characteristics: gender, age, education (two indicator variables, one for secondary education and one for at least some university-level, with the residual category being those with less than a high school education), and employment status (two indicators, one for full time worker and one for unemployed, with the residual category being respondents not in the labor force or employed part-time);
- β_{0j} gives the expected ideological location of voters in the omitted category, the secular poor, in country j (when all the individual-level variables are equal to 0);
- β_{1j} estimates the difference between the ideology of the secular rich and the secular poor in county j;
- β_{2j} estimates the difference between the ideology of the religious poor and the secular poor in county j;
- β_{3j} estimates the difference between the ideology of the religious rich and the secular rich in county j;
- Z_j is a vector of country-level explanatory variables (the level of state support, and controls for potential macro-level confounders, discussed below).

The hierarchical model and estimated variance components define a data-level covariance matrix with positive correlations for any two observations from the same country. This covariance matrix is used to calculate the standard errors using standard formulas for least squares with heteroscedastic and correlated errors. As we mention above, especially when the number of macro units is relatively small, the sandwich estimator underestimates the standard errors, which would therefore be smaller than the standard errors estimated with the hierarchical model.

We also allow the country-level errors η to be correlated across equations: specifically, we model them as draws from a multivariate normal distribution with mean vector zero and covariance matrix Σ_η estimated from the data. This is analogous to a seemingly unrelated regression model, and leads to efficiency gains if the country-level shocks are correlated across second-level equations.[8]

Since β_{0j} gives the expected ideological location of the secular poor in country j, our primary interest lies in the estimates of β_{2j}, the coefficient on the indicator variable for the religious poor. This captures what we refer to as the *wedge* between the religious poor and the secular poor in country j. The theoretical prediction we wish to test is that the wedge β_{2j} is positive if state support is relatively low (i.e., the religious poor are more right-wing than the secular poor), and that the size of this wedge between the religious and secular poor declines as state support for religion increases (i.e., the religious poor are more left-wing and thus more like the secular poor when state support is high).

The continuous macro-level predictors are centered at 0, hence γ_{00} is the estimate of the average ideological position of a secular poor individual in a country with average state support for religion, and γ_{01} is the estimate of how this ideological position varies with state support. Our substantive interest lies in Eq. (8), which measures how voting differences between the religious and secular poor (β_{2j}) vary with state support. The coefficient γ_{20} captures the wedge in a country with the average degree of state support. Our theoretical expectation is supported if γ_{20} 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_{21} is negative (i.e., the wedge between religious and secular poor voters declines as state support increases).

[5] Grim and Finke (2006) do not rate the U.S. on this variable. We obtain very similar results (available upon request) if we include the U.S. by coding it as scoring a two on this variable (the same value as Canada).

[6] See Angrist and Pischke, (2009, section 8.2); see also Franzese, 2005 for a comparison of the properties of clustered standard errors vis-a-vis hierarchical models in the case of multi-level data.

[7] See Gelman and Hill (2007) and Hsiao (2003, chapter 6) for a textbook treatment.

[8] We also tested the robustness of the result to the assumption that the country-level errors are independent across equations. None of the conclusions is affected by these variants of the models.

The models are estimated via restricted maximum likelihood as implemented in the function lmer (Bates, 2008) in the R environment (R Development Core Team, 2009). The continuous macro-level variables are standardized by dividing by two standard deviations so that the coefficients (including those on dummy variables) are all approximately on the same scale (Gelman, 2008).

3.3. Results

Column 1 from Table 1 reports the coefficients and standard errors for our most parsimonious model. The results for the individual-level control variables show that the most leftist demographics comprise individuals who are less educated, young, unemployed, and female. The estimates also show that the baseline group, the secular poor, support a party with an average ideological position of 10.2 (our estimate of γ_{00}) in a country with average state support for religion. In the average country, the rich support parties that are more right wing than those supported by the secular poor (the estimate for Rich, γ_{10}, is 0.44), and the religious rich support parties that are more conservative than those supported by the secular rich (by 0.67, the estimate of γ_{30}).

Turning to the second-level results, the estimate of the interaction between State Support and the baseline group shows that the secular poor are slightly more left-wing in countries with higher state support ($\gamma_{01} = -0.32$), but this estimate of γ_{01} has a very large standard error. The estimates of γ_{11} (for the secular rich) and γ_{31} (for the religious rich) are also estimated with considerable error, suggesting that voting patterns for individuals in these groups do not vary in systematic ways with the level of state support.

Our main substantive interest lies in the second-level results for the religious poor. Consistent with the theoretical model, in a country with an average level of state support, the religious poor support parties that are more right-wing than those supported by the secular poor (i.e., the estimate of γ_{20} is 0.94 and is quite precise). The results also show that the difference between voting by the religious poor and the secular poor declines as state support increases (i.e., the estimate of γ_{21} is −0.91 and is also quite precise). We therefore find the relationship predicted by the theoretical model between state support and voting patterns by the religious and secular poor.

Is this empirical finding regarding state support possibly spurious due to a correlation between state support and other elements of the macro environment? We consider two other possible second-level controls that could be related both to the level of state support and to the political preferences of religious voters. First, a prominent argument in the literature is that religious individuals support right-wing parties because they prefer the positions of such parties on social issues such as abortion or gay rights (see Roemer, 1998 for a formalization). Such voting considerations might drive a wedge between the vote choices of secular and religious voters, and at the same time might be associated with the degree of church-state separation in a given country. To control empirically for this possibility, we again draw on the Benoit and Laver data, which places 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). *Social Polarization* is the difference in the score of the most conservative and the most liberal party on this dimension. As polarization increases, the stakes on social issues should be higher and hence should have the greatest potential to drive a wedge between religious and secular voters.

Second, since Weber's classic argument (see Benabou and Tirole, 2006 for a recent formalization), many have held that Protestantism implies a set of ethics emphasizing self-reliance and effort. Protestant voters, regardless of their income, might therefore be less supportive of redistribution than members of other confessions or religions, leading to more voting polarization between the secular and religious poor in protestant countries. If Protestantism is also associated with more church-state separation, or Catholicism with less church-state separation, the results in model 1 may be spurious. The variables *Protestantism* and *Catholicism* are respectively the proportion of Protestants and of Catholics in the country in 1970 (as reported in the replication data for Barro and McCleary (2003, 2005)).

Table 1
Estimates of the hierarchical linear models.

DV: tax ideology of party supported	1	2	3
Educ (Mid)	0.12	0.07	0.06
	(0.05)	(0.05)	(0.05)
Educ (High)	0.01	−0.05	−0.08
	(0.06)	(0.06)	(0.06)
Age	0.02	0.02	0.02
	(0.01)	(0.01)	(0.01)
Female	−0.16	−0.16	−0.16
	(0.03)	(0.04)	(0.04)
Unemployed	−0.56	−0.46	−0.43
	(0.1)	(0.1)	(0.11)
Fulltime	0.05	0.01	0.03
	(0.04)	(0.05)	(0.05)
Second level: secular poor			
Intercept (γ_{00})	10.19	10.21	10.3
	(0.26)	(0.3)	(0.35)
State support (γ_{01})	−0.32	−0.4	−0.41
	(0.49)	(0.55)	(0.63)
Social polarization		0.14	0.23
		(0.61)	(0.7)
Catholics		−0.46	−0.52
		(0.69)	(0.75)
Protestants		−0.36	−0.24
		(0.67)	(0.75)
Second level: religious poor			
Religious poor (γ_{20})	0.94	0.99	1
	(0.19)	(0.19)	(0.19)
State support (γ_{21})	−0.91	−0.83	−0.89
	(0.38)	(0.36)	(0.36)
Social polarization		0.14	0.31
		(0.41)	(0.4)
Catholics		0.97	0.66
		(0.45)	(0.43)
Protestants		0.56	0.65
		(0.47)	(0.47)
Second level: Secular rich			
Rich(γ_{10})	0.44	0.43	0.45
	(0.13)	(0.14)	(0.17)
State support (γ_{11})	0.22	0.28	0.31
	(0.26)	(0.27)	(0.31)
Social polarization		0.13	0.14
		(0.3)	(0.34)
Catholics		−0.2	−0.18
		(0.34)	(0.38)
Protestants		0.08	0.12
		(0.33)	(0.37)
Second level: religious rich			
Religious rich (γ_{30})	0.67	0.66	0.64
	(0.19)	(0.19)	(0.19)
State support(γ_{31})	−0.45	−0.28	−0.44
	(0.38)	(0.36)	(0.36)
Social polarization		−0.23	−0.05
		(0.4)	(0.4)
Catholics		1.34	0.97
		(0.44)	(0.42)
Protestants		0.39	0.43
		(0.45)	(0.45)
N	40,078	35,720	32,977
Countries	26	25	22

Note: The data are from country-specific surveys from the Comparative Study of Elections Systems taken from 1996 to 2006. The dependent variable is the ideology (on the Benoit and Laver (2006) 1–20 tax policy scale, with 20 the most conservative position) of the party supported by the respondent. The hierarchical models are estimated via restricted maximum likelihood. Standard errors, which take into account country-level clustering (see text for details), are in parentheses.

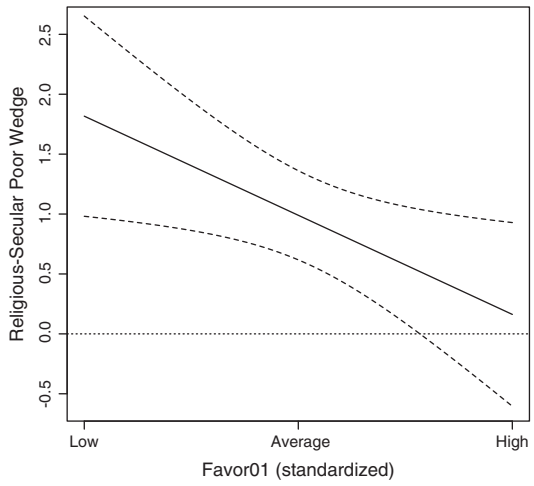

Fig. 1. Estimated wedge between secular and religious lower income voters using estimates from Model 2.

Model 2 presents the results when Social Polarization, Protestantism, and Catholicism are added to model 1 as second-level regressors.[9] Focusing on the second-stage results of central interest, we find that the estimate of γ_{20} remains positive and significant, while the estimate of $\gamma_{21}$is negative and significant. The results for State Support are therefore robust to the inclusion of these other macro variables. We also find that, all else equal, Catholicism is significantly associated with more conservatism among poor religious voters and among rich religious voters. None of the other second-level coefficients are statistically significant at conventional levels.

Model 3 further probes the robustness of the result by eliminating countries from the sample. In three countries, we classify voters as religious based on a measure of "religiosity" rather than church attendance. Model 3 re-estimates model 2 without these three countries. Table 1 shows that the results for the religious poor (γ_{20} and γ_{21}) are extremely similar across models 1–3 (as are the results for the other variables).

To illustrate the substantive implications of the estimates, Fig. 1 depicts the expected size of the wedge as a function of state support of religion, based on the estimates of model 2. The 95-percent confidence intervals are computed via the delta method for a thousand points in the range of the explanatory variable. When state support is at its lowest level, a religious poor voter is expected to support a party that is more than one and a half points to the right of the party supported by a secular poor voter with the same individual characteristics. As state support increases, the wedge shrinks, and in the high range of state support, the religious poor are expected to support parties that are essentially indistinguishable from those supported by the secular poor.

3.4. Instrumenting for state support

It is possible that the institutions that regulate church-state entanglement might themselves be a consequence of the political preferences of voters. When low-income religious voters are more predisposed towards pro-redistribution parties, for example, they may be rewarded with institutional arrangements that distribute resources to them via religious organizations. While this is plausible, it is important to recognize that the institutions regulating church-state separation are typically the result of long-term historical patterns, are often not fully under the control of contemporary policymakers, and tend to be quite sticky. In many cases the ability of the state to fund social services delivered by religious organizations might be constrained by constitutional provisions that are hard to change by design (see van Bijsterveld, 2000).

It is nonetheless worthwhile to check the robustness of the results using an instrumental variables approach. To instrument for state support for religious organizations, we exploit data collected by Barro and McCleary (2003, 2005). Specifically, Favor01 is correlated with the proportion of Catholics and Protestants in the population at the beginning of the 20th century, and with the existence of a state religion in 1900.

The historical variables obviously cannot be affected by contemporary patterns of support for redistribution, so reverse causation is not possible. We must worry, though, about pathways other than current church-state separation by which historical legacies affect the political preferences of lower income religious voters. The most obvious possible pathways are contemporary measures of the historical variables we use as instruments — Protestantism, Catholicism, and state religion could each plausibly affect voter preferences. For this reason, we include the recent counterparts of the instruments as controls. For instance, we use the existence of a state religion in 1900 as an instrument and control for the existence of a state religion in 1970. Similarly, we use the proportion of Catholics and Protestants in 1900 as an instrument and control for proportions of Catholics and Protestants in 1970 in the second stage. These controls, along with the inclusion of the social polarization variable, provide some assurance that the most likely pathway by which the instruments from 1900 are related to voting preferences is through their effect on the institutions that regulate church-state separation.

In order to estimate the instrumental variable models with nested data, we follow a two-step approach to the estimation of varying-coefficients models (Amemiya, 1978). We first estimate Eq. (5) by regressing, country-by-country, the measure of ideology on individual level controls and the dummies for membership in social groups defined by income and religiosity. The coefficient on the Religious Poor dummy, β_{2j}, estimates the ideological wedge between religious and secular lower income voters in a given country. We then use this estimate of β_{2j} as the dependent variable in the second step, where we estimate Eq. (8) via TSLS, instrumenting for state support. If the number of first-level units is large (as in our case) a two-step estimation strategy approximates closely the single-step hierarchical model (Hanushek, 1974; Jusko and Shively, 2005). Yet, the degree of precision with which we estimate the size of the wedge varies across countries. Hence the errors in our dependent variable are heteroskedastic by construction, and not adjusting for this phenomenon leads to incorrect estimates of the standard errors. We show that the results are robust to three different estimation approaches. In particular, we estimate the TSLS model (a) without weighting and correcting the standard errors to account for heteroskedasticity,[10] (b) weighting observations by the inverse of the standard error of the estimate of the β_2 coefficient for the religious poor (Saxonhouse, 1976; King, 1997), and (c) weighting observations according to the procedure suggested by Hanushek (1974) and Lewis and Linzer (2005).

We do not report the first-level coefficients for each of the 26 countries. The second-stage estimates for the instrumental variables approach are reported in models 4–6 of Table 2. Looking across the three models, regardless of the specific estimation method, the coefficient on the measure of state support is negative and precisely estimated, implying that the wedge is small in countries in which the state supports religious organizations and large in countries where it does not.

[9] In all the models that include Social Polarization, New Zealand drops out of the sample because Benoit and Laver (2006) do not report scores on the relevant dimension for this country.

[10] Following Angrist and Pischke's (2009) suggestion, given the small size of our second-level sample we choose the maximum between the conventional and the White (1980) heteroskedasticity-robust standard errors.

Table 2
Second-step estimates from two-step 2SLS models with instruments for state support.

DV: β_{2j}	Unweighted estimates per Angrist and Pischke (2009)	Weighted estimates per Saxonhouse (1976)	Weighted estimates per Hanushek (1974)
	(4)	(5)	(6)
State support (γ_{21})	−1.92	−1.49	−1.58
	(0.63)	(0.42)	(0.66)
Social polarization	0.38	0.71	0.54
	(0.47)	(0.35)	(0.52)
Catholics 1970	0.65	0.36	0.47
	(0.58)	(0.38)	(0.62)
Protestants 1970	0.29	0.11	0.13
	(0.57)	(0.41)	(0.63)
State religion 1970	0.54	0.33	0.36
	(0.53)	(0.34)	(0.54)
Intercept (γ_{20})	0.57	0.58	0.61
	(0.29)	(0.17)	(0.28)
Countries	25	25	25
Adjusted R^2	0.14	0.28	0.11

Note: The dependent variable is β_{2j}, the coefficient on the religious poor indicator variable in (unreported) first-step regressions estimated separately in each country using the same data and individual level controls as the models in Table 1. The endogenous regressor is State Support and the instruments are Catholics (1900), Protestants (1900) and State religion (1900).

4. Discussion

Our focus on how religious networks affect voting and redistribution provides a novel explanation for why the welfare state and charitable giving levels are so different in the US and Europe. The model suggests that societies with strong state support for religion should have greater support for left-wing parties and less charitable giving. In Europe, there is very little charitable giving (e.g. Alesina et al., 2004; Brooks, 2006) but there is a long history of state financial support for social service provision by churches (see essays in Dubeck and Overgaard, 2003, as well as Berman et al., 2007; Fox, 2006). In Belgium, to take one example, 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 Catholic-based institutions to make 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 a second 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 counseling, 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). Europe, of course, has large welfare states, often buttressed by strong Christian Democratic parties that are relatively leftist on redistributive policy and whose support for the welfare state typically has been accompanied by an insistence on the continued role of churches in social service provision. In the US, by contrast, even after the introduction of the Office of Faith Based Initiatives, there is very little state financial support for religious organizations. And the US has a relatively small welfare state and relatively high levels of charitable giving. These patterns in Europe and the US are what the model presented above would predict given the differences in state support for religion in these countries.

Although there is relatively little state financial support, the US does have a strong history of church involvement in the charitable provision of social programs (see Hodgkinson et al. (1988), Dudley and Roozen (2001), Cnaan et al. (2002) and Wuthnow (2004)). But could this support be at a large enough scale to affect the incentives of voters? Recent research suggests an affirmative answer. Dehejia et al. (2007) consider the effect of an income shock on household consumption, and they 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: if an individual receives a negative income shock, decline in consumption will be 40% less if the individual participates in religion than if he or she does not.

With data on social policy expenditures from Presbyterian churches, Hungerman (2005) 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 1 dollar decrease in welfare spending per capita in a community leads to an increase in per member spending on local community projects of up to 38 cents. Is this large enough number to suggest that church-provided social programs could be an adequate substitute for state-provided benefits?

The answer emphasized by our model – which focuses on the exclusion of some individuals from the church based programs – is that it depends on the proportion of individuals who give to charity and the proportion of poor who receive benefits from churches. Hungerman estimates that 50% of the population are church members, so using his estimates, a 1 dollar per capita decrease in state welfare leads to an increase in charity from the church for the religious poor of $\frac{.38*.5}{\delta(1-\beta)}$ and to a decrease in state-based benefits for each poor person of $\frac{1}{1-\beta}$. So a religious poor person prefers lower welfare spending if the proportion of religious poor is less than 19% (i.e., if $\delta<.19$). Given that the analysis focuses on social programs and not on valuable day care or educational benefits, it underestimates the total value of church-based programs to low-income individuals, but even ignoring the value of other programs, it is almost certain that the local churches do not provide benefits to more than 19% of all needy individuals. A plausible case can therefore be made that the effects identified in the model are highly relevant to a small but hardly trivial proportion of the poor. Put differently, if the Republicans can count on support for low taxes from 19% of the bottom 40% of the income distribution, this can have a significant effect on electoral outcomes, and thus on Republican strategies for reaching out to low-income religious voters.

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 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 traits of religious and non-religious individuals. The argument here shares much with Levy (2005; see also Fernandez 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.

5. Conclusion

If religious organizations can create networks of social inclusion or exclusion, then providing social services through religious organizations opens up the possibility of a group-based distributive politics that pits 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, charitable giving, and the scale of government-run redistribution programs. It is possible, then, to understand how religion affects the political economy of redistribution without assuming that religious individuals have a uniform set of core values or psychological traits that directly shape their preferences regarding government-run redistributive programs. It is also possible to understand why the ideological preferences of religious voters are not invariant to the institutional context, but rather respond in predictable ways to the incentives created by the structure of church-state relations.

Two avenues for future research seem particularly important. Our model takes "religiosity" as exogenous, and we define "religiosity" vis-à-vis access to social services provided by religious organizations. As noted in the Introduction, there is considerable evidence that social services provided by churches go overwhelmingly to church members, and there are a number of theoretical arguments about why churches have incentives to limit access to their social services. But it is also possible that churches can use social services to recruit new members. Berman et al. (2007), for example, show that as the provision of Catholic social services for children have declined, so too have attendance rates and fertility rates of church members. This suggests that members' behavior responds to social service provision by the church. Further research is therefore necessary into the interaction between social service provision and religious attendance.

Similarly, the model presented here takes the level of state-support for religion as exogenous. While the preponderance of such support is the result of slowly evolving historical processes, it is also clear that politicians could change these levels of support, as when the US created the Office of Faith-Based Initiatives. And politicians could create policies that create incentives for charitable giving, such as when they offer tax deductions for such giving, or when they create matching grants that provide financial support to religious organizations conditional on the religious organizations also contributing substantial funds of their own. An important topic for future research therefore concerns understanding how and under what circumstances politicians seek to increase or decrease financial support for social programs run by religious organizations.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at doi:10.1016/j.jpubeco.2011.02.001.

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