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Religious favoritism in Europe: A political competition model

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Abstract
This paper explores a highly controversial issue: while most European countries are secular, the governments of these countries widely support religious institutions. The arguments put forward by the median voter seem insufficient to explain the data. We show that if political parties are allowed to take an ideological position with respect to religion, the observed deviations from the most preferred policy by the median voter could be explained.

Keywords
favoritism, political economics, religiosity, voting

> Religion, [Adam] Smith argued, is more vibrant where there is a disassociation between church and state.
>
> McCleary and Barro (2006)

1 Introduction

This paper explores a highly controversial issue: while most European countries are secular, the governments of these countries widely support religious institutions. This financial support gives rise to a certain amount of

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controversy due, in many cases, to a lack of transparency and the fact that funding is not limited to subsidies but other types of economic and legal favors as well. In a recent study, Finke and Grim (2006) conducted an exhaustive analysis of religious favoritism for 196 countries.[1] They use the US State Department's International Religious Freedom reports to code national religious institutions, among them, the *Government Favoritism of Religion Index* (which takes values from 0 to 10, where low is less regulation).[2] According to these data, the number of European countries that do not favor religious institutions is very small. With respect to the latter, Fox and Sandler (2005) and Fox (2006) explore the separation of religion and the state in several countries. They conclude that western democracies except for the US have at least some forms of government entanglement with religion.

This paper examines the political benefits of religious favoritism. Obviously, the first explanation might have to do with citizens' preferences on this issue. Despite the well-known process of secularization occurring across Europe, religious participation continues to be high in a large number of countries. More precisely, according to the 2004 *European Social Survey*, more than fifty percent of citizens belong to some denomination in sixteen out of twenty-six European countries.

Thus, the first question to address is the sign of the correlation (if it exists) between religious participation and the government favoritism index to religion (GFI hereafter). To do so, this paper merges a GFI provided by Finke and Grim (2006) with information regarding the participation (and denominations) of European citizens in religious activities arising from the 2004 *European Social Survey* (ESS for short).[3]

Figure 1 illustrates the positive correlation between the GFI and religious participation across Europe.[4] It is also shown that most European countries are far from becoming fully secularized and, at least in some cases, government favoritism to religion has a simple explanation: *the majority of the population supports religious policy*. That is, in most countries the median voter belongs to the major denomination and therefore supports government favoritism towards the dominant religion. Therefore, we consider that there is only one relevant religion within each country.[5]

However, the arguments put forward by the median voter seem insufficient to explain all of the variability in the sample regarding the GFI. A number of countries (Poland, the Czech Republic or Ireland are the most salient cases) run the opposite way: the larger the percentage of citizens belonging to any denomination, the smaller the GFI and *vice versa*. In addition, there is quite a large group of countries in which religious participation is about 70% to 80% that present a high dispersion of the GFI.

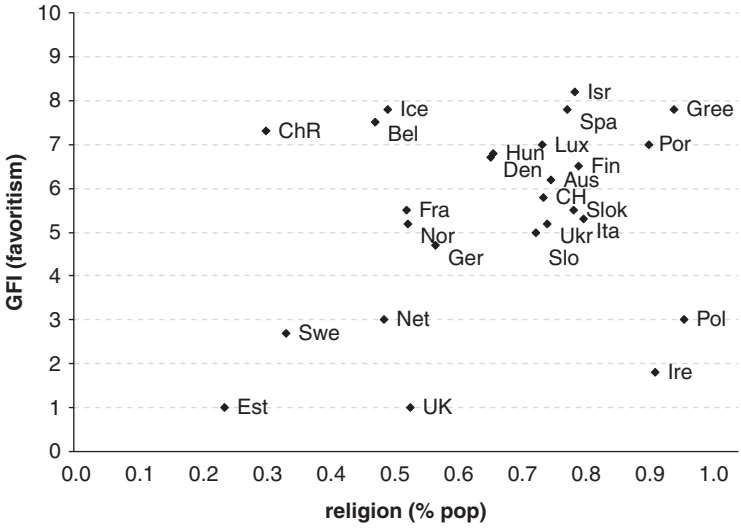


Figure 1. European puzzle

In order to explain all these features, this paper explores favoritism in three steps:

1) We develop a political competition model in which the main assumption is that citizens consider that *secularization might be negative for the country*, in the sense that the country's society is losing part of its cultural background and traditional values. We use a pre-electoral Downsian model of political competition in which voters' preferences on religious favoritism are determined endogenously and they are a key point for the final political outcome. In this context, for the sake of simplicity, we assume that there are only two parties.[6] If secularization is an important issue in elections and parties are opportunistic on this issue, the model explains the positive correlation observed between the GFI and religious participation across Europe. We also find that if we allow political parties to hold an ideological position with respect to religion, the observed deviations from the policy most preferred by median voters could also be explained.
2) Using European data *we empirically explore the role of the variables we model* to explain favoritism. Our model is strongly based on the idea that citizens are secularization averse and that this aversion is

related to their own level of religiosity, where the most religious are also the most secularization averse. Using data arising from the 2004 ESS and the International Social Survey Program for 1998 (ISSP-1998 for short), we check if our assumptions are true for the European countries. We find that religious citizens are always (in all the countries) more secularization averse than those who are non-religious. Additionally, we find that the percentage of anti-religious citizens is marginal.

3) Once we have explored the empirical evidence we go back to the model and its implications. We show that in most European countries, political parties take a partisan rather than an opportunistic position with regard to the religious issue. In this partisan environment, favoritism to religion arises as the expected behavior.

After the introduction, the paper is organized as follows. An economic model is developed in Section 2. This model is then used in Section 3 to study political competition. The empirical support for our assumptions is analyzed in Section 4 using data from the ESS and the ISSP. In Section 5 the model and its implications (extensions) are discussed with regard to the empirical evidence. Finally, conclusions are drawn in Section 6.

2 The Economic Model

Consider a country where the population is composed of individuals that are religious and individuals that are not religious (labelled r and n respectively). From now on we assume that there is only one relevant religion within the country (see footnote 5). Let R and N be the number of individuals that are *religious*, that is, those belonging to the main religion and those who are *non-religious* respectively. All individuals vote so they all are considered voters.

Voters care about their private consumption and about the degree of societal secularization (S). We assume that secularization has a negative effect on voters' expected utility. This effect is induced by voters' perception that secularization undermines societal values which are inherent to their country and therefore citizens care about these issues. We identify *religious environment* with national values such as culture, traditions, folklore, and national history. Note that most of the European countries have clear Christian roots. Voters' expected utility function takes the following functional form:

$$U_i(c_i, S) = c_i - \beta_i S, \tag{1}$$

where c_i is the consumption level of voter $i = r$, n and $\beta_i \in R_+$ is a parameter which measures the impact of societal secularization on the utility of voter $i = r, n$.

All voters receive the same exogenously given salary ω which, after paying taxes, is spent entirely on consumption. Hence, voters' budget constraint can be written as:

$$c_i = (1 - t_i)\omega \qquad i = r, n \tag{2}$$

where t_i is the 'ad valorem' personal income tax imposed on voter i by the government.

We suppose that the current level of societal secularization in the country depends on the resources devoted by the government to subsidize the major religion in the country.

> (S)tate religion also typically involves subsidies, such as payments to church employees, and the collection of taxes dedicated to church uses.
>
> Barro and McCleary (2005)

Let x be the government's subsidy for the major religion in the country. In particular, the larger the religious subsidy, the lower the degree of societal secularization, i.e. $S(x)$ with $S'(x) < 0$. We also assume decreasing rates of return of $S(x)$ with respect to the religious subsidy x. That is, $S''(x) > 0$.

The government uses taxes to fund the religious subsidy. We assume that the government's budget is always balanced, that is,

$$x = \omega(t_r R + t_n N) \tag{3}$$

We suppose that the subsidy cost may not be equally distributed among religious and non-religious voters. *Religious voters* contribute the same or more than *non-religious voters*:

$$t_n = \alpha t_r \qquad \alpha \in [0, 1], \tag{4}$$

where α is the parameter that stands for equality in sharing the cost of the religious subsidy among the two groups of voters. A justification for this assumption is that in many European countries (Spain for instance) taxpayers may decide or not to contribute with a percentage of their income to the religion subsidy. Usually, taxpayers that prefer not to contribute to the religion subsidy have another options like donations for humanitarian purposes. Since we are not interested in other government expenditures we only include in our model the differences in the burden of government subsidies for religion among religious and non-religious voters.

From the government's budget constraint the *government's religious subsidy* (x) is represented by the following personal income tax function imposed on *religious voters*:

$$x = t_r \omega (R + \alpha N) \tag{5}$$

Regarding the optimal religious subsidy for *religious voters*, x^*_r, we find that, given a certain α, it is such that the following FOC has to be satisfied:

$$-S(x^*_r) = \frac{1}{\beta_r (R + \alpha N)} \tag{6}$$

Thus, the optimal income tax for a *religious voter* is:

$$t^*_r = \frac{x^*_r}{\omega (R + \alpha N)} \tag{7}$$

When doing the same for *non-religious voters* we find that, given a certain α, the optimal religious subsidy and the optimal income tax are:

$$-S(x^*_n) = \frac{\alpha}{\beta_n (R + \alpha N)} \tag{8}$$

$$t^*_n = \frac{\alpha x^*_r}{\omega (R + \alpha N)} \tag{9}$$

Regarding voters' optimal religious subsidy we can make two straightforward remarks:

(i) for *religious (non-religious) voters*, the optimal religious subsidy increases (decreases) with the equality in the share of the cost of the religious subsidy, i.e. $x^*_r(\alpha), x^{*\prime}_r(\alpha) > 0, x^*_n(\alpha), x^{*\prime}_n(\alpha) < 0$);

(ii) if the secularization aversion of *religious voters* (β_r) is sufficiently large with respect to the secularization aversion of *non-religious voters* (β_n), the optimal religious subsidy is larger for *religious voters* than for *non-religious voters*. More precisely, the optimal religious subsidy is larger for *religious voters* than for *non-religious voters* if:

$$\beta_r > \frac{\beta_n}{\alpha} \tag{10}$$

Notice that the higher the tax equality between the two groups, the more likely *religious voters* are to prefer higher subsidies than *non-religious voters*. If the subsidy cost is shared equally ($\alpha = 1$), the optimal subsidy for *religious voters* will always be larger than the optimal subsidy for *non-religious voters* since $\beta_r > \beta_n$.

The above ideas have some interesting implications. If we assume that β_r and β_n are such that condition (10) holds and that the number of religious voters is larger than the number of non-religious voters ($R > N$) – as occurs in the majority of European countries – we then have two salient conjectures:

Conjecture 1 *Assume that β_r and β_n are such that condition (10) holds and $R > N$ then, the real implemented subsidy, $\tilde{x}$ would be closer to x_r^* than x_n^*, that is:*

$$|x_r^* - \tilde{x}| < |x_n^* - \tilde{x}|.$$

Conjecture 2 *Assume that β_r and β_n are such that condition (10) holds and $R > N$ then, the cost of the actual subsidy would be shared by both religious and non-religious voters, that is:*

$$1 = \alpha_r^* \geq \tilde{\alpha} > \alpha_n^* = 0.$$

Note that the above conjectures show that for some preferences ($\beta_r >> \beta_n$) and religious distributions in the population, both the subsidy and the share of the subsidy cost would be closer to those of religious subjects and clearly positive. *Recall that both measures reflect religious favoritism*.

Also, note that both ideas explain why there is a positive relationship between favoritism and the fraction of religious population ($\frac{R}{N+R}$) as shown in Figure 1 above. However, they do not explain the countries that are not on the diagonal such as Belgium, the Czech Republic, Ireland, Poland or Iceland.

In the next section regarding preferences on secularization, we use a political competition game to determine the actual degree of government favoritism to religion. Using the degree of favoritism implemented at the political equilibrium, we check whether the previous conjectures are true or not.

3 Political competition

In the model described thus far we have assumed that there exists a government which, in order to control secularization, favors religious activities by means of a religious subsidy (x). This religious subsidy is funded by the revenues obtained from voters' personal income tax (t), which may be more or less equal for religious and non-religious voters (α). Thus, the government's choices are represented by a triplet (x,t,α) that satisfies the government's budget constraint. Notice that if the government's budget constraint has to be satisfied, choosing only two of these three variables determines a

unique value for the third one. Without loss of generality, we assume that the level of religious subsidy and the income tax rate (x,t) are chosen by the government. Hence, the degree of equality in the share of the cost of subsidy α will be given by the government's budget constraint for each pair of values for x and t.

In this section, we analyze the political competition before the government is elected. We consider a two-party model of competition. As we explained above, parties' choices are represented by the level of religious subsidy and the income tax rate (x_j,t_j). Thus, the policy space is $X = R_+ \times [0,1]$.

A voter will vote for the party that pledges to provide a higher level of utility. That is, worker i will vote for party 1 if $U_i(x_1, t_1) > U_i(x_2, t_2)$, but will vote for party 2 if $U_i(x_2, t_2) > U_i(x_1, t_1)$. In case of indifference, a voter is assumed to vote for each party with equal probability.

The game takes place in two stages. In the first stage, parties propose a certain policy in X. In the second stage, each voter votes for the party whose proposal provides a higher utility. We assume that parties are fully committed to their policy proposals. This means that the party that wins the election has to implement the policy chosen in the first stage.

The winner is elected by majority rule. In case of a tie, both parties win with the same probability (equal to 1/2). We assume that parties maximize the probability of winning. Thus, the payoff function of a party can be defined as:

$$V_j(x_j,t_j) = \begin{cases} 1 & \text{if} \quad \#\{v: U_v(x_j,t_j) > U_v(x_k,t_k)\} + \dfrac{B}{2} > \dfrac{R+N}{2} \\ \dfrac{1}{2} & \text{if} \quad \#\{v: U_v(x_j,t_j) > U_v(x_k,t_k)\} + \dfrac{B}{2} = \dfrac{R+N}{2} \\ 0 & \text{if} \quad \#\{v: U_v(x_j,t_j) > U_v(x_k,t_k)\} + \dfrac{B}{2} < \dfrac{R+N}{2} \end{cases}$$

where $\#\{v: U_v(x_j, t_j) > U_v(x_k, t_k)\}$ is the number of voters who prefer to vote for party j ($j \neq k$) and $B = \#\{v: U_v(x_j, t_j) = U_v(x_k, t_k)\}$ is the number of voters that are indifferent to both parties. Thus, if the number of voters that prefer to vote for party j plus half of the voters which are indifferent to both parties is larger than half of the total number of voters, party j will win the election.

We consider two different scenarios: (*i*) First, parties are purely opportunistic. That is, parties decide about both variables simultaneously in order to win the election. In this case, a strategy is defined as (x_j, t_j); (*ii*) Second, parties hold an ideological position on the religious issue. We assume that the

level of religious subsidy is fixed for each party and they can only decide the tax scheme. That is, parties present a tax platform to win the election solely in order to implement their preferred religious policy. Hence, a strategy for a party is $t_j \in [0,1]$.

Since voter behavior is unambiguous in this model, we define a game equilibrium only in terms of the strategies of the two parties at the first stage. Thus, in the opportunistic setting a pure-strategy equilibrium is a pair of values for the level of religious subsidy and for the tax schemes for each party $[(x_1^e, t_1^e), (x_2^e, t_2^e)]$ such that both parties maximize the probability of winning given their opponent's choices. In the ideological setting, given x_1 and x_2, a pure strategy equilibrium is a pair of values for the taxes $[t_1^e(x_1, x_2), t_2^e(x_1, x_2)]$ such that both parties maximize the probability of winning given their opponent's choice.

3.1 Opportunistic parties

Let us suppose that parties are purely opportunistic, that is, they choose both the level of religious subsidy and the tax in order to win the election.

Given this scenario, an important variable for political parties will be the number of *religious* and *non-religious voters* because the preferences of the median voter coincide with the preferences of the majority of society.

If $R > N$, the median voter will be religious. Therefore, in order to maximize the probability of winning, parties will try to obtain the vote of *religious voters*. Given a tax t, the largest utility that a party can offer to a *religious voter* is $U_r(x_r^*(t),t)$, that is, the *religious voters'* utility when the government implements the optimal level of religious subsidy for *religious voters*. Additionally, given a positive level of religious subsidy x, the maximum utility that a party can offer to a *religious voter* is $U_r(x, \frac{x}{\omega(R+N)})$, that is, the religious voters' utility when the government distributes the share of the subsidy cost equally among voters ($\alpha = 1$). Thus, when the median voter is religious, $\tilde{x} = x_r^*$ and $\tilde{\alpha} = \alpha_r^* = 1$.

A similar result is obtained when the median voter is non-religious (if $N > R$). Given a tax t, the highest utility that a party can offer to a *non-religious voter* is $U_n(x_n^*(t),t)$, that is, the *non-religious voters'* utility when the government implements the optimal level of religious subsidy for *non-religious voters*. Additionally, given a positive level of religious subsidy x, the highest utility that a party can offer to a *non-religious voter* is $U_n(x, 0)$, that is, the *non-religious voters'* utility when the government makes only *religious voters* pay taxes to finance the religious subsidy ($\alpha = 0$). Hence, $\tilde{x} = x_n^*$ and $\tilde{\alpha} = \alpha_n^* = 0$.

Proposition 1 *When parties choose both t and x simultaneously, the unique equilibrium outcome will be a tie: both parties win the election with a probability equal to* $\frac{1}{2}$. *Moreover, a pure strategy equilibrium will be the optimal policy for the median voter, i.e.* $\left[(x_r^*, \frac{x_r^*}{\omega(R+N)}), (x_r^*, \frac{x_r^*}{\omega(R+N)})\right]$ *if* $R > N$ *and* $\left[(x_n^*, 0), (x_n^*, 0)\right]$ *if* $N > R$.

Proof. Since both parties are *a priori* identical, if one of them chooses (*x, t*) such that it wins the election with probability 1, there cannot be an equilibrium because the party's opponent may choose the same (*x, t*) and win the election with a probability of $\frac{1}{2}$. Thus, if the game does not end in a tie, matching the opponent's strategy is always a profitable deviation for one of the parties. Hence, the unique equilibrium outcome will be that both parties win the election with a probability equal to $\frac{1}{2}$.

If $R > N$, the party that offers a pair (*x, t*) such that the utility of religious voters is higher will win the election. Given a pair of values (x_1, t_1) with $t_1 > \frac{x}{\omega(R+N)}$, party 2 can win the election with a probability equal to 1 by choosing $x_2 = x_1$ and $t_2 < t_1$. Thus, in equilibrium both parties must choose $t_2 = t_1 = \frac{x}{\omega(R+N)}$.

Suppose that $t_2 = t_1 = \frac{x}{\omega(R+N)}$ and party 1 chooses $x_1 \neq x_r^*$. Party 2 can then win the election by choosing $x_2 = x_r^*$. Thus, in equilibrium both parties must choose $x_1 = x_2 = x_r^*$. Hence, $[x_r^*, 1]$ has to be chosen by both parties at equilibrium.

Similarly, we can prove that if $N > R$, then $\left[(x_n^*, 0), (x_n^*, 0)\right]$ can be sustained as an equilibrium.

A clear implication arises from the previous result:

Implication 1 *Under opportunistic parties, the percentage of religious citizens* $(\frac{R}{N+R})$ *determines both the level of religious subsidies implemented by the government and the share of the cost.*

Thus, under opportunistic parties, the median voter's level of religiosity might explain part of the observed behavior in Figure 1. Additionally, we can conclude that if parties are opportunistic, the conjectures stated

above are both true. Our arguments serve to explain countries which largely favor religion and those in which no aid is provided by the government. However, we are still unable to explain the values in the middle of the interval.

3.2 Ideological Parties

We consider ideology as a strong preference for one of the policy instruments. It is assumed that parties are committed to implementing a specific policy regarding religious policy. By *Non-Religious party* we denote the party that is committed to a lower level of religious subsidy, whereas *Religious party* refers to the party committed to a higher level of religious subsidy (i.e. $x^R > x^N$). Thus, ideology can be interpreted in this game as the intensity of protection against secularization, that is, the amount of religious subsidies.

Given that the level of religious subsidy is supposed to be fixed by the parties, they only have to propose their tax schemes.

Let us now focus on a country with a majority of *religious voters*. If $R > N$, the median voter will be religious and, given a certain level of religious subsidy x, any political party will try to propose a value for t in order to give *religious voters* a higher level of utility than that offered by their opponent. Since the level of religious subsidy is given, societal secularization is also given in the country. Thus, parties will want to offer a value for t that minimizes the cost imposed upon *religious voters*.

Given a fixed value of x, the optimal value of t for *religious voters* is $t = \frac{x}{\omega(R+N)}$. Thus, the maximum utility that party j can offer to *religious voters* given a fixed value of x^j is $U_r(x^j, \frac{x^j}{\omega(R+N)})$. Then, if $U_r(x^N, \frac{x^N}{\omega(R+N)}) > U_r(x^R, \frac{x^R}{\omega(R+N)})$ the *Non-Religious party* has a non-empty set of dominant strategies that guarantees a sure victory (this set will include the optimal tax for the median voter $t = \frac{x_r^*}{\omega(R+N)}$).

Otherwise, if $U_r(x^N, \frac{x^N}{\omega(R+N)}) < U_r(x^R, \frac{x^R}{\omega(R+N)})$, the *Religious party* has a non-empty set of dominant strategies that guarantees a sure victory (this set will also include the optimal tax for the median voter $t = \frac{x_r^*}{\omega(R+N)}$).

Finally, if $U_r(x^N, \frac{x^N}{\omega(R+N)}) = U_r(x^R, \frac{x^R}{\omega(R+N)})$, then both parties can assure a tie by choosing $t^j = \frac{x^j}{\omega(R+N)}$.

Notice that if both parties choose the value for t that minimizes the tax imposed on religious voters (i.e. $t^j = \frac{x^j}{\omega(R+N)}$), the *Religious party* will win the election if $U_r(x^N, \frac{x^N}{\omega(R+N)}) < U_r(x^R, \frac{x^R}{\omega(R+N)})$. That is, if:

$$\beta_r \frac{-(S(x^R) - S(x^N))}{x^R - x^N} > \frac{1}{(R+N)}. \quad (11)$$

The previous result is stated in the following proposition.

Proposition 2 *Suppose $x^R > x^N$ are fixed and parties choose t, then if $R > N$, the Religious party has a non-empty set of strictly dominant strategies and the equilibrium outcome of the election is that the Religious party will win the election with probability* 1 *if:*

$$-\beta_r(S(x^R) - S(x^N)) > \frac{1}{(R+N)}(x^R - x^N)$$

The inequality written in the proposition is composed of two positive terms since $x^R > x^N$ and $S'(x) < 0$. The one on the left-hand side represents the benefit to religious voters in terms of the secularization derived from voting for the party that favors religion the most. The one on the right-hand side represents the cost to religious voters in terms of the private consumption derived from voting for the party that favors religion the most when both parties propose an equal share of the cost of the religious subsidy. Hence, given a high enough marginal return of anti-secularization policies for the median voter, the religious party wins and the implemented policy is $\tilde{x} = x^R > x^N \geq 0$.

The previous result has a clear implication:

Implication 2 *Under ideological parties and for any percentage of religious population, the amount of subsidy is always positive when anti-secularization policies are profitable enough (in terms of individual utility).*

In sum, if parties are ideological on the religious issue, voter religiosity is not a determinant for the level of favoritism in contrast to what occurs when parties are opportunistic on this issue. In this case, the key for the most religious party to win and implement some favoritism is the efficacy of the anti-secularization policy (in terms of individual utility) for the median voter. This result may serve to explain both types of European countries in Figure 1:

(i) the large group of countries with about 70% to 80% of religious participation that show a high dispersion regarding the GFI.
(ii) countries with a large percentage of citizens belonging to a denomination and a small GFI and *vice-versa*.

4 Empirical Evidence

The model presented above and, obviously, its implications crucially depend on a variable that we name *secularization aversion*. This variable reflects the loss of main attributes of the religious environment as perceived by citizens. Throughout the paper we assume that the level of *secularization aversion* for all citizens is positive, $\beta_i > 0$, $i = n,r$, while the level of aversion for religious citizens is larger, $\beta_r > \beta_n$. In this section we will attempt to check if both assumptions are possible using European data.

Unfortunately, we did not find this variable in the most well-known surveys on religion: the European-ESS and the International-ISSP. However, we did find something similar in the latter survey. This survey includes a question that addresses the issue of *secularization aversion*. The question reads as follows[7]:

> **item 31:** [country name] would be a better country if religion had less influence[8]

The possible answers are: (1) Strongly agree; (2) Agree; (3) Neither agree nor disagree; (4) Disagree; (5) Strongly disagree. Now we establish a simple parallelism: We call subjects who consider religion to be negative *religious averse* ($v_{31} = 1,2$), while those who consider religion to be positive are called *secularization averse* ($v_{31} = 4,5$). To simplify we define ($v_{31} = 3$) as *religious neutral*.

Our model explores secularization aversion for religious and non-religious citizens. Formally, the ISSP provides this classification in item 60:

> **item 60:** Would you describe yourself as: (1) Extremely religious; (2) Very religious; (3) Somewhat religious; (4) Neither religious nor non-religious; (5) Somewhat non-religious; (6) Very non-religious; (7) Extremely non-religious.

According to this classification, we classify subjects as *religious*, *r*, $v_{60} = 1,2,3$ and as *non-religious*, *n*, $v_{60} = 5,6,7$. Individuals with values = 4 are omitted from the analysis.

Now we combine both item 31 and item 60 in order to obtain a measure of the parameter that stands for individuals' level of secularization aversion (β_i).

We analyze two important issues empirically: (*1*) we want to check the value, if positive, of secularization aversion and more specifically, if there is

any difference between religious and non-religious citizens, that is, $\beta_r > \beta_n$; (*2*) we study the proportion of countries that have a majority of religious citizens because this situation may be crucial to explaining the observed favoritism. Using the information provided in the ISSP (items 31 and 60) and in the ESS (to show the percentage of religious citizens) we build Table 1.

Columns 2–5 in Table 1 check if secularization aversion is sufficiently larger for religious than for non-religious citizens ($\beta_r > \beta_n$) for each country. Column 4 shows the Mann-Whitney non-parametric test and column 5 evaluates if the assumption is plausible.

The rest of the table studies national religiosity. Columns 6-7 show the percentage of religious population by country (using the 2004-ESS[9]) and the percentage of citizens that clearly declared themselves to be extremely religious averse ($v_{31} = 1$ in item 31).[10]

Let us make three remarks regarding the data in Table 1. First, the intuitive assumption that religious individuals are more concerned about secularization *seems to be true for all the European countries* considered in the sample. This is important because we observe that $\beta_r > \beta_n$ in all countries regardless of the percentage of religious citizens as we assume in our model.

Table 1. Secularization aversion

	$\beta_r > \beta_n$				$R > N$	
	β_r	β_n	Z		R	#1 (%)
Austria	3.21	2.89	–5.87	yes	0.71	5.3
Bulgaria	3.50	2.99	–6.10	yes	–	4.7
Czech R.	3.95	3.05	–9.46	yes	0.28	5.1
Denmark	3.81	3.55	–3.53	yes	0.62	2.9
France	3.98	2.98	–14.15	yes	0.50	0.8
Germany	3.63	2.92	–7.58	yes	0.54	1.95
Hungary	3.77	3.17	–8.12	yes	0.63	1.4
Ireland	3.38	2.60	–8.60	yes	0.87	1.6
Israel	3.90	2.32	–18.07	yes	0.75	3.0
Italy	3.34	2.84	–7.98	yes	0.76	4.4
Holland	3.39	2.37	–13.99	yes	0.46	2.0
Norway	3.80	2.57	–15.38	yes	0.50	1.9
Poland	3.13	2.50	–7.01	yes	0.92	1.5
Portugal	3.03	2.76	–3.77	yes	0.86	5.4
Slovakia	3.66	2.64	–11.23	yes	0.75	3.1
Slovenia	3.67	2.64	−12.56	yes	0.69	4.9
Spain	3.50	2.99	–13.83	yes	0.74	1.1
Switzerland	3.69	3.13	–9.52	yes	0.70	4.1
Sweden	4.20	3.19	–10.83	yes	0.32	1.8
UK	3.89	2.65	–10.56	yes	0.51	0.4

Second, *more than fifty percent of the population is religious in a large number of European countries*. The Czech Republic, the Netherlands, and Sweden are the only exceptions.

We can observe both crucial ideas in almost all European countries: $R > N$ and $\beta_r > \beta_n$. This means that a majority of the population is always in favor of favoritism towards religion.

Finally, *the proportion of clearly religious-averse citizens is very small* and never larger than 6%. That is, almost all individuals are somewhat concerned about societal secularization. Therefore, in electoral terms, the *potential cost* of pro-religion policies is very low.

In sum, the data set seems to support our model: (*i*) subjects are generally concerned about secularization, (*ii*) religious subjects are more concerned about this issue, (*iii*) in the majority of European countries the proportion of religious citizens exceeds fifty percent, and (*iv*) the percentage of citizens who react negatively to pro-religion policies is marginal. From an empirical standpoint, we can conclude that religious favoritism seems to be politically profitable.

5 Discussion

Let us now discuss the relevance of political party behavior (opportunism vs. partisanship) in explaining government favoritism to religion.

Under opportunistic parties on the religious issue we can easily explain the observed favoritism as the result of the optimal policy for the median voter. When the median voter is religious (under $R > N$),[11] the policy implemented constitutes the optimal policy for this type of voter i.e. $\tilde{x} = x_r^*$. Also, given the FOC (see equation [6]), an increase in religious voters' aversion to secularization increases the implemented religious subsidy, that is, $\Delta\beta_r \Rightarrow \Delta x_r^*$. Hence, *the larger the national secularization aversion, the larger the level of religious favoritism*.

The latter may seem to be a simple and sensible explanation for the behavior observed in Figure 1: the level of religiosity within society (defined not only by the proportion of religious citizens, but also by the level of their secularization aversion) is a predictor of government favoritism to religion. However, when comparing the government favoritism index to the median voter's level of secularization aversion in countries where the majority of the population is religious, we do not find a positive correlation (as shown in Figure 2). This empirical result contrasts with the assumption that parties behave in an opportunistic manner regarding religion.

In fact, opportunism regarding religious issues seems to be rare in religious countries. Religion is not just another issue in the political arena. Many political parties in countries across Europe hold a clear ideological

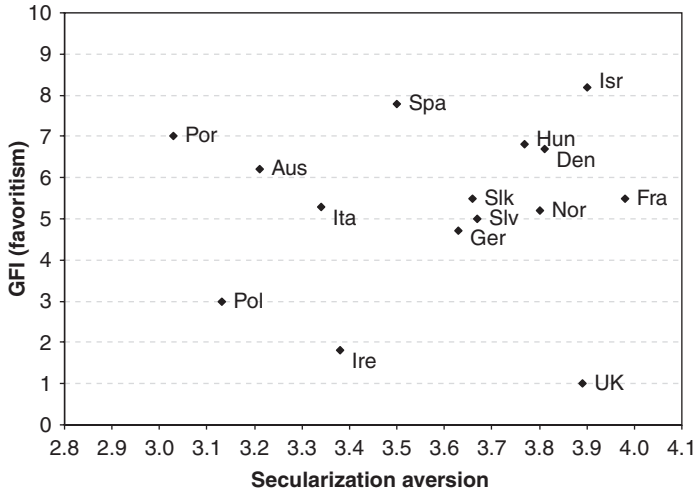


Figure 2. Favoritism vs secularization aversion where $R > N$

position on religious issues. Obvious examples are the *Shas* (Israel), *Partido Popular* (Spain), *Forza Italia* (the largest majority faction of the former *Democrazia Cristiana* in Italy), *Christlich Demokratische Union Deutschlands* CDU (Germany), *Österreichische Volkspartei* ÖVP (Austria), to name but a few. Moreover, most of these political parties belong to the *European People's Party* (the largest political group in the European Parliament) which declares itself to be Christian.

With regard to partisan parties on the religious issue, the results differ from the former case: the religious makeup of the population is not the only factor that determines which party will win. In fact, depending on whether the optimal policy for the median voter is closer to one party than to another, one and not the other will win.[12] In addition, there are only two possible implementable degrees of government favoritism to religion, both of which are given from the parties' ideological positions. This idea is illustrated in the figure below.

Figure 3 shows three different situations depending on whether the median voter's optimal level of subsidy is low (x_r^{a*}), medium (x_r^{b*}) or high (x_r^{c*}) regarding the parties' ideological positions on this issue.

Case (*a*) shows a median voter with reduced preferences for religion who is, in fact, less religious than the non-religious party. In this case, the prediction is clear: the less religious party will win. Then $x_r^*(\beta_r) < x^N \Rightarrow$ the non-religious party wins and $\tilde{x} = x^N$

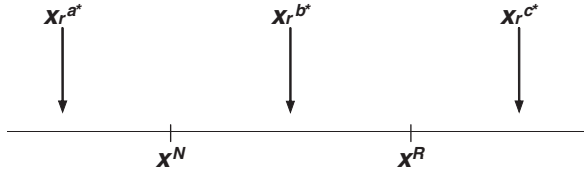


Figure 3. Political equilibrium under partisan parties

Case (*c*) is also clear. When the median voter is more religious than the religious party, then the latter will win. Hence, $x_r^*(\beta_r) > x^R \Rightarrow \tilde{x} = x^R$. This case may shed some light on the recent victory of religious parties in countries such as Poland.[13] More precisely, Poland is a country with a very religious population (most of whom are Catholic) that has recently been immersed in a process of transition from Communism. It is therefore plausible to think that concern about secularization was quite high among citizens in Poland during Communism. Consequently, citizens' optimal degree of government favoritism to religion was higher than the implemented government favoritism to religion during this period. If we observe the case of Poland in Figure 1, we can see that the current level of favoritism is low. However, it is likely that the religious party *Law and Justice*, which took office in 2006, will notably increase financial support to the Catholic Church.

Case (*b*) is the most enlightening. Here there is no direct result since the final outcome will be determined by the proximity of the median voter's optimal policy to each party's ideological position. Recall that parties may not vary their position on the religious issue – they are ideological – but,

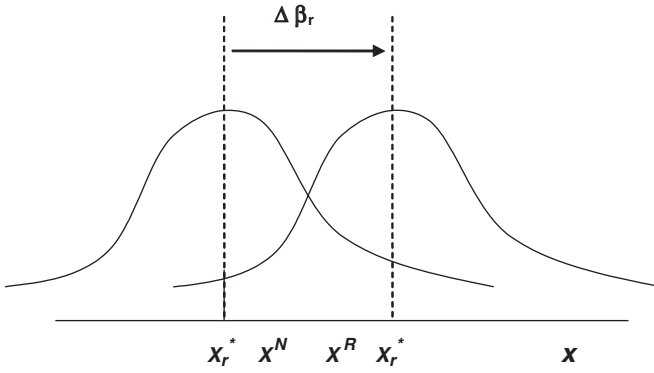


Figure 4. Influence on β's distribution

they have clear incentives to manipulate *voters' secularization aversion,* β_i. Figure 4 depicts the religious party's incentive to increase median voter's concern about secularization.

Thus the religious party[14] has clear incentives to manipulate β*'s* distribution. Parties may find it very profitable to promote fundamentalism: as religious voters' negative concern about societal secularization increases (higher values of β_r) religious voters will tend to vote for the *Religious party* that will be more likely to win the election.

6 Conclusion

In a recent paper Finke and Grim (2006) showed that most of the governments in European countries favor religion and what is even more striking is that many of them favor it to a large degree.

To study this phenomenon, we develop a political competition model. We analyze two scenarios: when parties are opportunistic on the religious issue and when parties are ideological on the issue.

Under opportunistic parties we find that median voter religiosity determines the level of favoritism: *the more religious the population, the higher the level of favoritism to religion*. We find that this first scenario is refuted by the data since there is no correlation between these variables.

In the scenario in which parties are ideological the level of religiosity of the median voter does not determine the level of favoritism to religion. This is more in line with what we find in data, and it permits us to explain a wide number of cases. In this case, the distance between the median voter's secularization aversion and the ideology of the most religious party determines who will win the election and the subsequent level of favoritism implemented by the government. This result may serve to explain both: (*i*) the large group of European countries with a similar percentage of religious participation (about 70% to 80%) which present a high dispersion regarding the GFI, and (*ii*) the European countries with a large percentage of citizens belonging to a denomination and a small level of favoritism and *vice-versa.*

Finally, we use data from the ESS and ISSP to empirically test the assumptions in our model. Interestingly, we observe that religious citizens are concerned about secularization (and more concerned than non-religious citizens); religious citizens are the majority in most European countries. This empirical evidence is consistent with the assumptions of our model.

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Notes

1. We use this data set because it is easily available (and free). To compare it with the Fox's Religion and State data set or the data set on this issue provided by the Freedom House is beyond the scope of our paper.
2. Variables were coded from the reports for 2003. For further information see the Association of Religion Data Archives webpage www.thearda.com.
3. Some data missing in the ESS-2004 wave were replaced with data arising from the ESS-2001 wave. This is the case of the following countries: Finland, France, Israel, and Italy.
4. However, in a linear model with a constant (3.47; p-value = 0.02) the percentage of religious citizens proves to be non-significant in explaining government favoritism to religion ($\widehat{\beta_R} = 3.19$; p-value= 0.15) and the R^2 is very small, $R^2 = 007$.
5. This assumption is completely justified in Europe. There are very few countries with more than one religion. Moreover, if we consider that, in practise, the differences among Christian denominations are small, then all the European countries are single-religion countries. In fact, the percentage of religious individuals belonging to this category (of Christians) is always over 90%. The only exception is Israel.
6. A three party model may be more suitable for the European case. However, in our context in which voters' preferences for policies are endogenously determined these type of models are technically intractable and moreover equilibrium may not exist.
7. Note that a number of European countries are not included in the ISSP-1998 wave: Belgium, Estonia, Greece, Iceland, Luxembourg and Ukraine. Also note that data for Germany is the mean of East/West observations and that Ireland includes North Ireland.
8. This is exactly as the item appears on the ISSP questionnaire.
9. We use data from the ESS instead of using data from the ISSP to be consistent with Figure 1.
10. Notice that the group of voters simply denoted as religious aversive are those for which variable $v_{31} = 1,2$.
11. Recall that the opposite case, $N > R$, seems to be trivial in Europe.
12. This is an alternative interpretation of Proposition 2. Notice that the latter Proposition shows that the efficacy of the religious subsidy policy ($\frac{-\Delta S(x)}{\Delta x}$) matters. In particular, if efficacy is high enough, the *Religious party* will surely win the election. However, since $S''(x) > 0$, efficacy decreases on x, meaning that the lower the level of religious subsidy pledged by both parties, the higher the probability that the *Religious party* will win.

13. The party that won the largest percentage of votes in the 2005 elections was *Law and Justice*, a center-right party that pledges to uphold traditional family and Christian values.
14. The idea is symmetric for non-religious parties.

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