The Political Economy of Beliefs: Why Fiscal and Social Conservatives and Liberals Come Hand-in-Hand

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Abstract

Religious intensity as social insurance may explain why fiscal and social conservatives and fiscal and social liberals tend to come hand-in-hand. We find evidence that religious groups with greater within-group charitable giving are more against the welfare state and more socially conservative. The alliance reverses (social conservatives become fiscal liberals) for members of a state church and this reversal is unlikely to be driven by omitted environmental variables: increases in church-state separation precede increases in the alliance between fiscal and social conservatism. The theory provides a novel explanation for religious history: as elites gain access to alternative social insurance, they legislate increasing church-state separation to create a constituency for lower taxes. This holds if religious voters exceed non-religious voters, otherwise, elites prefer less church-state separation in order to curb the secular left, generating multiple steady states where some countries sustain high church-state separation, high religiosity, and low welfare state, and vice versa. We use this framework to explain the changing nature of religious movements, from Social Gospel to the religious right, and why church-state separation arose in the US but not in many European countries.

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From abolition to woman suffrage to civil rights, the leaders of America's most successful liberal crusades have turned to the Bible to justify their causes, but the history of the religious left seems to stop in 1968, the starting point of a decades-long trend by which Democrats have become the secular party and the Republicans the religious party (Lizza 2005).

1 Introduction

Why do fiscal and social conservatives and fiscal and social liberals come hand-in-hand in the times and places that they do?[1] Today, some argue that depending on the welfare state is the same as worshipping the government as if it were God.[2] In the US, welfare support decreases while self-identified fundamentalism increases with religious attendance.[3]

[Figure 1 goes here]

In contrast to the Social Gospel movement of the early 1900s (Fogel 2000) or the Christian Democratic party in some European countries, contemporary religious groups tend to emphasize individual responsibility at the expense of the welfare state. No obvious theory explains why political alliances align along one diagonal versus another in a matrix of fiscal and social attitudes.[4] Religious intensity as social insurance provides a simple explanation.[5] The religious right may be against welfare because it competes against their constituency.[6]

The hypothesis that the religious right may be against welfare because it competes against their constituency helps solve three puzzles. Why fiscal and social conservatism align together in most countries is puzzling since the fiscal libertarianism espoused by the Republican party could be a good fit with an equally libertarian position on issues of personal choice such as abortion. Why fiscal and social conservatism did not align together in the past or in some countries today presents another puzzle. Separation between church and state is key: welfare is not competitive against religious groups when government funding can be distributed to religious groups.

[1] Converse (1964) and Poole and Rosenthal (1991, 1997) on the uni-dimensionality of US congressional voting; Gill and Lundsgaarde (2004), Scheve and Stasavage (2005), and Cavanaugh (2005) on the pattern across countries.

[2] Fernandes, Purcell, Rinear, and Wiesinger (2003) and Hornberger (1993).

[3] 33% of Americans self-identify as fundamentalist in the General Social Survey.

[4] Scheve and Stasavage (2005) argue that theories involving denominational differences, altruism, differences in the making of inferences, issue-bundling, and spurious correlation cannot explain the link between religiosity and welfare preferences. Glaeser, Ponzetto, and Shapiro (2005) theorize why religion is salient in politics but not why Republicans and Democrats divide along religious issues the way they do. Jost, Glaser, Kruglanski, and Sulloway (2003) argue that uncertainty aversion explains why fiscal and social conservatism come together. Uncertainty aversion is consistent with a preference for insurance.

[5] Iannaccone (1992) and Berman (2000) on theory of religious insurance; Dehejia, DeLeire, and Luttmer (2005) and Chen (2005a, 2005b) on evidence of religious insurance ($\Delta Outcome = \Delta Income + Religion + \Delta Income * Religion$; Dehejia, et.al run this across time within individuals while Chen runs this across individuals within villages).

[6] Gruber and Hungerman (2005), Hungerman (2005), Gill and Lundsgaarde (2004), and Cnaan, Boddie, Handy, and Schneider (2002) on government welfare crowding out church participation and charitable provision; Beito (2000) and Kaufman (2003) on a similar decline in charitable provision by other private groups.

Why some countries sustain high religiosity, high church-state separation, and low welfare state while others sustain low religiosity, low church-state separation, and high welfare state presents the final puzzle.[7] Elites desiring low taxes prefer to separate church and state when the relative weight of religious constituencies is large. Religious constituencies shift to fiscal conservatism, reducing size of welfare state, which in turn increases religious constituencies, creating a positive feedback. Elites prefer a state church when the relative weight of non-religious constituencies is large. Non-religious constituencies align with fiscal conservatism, creating pressure for a smaller welfare state, which increases religious constituencies and creates a negative feedback.

We uncover several empirical regularities to be explained by the theory. First, fiscal and social conservatism and liberalism come hand-in-hand at the individual level within countries, not just congressionally or across countries. Second, religious groups with greater within-group charitable giving are more against the welfare state and more socially conservative. Third, the alliance reverses (social conservatives become fiscal liberals) for members of a state church. And fourth, this reversal is unlikely to be driven by omitted environmental variables: increases in church-state separation precede increases in the alliance between fiscal and social conservatism.

The US General Social Survey and World Values Survey show that fiscal and social conservatism and fiscal and social liberalism align at the individual level. Religious attendance is positively correlated with social conservatism and fiscal conservatism. The Center on Philanthropy Panel Study portion of the Panel Study of Income Dynamics shows that the fraction of charitable giving contributed to religion is monotonically increasing in both fiscal and social conservatism–Mormons (0.91), Evangelical Protestant (0.82), Mainline Protestant (0.62), Catholic (0.51), Other (0.50), Jewish (0.40), and None (0.40).

Data on church-state separation from the Barro-McCleary dataset, combined with the World Values Survey, shows that if the government is fundamentalist or church-state separation does not exist, the alliance reverses for members of the state church. The relationship between religious attendance and fiscal conservatism is weaker in countries with a state church. Religious attendance predicts increasing support for welfare if the individual is a member of the state church.

Data from US judicial decisions suggests that the reversal of the alliance across countries also exists across time. Church attendance predicts Republican voting but the strength of this relationship was declining before 1980 and has sharply increased ever since. The relationship increases more sharply, the more activity by the US Supreme Court separating church and state, such as disallowing prayer in public schools, religious meetings in public schools, etc.

We use this theory to provide a novel explanation of religious history. As credit markets develop[8], elites gain access to alternative social insurance and prefer to opt out of religious and

[7] For the negative covariance between religious attendance and having a state church, see Finke and Stark (1983), Iannaccone (1998), and Barro and McCleary (2005); for the negative covariance between religiosity and size of welfare state, see Gill and Lundsgaarde (2004), Scheve and Stasavage (2005), and Cavanaugh (2005).

[8] Chen (2005a, 2005b) finds alternative social insurance in the form of credit reduces the effect of economic shocks on religious intensity. Glaeser and Scheinkman (1998) argue this may be a reason for religious usury restrictions. Less-developed countries tend to be more theocratic.

government insurance. They increase church-state separation[9] to turn previously pro-welfare religious groups against welfare, creating a constituency for lower taxes. But this incentive to increase church-state separation exists only if religious voters exceed non-religious voters, whose tax preferences shift in the opposite direction. If non-religious constituencies are large enough, elites prefer less church-state separation in order to curb the secular left.

We close the model with a simple observation. If we allow religiosity to decrease with size of welfare state, multiple steady states arise where some countries sustain high religiosity, high church-state separation, and low welfare state, and vice versa. Countries with high religious weight increase church-state separation and shrink the welfare state, which induces marginal members seeking insurance to become more religious, creating a positive feedback. At the other steady state, countries with low religious weight keep church-state separation low to curb the demand for welfare by non-religious groups, but a smaller welfare state would induce marginal members seeking insurance to become more religious, creating a negative feedback. The negative feedback reduces the initial incentive to decrease church-state separation and stabilizes countries with low initial religious weight at low religiosity, low church-state separation, and high welfare state.

Why did the Social Gospel movement become the religious right? More precisely, why is it that religious groups that once led the welfare movement around the world (e.g. Social Gospel in the US and Christian Democrats in Europe) have become or been replaced by the religious right in the US, where religious groups prefer to dismantle the welfare state? In the absence of church-state separation, religious insurance groups are incentivized to expand the welfare state as it allows them to attain greater participation by others, which expands their budget set. However, as credit markets expand, elites desire less social insurance. In countries with high religiosity like the US, elites increase church-state separation, thereby creating the religious right, who want less welfare. This creates a self-sustaining cycle of high religiosity, high church-state separation, and low welfare provision. Why did church-state separation arise in the US but not in many European countries? In many European countries with low initial religiosity, elites never increased church-state separation, to curb the appetite of the secular left. This creates a stable steady state with low religiosity, low church-state separation, and high welfare provision.

Interestingly, temporary shifts in any of these factors, credit availability or religious intensity, can cause countries to permanently shift from one steady state to another[10], important for understanding the dynamics of credit market access, theocracy, and fundamentalism in developing and reconstructing war-torn countries. For example, economic sanctions may increase theocratic tendencies in religious countries if elites are restricted from international capital markets and lose alternative social insurance. In this case, the story reverses: elites decrease church-state separation if religious voters exceed non-religious ones to increase the constituency for a high degree of government-cum-religious insurance.

[9] Feldman (2005) and Hamburger (2003) note that contrary to common belief, separation of church and state was not read into the US Constitution until the last century.

[10] The US General Social Survey shows a decline in US monthly religious attendance, coincident with a force decreasing church-state separation in judicial decisions and contemporary debate.

This research contributes to a growing literature on the political economy of beliefs, most directly, "Why Did the West Extend the Franchise?" (Acemoglu and Robinson 2000) and "Why Have Women Become Left-Wing?" (Edlund and Pande 2002). We ask analogous questions, why did some countries separate church and state and why have religious people become right-wing. This research is also related to the theory literature (Demarzo, Vayanos, and Zwiebel 2003), which theorizes political positions generally and eventually map along a single axis. We are asking why particular positions (abortion and taxes) map to similar coordinates on that axis.[11]

The remainder of the paper is organized as follows. Section 2 presents our model. Section 3 discusses the data. Sections 4 through 8 present the empirical evidence and Section 9 concludes.

2 Model

In this section, we develop our model of the political economy of beliefs. Religious intensity corresponds to the degree to which someone participates in mutual insurance, i.e. the higher the religious intensity, the greater fraction of income shock shared with the insurance group.

We proceed in four parts. First, we solve for tax preferences as a function of religious intensity. Second, we introduce a state church and show how the elasticity of tax preferences with respect to religious intensity depend on being a member of the state church. Third, we introduce elites who desire a lower tax burden and show how their preferences on church-state separation depend on the relative weight of religious and non-religious constituencies. Fourth, we allow religiosity to decrease with size of welfare state and demonstrate multiple steady states arise where some countries sustain high church-state separation, high religiosity, and low welfare state, and other countries sustain low church-state separation, low religiosity, and high welfare state.

2.1 Basic Trade-Off Between Religious and Government Insurance

2.1.1 Religious Insurance

Agents receive a shock ($L < H$):

$$x = \begin{cases} H & \text{with probability } \frac{1}{2} \\ L & \text{with probability } \frac{1}{2} \end{cases}$$

There is a continuum of agents of unit measure. Members of religious organizations smooth their shocks through their religious community. An agent with religious attendance $\alpha \in [0, 1]$, chosen after the shock x is realized, shares a fraction α of his income with the religious group and keeps $1-\alpha$ of his income separate from the risk-sharing pool. Agents divide the group budget in a manner proportionate to their relative religious intensity, which is $\alpha/\bar{\alpha}$ where $\overline{\alpha}$ denotes average religious

[11] This paper also contributes to a more general literature on political economy (Becker 1958, Fiorina, Abrams and Pope 2004, Layman 2001) of redistribution (Romer 1975, Meltzer and Richard 1981, Roemer 1998) and social insurance (Moene and Wallerstein 2001, 2003).

intensity. Note that agents do not receive the same amount they put in: agents who receive negative shocks will get money from agents who receive positive shocks even if their religious intensity is the same.

Since agents who receive positive shocks would otherwise not participate, social sanctions $S(\cdot)$ ensures the stability of religious insurance[12]. These agents suffer social sanctions, which is captured by $rS\left(\alpha/\bar{\alpha}\right)$, where r is a measure of an agent's vulnerability to social sanctions. The parameter r can also be thought of as capturing social conservativeness – the more socially conservative, the more sanctioning of non-group members. The cost function $S\left(\cdot\right)$ is decreasing in $\alpha/\bar{\alpha}$ and convex, so $S' < 0$ and $S'' \geq 0$. Social sanctions facilitate the insurance provision by religious groups. If r were 0, no insurance can be sustained as H agents all choose 0 participation.

Utility $u(.)$ is a standard increasing concave function of income. Let α_x denote the choice of religious intensity, where x can be H or L. Let $\overline{\mu}$ be the religious budget. The payoff to an agent who realizes x is:

$$U_x = u[(1-\alpha_x)x + \frac{\alpha_x}{\overline{\alpha}}\overline{\mu}] - rS(\frac{a_x}{\overline{\alpha}}) \tag{1}$$

From the setup it follows that the religious budget is $\overline{\mu} = \frac{1}{2}(H\alpha_H + L\alpha_L)$ and average religious intensity is $\overline{\alpha} = \frac{1}{2}(\alpha_H + \alpha_L)$. For shorthand, we will call an agent who receives a high shock by H and an agent who receives a low shock by L. Agents take into account how the decision of others affects the budget $\overline{\mu}$ and optimize their religious intensity by equating marginal benefits to marginal costs in equation 1.

It can be immediately observed that agent L chooses a higher level of religious intensity than agent H, $\alpha_L^* > \alpha_H^*$. The intuition is simply that the higher is α_H the less agent H gets, whereas for agent L, the higher is α_L the more he gets.

It is important to observe that H's religious intensity is, in a sense, complementary for L's religious intensity: those who are more religiously intense prefer others to be religiously intense as well in order to appropriate their high income draw: this captures the local public goods aspect of club goods theory (Buchanan 1965). Therefore, for L, there are positive externalities from others' participation.

However, those who are less religiously intense prefer others to be less religiously intense to prevent appropriation of their high income draw. So for H, there are negative externalities from others' participation.

2.1.2 Government

We now introduce government transfers with tax rate τ and $T\left(\tau\right)\bar{Y}$ the amount of lump sum redistribution received from the government. The timing is such that agents, knowing their r,

[12] More precisely, this is a model of ex-post insurance, introduced in Chen (2004a), where agents choose participation after information is revealed. A model of ex-ante insurance would also give a trade-off between religious and government insurance. See, for example, Boodman (2005) regarding faith-based alternatives to health insurance where individuals contribute a monthly share and face sanctions for ignoring Christian doctrine or using secular courts to settle disputes.

choose a preferred $\tau \in [0,1]$, before realizing shock x and choosing to contribute a fraction α of their shock to the budget of their religious group $\overline{\mu}_r$ (the timeline: $r - \tau - x - \alpha$). Now the payoff to an agent who realizes x is:

$$U_x = u\left[(1-\tau)\left((1-\alpha_x)\,x + \frac{\alpha_x}{\bar{\alpha}}\overline{\mu}_r\right) + T(\tau)\,\bar{Y}\right] - rS\left(\frac{\alpha_x}{\bar{\alpha}}\right)$$

Each religious group (or denomination) has their own r degree of social conservatism and separate budget, and will be able to sustain a corresponding level of mutual insurance.

The optimal choice of α_x equates marginal benefits to marginal costs and satisfies:

$$(1-\tau)\,u'\left[(1-\tau)\left((1-\alpha_x)\,x + \frac{\alpha_x}{\bar{\alpha}}\overline{\mu}_r\right) + T(\tau)\,\bar{Y}\right]\left(\frac{\overline{\mu}_r}{\bar{\alpha}} - x\right) - \frac{r}{\bar{\alpha}}S'\left(\frac{\alpha_x}{\bar{\alpha}}\right) \begin{array}{ll} \leq 0 & \text{if } \alpha_x = 0 \\ = 0 & \text{if } \alpha_x \in (0,1) \\ \geq 0 & \text{if } \alpha_x = 1 \end{array},$$

and this provides religious intensity functions $\alpha_L(r)$ and $\alpha_H(r)$ as functions of vulnerability to social sanctions. As the sanction function S is convex, it can be seen that $\alpha_x' \geq 0$ with strict inequality for $\alpha_x < 1$. This formalizes the intuition that religious intensity increases with social sanctions. For L, optimal $\alpha_L^* = 1$. Since $\overline{\mu} = \frac{1}{2}(H\alpha_H + L\alpha_L)$ and average religious intensity is $\overline{\alpha} = \frac{1}{2}(\alpha_H + \alpha_L)$, $\frac{\overline{\mu}_r}{\bar{\alpha}} - L > 0$, so the marginal benefit is always positive.

Pre-tax income for L and H with religious intensity α_L and α_H can now be written as:

$$Y_L = (1-\alpha_L(r))L + \frac{\alpha_L(r)}{\overline{\alpha}(r)}\overline{\mu}_r = L + \frac{\alpha_H(r)}{1+\alpha_H(r)}(H-L) \tag{2}$$

$$Y_H = (1-\alpha_H(r))H + \frac{\alpha_H(r)}{\overline{\alpha}(r)}\overline{\mu}_r = H - \frac{\alpha_H(r)}{1+\alpha_H(r)}(H-L) \tag{3}$$

Since α_H is increasing in r, it can be seen that increasing social conservativeness works as a mean-preserving contraction of the spread between H and L as in the case without taxation. Agents have tax preferences satisfying the first-order condition:

$$\sum_{x\in\{L,H\}} \frac{1}{2}u'\left((1-\tau^*)\,Y_x + T(\tau^*)\,\bar{Y}\right)\left[T'(\tau^*)\,\bar{Y} - Y_x\right] = 0.$$

Since $Y_H - Y_L$ decreases in r, it can be shown that the optimal tax rate τ^* is decreasing in r as well if $T''(\tau) < 0$.

Proposition 1 *When utility is increasing and concave ($u'(x) > 0$ and $u''(x) < 0$) and taxation induces deadweight loss ($T'(\tau) < 1$ and $T''(\tau) < 0$), agents' preferred tax rate is decreasing in r.*

Proof: The proof follows from re-arranging the first-order condition above and deriving:

$$T'(\tau^*) = \frac{u'\left((1-\tau^*)\,Y_L + T(\tau^*)\,\bar{Y}\right)Y_L + u'\left((1-\tau^*)\,Y_H + T(\tau^*)\,\bar{Y}\right)Y_H}{\left[u'\left((1-\tau^*)\,Y_L + T(\tau^*)\,\bar{Y}\right) + u'\left((1-\tau^*)\,Y_H + T(\tau^*)\,\bar{Y}\right)\right]\bar{Y}}$$

The fraction increases and approaches 1 as $Y_H - Y_L$ decreases. This can be seen by observing that if the spread $Y_H - Y_L$ increases, the denominator increases faster than the numerator increases and so the overall fraction falls.

The intuition behind the result is that as r rises, the optimal α_H^* will rise as well as those who receive relative positive shocks feel more obliged to contribute due to rising social sanctions $rS(.)$. For simplicity, optimal $\alpha_L^* = 1$ in this specification. More generally, with a cost of religious attendance such that optimal α_L^* is less than 1, then the optimal α_L^* will rise with r as well because the budget of the religious group has expanded and because average religious intensity $\overline{\alpha}$ has risen, they must increase their religious intensity as well to keep the same share of the budget. With higher average religious intensity $\overline{\alpha}$, agents with high r can expect to have more smoothing provided by their religious group. Under standard assumptions ($T' < 1$, $T'' < 0$, i.e. deadweight losses from taxation), those who face less volatility will need and prefer less government insurance.

Thus, fiscal and social conservatives (high r and low τ) and fiscal and social liberals (low r and high τ) tend to come hand-in-hand and religious groups with greater within-group charitable giving are more against the welfare state (high α and low τ).

2.2 Separation Between Church and State

We introduce a state church by allowing a fraction γ of government budget $T(\tau)\bar{Y}$ to be apportioned directly for religious groups. The simple way to do this is to put $\gamma T(\tau)\bar{Y}$ directly inside the religious budget as follows:

$$U_x = u\left[(1-\tau)\left((1-\alpha_x)\,x + \frac{\alpha_x}{\bar{\alpha}}(\overline{\mu}_r + \gamma T(\tau)\bar{Y})\right) + (1-\gamma)T\left(\tau\right)\bar{Y}\right] - rS\left(\frac{\alpha_x}{\bar{\alpha}}\right)$$

and it can be seen that those with higher α, and who receive a higher share of the religious budget, will now be less inclined to be against the welfare state. More technically, we introduce ξ_r, the fraction of government funds for religious activity that goes to groups with social conservatism r. The payoff to agent x can be written as:

$$U_x = u\left[(1-\tau)\left((1-\alpha_x)\,x + \frac{\alpha_x}{\bar{\alpha}}\overline{\mu}_r\right) + \left(\gamma\xi_r\frac{\alpha_x}{\bar{\alpha}} + (1-\gamma)\right)T\left(\tau\right)\bar{Y}\right] - rS\left(\frac{\alpha_x}{\bar{\alpha}}\right)$$

State funding provided to religious groups is exempt from taxation. This assumption is reasonable– state funding of religious buildings, insurance programs, or faith-based initiatives should not appear as taxable income. In reality, state funding of religious budgets is fungible with agents' own charitable contributions and could appear as taxable income. For considering religious agents' tax preferences, this effect is second-order, but for welfare considerations, this fungibility effect should be included. Even symbolic support of religious institutions may influence the population's vulnerability r to social sanctions. We focus on agents' tax preferences instead of welfare.

Our formulation allows both the case where some religious groups are eligible for state funds but others are not (this more closely resembles the European case) as well as the case where any

religious group is eligible to receive state funding (this more closely resembles the contemporary US case. The US was more like Europe even in the recent past–reading Protestant Bibles and disallowing Catholic Bibles in public schools was considered a form of double taxation on Catholics who also had to fund their own schools).

Proposition 2 *There exists a fraction γ^* and function ξ_r such that the preferred tax rate of members of the state church is increasing with religious intensity iff $\gamma > \gamma^*$ and the preferred tax rate is below unity.*

Proof: Consider the extreme case of $\gamma = 1$. Then the income of agent x is

$$Z_x = (1-\tau) Y_x + \xi_r \frac{\alpha_x}{\bar{\alpha}} T(\tau) \bar{Y}$$

where Y_x is defined in (2) and (3). Then

$$\frac{\partial Z_x}{\partial \tau} = \xi_r \frac{\alpha_x}{\bar{\alpha}} T'(\tau) \bar{Y} - Y_x,$$

so tax preferences satisfy the following expression:

$$T'(\tau^*) = \frac{1}{\xi_r} \frac{u'(Z_L) Y_L + u'(Z_H) Y_H}{\left[\frac{\alpha_L}{\bar{\alpha}} u'(Z_L) + \frac{\alpha_H}{\bar{\alpha}} u'(Z_H)\right] \bar{Y}}$$

Similar to the case without a state church, the fraction on the right increases with r, which reduces the spread between H and L agents. However, if ξ_r increases with r sufficiently fast, the overall fraction will decline with r. Consequently, members of the state church have a preferred tax rate that is increasing with religiosity. For religious groups outside the state church or ineligible for state funding, ξ_r is constant (if government transfers are distributed randomly in the population, groups receive government largess as a share of the population but this largess is divided over their population share), so their preferred tax rate is decreasing with religiosity.

2.3 Elite Preferences On Church-State Separation

We now introduce elites who desire a lower tax burden. We show how their preferences on church-state separation depend on the relative weight of religious and non-religious constituencies.

We have shown religious intensity and tax preferences are inversely related when there is separation between church and state but religious intensity and tax preferences are positively related when there is no separation. The predictions of the model can be summarized in a simple diagram:

	$\gamma = 0$		$\gamma = 1$	
	High τ	Low τ	High τ	Low τ
High r		Religious right	Social gospel	
Low r	Secular left			Libertarian

Without a state church ($\gamma = 0$), the highly religious prefer low taxes (religious right) and the less religious prefer high taxes (secular left). With a state church ($\gamma = 1$), the highly religious

prefer high taxes (social gospel) while the less religious prefer low taxes (libertarian).

For simplicity, we limit attention to a case with two groups, high r and low r. Let f denote the fraction of the population that is high r and $(1-f)$ denote the fraction that is low r. In a society where f is large, elites prefer low γ to curb the tax preferences of the religious right. In a society where f is small, elites prefer high γ to curb the tax preferences of the secular left.

The decision to separate church and state appears to be more a decision of the elites judiciating in a court of law than a decision by popular vote. If both γ and τ are chosen by voters, then a society with large f will prefer high γ and high τ, a theocracy. To disallow this possibility, we let elites choose γ and voters choose τ.

Proposition 3 *If f is high, elites prefer low γ; if f is low, elites prefer high γ.*

Proof: Consider a simple model where taxes are determined by probabilistic voting between two parties (Lindbeck and Weibull 1987), where all voters have the same distribution for their individual party-specific taste shifters. Then both parties will commit to platforms maximizing a utilitarian social welfare function, $W(\tau) = fU_{hi\_r}(\tau) + (1-f)U_{lo\_r}(\tau)$, which in this case involves putting the population weight f on the high r agents and weight $(1-f)$ on the low r agents. If $f=0$, voters prefer a low tax rate if $\gamma=1$; if $f=1$, voters prefer a low tax rate if $\gamma=0$. The proposition then follows by continuity.

2.4 Dynamics of Church-State Separation, Welfare State, and Religiosity

We now allow religiosity r to decrease with size of welfare state τ. We show that this gives rise to multiple steady states. If a society begins with high r, elites separate church and state to create a constituency for a smaller welfare state as those who were previously religious left shift to the religious right. But marginal individuals seeking insurance will seek religious instead of government support, which leads to higher r, creating a positive feedback with high church-state separation, high religiosity, and low welfare state.

If on the other hand a society begins with low r, elites desire an expansive state church to curb the secular left whose tax preferences shift in the opposite direction. The secular left (social liberal – fiscal liberal) become libertarian (social liberal – fiscal conservative) when government spending can target religious groups. Elites attempting to shrink the welfare state are unable to: they prefer to decrease church-state separation to curb the secular left, but a smaller welfare state would lead marginal individuals to seek religious insurance, which reverses the incentive for elites to decrease church-state separation. The negative feedback suggests a stable steady state where elites are stuck with low church-state separation, low religiosity, and high welfare state.

Proposition 4 *Multiple steady states, (high r, low γ, low τ) and (low r, high γ, high τ), obtain.*

Proof: We make a simple extension to examine how the fraction f of the population that is high r changes over time and which steady states exist. Consider the model of probabilistic

voting described above. To capture the crowd-out of religiosity r by welfare state τ, we introduce replicator dynamics (Bowles 2004, Weibull 1995) so that if τ is high, high r agents are not getting their optimum whereas low r agents are, so there will be a tendency to shift towards low r, and vice versa. For simplicity, we use a continuous time model where politics at every stage is determined to maximize expected support and we disregard any dynamic effects on voting (in the case with exogeneous income explored here, there is little scope for dynamic concerns). The evolution of f can be written as:

$$\frac{\dot{f}}{f} = U_{hi\_r}\left[\tau\left(f\right)\right] - U_{lo\_r}\left[\tau\left(f\right)\right]. \tag{4}$$

Expression (4) assumes that the tax rate at any time depends on the fraction of religious agents. This captures the dynamics of politics. If there is no state church, it follows from Proposition 1 that religious agents prefer a lower tax rate than non-religious agents. For relevant values of τ, U_{hi_r} is decreasing and U_{lo_r} increasing in τ. Hence f is increasing for low values of τ and decreasing for high values of τ, if U_{hi_r} and U_{lo_r} cross. From probabilistic voting, the chosen τ is decreasing in f. On the other hand, if there is a state church and sufficient targeting, we know from Proposition 2 that preferences reverse, so U_{hi_r} is increasing and U_{lo_r} decreasing in τ. In this case, f is decreasing for low values of τ and increasing for high values of τ and from probabilistic voting, the chosen τ is increasing in f.

Now consider the following equations of motion. For tractability, we let r denote a country-wide average religiosity. From Propositions 1 and 2 and the previous discussion, there is a positive relationship between τ and r when γ is high, but a negative relationship between τ and r when γ is low. We capture this with $\tau := (\gamma - 0.5)r + 0.5$. To ensure $\tau \in [0,1]$, we limit $r \in [0,1]$. From Proposition 3, there is an inverse relationship between church-state separation and religiosity and we capture this with $\gamma := 1 - r$. Finally, we summarize the crowding out of religiosity by the welfare state with $r := 1 - \tau$. Combining these three equations of motion gives the quadratic roots $(r = 1, \gamma = 0, \tau = 0)$ and $(r = 0.5, \gamma = 0.5, \tau = 0.5)$ as the two steady states denoting (high r, low γ, low τ) and (low r, high γ, high τ).

2.5 Historical Discussion

The model can be summarized as follows:

- Fiscal and social conservatives and fiscal and social liberals tend to come hand-in-hand. Religious groups with greater within-group giving are more against the welfare state and more socially conservative.
- If church-state separation does not exist or the government were to become fundamentalist, the alliance would reverse: social conservatives would be fiscal liberals.

In the absence of church-state separation, additional taxes is like further religious redistribution. Religious individuals are more in favor of government redistribution, but non-religious individuals

are less in favor of government redistribution because part of it can be targeted for religious groups.

Standard insurance theory suggests that those who are more involved in insurance groups prefer others to be more involved as well in order to smooth their shocks over a larger group. Without church-state separation, taxes allow the religious to co-opt the non-religious to participate more in their insurance group. This matches the US experience of a religiously-led welfare movement during the Social Gospel period (described in Fogel 2000).

But why would the Social Gospel movement transform into an individualistic religious right that rejects the welfare state?

- As credit markets develop, elites gain access to alternative forms of social insurance and prefer less religious and government insurance. They legislate or judiciate increasing church-state separation in order to create a constituency for lower taxes, if religious voters exceed non-religious voters. Otherwise, elites prefer a state church to curb the secular left.

If the elites can smooth intertemporally by themselves, they will choose to opt out of social insurance provided by government and religious groups. With increasing church-state separation, social conservatives who previously were fiscal liberals now become fiscal conservatives, thus creating a constituency for lower taxes.

However, this explanation begs the question, what about Europe? Why do many countries in Europe still retain a state church?

Church-state separation expands the constituency for lower taxes among the religious but also expands the constituency for higher taxes among the secular. Depending on the exact parameters– if the number of religious individuals exceeds non-religious–then elites desiring lower taxes have the incentive to legislate increasing church-state separation. However, if the number of religious individuals is too low, then the elites prefer a state church to suppress the higher tax preferences of the non-religious.

The model closes with a simple observation. As the welfare state shrinks, marginal members seeking insurance become more religious.

- Multiple steady states arise where some countries sustain high religiosity, high church-state separation, and low welfare state, whereas other countries sustain low religiosity, low church-state separation, and high welfare state.

Countries with high religious weight increase church-state separation. Religious groups shift for less welfare, but this induces marginal members seeking insurance to become more religious, which increases the incentive for church-state separation, creating a positive feedback. Multiple steady states arise where some countries sustain high religiosity, high church-state separation, and low welfare state, and vice versa.

Countries with low religious weight keep church-state separation low to curb the demand for welfare by non-religious groups, but marginal members seeking insurance may increase religiosity,

which increases the incentive for church-state separation, creating a negative feedback. This stabilizes this steady state with a large welfare state, low church-state separation, and low religiosity.

As credit markets become sufficiently developed so that non-religious constituency outweighs the religious constituency, then the elites that desire low taxes now prefer to decrease church-state separation in order to curb the secular left. This could explain why certain factions in the US today are trying to decrease church-state separation. This could also explain why Europe never had the "correct" balance of people for which the elites would have desired increasing church-state separation: the number of religious individuals were too few for their change in tax preferences to matter.

3 Data

The study draws upon several data sets. The first is the General Social Survey (Davis, Smith and Marsden, 2003), an annual survey of randomly sampled US residents containing information on demographic characteristics like income, education, and race, as well as religious attendance and political support for welfare spending and the Republican party. The second is the World Values Survey (Inglehart et al., 2000), which consists of three major waves, 1981-84, 1990-93, 1995-97, and again demographic characteristics, religious attendance, and political support variables. (We do not use the fourth wave of the World Values Survey because it does not contain data on support for welfare state.) The third is the Barro and McCleary (2005) data set on church-state separation across the world, which is based on Barrett (1982) and Barrett, Kurian, and Johnson (2001). They classify countries as having a state religion if the constitution designates an official state church and restricts or prohibits other forms of religion, or, if the government merely systematically favors a specified religion through subsidies and tax collection or through the teaching of religion in public school. For a list of countries, see Appendix Table 6. Data on philanthropic giving is merged with the US data. The 2001 Center on Philanthropy Panel Study portion of the Panel Study of Income Dynamics collects this data; summary statistics by denomination are reported in Smith (2004). Denomination categories are also taken from Smith (2004).

All regressions include regional fixed effects to control for omitted environmental variables that may influence the way political support differs across space. All specifications also include dummies for year, race, gender, and controls for log of income[13], age, age-squared, and years of completed schooling (dummies for categories of completed schooling in the World Values Survey). All estimates discussed below are marginal effects from probit models evaluated at sample means. Standard errors are adjusted for correlation within region of residence. Summary statistics are displayed in Appendix Table 1.

As a check that religious attendance/participation is correlated with the degree of involvement with the group's social insurance, we show in Appendix Table 2 that higher attendance is correlated with responding to, "If you were ill, how much would people in your congregation help you out?"

[13] Alternative measures of income have virtually no impact on the estimated parameters on religion.

with "a great deal" as opposed to "some", "a little", or "none". The coefficient of 0.0864 in Column (1) suggests moving eight categories of religious attendance from "never attend" to "several times a week" would increase the probability if receiving a great deal of help by 69 percentage points. About 46% of respondents report that the congregation would help them out a great deal if they were ill. Column (2) shows denomination fixed effects. Members of more conservative denominations, such as Evangelical Protestants, are significantly more likely to receive a great deal of help if ill (a positive 34 percentage point association), than are members of less conservative denominations, such as Jews (a negative 12 percentage point association).

The main measure of welfare support in the US is the response to the question, "We are faced with many problems in this country, none of which can be solved easily or inexpensively. Are we spending too much money, too little money, or about the right amount on welfare". "Too little money" is coded as 1, as support welfare. The main measure of welfare support in the World Values Survey is the response to the question, "Do you think what the government is doing for poverty in this country is about right, too much, or too little?" Too little is coded as 1. The categories, "too much" and "about right", are distributed similarly with respect to religious attendance. Other variables of interest are also coded as 1-0 for consistency and ease of interpretation.

The data appendix discusses the remaining variable definitions.

4 Fiscal and Social Conservatism and Liberalism

Do fiscal and social conservatives and fiscal and social liberals come hand-in-hand at the individual level within countries, not just congressionally or across countries? Figure 1 plots welfare support as it varies with religious attendance. Welfare support declines as religious attendance increases. Roughly 22% of those who never attend religious services support more welfare while a little under 17% of weekly attenders support more welfare. The inverse relationship between welfare support and religious attendance remains when controlling for demographic background characteristics, as shown in Table 1, which reports results from regressions of the form:

$$WelfareSupport_i = \beta_0 Religion_i + \beta_1 SocialConservatism_i + \alpha' \mathbf{Controls}_i + \varepsilon_i.$$

[Table 1 goes here]

$Religion_i$ measures religious attendance and $SocialConservatism_i$ measures views on social matters of topical concern, a 0-1 index summing values on the following topics: support for prayer in public schools, making abortion illegal, women should stay at home, premarital sex is always wrong, and considering oneself to be fundamentalist. Welfare support declines with both religious attendance and social conservatism. To get a sense of the magnitude, the coefficient of -0.0076 in Column (1c) of Table 1 suggests moving eight categories of religious attendance from "never attend" to "several times a week" would decrease welfare support by 6.1 percentage points. Only

20% of respondents support more welfare, so this is roughly one-third the baseline. The coefficient of -0.0183 in Column (1c) suggests moving from 0 to 1 in social conservatism would reduce welfare support by roughly the same amount as increasing two and a half categories of religious attendance.

Attenders are also more likely to identify as strong Republicans (Columns 2a-2c) and be politically conservative (Columns 4a-4c). The coefficient of 0.0055 in Column (2c) suggests increasing eight categories of religious attendance increases probability of identifying strongly as Republican by 4.4 percentage points. Only 9.4% of respondents identify strongly as Republicans. The coefficient of 0.0554 in Column (2c) suggests moving from 0 to 1 in social conservatism would increase strong Republican identification by roughly the same amount as ten categories of religious attendance. The results on political conservatism can be interpreted similarly. Roughly 17% of respondents consider themselves conservative or extremely conservative politically. Eight categories of religious attendance is half that size. Moving from 0 to 1 in social conservatism is now equivalent to fifteen categories of religious attendance. Support for equality declines with religious attendance (Columns 3a-3c). About 29% of respondents are pro-equality. Eight categories of religious attendance reduces support for equality by 6.2 percentage points.

Figure 2 shows that welfare support declines with religious attendance in most countries for which we have data.

[Figure 2 goes here]

The bars indicate the coefficient between religious attendance and welfare support for each country in the World Values Survey. For comparison with the General Social Survey, the average coefficient is -0.0087, slightly larger than -0.0083 in Column (1a) of Table 1. For the US, the World Values Survey coefficient is -0.017. These coefficients are comparable. There are fewer categories of religious attendance in the World Values Survey, seven, instead of nine in the General Social Survey. Moreover, the question on welfare support is asked slightly differently, with the General Social Survey asking about government spending on welfare and the World Values Survey asking about government action on poverty. In the General Social Survey, 20% of respondents are pro-welfare whereas in the World Values Survey, 40% of US respondents are pro-welfare.

5 Within-Group Giving and Conservatism

Are religious groups with more within-group charitable giving more against welfare? Previous research suggests within-group giving is correlated with mutual insurance. Approximately half of all philanthropic donations in the US from individuals go to religious organizations. By 2003, financial giving to religious organizations amounted to $84 billion annually (Cadge and Wuthnow 2005 citing US Statistical Abstract 2004). Church involvement among evangelical Protestants is associated mainly with volunteering within the congregation, while mainline Protestants volunteer with a wider variety of community organizations (Wuthnow 1999). In one national survey of working Americans, 4% claimed to have received financial help from a religious organization within the past year. 80% of these recipients were themselves church or synagogue members (compared to

56% of non-recipients) and 61% belonged to religious fellowship groups (compared to 18% among non-recipients). The recipients were disproportionately those who had been laid off work or experienced pay cuts and had trouble paying their bills (Wuthnow 1994b).

Our analysis suggests within-group giving is correlated with fiscal and social conservatism. Appendix Table 3 shows the degree of within-group giving for each denomination taken from (Smith 2004). Mormons give 91% of the charitable giving to religion, Evangelical Protestants 82%, Mainline Protestants 62%, Catholics 51%, Other Religions 51%, Jewish 40%, and None 40%. The percentage of overall income given to religion also roughly corresponds with the same ordering.

[Table 2 goes here]

Table 2 reports results from regressions where different opinions are regressed on the fraction of charitable giving that goes to religion.[14] Columns (1) to (5) indicate that members of denominations with a high fraction of giving to religion tend to be more socially conservative on prayer, abortion, women, premarital sex, and fundamentalism. These coefficients, such as 0.5854 in Column (1), suggest moving roughly 50 percentage points of within-group giving, from the lowest (40%) to the highest (91%), would increase support for prayer in public schools by 29% (61% of respondents support prayer in public school), increase support for making abortion illegal by 21% (60% of respondents support making abortion illegal), increase support for having women at home by 15% (42% believe women belong at home), increase belief in premarital sex as wrong by 26% (28% believe premarital sex is wrong), and increase self-identification as fundamentalist by 100% (32% identify themselves as fundamentalist).

Columns (6) to (9) indicate that members of denominations with a high degree of within-group giving are also less supportive of welfare and equality and are more likely to identify as Republican and be politically conservative. These coefficients, such as -0.1317 in Column (6), suggest moving 50 percentage points of within-group giving reduces support for welfare by 7% (20% support more welfare), increases strong Republican identification by 8% (9% identify strongly as Republican), and increases political conservativeness by 13% (17% identify as politically conservative or extremely conservative).

[Figure 3 goes here]

Figure 3 display the coefficients on denomination fixed effects in analogous regressions reported in Appendix Table 4.[15] These results can be read in two ways. Appendix Table 4 can be read

[14] Regressions are all of the form:

$$WelfareSupport_i = \beta WithinGroupGiving_i + \alpha' \mathbf{Controls}_i + \varepsilon_i$$

[15] Regressions are all of the form:

$$WelfareSupport_i = \beta Denomination_i + \alpha' \mathbf{Controls}_i + \varepsilon_i$$

vertically, for each fiscal or social attitude, more conservative/liberal denominations indicate more extreme positions. Figure 3 groups the coefficients by denomination. Groups with greater within-group giving, such as Mormons and Evangelical Protestants, tend to be more socially conservative on prayer, abortion, women, and premarital sex. They are also more fiscally conservative, being less supportive of welfare and equality and being more likely to identify as Republican, politically conservative, and fundamentalist.

6 Church-State Separation

Do social conservatives become fiscal liberals if there is a state church? To test this, we regress stated welfare support on religious attendance and attendance interacted with a dummy if the respondent's country has a state church, i.e. a regression of the form

$$WelfareSupport_{ij} = \beta_0 Attendance_{ij} + \beta_1 Attendance_{ij} \times StateChurch_j + \beta_2 StateChurch_j + \alpha' \mathbf{Controls}_{ij} + \varepsilon_{ij}$$

The key parameter of interest is whether a state church mitigates the negative correlation of religion and welfare support, i.e. $\beta_1 > 0$, which the theory predicts. Table 3 reports estimates from this specification.

[Table 3 goes here]

Column (1) indicates that across the world, religious attendance is strongly related to less welfare support, hence confirming that Proposition 1 holds across a wide range of countries. The coefficient of -0.0087 suggests that moving six categories of religious attendance, from "never attend" to "more than once a week", would reduce support for welfare by 5.2 percentage points. Roughly 76% of the sample believe the government is doing too little about poverty.

To confirm that church attendance and social conservatism are related, Appendix Table 5 shows that church attendance predicts social conservatism around the world. These questions are of four categories: child obedience/ownership, women's role, sexual activity, and moral absolutism. On most questions, church attendance and social conservatism on these values are statistically significantly related.

The coefficient on the interaction term, 0.0007 in Column (2), indicates that having a state church marginally reduces the strength of the relationship between religious attendance and welfare support by 7% and this reduction is not statistically significant. Appendix Table 6 list the countries in our data that have or do not have a state church.

The key test of Proposition 2 is obtained by interacting religious attendance with belonging to the state church, i.e. the specification:

$$WelfareSupport_{ij} = \beta_0 Attendance_{ij} + \beta_1 Attendance_{ij} \times BelongToStateChurch_{ij} + \beta_2 BelongToStateChurch_{ij} + \alpha' \mathbf{Controls}_{ijt} + \varepsilon_{ij}$$

where $BelongToStateChurch_{ij}$ is an indicator of individual i lives in a country j with a state church and belong to it. If Proposition 2 is true, we would expect $\beta_0 + \beta_1$ to be positive. The results in Column (3) indicate individuals who are members of the state church display a positive relationship between religious attendance and welfare support. β_0 and β_1 are statistically significant at the 1% and 5% level, together, $\beta_0 + \beta_1$, is statistically significant at the 15% level. The coefficient of -0.0108 indicates one category of religious attendance reduces welfare support by 1% for individuals who do not belong to a state church, the same result as for individuals within the US. Adding 0.0271 and -0.0108 in Column (3) suggests one category of religious attendance increases welfare support by 1.6% for individuals belonging to a state church.

These regressions restrict the marginal effect of going from one category of church attendance to another to be the same across all categories. To consider possible nonlinearities, Figure 4 displays the conditional correlations between welfare support and dummies for each level of religious attendance (the omitted category is no attendance).[16] The squares and solid line indicate that welfare support increases with church attendance for members of the state church but the triangles and dashed line indicates that welfare support declines with church attendance for non-members. This replicates the results in Column (3) of Table 3 and confirms Proposition 2.

[Figure 4 goes here]

One alternative hypothesis for these results is that religious groups are against the welfare state because the welfare state assists people who are not members of their own group. Column (4) of Table 3 tests this hypothesis by also including as control, an interaction term between church attendance and percent of the country's population that is of the respondent's religion. The main results on belonging to a state church are very similar in magnitude and significance as in Column (3). It does not appear that the church-state separation results are being driven by individuals being more against the welfare state when they are of a minority religion. The coefficient of -0.065 is the opposite sign suggested by the hypothesis and is not statistically significant.

7 US Judicial Decisions on Church-State Separation and Fiscal-Social Conservatism

We now return to the puzzle regarding why the Social Gospel movement shifted to the religious right. A much-debated voting pattern (as in Glaeser, Shapiro, and Ponzetti 2005) is that religiosity

[16] These results are also robust to using a dummy variable for attending at least once a month.

has increasingly predicted Republican voting, but this hasn't always been the case, the relationship between religious attendance and Republican voting was actually declining before 1976. Figure 5 displays for each electoral vote, the correlation between monthly church attendance and Republican voting. In 1968, the association was roughly 0.07, dipping to 0.01 in 1976, and increasing to 0.17 in 1992.

[Figure 5 goes here]

One question that often arises is, didn't the US always have church-state separation? But according to legal scholars (Hamburger 2002, Feldman 2005), church-state separation was actually not read into the Constitution until the last century. As example, they cite the case of Catholic immigration in the late 19th century. Protestant Bible reading in public schools triggered parents to send their children to Catholic private schools, who then argued that they were being doubly penalized in taxes for Protestant public schools and tuition for Catholic private schools. In response, there was a proposal to ban government funding of religious institutions in the 1870s. Before the welfare state, government support for the poor was often distributed through religious organizations. In fact, the secular movement promoting separation of church and state didn't begin until the 1920s, in the US by elites, and in Europe by the non-elites.

The previous sections found an alliance between fiscal and social conservatism at the individual level within countries that appeared to be explained by a mechanism for social insurance as measured by within-group giving, and this alliance reversed for members of the state church. This section asks whether this reversal can also be found across time within the US as judicial decisions gradually separated church and state and at different speeds in different time periods. To mitigate concerns that the cross-country test of church-state separation is driven by other omitted country-level factors, we construct a time-series of church-state separation judicial decisions within the US.

The switch in the relationship between church attendance and Republican voting roughly coincides with judicial decisions on separation of church and state, which reaches its highest rate during the 1970s and early 1980s (Figure 6). Figure 6 and Appendix Table 7 document US Supreme Court activity (where the Supreme Court either made a decision or let stand a lower court decision) on church-state separation in public schools. Figure 6 shows the number of decisions each year that increase or decrease separation of church and state.

[Figure 6 goes here]

These decisions include disallowing religious instruction in public schools (1948), disallowing prayer in public schools (1962), disallowing Bible recitation in public schools (1963), disallowing direct government assistance to religious schools (1971), disallowing tax deductions and reimbursements for children in religious schools (1973), disallowing the display of Ten Commandments (1980), ruling that the equal treatment of creation science and evolution is unconstitutional (1981), and disallowing graduation prayer (1992). The data in Appendix Table 7 comes from About.com

("Supreme Court Decisions-Religion in Schools"), which draws from Hall (1999) and Alley (1988, 1998) Supreme Court decisions and Circuit Court decisions that were certiorari denied (appealed but let stand by the Supreme Court without hearing).

[Figure 7 goes here]

Figure 7 shows that increases in church-state separation precede increases in the strength of the relationship between church attendance and Republican voting. The x-axis marks the net number of judicial decisions increasing or decreasing church-state separation in the four years prior to an election year. The y-axis marks the change in the coefficient on the relationship between church attendance and Republican voting. An OLS regression of the form

$$\Delta ChurchAttendance\_RepublicanVoting_t = \beta_o \Delta ChurchStateSeparation_t + \varepsilon_t$$

yields an estimate of β_0 of 0.033(0.014), a positive relationship that is statistically significant at the 6% level. (An OLS regression of change in voting patterns on the following period's church-state separation decisions yields a coefficient of 0.006(0.020), a rough Granger causality test.) This coefficient suggests 1 judicial decision increasing church-state separation would increase how strongly church attendance predicts Republican voting by 0.033. To explain a shift in the coefficient between church attendance and Republican voting of 0.16 (0.01 in 1976 to 0.17 in 1992) would require roughly 4.8 judicial decisions. The General Social Survey series ends in 1996, but given the number of judicial decisions increasing church-state separation since then (8 increasing, 3 decreasing), the vociferousness of the contemporary debate on religion and politics is not surprising.

8 Religious Attendance and Church-State Separation

Without temporary shocks on parameter values to see if countries shift from one steady-state basin of attraction to another, a formal test for multiple steady states is beyond the scope of this paper. Table 4 examines part of the hypothesis where some countries sustain high religiosity, high church-state separation, and low welfare state, whereas others sustain low religiosity, low church-state separation, and high welfare state. As reported by many others (e.g. Barro and McCleary 2004), Table 4 documents that religious attendance is indeed higher in countries without a state church. 26% of respondents in countries with a state church attend monthly while 38% of respondents in countries without a state church attend monthly.

[Table 4 goes here]

One piece of evidence is suggestive. In the US General Social Survey (and again, documented by Glaeser, Shapiro, and Ponzetti 2005), monthly church attendance was 57% in 1972 but declined

to 45% in 2000, dipping below 50% in 1994 (Figure 8).

[Figure 8 goes here]

If this is interpreted as non-religious voters exceeding religious voters (Glaeser, et.al 2005 interpret monthly attendance as cut-off for religiosity playing a role in political preferences), this is consistent with the contemporaneous force to decrease church-state separation, such as faith-based initiatives and school vouchers, that is now the subject of much debate. The court has ruled it is constitutional to allow students to vote on whether to have a graduation prayer (1992), allow public school teachers to tutor private religious school students (1997), allow educational money and equipment for religious schools (2000), and allow public money to subsidize education at religious schools (2002). Figures 6 and 8 together suggest that decisions that decrease church-state separation coincide with monthly church attendance dipping below 50%.

9 Conclusion

Religious intensity as social insurance may explain why fiscal and social conservatives and fiscal and social liberals come hand-in-hand.

We present evidence consistent with this hypothesis. Fiscal and social conservatism and fiscal and social liberalism are correlated at the individual level within countries and not just congressionally or across countries. Religious groups with greater within-group giving are more against the welfare state and more socially conservative. The relationship between fiscal and social attitudes is reversed for members of the state church: religious intensity predicts welfare support if the individual is a member of the state church.

These observations provide a novel explanation for religious history. The changing nature of religious movements from Social Gospel (social conservatives - fiscal liberals) to the religious right (social conservatives - fiscal conservatives) is coincident with increasing separation between church and state. We present evidence that increases in church-state separation precede increases in the political alliance between religiosity and Republican voting and the magnitudes of these increases are also correlated.

While the increase in church-state separation can be due to various factors, one explanation is parsimonious within a social insurance framework. Increasing credit availability allows elites access to alternative forms of social insurance, which raises their incentive to judiciate increasing church-state separation. Increases in church-state separation create a constituency for a smaller welfare state as those who were previously religious left shift to the religious right. This explanation holds if religious voters exceed non-religious voters, whose preferences shift in the opposite direction, in the absence of a state church. Libertarians (social liberal - fiscal liberal) become secular left (social liberal - fiscal conservative) when government spending can no longer target religious groups. Elites would prefer to decrease church-state separation to curb the secular left if non-religious voters exceed religious voters, which may explain why church-state separation arose in the US but not in Europe,

where religiosity has historically been lower than in the US.

We close the model with a simple observation. In a case like the US, where increasing church-state separation creates a religious constituency for a smaller welfare state, marginal individuals seeking insurance will seek religious instead of government support. This increases the religious constituency, which further increases the incentive for church-state separation. Multiple steady states arise where some countries sustain high church-state separation, high religiosity, and low welfare state and other countries sustain low church-state separation, low religiosity, and high welfare state. Countries like some in Europe retain a large welfare state even with the advent of credit availability. Elites attempting to shrink the welfare state are unable to: they prefer to decrease church-state separation to curb the secular left, but a smaller welfare state would lead marginal individuals to seek religious insurance, which reverses the incentive for elites to decrease church-state separation. We present evidence that church-state separation and monthly religious attendance are highly correlated across countries.

Some argue that depending on the welfare state is the same as worshipping the government as if it were God. No obvious theory explains why political alliances align along this diagonal. This paper proposes an explanation based on the idea of religion as social insurance. Outside insurance would then be competitive against religious constituencies. Fundamentalism can persist because optimal insurance may be a substantial fraction of pre-unemployment wages (Chetty 2005).

A Data Appendix

The following variables are drawn from the US General Social Survey.

Prayer in Public School refers to the question, "The United States Supreme Court has ruled that no state or local government may require the reading of the Lord's Prayer or Bible verses in public schools. What are your views on this–do you approve or disapprove of the court ruling?" Disapprove is coded as 1, approve as 0.

Abortion should be Illegal refers to the question, "Please tell me whether or not you think it should be possible for a pregnant woman to obtain a legal abortion if she wants it for any reason" No is coded as 1, yes as 0.

Women Belong at Home refers to the question, "Is it much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family." Strongly agree and agree are coded as 1, disagree and strongly disagree are coded as 0.

Premarital Sex is Wrong refers to the question, "There's been a lot of discussion about the way morals and attitudes about sex are changing in this country. If a man and woman have sex relations before marriage, do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?" Always wrong is coded as 1, the remainder as 0. 4.

Identify Republican refers to the question, "Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?" Strong Republican is coded as 1, not very strong Republican, Independent close to Republican, Independent, Independent close to Democrat,

Not very strong Democrat, Strong Democrat are coded as 0. 5.

Pro-Equality refers to the question, "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Here is a card with a scale from 1 to 7. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel?" 1 and 2 are coded as 1 and 3-7 coded as 0. 6.

Politically Conservative refers to the question, "We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal–point 1–to extremely conservative– point 7. Where would you place yourself on this scale? Extremely conservative and conservative are coded as 1, slightly conservative, moderate, slightly liberal, liberal, and extremely liberal are coded as 0. 7.

Identify Fundamentalist refers to the question, "Do you consider yourself to be fundamentalist, moderate, or liberal?" Fundamentalist is coded as 1, Moderate and Liberal as 0.

Congregation Helps You refers to the question, "If you were ill, how much would the people in your congregation help you out?" A great deal is coded as 1, some, a little, or none are coded as 0.

The following variables are taken from the World Values Survey.

Child Obedience/Ownership Variables:

Respect Parents Always refers to "Regardless of what the qualities and faults of one's parents are, one must always love and respect them" as opposed to "One does not have the duty to respect and love parents who have not earned it by their behavior and attitudes"

Parents Self-Sacrifice refers to "Parents' duty is to do their best for their children even at the expense of their own well-being"

Kids Learn X refers to "Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five", where X can be, Good Manners, Independence, Hard Work, Feeling of responsibility, Imagination, Tolerance and respect for other people, Thrift saving money and things, Determination and perseverance, Religious faith, Unselfishness, and Obedience

Women's Role Variables:

Men Deserve Jobs More refers to "When jobs are scarce, men should have more right to a job than women"

Women Need Children refers to "Do you think that a woman has to have children in order to be fulfilled or is this not necessary"

Marriage Not Out-Dated refers to "Do you agree or disagree with the following statement? Marriage is an out-dated institution"

Sexual Activity Variables:

Complete Sexual Freedom refers to "If someone said that individuals should have the chance to enjoy complete sexual freedom without being restricted, would you tend to agree or disagree?"

Approve Out-of-Wedlock Birth refers to "If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?"

Moral Absolutism Variables:

Moral Absolutism refers to "Here are two statements which people sometimes make when discussing good and evil. Which one comes closest to your own point of view? A. There are absolutely clear guidelines about what is good and evil. These always apply to everyone, whatever the circumstances. B. There can never be absolutely clear guidelines about what is good and evil. What is good and evil depends entirely upon the circumstances at the time"

Homosexuality Never refers to "Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between" Homosexuality never justifiable

Abortion Never refers to Abortion being never justifiable.

Divorce Never refers to Divorce being never justifiable.

Euthanasia Never refer to Euthanasia—ending the life of the incurably sick—being never justifiable.

Church-state separation data is drawn from Barro and McCleary (2005), which is based on Barrett (1982) and Barrett, Kurian, and Johnson (2001). They classify countries as having a state religion if the constitution designates an official state church and restricts or prohibits other forms of religion, or, if the government merely systematically favors a specified religion through subsidies and tax collection or through the teaching of religion in public school. Countries with no state religion include Australia, Belgium, Canada, France, Mexico, and the United States. Countries with state religion include Iceland, Denmark, Norway, United Kingdom, Italy, Iran, Iraq, Libya, Nepal, and Greece, just to name a few. The entire list is in Table 1a-1g of Barro and McCleary (2005).

B References

Acemoglu, Daron and J. Robinson (2000) "Why Did the West Extend the Franchise? Growth, Inequality, and Democracy in Historical Perspective," Quarterly Journal of Economics, 115(4), 1167-1199.

Alley, Robert S. (1988) The Supreme Court on Church and State. Oxford University Press.

Alley, Robert S. ed. (1998) Constitution and Religion: Leading Supreme Court Cases on Church and State. Prometheus Books.

Barrett, D. B. (1982) World Christian Encyclopedia, 1st ed. Oxford, Oxford University Press.

Barrett, D. B., G. T. Kurian, and T. M. Johnson (2001). World Christian Encyclopedia, 2nd ed. Oxford, Oxford University Press.

Barro, Robert J. and Rachel M. McCleary (2004), "Which Countries Have State Religions?" NBER Working Paper No. 10438.

Becker, Gary S. (1958) "Competition and Democracy," Journal of Law and Economics, 1:105-109.

Beito, David T. (2000) From Mutual Aid to Welfare State: How Fraternity Societies Fought Poverty and Taught Character. UNC Press.

Benabou, Roland and Efe Ok, "Social Mobility and the Demand for Redistribution," Quarterly Journal of Economics, 110.

Berman, Eli (2000) "Sect, Subsidy, and Sacrifice: An Economist's View of Ultra-Orthodox Jews," Quarterly Journal of Economics, 65(3), 905-953.

Boodman, Sandra (2005) "Seeking Divine Protection: Some Believers Put Faith in Church Plans Instead of Standard Health Insurance," Washington Post, October 25, 2005.

Bowles, S. (2004): *Microeconomics. Behavior, Institutions, and Evolution.* New York: Princeton University Press.

Cadge, Wendy and Robert Wuthnow (2005) "Religion and the Nonprofit Sector" in Powell, W. and Steinberg, R. eds. The Nonprofit Sector: A Research Handbook, Yale University Press.

Cavanaugh, Jeff (2005) "Unholy Alliance or Match Made in Heaven? Welfare State Outcomes, the Economics of Religion, and the Logic of Conservative Political Coalitions," University of Illinois at Urbana-Champaign mimeo.

Chen, Daniel (2005) "Club Goods and Group Identity: Evidence from Islamic Resurgence During the Indonesian Financial Crisis," University of Chicago mimeo.

Chen, Daniel (2005) "Islamic Resurgence and Social Violence During the Indonesian Financial Crisis," University of Chicago mimeo.

Chetty, Raj (2003) "Consumption Commitments, Unemployment Durations, and Local Risk Aversion," NBER Working Paper No. 10211.

Cnaan, R. A., Boddie, S. C., Handy, F., Yancey, G., & Schneider, R. (2002). The invisible caring hand: Amer
York: New York University Press.

Converse, Philip (1964), "The Nature of Beliefs Systems in Mass Publics," in D. Apter, ed., Ideology and Discontent (New York: Free Press, 1964).

Davis, James A., T. Smith, and P. V. Marsden. (2003) General Social Surveys, 1972-2002, volume 3728. ICPSR, Ann Arbor, MI.

Dehejia, Rajeev, T. DeLeire, and E. F. P. Luttmer (2005) "Insuring Consumption and Happiness Through Religious Organizations," NBER Working Paper No. 11576.

Demarzo, Peter, D. Vayanos, and J. Zweibel (2003) "Persuasion Bias, Social Influence, and Uni-Dimensional Opinions," Quarterly Journal of Economics, 118(3), 909-968.

Edlund, Lena and R. Pande (2002) "Why Have Women Become Left-Wing: The Political Gender Gap and the Decline in Marriage," Quarterly Journal of Economics, 117(3), 917-961.

Feldman, Noah (2005) Divided By God: America's Church-State Problem –And What We Should Do About It. Farrar, Straus and Giroux.

Finke, R. and R. Stark (1983), Churching of America 1776-1990: Winners & Losers in Our Religious Economy. Rutgers University Press.

Fiorina, Morris, Abrams and Pope. (2004). Culture War? The Myth of a Polarized America. Longman Press.

Fogel, Robert W. (2000) The Fourth Great Awakening and the Future of Egalitarianism, University of Chicago Press.

Fox, J. and S. Sandler, (2004) "World Separation of Religion and State in the 21st Century," International Studies Association Conference, Montreal, March.

Gill, Anthony (2005) "The Political Origins of Religious Liberty: A Theoretical Outline," Interdisciplinary Journal of Research on Religion, 1(1).

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

Glaeser, E., G. Ponzetto, and J. Shapiro (2004) "Strategic Extremism: Why Republicans and Democrats Divide on Religious Values," HIER Working Paper #2044.

Glaeser, E. and J. Scheinkman (1998) "Neither a Borrower Nor a Lender Be: An Economic Analysis of Interest Restrictions and Usury Laws," Journal of Law and Economics 41, 1-36.

Gruber, Jon and D. Hungerman (2005) "Charitable Church Giving and the Rise of the Welfare State," NBER Working Paper.

Hall, Kermit L. ed. (1999) The Oxford Guide to United States Supreme Court Decisions, Oxford University Press.

Hamburger, Philip (2002) Separation of Church and State, Harvard University Press.

Hungerman, Daniel M. (2005) "Are Church And State Substitutes? Evidence from the 1996 Welfare Reform" Journal of Public Economics.

Iannaccone, Laurence R. (1992) "Sacrifice and Stigma: Reducing Free-riding in Cults, Communes, and Other Collectives," Journal of Political Economy, 100(2), 271-291.

Iannaccone, Laurence R. (1998) "Introduction to the Economics of Religion," Journal of Economic Literature, 36(3), 1465-95.

Inglehart, Ronald et al. (2000) World Values Surveys and European Values Surveys, 1981-84, 1990-93, and 1995-97, volume 2790. ICPSR, Ann Arbor, MI.

Jost, John T., J. Glaser, A. W. Kruglanski, and F. J. Sulloway (2003), "Political Conservatism as Motivated Social Cognition," Psychological Bulletin, 129(3), pp. 339-375.

Kaufman, Jason (2005) For The Common Good? American Civic Life and the Golden Age of Fraternity, Oxford University Press.

Kristof, Nicholas (2005) "God on Their Side," New York Times September 27, 2003.

Layman, Geoffrey (2001), The Great Divide: Religious and Cultural Conflict in American Party Politics, Columbia University Press.

Lizza, Ryan "'God's Politics': The Religious Left", New York Times February 6, 2005.

Meltzer, A. H., and S. F. Richard (1983): "Tests of a rational theory of the size of government." *Public Choice* 41: 403-18.

Moene, Karl O. and Michael Wallerstein (2001) "Inequality, Social Insurance, and Redistribution," American Political Science Review, Vol 95, No 4.

Moene, Karl O. and Michael Wallerstein (2003) "Earnings Inequality and Welfare Spending: A Disaggregated Analysis," World Politics, 55, 485-516.

Poole, Keith, and Howard Rosenthal (1991), "Patterns of Congressional Voting," American Journal of Political Science, Vol 35, 228-278.

Poole, Keith and Howard Rosenthal (1997), Congress: A Political-Economic Theory of Roll Call Voting, Oxford, UK: Oxford University Press.

Roemer, John (1998) "Why the poor do not expropriate the rich: an old argument in new garb," Journal of Public Economics 70, 399-424.

Romer, T. (1975): "Individual welfare, majority voting and the properties of a linear income tax." *Journal of Public Economics* 4: 163-85.

Sapiro, Virginia and S. J. Rosenstone. (2002) American National Election Studies Cumulative Data File, volume 8475. ICPSR, Ann Arbor, MI.

Scheve, Kenneth and David Stasavage. (2005) "Religion and Preferences for Social Insurance," mimeo.

Smith, Thomas (2004), "Religious Affiliation and Philanthropy," University of Illinois mimeo.

US Statistical Abstract. (2004), Washington DC: Government Printing Office.

Weibull, J. W. (1995): *Evolutionary Game Theory.* Cambridge, MA: MIT Press.

Wuthnow, Robert (1994), God and Mammon in America. New York: Free Press.

Wuthnow, Robert (1999), "Mobilizing Civic Engagement: The Changing Impact of Religious Involvement." in Civic Engagement in American Democracy, eds. Theda Skocpol and Morris Fiorina. Washington, DC and New York: Brookings Institution Press and Russell Sage Foundation.

Figure 1: Welfare Attitudes and Religious Attendance in the US

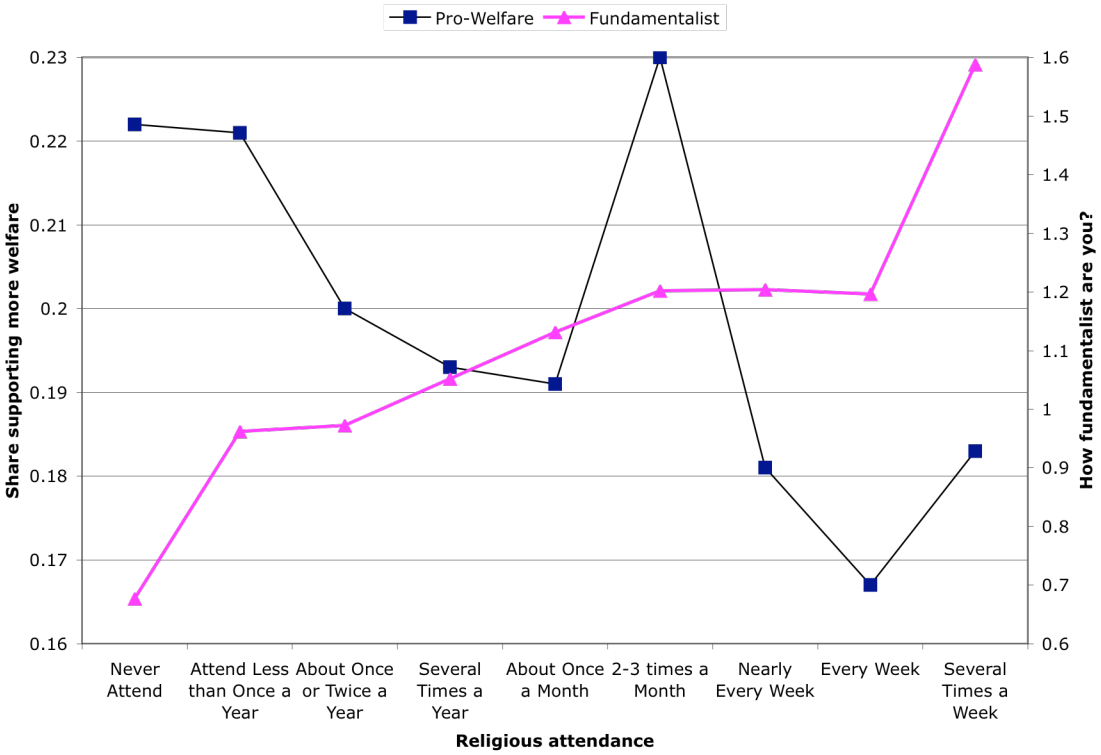
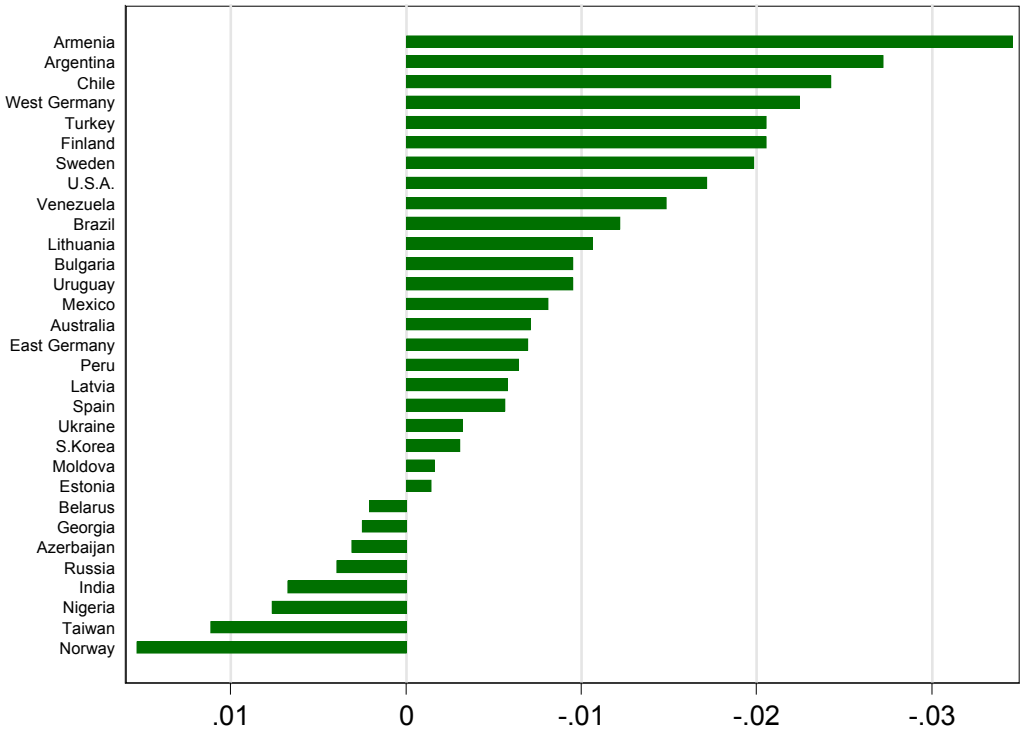
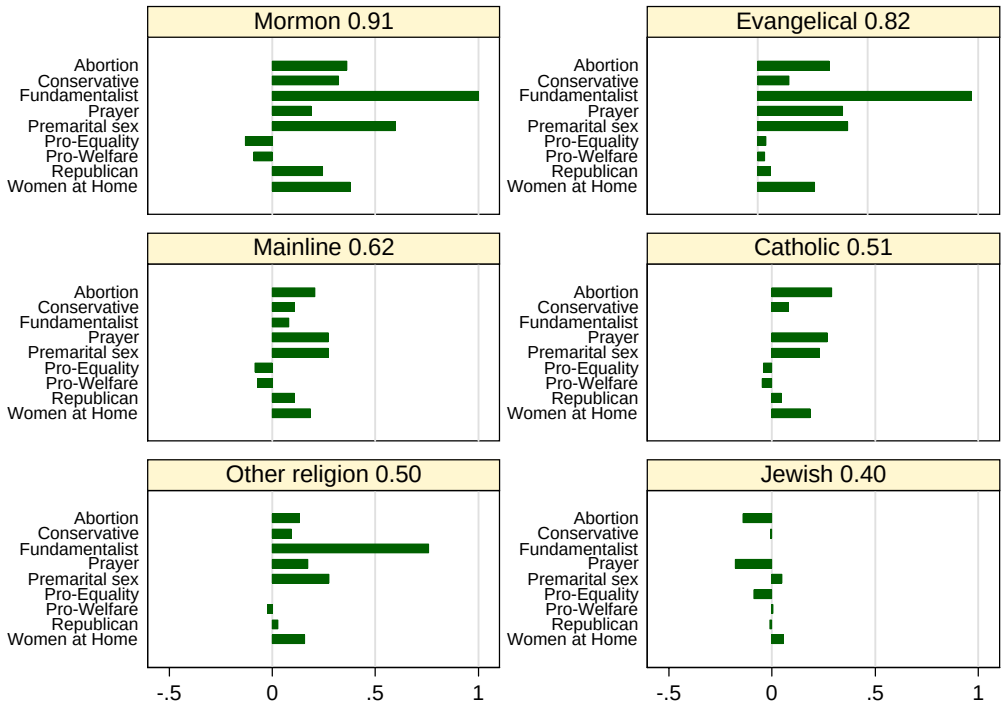


Figure 2: Welfare Attitudes and Religious Attendance Across the World



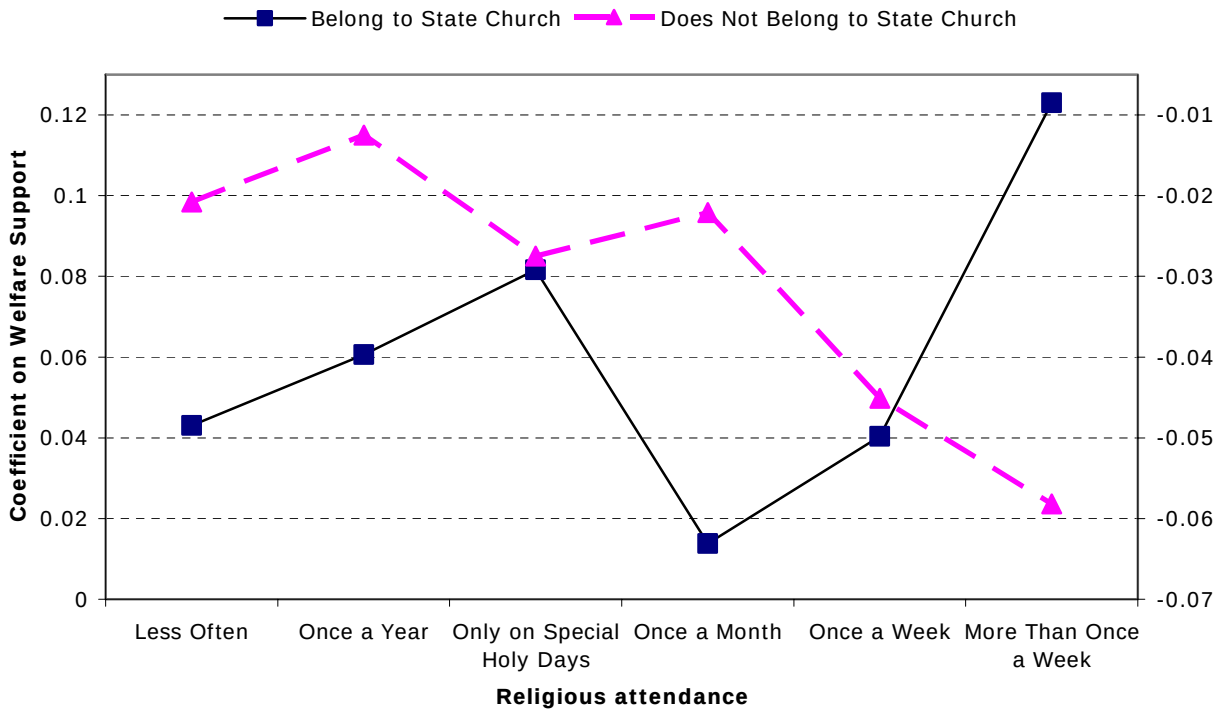
Bars show the magnitude of the association between religious attendance and preferences for redistribution. The regression specification is similar to that of Column (1) in Table 3.

Figure 3: Fiscal and Social Attitudes by Denomination in the US



Bars show denomination fixed effects for the regressions displayed in Appendix Table 3.

Figure 4: Welfare Attitudes and Church-State Separation Across the World

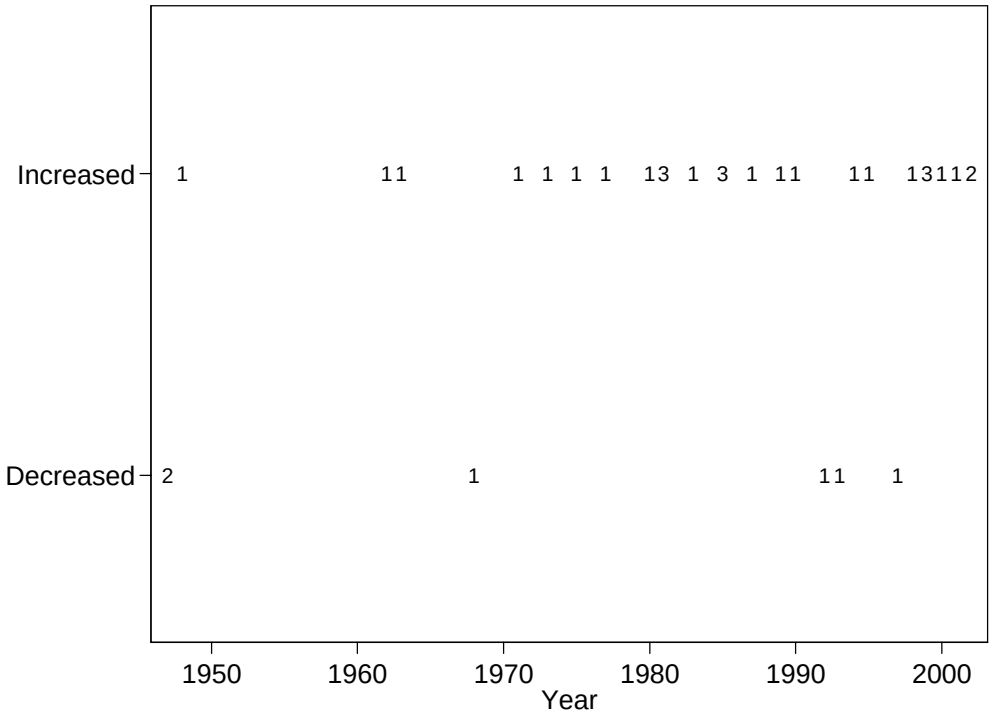


The solid line indicates the relationship between welfare support and religious attendance for individuals who belong to a state church (left axis) and the dashed line indicates the relationship for individuals who do not belong to a state church (right axis). The regression specification is similar to that of Column (3) in Table 3.

Figure 5: Trends in the Association Between Church Attendance and Republican Voting

The graph shows the coefficient of church attendance on the probability of voting Republican by election year with 95% confidence intervals.

Figure 6: Church-State Separation Decisions in the US



This chart shows the yearly number of Supreme Court decisions that increased or decreased church-state separation in public schools.

Figure 7: Church-State Separation and Right-Wing Voting in the US

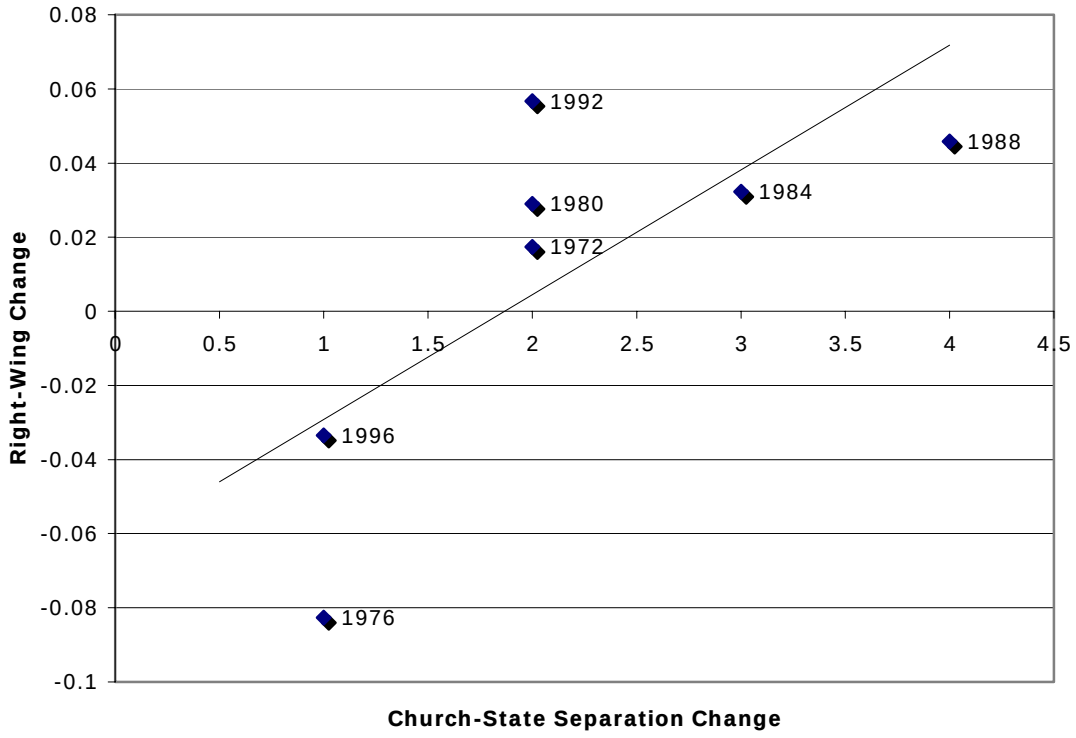
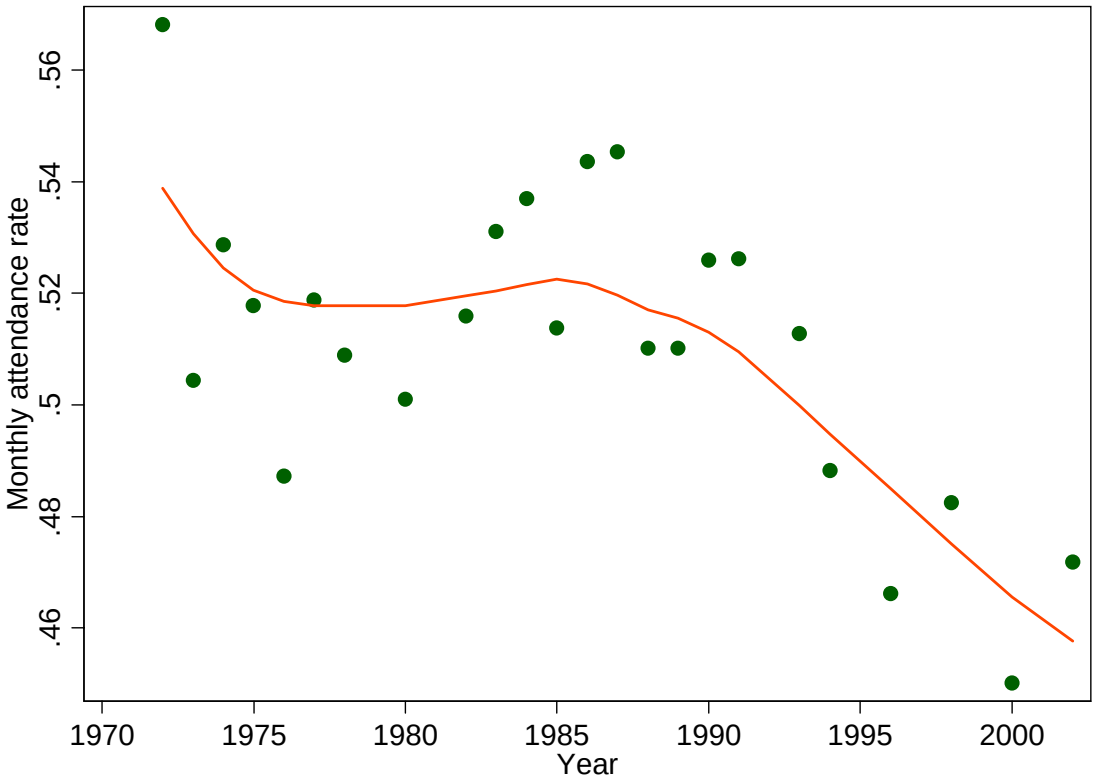


Figure 8: Trends in Monthly Church Attendance in the US



Average monthly attendance and smoothed averages using Fan regression.

Table 1

Fiscal and Social Conservatism/Liberalism in the US

	Pro-Welfare				Identify as Republican	
	(1a)	(1b)	(1c)	(2a)	(2b)	(2c)
Church Attendance	-0.0083***		-0.0076***	0.0078***		0.0055***
	(0.0008)		(0.0010)	(0.0005)		(0.0004)
Social Conservatism		-0.0358***	-0.0183**		0.0707***	0.0554***
		(0.0078)	(0.0080)		(0.0068)	(0.0065)
N	22395	22489	22329	36489	36733	36404
	Pro-Equality				Politically Conservative	
	(3a)	(3b)	(3c)	(4a)	(4b)	(4c)
Church Attendance	-0.0070***		-0.0078***	0.0173***		0.0106***
	(0.0014)		(0.0013)	(0.0012)		(0.0009)
Social Conservatism		0.0053	0.0245*		0.1932***	0.1628***
		(0.0160)	(0.0149)		(0.0125)	(0.0119)
N	18608	18800	18588	31672	31932	31637

Notes:

1. Data are from General Social Survey cumulative file, 1972-2000. All estimates are marginal effects from probit models evaluated at sample means. Standard errors in parentheses are adjusted for correlation within region of residence.
2. All specifications include dummies for region of residence, year, race, gender, and controls for the log of income, age, age^2, and years of completed schooling.
3. Social Conservatism is a 0-1 index summing up values on Prayer in Public School, Abortion should be Illegal, Women Belong at Home, Premarital Sex is Wrong, and Identify as Fundamentalist.

Table 2

Within-Group Giving and Fiscal/Social Conservatism in the US

	Prayer in Public School	Abortion should be Illegal	Women Belong at Home	Premarital sex is Wrong	Identify Fundamentalist	Pro-Welfare	Identify as Republican	Pro-Equality	Politically Conservative
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Within-Group Giving	0.5854***	0.4241***	0.3067***	0.5211***	1.9928***	-0.1317***	0.1684***	-0.0577	0.2510***
	(0.0330)	(0.0525)	(0.0558)	(0.0623)	(0.0532)	(0.0124)	(0.0203)	(0.0432)	(0.0225)
N	16118	18447	12931	19719	30052	18992	30916	15788	26847

Notes:

1. Data are from General Social Survey cumulative file, 1972-2000. All estimates are marginal effects from probit models evaluated at sample means. Standard errors in parentheses are adjusted for correlation within region of residence.

2. All specifications include dummies for region of residence, year, race, gender, and controls for the log of income, age, age^2, and years of completed schooling.

Table 3

Fiscal and Social Conservatism and Church-State Separation Across the World

	Pro-Welfare	Pro-Welfare	Pro-Welfare	Pro-Welfare
	(1)	(2)	(3)	(4)
Church Attendance	-0.0087***	-0.0091***	-0.0108***	-0.0081**
	(0.0034)	(0.0027)	(0.0025)	(0.0037)
Attendance * Has State Church		0.0007		
		(0.0085)		
Has State Church		0.2359***		
		(0.0526)		
Attendance * Belongs			0.0271**	0.0296**
to State Church			(0.0121)	(0.0120)
Belongs to State Church			-0.0540	-0.0513
			(0.0505)	(0.0543)
Attendance * % Country is Own				-0.0065
Religion				(0.0073)
% Country is Own Religion				-0.0178
				(0.0376)
N	52989	52989	44664	44664

Notes:

1. Data are from World Values Survey cumulative file, waves 1-3. All estimates are marginal effects from probit models evaluated at sample means. Standard errors in parentheses are adjusted for correlation within country of residence.
2. All specifications include dummies for country of residence, survey wave, gender, and educational attainment category and controls for log of income, age, and age^2.
3. Data on church-state separation from Barro and McCleary (2004), which is based on Barrett (1982) and Barrett, Kurian and Johnson (2001). They classify countries as having a state religion if the constitution designates an official state church and restricts or prohibits other forms of religion, or, if the government merely systematically favors a specified religion through subsidies and tax collection or through the teaching of religion in public school. See Appendix Table 6 for a list.

Table 4

Church Attendance in Countries With and Without a State Church

	Fraction with at least monthly religious attendance
	(1)
Countries with state church	0.2628***
	(0.0503)
Countries without state church	0.3782***
	(0.0449)
Difference	-0.1154*
	(0.0674)
N	168482

Notes:

1. Data are from World Values Survey cumulative file, waves 1-3. Standard errors in parentheses are adjusted for correlation within country of residence.
2. Data on church-state separation from Barro and McCleary (2004), which is based on Barrett (1982) and Barrett, Kurian and Johnson (2001). They classify countries as having a state religion if the constitution designates an official state church and restricts or prohibits other forms of religion, or, if the government merely systematically favors a specified religion through subsidies and tax collection or through the teaching of religion in public school. See Appendix Table 6 for a list.

Appendix Table 1
Descriptive Statistics

US Summary Statistics (GSS)		World Summary Statistics (WVS)	
Welfare Support	0.197	Welfare Support	0.761
	(0.002)		(0.002)
Religious Attendance (Categories 1-9)	3.897	Religious Attendance (Categories 1-7)	4.412
	(0.013)		(0.005)
Monthly Religious Attendance	0.506	Monthly Religious Attendance	0.362
	(0.002)		(0.001)
Social Conservatism (Index 0-1)	0.417	Have State Church	0.398
	(0.002)		(0.001)
Politically Conservative	0.173	Belong to State Church	0.227
	(0.002)		(0.001)
Identify Strongly as Republican	0.094	Fraction of Country is Your Religion	0.570
	(0.001)		(0.001)
Support Equality	0.294	Income	1,502
	(0.003)		(72)
Support Prayer in Public Schools	0.605	Age	40.8
	(0.003)		(0.041)
Abortion Should Be Illegal	0.599	N	168482
	(0.003)		
Women Should Stay At Home	0.423		
	(0.004)		
Premarital Sex is Wrong	0.284		
	(0.003)		
Self-identified Fundamentalism	0.322		
	(0.002)		
Congregation Helps You "A Great Deal" if Ill	0.462		
	(0.176)		
Income	30567		
	(135)		
Age	45.220		
	(0.084)		
Education	12.537		
	(0.015)		
N	43698		
Denominations	%		
Mormons	0.98		
Evangelical Protestants	24.65		
Mainline Protestants	28.16		
Catholics	29.31		
Other Religion	3.81		
Jewish	2.50		
None	10.59		
Supreme Court Decisions Regarding Church-State Sepa	40		
in Public Schools, 1940-2002			

Appendix Table 2
Social Insurance and Religion

	Congregation Helps You A Great Deal if Ill	
	(1)	(2)
Church Attendance	0.0864***	
	(0.0105)	
Evangelical Protestant		0.3385*
		(0.1996)
Mainline Protestant		0.2745
		(0.1899)
Catholic		0.0565
		(0.1726)
Other religion		0.4930***
		(0.1262)
Jewish		-0.1165
		(0.1648)
N	720	586

Notes:
1. Data are from General Social Survey cumulative file, 1972-2000. All estimates are marginal effects from probit models evaluated at sample means. Standard errors in parentheses are adjusted for correlation within region of residence.
2. All specifications include dummies for region of residence, race, gender, and controls for the log of income, age, age^2, and years of completed schooling.
3. Sample size is smaller than in other tables because this question is only asked in 1998. Column 2, the omitted category is no religion.

Appendix Table 3
Within-Group Giving by Denomination in the US

	$ to Religious	$ to All Charity	**%Charity to Relg**	Income	%Inc to R	N
Mormons	4066	4467	**0.91**	77730	0.052	26
Evangelical Protestants	908	1139	**0.82**	49755	0.018	1271
Mainline Protestants	740	1193	**0.62**	72310	0.010	997
Catholics	491	962	**0.51**	71010	0.007	1451
Other	750	1504	**0.50**	49780	0.015	938
Jewish	1127	2791	**0.40**	125160	0.009	142
None	221	553	**0.40**	54360	0.004	663

Notes:
1. Data are from the 2001 Center on Philanthropy Panel Study portion of the PSID. Summary statistics by denomination are reported in Smith (2004).

Appendix Table 4

Within-Group Giving and Fiscal/Social Conservatism in the US

	Prayer in Public School	Abortion should be Illegal	Women Belong at Home	Premarital sex is Wrong	Pro-Welfare	Identify as Republican	Pro-Equality	Politically Conservative	Identify as Fundamentalist
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Mormon	0.1893***	0.3627***	0.3791***	0.5986***	-0.0907***	0.2437***	-0.1314***	0.3232***	100%
	(0.0288)	(0.0270)	(0.0346)	(0.0370)	(0.0296)	(0.0239)	(0.0199)	(0.0376)	
Evangelical Protestant	0.3852***	0.3252***	0.2575***	0.4094***	0.0314***	0.0581***	0.0378***	0.1420***	96.70%
	(0.0215)	(0.0266)	(0.0239)	(0.0163)	(0.0099)	(0.0090)	(0.0076)	(0.0122)	
Mainline Protestant	0.2746***	0.2080***	0.1869***	0.2722***	-0.0713***	0.1077***	-0.0841***	0.1086***	8.08%
	(0.0183)	(0.0236)	(0.0208)	(0.0181)	(0.0114)	(0.0083)	(0.0054)	(0.0183)	
Catholic	0.2686***	0.2916***	0.1858***	0.2320***	-0.0473***	0.0453***	-0.0402***	0.0785***	0%
	(0.0257)	(0.0268)	(0.0290)	(0.0275)	(0.0110)	(0.0082)	(0.0110)	(0.0127)	
Other religion	0.1741***	0.1342***	0.1597***	0.2764***	-0.0212	0.0275*	-0.0000	0.0931***	76.06%
	(0.0097)	(0.0185)	(0.0315)	(0.0285)	(0.0162)	(0.0145)	(0.0277)	(0.0171)	
Jewish	-0.1791***	-0.1419***	0.0535	0.0482	0.0039	-0.0098	-0.0876***	-0.0078	0%
	(0.0577)	(0.0363)	(0.0481)	(0.0468)	(0.0298)	(0.0157)	(0.0266)	(0.0129)	
N	18613	21092	15210	22549	21956	36504	18247	30652	

Notes:

1. Data are from General Social Survey cumulative file, 1972-2000. All estimates are marginal effects from probit models evaluated at sample means. Omitted category is No Religion. Standard errors in parentheses are adjusted for correlation within region of residence.
2. All specifications include dummies for region of residence, year, race, gender, and controls for the log of income, age, age^2, and years of completed schooling.
3. Column 9 contains sample means for each denominational category.

Appendix Table 5

Social Conservatism around the World

	Respect Parents Always	Parents Sacrifice for Children	Kids Learn Good Manners	Kids Learn Religious Faith	Kids Learn Obedience	Kids Learn Independence	Kids Learn Imagination	Kids Learn Toleration	Most Important Faith, Obedience
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Church Attendance	0.0095	0.0226***	0.0051**	0.0657***	0.0101***	-0.0223***	-0.0021	0.0035	0.0428***
	(0.0063)	(0.0036)	(0.0025)	(0.0081)	(0.0027)	(0.0045)	(0.0045)	(0.0062)	(0.0053)
N	72262	70782	71500	72192	72192	71840	72072	71299	55436

Men Deserve Jobs More	Women Need Children	Marriage Not Out-Dated	Complete Sexual Freedom	Approve Out-of Wedlock Birth	Moral Absolutism	Homosexuality Never	Abortion Never	Divorce Never	Euthanasia Never
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
0.0098***	0.0092	0.0126*	-0.0197***	-0.0287***	0.0412***	0.0190**	0.0329***	0.0158***	0.0316***
(0.0036)	(0.0071)	(0.0066)	(0.0048)	(0.0075)	(0.0092)	(0.0089)	(0.0040)	(0.0045)	(0.0055)
71738	71718	71144	68760	68879	68869	71818	70527	71435	68296

Notes:

1. Data are from World Values Survey cumulative file, waves 1-3. All estimates are marginal effects from probit models evaluated at sample means. Standard errors in parentheses are adjusted for correlation within country of residence.

2. All specifications include dummies for country of residence, survey wave, gender, and category of educational attainment and controls for the log of income, age, and age^2.

Appendix Table 6
Countries With and Without a State Church

Without State Church	With State Church
Australia	Argentina
Brazil	Armenia
Chile	Azerbaijan
East Germany	Belarus
Estonia	Bulgaria
India	Finland
Latvia	Georgia
Lithuania	Moldova
Mexico	Norway
Nigeria	Peru
Russia	Spain
Russia	Ukraine
S.Korea	Venezuela
Sweden	
Taiwan	
Turkey	
U.S.A.	
Uruguay	
West Germany	

Notes:
1. Countries included if in Barro and McCleary church-state dataset and contains answers to the welfare question in the World Values Survey.

Appendix Table 7: US Supreme Court Decisions on Church-State Separation

1940 Minersville School District v. Gobitis (1940)
none In an 8-1 Court Decision, the Court ruled that a school district's interest in creating national unity was sufficient to allow them to require students to salute the flag.

1943 West Virginia State Board of Education v. Barnette (1943)
none The Court ruled 8-1 that a school district violated the rights of students by forcing them to salute the American flag.

1947 Everson v. Board of Education (1947)
decrease Supreme Court decision finding that a New Jersey law providing for reimbursement to parents of parochial school students for transportation costs on public busses is constitutional.

1948 McCollum v. Board of Education (1948)
increase By a 6-1 vote the Supreme Court agreed with Mrs. McCollum, an atheist mother, and disallowed the practice of having religious education to take place in public school classrooms during the school day.

1962 Engel v. Vitale (1962)
increase The Court ruled 7 to 1 that it was unconstitutional for a government agency like a school or government agents like public school employees to require students to recite prayers.

1963 Abington Township School District v. Schempp (1963)
increase The Court ruled 8-1 against requiring the recitation of Bible verses and the Lord's Prayer.

1968 Board of Education v. Allen (1968)
decrease Supreme Court decision finding that a New York Law requiring public school districts to purchase text books for private schools, including parochial schools, is permissible and not a violation of the Establishment Clause.

1968 Epperson v. Arkansas (1968)
increase The Court found that an Arkansas law prohibiting the teaching of evolution is impermissible because it violates the Establishment Clause and prohibits the free exercise of religion.

1971 Lemon v. Kurtzman (1971)
increase On June 28th, 1971, the Court unanimously (7-0) determined that the direct government assistance to religious schools was unconstitutional.

1972 Wisconsin v. Yoder (1972)
none On May 15th 1972 the Court ruled 6 to 1 that the compulsory education law in Winconsin did indeed violate the Free Exercise Clause for Amish parents.

1973 Committee for Public Education v. Nyquist (1973)
increase The Court found all three sections of a New York law providing, among other things, tax deductions and reimbursements for children in parochial schools, unconstitutional. Each of the three parts of the law had the primary effect of furthering religion.

1975 Meek v. Pittenger (1975)
increase Supreme Court decision invalidating most of two Pennsylvania laws providing for instructional materials and equipment to religious schools because most of that aid could be easily diverted to religious purposes.

1977 Wolman v. Walter (1977)
increase The Court allowed Ohio to provide standardized tests, therapeutic and diagnostic services to non-public school children. However, the state was not permitted to offer educational materials or subsidize class field trips.

1980 Stone v. Graham (1980)
increase The Court ruled that a Kentucky law requiring the posting of the Ten Commandments in each public school classroom in the state to be unconstituional.

1981 Segraves v. California (1981)
increase A California judge ruled that teaching evolution in public school science classes does not infringe upon the rights of any students or parents to the free exercise of their religion, even if they sincerely believe that evolution is contrary to their religious beliefs.

1981 McClean v. Arkansas (1981)
increase
The Court found that Arkasas' "blanced treatment" law mandating equal treatment of creation science with evolution was unconstitutional.

1983 Mueller v. Allen (1983)
decrease
The Supreme Court rules 5-4 that a Minnesota law allowing parents to make tax deductions for expenses incurred through things like

textbooks and other supplies at private schools is constitutional, even thought most of the benefit goes to religious and not secular schools.

1985 Aguilar v. Felton (1985)
increase In a 5-4 Court Decision in 1985, the Court overturned New York City's program of paying the salaries of public employees who provided any remedial assistance to low-income students in parochial school environments.

1985 Grand Rapids School District v. Ball (1985)
increase Grand Rapids School District offered two programs conducted in leased private school classrooms: one taught during the regular school day by public school teachers and the other taught after regular school hours by part-time teachers. Both were found unconstitional.

1985 Wallace v. Jaffree (1985)
increase The Court found that an Alabma law requiring that each school day begin with a one minute period of "silent meditation or voluntary prayer" was unconstitional.

1987 Edwards v. Aguillard (1987)
increase In a 7-2 Court Decision, the Court invalidated Louisiana's "Creationism Act" because it violated the Establishment Clause.

1989 Board of Education of Kiryas Joel Village School v. Grumet (1989)
increase The Court found that a school district boundary was unconstitutionally drawn to deliberately aid a particular religious group.

1990 Webster v. New Lenox (1990)
increase Seventh Circuit Court of Appeals ruled that school boards have the right to prohibit teaching creationism because such lessons would constitute religious advocacy and, hence, such restrictions do not constitute an infringement on a teacher's free speech rights.

1992 Lee v. Weisman (1992)
increase On June 24th 1992, the Court ruled in a 5-4 Court Decision that the graduation prayer during school graduation violated the Establishment Clause.

1992 Jones v. Clear Creek (1992)
decrease The Fifth Circuit Court ruled that it was not unconstitutional for a school to allow graduating seniors to vote on whether or not there would prayers during graduation ceremonies.

1993 Zobrest v. Catalina Foothills School District (1993)
decrease In 1993, the Court decided 5-4 to require a school district to offer a student in a private religious school the sign language interpreter he needed.

1994 Peloza v. Capistrano (1994)
increase Ninth Circuit Court of Appeals decision that a teacher does not have a right to teach creationism in a biology class, that "evolutionism" is not a religion or world view, and that the government can restrict the speech of employees while they are on the job.

1994 Brown v. Woodland Joint Unified School District (1994)
none Ninth Circuit Court of Appeals decision holding that a school district's use of the "Impressions" teaching aid did not constitute a promotion of witchcraft and denigration of Christianity.

1995 ACLU v. Black Horse Regional Board of Ed. (1995)
increase Third Circuit Court opinion that a school could not allow students to vote on whether or not they would have a student-lead prayer during graduation because the degree of state involvement in the ceremonies meant that any aspect of it was state-approved, including the prayer and prayer content.

1997 Agostini v. Felton (1997)
decrease On June 23rd, 1997, in a 5-4 Court Decision, the Court allowed public school teachers to tutor private school students in their private schools, even if the schools were primarily religious in nature.

1998 Good News Club v. Milford Central School District (1998)
increase Second District Court decision which found that a school district in New York could prohibit a community religious group from meeting in the school building because they would using it for specifically religious purposes.

1999 DiLorento v. Downey USD (1999)
increase The Supreme Court let stand, without comment, a 9th Circuit Court of Appeals decision that a school district was within its rights to discontinue a program of paid advertising signs on school grounds rather than accept a sign promoting the Ten Commandments.

1999 Cole v. Oroville Union High School (1999)
increase Ninth Circuit Court ruling that extremely sectarian and proselytizing speeches at a graduation ceremony could be prohibited because of the reasonable impression that the religious message was supported by the school. The Supreme Court let this stand.

1999 Freiler v. Tangipahoa (1999)
increase Fifth Circuit Court of Appeals found that a disclaimer to be read before teaching about evolution ultimately had the effect of furthering

religious interests and was therefore unconstitutional.

2000 Santa Fe School District v. Doe (2000)
decrease The Supreme Court ruled that official, student-led prayers before a school football game violated the separation of church and state.

2000 Mitchell v. Helms (2000)
increase Supreme Court decision allowing for educational materials and equipment to be given to religious schools, even if such equipment could be and is diverted for religious purposes - so long as this aid is granted to any religious or private school in an even-handed manner.

2001 LeVake v. Independent School District (2001)
increase A federal district court finds that a school may remove a teacher from teaching a biology class when that teacher, a creationist, cannot adequately teach evolution.

2002 FFRF v. Rhea County Board of Education (2002)
increase A federal district court decides that a public school cannot have students from the local Bryan College come in to teach Bible classes.

2002 Zelman v. Simmons (2002)
decrease The Supreme Court rules 5-4 that a Cleveland, Ohio, program which spends large amounts of public money on subsidizing education at religious schools is constitutional.

2002 Newdow v. U.S. Congress (2002)
increase The Ninth Circuit Court of Appeals rules that the addition of the words "under God" to the Pledge of Allgiance back in 1954 was unconstitutional.

Notes:
1. Data from About.com "Supreme Court Decisions-Religion in Schools", which document US Supreme Court activity (where the Supreme Court either made a decision or let stand a lower court decision) and are drawn from Hall (1999) and Alley (1988, 1998).