

# DISCUSSION PAPER SERIES

DP14380

## **GOD POLITICS**

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**MACROECONOMICS AND GROWTH**



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Discussion Paper DP14380  
Published 04 February 2020  
Submitted 22 January 2020

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[www.cepr.org](http://www.cepr.org)

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# GOD POLITICS

## Abstract

Can politics change religious beliefs? The faith-based initiatives are a series of reforms with the purpose of securing religious freedom and improving conditions for religious organizations, who are thought to provide better for the needy than the state. We utilize the different uptake of the initiatives over the period 1996-2010 across US states in a differences-in-differences setup. We find that religious attendance and intensity of beliefs increased after states passed one or more faith-based initiatives. States do not differ in terms of changes in religiosity or potentially important confounders prior to the reforms. Results are robust to comparing contiguous counties and to using the method of synthetic controls. The main explanation seems to be a rise in the number of religious organizations and politicians, which has increased the public's access to religion. The initiatives had no impact on well-being. The results point to politics as one explanation for the continued high religiosity levels in many US states and contribute to our understanding of how politics can induce cultural change.

JEL Classification: Z12, Z18, I31, O4, H00, O51

Keywords: religion, policy, beliefs, Values, Religiosity, Well-being

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### Acknowledgements

We thank the following for helpful comments and suggestions: Philipp Ager, Mark Chaves, James Fenske, Oded Galor, Daniel Hungerman, Battista Severgnini, Asger Mose Wingender, conference participants at the CEPR conference on The Economics of Religion in Venice 2019, CAGE 10th Anniversary at the University of Warwick 2019, EEA in Manchester 2019, ASREC in Boston and Lund 2019 and DGPE in Copenhagen 2018. We also thank seminar participants at the University of St. Andrews, University of Bologna, Brown University, University of Hamburg, University of Groningen, University of Copenhagen, Copenhagen Business School, and the University of Sheffield. We thank Rebecca Sager for kindly sharing her data on legislative changes with us. We also thank Pernille Birch for invaluable research assistance.

”I understand in the past, some in government have said government cannot stand side by side with people of faith. I viewed this as not only bad social policy — I viewed it as discrimination.” George W. Bush, speech, June 2004, cited by Sager (2010).

## 1 Introduction

While religious participation has declined in many parts of the world, the USA stands out as a Western country with relatively high religious participation. At the same time, religion plays a central role in US politics with most politicians being affiliated with a religious denomination, frequently discussing their religion when campaigning, and many churches being politically active. We investigate whether the ties between religion and politics may explain an important part of the high US religiosity. Scholars have long discussed the link between religion and politics, but empirical research on the matter is scant.<sup>1</sup> Understanding this nexus of the political and religious domains is crucial for drawing normative conclusions about either.

We propose a simple test of whether politics can strengthen religious beliefs: the introduction of the faith-based initiatives in the USA.<sup>2</sup> The purpose of the initiatives was to secure religious freedom and to improve conditions for faith-based organizations whom were thought to provide better for the needy than the state. Faith-based organizations (FBOs) include religious organizations (churches, mosques, synagogues, or temples), organizations sponsored by a religious organization, or nonprofit organizations with a clearly stated religious motivation.<sup>3</sup> We focus on three main components of the initiatives. First, the aim of increased provision of public welfare by faith-based organizations, such as soup kitchens in prisons. Secondly, concrete laws to improve the environment for FBOs, such as fewer regulations and easier access to the government in general. An example is the Teen Challenge Bill that exempted religious treatment programs from government regulations, such as requirements for using licensed counselors, staff training, or reporting of medication errors. Thirdly, laws that encourage a friendlier environment for faith-based organizations, such as encouraging the state to contract with religious service providers. For instance, many states now have government officials responsible for connecting with the faith community.<sup>4</sup> The two latter types both aim to improve the environment for FBOs, but the first set of initiatives implement this by concrete changes, while the latter use encouragements.

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<sup>1</sup>A notable early scholar was Alexis De Toqueville (1935). His and later scholars’ work is summarized in Finke & Stark (2005). Outside the USA, a growing literature has focused on politics and Islam (e.g. Kuran (2012); Coşgel *et al.* (2012); Platteau (2017)).

<sup>2</sup>What we term the faith-based initiatives include the Charitable Choice provision and the later faith-based initiatives.

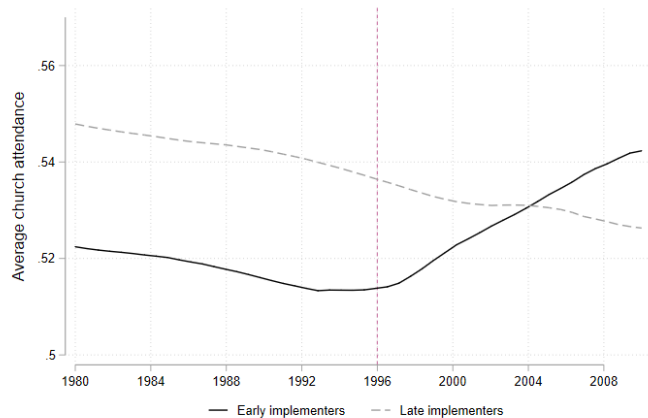
<sup>3</sup><https://www.nationalservice.gov/>. The faith to which the organization relates to does not have to be academically classified as religion (Bielefeld & Cleveland, 2013). FBOs are grass-root organizations active locally and internationally, deriving funding from donations, the state, or international grants (Ferris, 2005).

<sup>4</sup>Chaves (1999), Sager (2010), Chaves *et al.* (2004) Ch 3.

The first federal faith-based initiative, the Charitable Choice, was implemented in 1996. Later, other initiatives followed suit, and today, most states have implemented one or more initiatives. We exploit the different uptake and intensity of the initiatives across states to investigate the impact on religious participation and beliefs of the US population. To measure religiosity, we use the General Social Survey (GSS), which has surveyed the US population since 1972. Our sample period 1980-2010 covers 45,000 individuals. We find that the faith-based initiatives increased participation in religious services and the strength of religious beliefs. We measure the latter by strength of religious affiliation, intensity of prayer, beliefs in God, and beliefs that the Bible reflects the word of God. The results are robust to including state and year fixed effects and various controls. The estimated effects are substantial. Religious participation increased by 2.8 pct points after states implemented the faith-based initiatives. Since 1996, average US religious participation has risen by one pct point. Thus, the initiatives increased religious participation by nearly three times the overall change in participation rates. We find the same effect sizes for beliefs.

To illustrate our findings, we divide the states into two equally sized groups, based on the median implementation year in Figure 1. The figure shows that average church attendance has fallen slightly since the 1980s for all states.<sup>5</sup> Around 1996, the year of the first faith-based initiative, attendance began to rise in states that implemented faith-based initiatives earlier than the median. The decline in church attendance continued in remaining states.<sup>6 7</sup>

Figure 1: Average church attendance based on the timing of implementation



Early implementers are states that implement their first faith-based initiative before the median implementation year, while late implementers enact their first initiative after this year. The lines represent the kernel-weighted local polynomial regression.

<sup>5</sup>We re-scaled the attendance variable from the GSS to lie between 0 and 1. An average church attendance rate of 0.5 amounts to attendance once a month, while 0.62 amounts to attendance 2-3 times a month.

<sup>6</sup>The picture is identical if we split the states by the median *number* of faith-based initiatives. A similar picture emerges for strength of affiliation (Figure A.1). Appendix B.1 describes the data behind Figure 1.

<sup>7</sup>The fall in attendance rates seems to level off already around 1993. The actors behind the initiatives may have started influencing the religious landscape prior to the actual reforms, but the larger impact seems to have come only after implementation. We investigate potential pre-trends and dynamics in Section 5.

The figure also documents that states with lower attendance rates implemented the policies earlier than others. This is consistent with the finding by other scholars that many FBOs were reluctant to seek government funding in the early years out of fear of secularization.<sup>8</sup>

The faith-based initiatives were not implemented in isolation. A concern for our empirical analysis is whether increases in religiosity determined the implementation of the faith-based initiatives instead of the other way around or whether other drivers of the faith-based initiatives cause the rise in religiosity instead of the initiatives in themselves. To our knowledge, the literature does not suggest such systematic drivers of the initiatives. The initiatives were initiated from above rather than as a reaction to the religious preferences of the public. Further, Jay Hein, the former director of the White House Office of Faith-Based and Community Initiatives explains that implementation was done in secret as a "quiet revolution" (Sager, 2010). Based on interviews of 33 directors of faith-based offices, Sager (2010) concludes that implementation was varied and personal, which suggests no systematic trends. However, as documented by Figure 1, states may have differed in terms of *levels* of religiosity (and perhaps other confounders as well). Since we estimate changes within states, these differences in levels are no threat to our identification strategy. What matters is that changes in religiosity and important confounders do not differ systematically. We confirm empirically that there are no such systematic differences in changes. Furthermore, adding controls for observed factors that potentially influence differences in take-up timing, does not alter the results.

We reduce unobserved differences within states along two additional lines. First, we compare counties in pairs on either side of a common state-border. Secondly, we compare counterfactual and actual development in religiosity using the method of synthetic controls. The result remains: Religious attendance and beliefs rise in the aftermath of the faith-based initiatives. Further, the impact of the initiatives is similar across the four major regions of the USA, income groups, and education levels. The impact is stronger for African-Americans and Protestants, in line with the sociological literature arguing that these particular groups were most susceptible to the initiatives (Chaves, 1999; Sager, 2010).

We document that a main explanation for why the initiatives strengthen religiosity is an increased supply of religion. In the quest to increase religious freedom, the initiatives took several actions that benefited FBOs, such as reduced regulations, increased appropriations, and inclusion on government advisory boards. Using data on the universe of nonprofit organizations in the USA, we document that this effort resulted in more FBOs. The FBOs may work like religious missions that often provide goods and services, such as education and health care. Individuals demanding these services receive religion as a by-product with potentially

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<sup>8</sup>Chaves (1999), Sager (2010).

strengthened beliefs as a result.<sup>9</sup> Other studies have found increases in religiosity as a result of missions in developing countries.<sup>10</sup> We document similar effects in a Western country.

To disentangle the potential mechanisms further, we take four additional approaches. First, we divide the laws into laws that provide public welfare through the FBOs (program laws), laws that implemented changes that directly improve conditions for FBOs (concrete laws), and laws that encourage public officials to cooperate with the religious organizations and encourage a more friendly environment for religious organizations in general (symbolic laws). The main results of increased religiosity are driven exclusively by the latter two, signifying that something other than religious soup kitchens is determining the results.

Secondly, the homogeneous impact across income groups further rules out the potential explanation that increased public welfare available to the churches induced more people to go to church with strengthened beliefs as a result. This is consistent with the literature that emphasizes that not much money ended up in the church coffers.<sup>11</sup>

Thirdly, the larger number of FBOs is determined exclusively by the concrete laws that reduce regulations, increase appropriations, and include representatives from religious organizations on government advisory boards. This is consistent with the hypothesis that the initiatives improve operation conditions for the FBOs.

Fourthly, the sociological literature argues that the initiatives strengthened the role of religion in the public sphere.<sup>12</sup> The larger supply of religious nonprofit organizations is an example of this. Another is more religion in politics. With information on the religious denomination of state politicians, we find that the initiatives resulted in more politicians with a publicly known religious denomination. This impact is primarily driven by the more symbolic laws encouraging a more friendly environment for the faith community. This is consistent with the argument that symbolic policies can change cultural values and beliefs. We conclude that the initiatives increased the supply of religion in the public by increasing the supply of religious organizations and politicians.

The first faith-based initiative, Charitable Choice, was introduced as part of the 1996 welfare reform. The reform came with welfare cuts, and one concern for our analysis is whether this reduction in income is what increased religiosity, in keeping with the secularization hypothesis. This does not seem to be the case. First, the 1996 reform was introduced at the federal level, making it less likely that the reform in isolation induced different state-level

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<sup>9</sup>In his history of Christian missions, Robinson (1915) explains how building schools and hospitals was by far the most effective way for missionaries to convert locals to Christianity.

<sup>10</sup>E.g. Bryan *et al.* (2018), Nunn (2010)

<sup>11</sup>Flowers (2005); Lindsay (2008); Sager (2010); Wineburg *et al.* (2007). This literature also summarizes the vast critiques that this part of the faith-based initiatives received. In support, Chaves & Wineburg (2010) found that social service provision by the congregations did not rise during the faith-based initiatives.

<sup>12</sup>Sager (2010); Chaves *et al.* (2004).

changes in religiosity.<sup>13</sup> Secondly, our results are robust to controlling for public spending and the impact of the initiatives does not vary with public spending.<sup>14</sup> Thirdly, the results are robust to excluding the early years of the faith-based initiatives.

Proponents of the faith-based initiatives argued that FBOs are more efficient in providing welfare services than the government. Thus, we would expect the well-being of affected individuals to increase as a result of the initiatives. However, we find no impact on poverty rates, general public welfare, health, death rates by drugs or alcohol, violent crimes, hours worked, income, education, or feelings of life satisfaction.

We proceed by relating to the economics of religion literature. Next, Section 3 gives an overview of the faith-based initiatives. Section 4 gives a framework explaining how the initiatives may influence religiosity. The econometric analysis in Section 5 investigates potential pre-trends, identifies the impact of the faith-based initiatives on churchgoing and strength of beliefs, identifies the mechanisms, and last identifies the potential impact on well-being.

## 2 Additional Related Research

A large body of research investigates causes and consequences of types of religion, i.e. Christians vs the rest, Muslims vs the rest, or Protestants vs Catholics.<sup>15</sup> Instead, this paper concerns differences in the degree of religiosity within denominations, meaning the degree of religious attendance and strength of beliefs. Other research has attempted to explain differences in religiosity across the globe or across US states in particular.<sup>16</sup> These attempts can be divided into supply and demand side explanations. This paper relates primarily to the former.

Supply-side theories link differences in religiosity to the supply of religion, suppliers being the church, other religious organizations, or the state. A widely used model to investigate the supply side of the religious market was proposed by Azzi & Ehrenberg (1975). In their model, individuals allocate their time and goods among religious and secular commodities to maximize their lifetime and afterlife utility. The model can be used to predict individuals' response to an increased supply of religion, meaning more religious nonprofit organizations for instance. The larger supply in turn would improve the match-rate between potential follower and religion, thus increasing the likelihood that people would take up religion. Alternatively, since religious nonprofits often provide other services than religion, the higher supply also increases the likelihood that consumers seeking these other services will be treated with religion as well.

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<sup>13</sup>The results are robust to controlling for population groups that were potentially more influenced than others by the 1996 reform.

<sup>14</sup>A related concern is that increased government benefits to FBOs crowd out private donations (Gruber & Hungerman, 2007). We do not find evidence for this. If anything, private donations to religious purposes increase, albeit not significantly.

<sup>15</sup>See reviews by Becker *et al.* (2016) and Kuran (2018).

<sup>16</sup>See overviews of the economics of religion field by Iannaccone (1998) and Iyer (2016).



This may strengthen their religious beliefs and attendance levels, much like religious missions potentially do.<sup>17</sup>

Most existing studies investigating the relationship between the supply of religion and religiosity are correlational. An exception is a study by Bryan *et al.* (2018), who partnered with an evangelical Protestant anti-poverty organization to randomly offer poor households in the Philippines an education program based on "theology and values". After the program they found significant increases in religiosity.<sup>18</sup> Across Africa, Nunn (2010) found that descendants of people who experienced greater missionary contact are more likely to identify themselves as Christians today. We regard the faith-based initiatives as quasi-exogenous shocks to the supply of religion, enabling us to study the impact of the supply of religion on religiosity in a Western country.<sup>19</sup>

To explain why the US is more religious than Europe, some scholars have emphasized the larger supply of religion in the USA in line with these religious market mechanisms.<sup>20</sup> The larger supply of religion may stem from an earlier separation of church and state in the USA (Finke & Stark, 2005). The resulting deregulation of churches increased the supply of different religions. In addition to being the earliest, the US separation between church and state rested upon securing religious freedom, while the European separation rested on freeing the state from religion (Schaff, 1888). As a result, many of the earliest European colonizers in the USA fled religious prosecutions in Europe. Like the separation of church and state in the 18th century, the faith-based initiatives focused on securing religious freedom, this time by strengthening the ties between church and state.

Consistent with the above-mentioned theories, empirical studies find that religious attendance correlates positively with plurality of religions<sup>21</sup> and lack of government regulation of churches across countries.<sup>22</sup> However, McCleary & Barro (2006) found that the presence of an official state religion was positively associated with religiosity in a panel of 68 countries. They theorize that this may be due to the subsidies flowing to organized religion, increasing the supply of religion. In a similar manner, the faith-based initiatives may have increased the supply of religion by relegating more funding to FBOs and improving conditions for their

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<sup>17</sup>E.g. Bryan *et al.* (2018); Nunn (2010).

<sup>18</sup>They also documented increases in income, but no significant changes in total labor supply, assets, consumption, food security, or life satisfaction.

<sup>19</sup>Gruber & Hungerman (2008) identify a causal impact of a somewhat different supply-factor. They exploit differences across states in the repeal of blue laws over the period 1955-1991 as a quasi-exogenous shock to the opportunity cost of going to church. As the opportunity cost of churchgoing increases, participation in religious activities decreases, they find.

<sup>20</sup>The model is also used for predicting the response to a higher quality of religious services, which may include gospel choirs or well-spoken preachers, for instance.

<sup>21</sup>E.g. Voas *et al.* (2002); McCleary & Barro (2006). Early arguments by sociologists went in the opposite direction: The co-existence of many religions may make the truth of each individual religion less likely, thus weakening faith (Berger (1967)). Later empirics have found that this explanation does not dominate.

<sup>22</sup>McCleary & Barro (2006).

operations in general.

We now turn to the theories linking differences in religiosity to followers' *demand* for religion. A predominant demand-side theory is that religion may act as a buffer against psychological or economic distress.<sup>23</sup> For instance, the low degree of social security in the USA may have increased the demand for religion and may be one reason for its' high religiosity compared to other Western countries. Indeed, higher religiosity is associated with less redistribution, both in terms of actual spending (across countries and across counties in the USA) and in terms of individual preferences for redistribution.<sup>24</sup> The faith-based initiatives may have been a political substitute for social spending. In that case, our results provide an alternative explanation for the negative association between public spending and religiosity.

We are not the first to observe a link between religion and politics. A line of research focuses on the use of religion for political legitimacy.<sup>25</sup> This research focuses primarily on Islam and is mainly historical. Others focus on the link between the state and religious freedom in a historical setting (Johnson & Koyama, 2019). Historically, religion and politics were generally intertwined within for instance legal systems, religious persecution, and decisions on religious vs. secular education. Moving into more recent times, political scientists Wald & Calhoun-Brown (2014) argue that to understand American political life fully, religion is a factor that needs to be taken into account.<sup>26</sup> We identify empirically a direct link between politics and religion in the USA.

### 3 Background and Data on the Faith-Based Initiatives

The faith-based initiatives are a series of legislative changes implemented in the USA since 1996 to secure religious freedom and increase access to government funds for faith-based organizations, who are believed to be better providers for the needy than the state.

The first faith-based initiative, the Charitable Choice provision, was part of the 1996 welfare reform.<sup>27</sup> Charitable Choice was implemented primarily based on a series of executive orders issued by Governor George W. Bush and signed into law by President Bill Clinton. Charitable Choice relaxed restrictions on the amount of religion allowed in connection with welfare provision and directly required states to consider religious providers to deliver wel-

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<sup>23</sup>Norris & Inglehart (2011); Bentzen (2019); Ager & Ciccone (2018); Clark & Lelkes (2005); Chen (2010); Dehejia *et al.* (2007); Binzel & Carvalho (2017).

<sup>24</sup>Hungerman (2005) investigates the causal effect of government spending on church attendance and charitable giving, while Scheve *et al.* (2006) and Benabou & Tirole (2006) argue for the reverse causation. One argument for the latter is that the religious have already insured themselves against adversity through religion (psychologically or materially) and are therefore less willing to pay extra for government-provided insurance.

<sup>25</sup>Chaney (2013); Kuran (2012); Platteau (2017); Rubin (2017).

<sup>26</sup>See also Smidt *et al.* (2017) for an Oxford Handbook on religion and American politics.

<sup>27</sup>The cornerstone of the welfare reform was the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of which Charitable Choice was part.

fare.<sup>28</sup> The provision of government funding by organizations with religious roots was legal before Charitable Choice, but the government service had to be provided through a secular entity. Charitable Choice allowed FBOs to provide government welfare, such as vouchers, without segregating this from religious activities. Thus, a religious organization was no longer required to "alter its form of internal governance" or "remove religious art, icons, scripture, or other symbols as a condition for contracting to deliver services."<sup>29</sup> Several legislative changes, called the faith-based initiatives, followed after the Charitable Choice and are still being implemented.

A large part of the faith-based initiatives included efforts to increase access of FBOs to the government in more general. The commonest way was to appoint a faith-based liaison (FBL), which was a government official responsible for communication with the faith-based organizations (Sager, 2010). The liaisons provided technical assistance for grant writing, made religious organizations aware of the government funds by mailings and gatherings of clergy, advocated the faith-based language into state law, created government advisory boards with faith-based representatives on board, and established demonstration projects through which religious organizations received funds.<sup>30</sup> The liaisons often worked from an Office of Faith-Based Initiatives (OFBCI). An example is the White House Office of Faith-Based and Community Initiatives and Centers for Faith-Based and Community Initiatives, established in year 2000 (U.S. General Accounting Office, 2002). The purpose of the centers was to detect barriers to collaboration between government and religious organizations. In general, "there is a continued and growing effort at the state level to increase the presence of religious groups in the social services sector by specifically encouraging their participation and by encouraging government employees to work toward the inclusion of such groups in government-funded programs" (Sager (2010), p. 36).

The initiatives also encompassed reduced regulations on FBOs. A salient example is the Teen Challenge Bill. The Teen Challenge was a program offering drug rehabilitation through Christian scripture (Sager, 2010). Although the Teen Challenge did not receive government funds, it did offer treatment to drug users and therefore fell under government regulations. In 1995, the Texas Commission on Alcohol and Drug Abuse threatened to close down the Teen Challenge for violations of state regulations. Opponents argued that this was discrimination against faith. In 1997, the so-called Teen Challenge Bill was passed, which exempted religious treatment programs from state censure and oversight. To qualify for exemption, the program and its' proposed treatment had to be religious. As a result, the exempt Teen Challenge

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<sup>28</sup>Chaves (1999); Wright (2009); Chaves & Wineburg (2010); Edin & Lein (1997).

<sup>29</sup>Chaves (1999), p. 836.

<sup>30</sup>Chaves & Wineburg (2010); Ragan *et al.* (2003); Sager (2010).

facilities were not required to have licensed counselors, conduct staff training or criminal background checks, adhere to state health and safety standards, or report abuse, neglect, and medication errors as was required of non faith-based treatment programs (Sager, 2010). A related example, which enters our dataset, is Executive Order 13199, which called for eliminating "unnecessary legislative, regulatory, and other bureaucratic barriers that impede effective faith-based and other community efforts to solve social problems."<sup>31</sup> The removal of regulations for FBOs extended to all FBOs, publicly or privately funded.<sup>32</sup>

Proponents of the faith-based model argued that the initiatives secured religious freedom by allowing FBOs to compete for federal and state money without having to give up their religious character.<sup>33</sup> The faith-based initiatives were intended to guarantee that small religious groups were not discriminated against in government funding decisions. Further political support was based on the idea that FBOs were better at providing for the needy than their secular counterparts.<sup>34</sup> A public opinion poll from 1999 showed that the majority of Democrats, Republicans, and Independents believed that the social problems of the USA were better solved by a closer collaboration between government and religious associations.<sup>35</sup> Moreover, supporters of the initiatives argue that they have been beneficial insofar as they brought the faith-based voice back into the public sphere (Sager, 2010).

State governments were not required to adapt policies supporting the faith-based initiatives, as long as they did not directly discriminate against religious organizations Sager (2010). Implementation across states therefore varies in terms of timing and extent. For the main analysis, we rely on data collected by Rebecca Sager on the timing and number of legislative changes and executive orders issued between 1997 and 2009 related to Charitable Choice or the subsequent faith-based initiatives.<sup>36</sup> The data source is LexisNexis, the world's largest electronic database for legal and public records related information. Sager retrieved the relevant legislative changes by using search words such as "charitable choice" and "faith-based".<sup>37</sup> We find that the main institutions within the faith-based initiatives (the faith-based liaisons and offices of faith-based initiatives) and their budgets also increase attendance and beliefs, although the latter not significantly.

Table 1 shows the legislative changes retrieved from LexisNexis divided into different types:

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<sup>31</sup>Sager (2010), p. 32.

<sup>32</sup>Furthermore, the Charitable Choice provision permitted FBOs to discriminate on faith when hiring. It was not allowed, however, to discriminate against recipients of services based on their religion (Sager, 2010; Jacobson *et al.*, 2005).

<sup>33</sup>Chaves (1999); Sager (2010); Formicola *et al.* (2003); Monsma (2000).

<sup>34</sup>Carlson-Thies (1999); Cnaan & Boddie (2002); Sherwood (2000).

<sup>35</sup>U.S. General Accounting Office (2002), Carlson-Thies (2001).

<sup>36</sup>While some major changes were implemented at the federal level, our analysis includes time and state fixed effects throughout in order to focus attention on changes at the state level.

<sup>37</sup>For further details on the data collection, see Appendix A.1. The data is also described thoroughly in Sager (2010). Sager continuously updates the data and we received our version in April 2017.

laws with concrete institutional changes to improve conditions for FBOs and less concrete laws that encourage a friendly environment for FBOs. We will term the latter *Symbolic laws*, following Sager (2010). The former can be further divided into *Program laws* that involve providing government welfare through FBOs and *Concrete laws* that improve conditions for FBOs and increase their access to government in more general.<sup>38</sup> Table 1 documents that the majority of the program laws relegate government welfare through FBOs operating in prisons. The largest group of concrete laws allocates positions in state advisory boards to faith-based representatives. Examples are advisory boards for prisons or foster care agencies. Another group of concrete laws allocates appropriations directly to the FBOs or to the offices that help FBOs obtain funding. For instance, Florida passed appropriation bills for teenage pregnancy prevention, Ohio for alleviating child poverty and reducing out of wedlock births.

None of the symbolic laws guarantee FBOs greater access to public money or directly relegate government positions to the faith-based communities, but instead encourage an overall legal environment in which faith-based groups are seen as integral to the social service arena. The major part of the symbolic laws include encouraging government officials to partner with FBOs. These laws are mainly symbolic in that they do not call for contracting with specific organizations or make such contracting mandatory. A symbolic law passed in Wyoming 2004 states that "The Department of Family Services shall develop a comprehensive plan to improve the lives and future of all children and families in Wyoming. In developing the plan, the Department shall collaborate with the business councils, state and local agencies, and private groups, services providers and businesses, including FBOs." (Sager (2010), p. 99) These laws may have led to real changes in contracting, signified by the words of a liaison in a state that passed six bills to encourage the state to work with FBOs: "The state has not worked with a large number of FBOs. [...] these organizations were just not part of the general process, unless they were a large faith organization" (Sager (2010), p. 99 interview April 30 2005).

As mentioned earlier, the faith-based initiatives have been criticized for not delivering the promised amount of money. The largest stream of federal money was the Compassion Capital Fund (CCF) with an annual budget of \$30 million in 2002, increasing to \$57.8 million in 2007, distributed as hundreds of mini-grants (up to \$50,000 per grant, Chaves & Wineburg (2010)). Consistent with only few money being distributed, Chaves & Wineburg (2010) found that congregational involvement in social services, government funding, or collaborations did not increase between 1998 and 2007.<sup>39</sup> Instead, scholars have argued that the majority of the faith-based initiatives were laws, policies, and practices that potentially involved changing

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<sup>38</sup>The different types of laws are described rigorously by Sager (2010) Ch 4. However, Sager (2010) focuses exclusively on the laws that benefit the FBOs and thus excludes the program laws. Since we are interested in all faith-based initiatives, we include the program laws as well.

<sup>39</sup>They used surveys of appr. 1,300 congregations, available from the National Congregations Study (NCS).

government culture and creating a new "faith-based bureaucracy" that links state governments and religious organizations and legitimizes a new role for religion within politics.<sup>40</sup> Indeed, the largest group of laws in our sample is legislations that "Encourage the state to partner with FBOs".

Table 1: The number of faith-based initiatives by type

<b>Concrete laws creating government access and opportunities for FBOs</b>	
<b>Program laws</b>	<b>45</b>
Prison	30
Youth/school	6
Drug/alcohol	9
<b>Concrete laws</b>	<b>136</b>
Allocate positions in state advisory boards to faith-based representatives	70
Appropriations to FBOs	58
Exempt FBOs from standard regulations	6
Assist FBOs with grant writing process	2
<b>Less concrete laws encouraging a friendly environment for FBOs (Symbolic laws)</b>	<b>151</b>
Office of Faith Based Initiative	11
Encourage the state to partner with FBOs	132
Create a faith-based advisory board	8
<b>Total</b>	<b>332</b>

Note: Data on faith-based initiatives retrieved from LexisNexis for the period 1997-2009 by Rebecca Sager.

Figure 2 shows the sum of states that implemented at least one faith-based initiative over time. The states gradually implemented faith-based initiatives over time, until 44 states had implemented at least one by 2009.<sup>41</sup>

Figure 2: Number of states that implemented a faith-based initiative

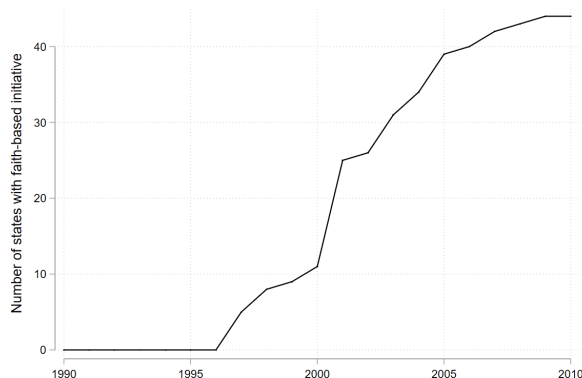
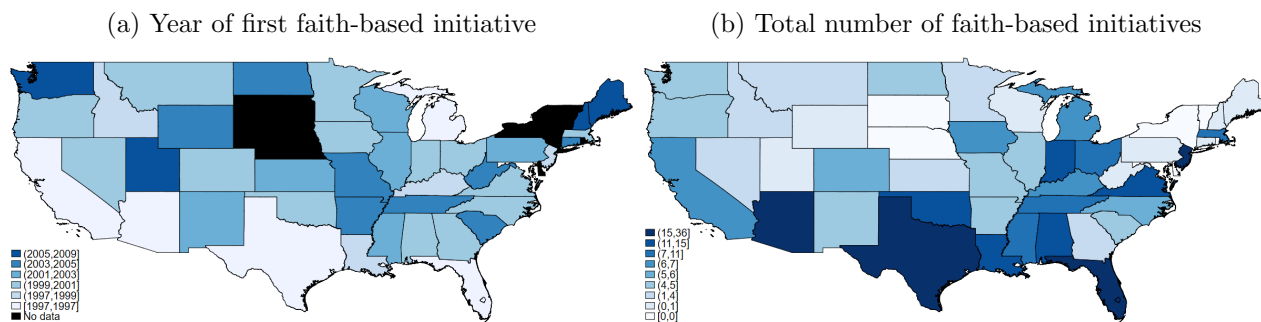


Figure 3 shows the spatial distribution of the first year of implementation (panel a) and the total number of faith-based initiatives implemented over the period 1997-2009 (panel b).

<sup>40</sup>Lindsay (2008); Sager (2010); Wineburg *et al.* (2007); Flowers (2005).

<sup>41</sup>States that had not implemented any faith-based initiatives by 2009 were Delaware, Nebraska, New York, Rhode Island, South Dakota, Vermont, and the District of Columbia.

Figure 3: The spatial spread of the faith-based initiatives 1997-2009



The first state to implement Charitable Choice policies was Texas in 1997 under the governance of George W. Bush, who believed in the power of religious groups to help the needy.<sup>42</sup> Texas also implemented most faith-based initiatives over the period. Thus, the Texas liaisons, offices, and legislative requirements were the precursors to similar policies and practices now found across the country. Another front-runner state was Florida, governed by Jeb Bush, who had a similar political preference for the initiatives as his brother, George W. Bush. The implementation in these two states therefore potentially differs from the rest of the USA, which explains their position as outliers. We therefore exclude Texas and Florida from the main sample (results are robust to including the two states, cf. Table A.6).

Nevertheless, some states may have been more likely than others to implement faith-based policies. In particular, state-level religiosity or other confounders may influence decisions on whether or not to implement the initiatives. A priori, it is not obvious whether more or less religious states would be more likely to implement the initiatives. Many faith-based organizations were reluctant to seek government funding out of fear of secularization.<sup>43</sup> This would create an expectation that more religious states were *less* likely to implement faith-based initiatives. This is what Figure 1 shows.<sup>44</sup> One could also have conjectured more religious states to be *more* likely to implement faith-based initiatives to attract funding for their FBOs. The latter is not supported by the data.

Based on interviews of faith-based liaisons in 30 states, Sager (2010) concludes that the implementation process at the state level was complex, varied, and personal. She notes (p.52) that "The history of the faith based initiatives has been tied to the activities of a few dedicated

<sup>42</sup>Sager (2010), p. 47.

<sup>43</sup>Chaves (1999), Sager (2010). Something similar was noted by Alexis de Tocqueville in the nineteenth century, who wrote that "...and as to state religions, I have always held that if they be sometimes of momentary service to the interests of political power, they always sooner or later become fatal to the church" (De Tocqueville (1835) Vol. II, Book 2, Chapter 13, p.246).

<sup>44</sup>In support, Chaves (1999) finds that liberal and moderate congregations were more likely than conservative congregations to pursue charitable choice opportunities. Further, despite that the evangelicals were targeted by the faith-based initiatives, they were also the group of congregations with the lowest interest in government funding in 1998 and 2006-2007, Chaves & Wineburg (2010) finds across 1,300 congregations.

individuals who strongly believe in the role of religion in social services.” Based on the interviews, Sager does identify two main reasons for why states implemented the initiatives. First, because of the welfare cuts envisaged in the 1996 welfare reform, the liaisons argue that some states had to seek alternative ways to provide for their needy. Second, some politicians simply found the idea of reintegrating religion into the public sphere appealing. She investigates this further empirically and finds that states with evangelical Republicans among their politicians and states with higher poverty rates are more likely to implement the faith-based initiatives. In addition, the sociological literature notes that African-American congregations were more familiar with the faith-based initiatives than others.<sup>45</sup> Likewise, interviewing congregations in Atlanta, Georgia, Owens (2006) found that the attitudes of the clergy towards entanglement with the government and the ethnic composition of members of the congregations were the key predictors of willingness to seek public funding.

We account for these potentially systematic differences in state characteristics prior to the legislative amendments in various ways. First, since we include state fixed effects throughout, the levels of all confounders are accounted for. Instead, our identification strategy relies on the absence of systematic differences in *changes* in religiosity and other potentially important confounders before the legislative amendments. We find no such systematic differences (i.e. we find no pre-trends).<sup>46</sup> Secondly, we account for various potentially relevant confounders in our econometric analysis, such as public spending, religious denomination, and ethnicity. Thirdly, the results are robust to excluding states that implemented their first law in the early period, making it less likely that the 1996 welfare reform was the driving force behind the results. Fourthly, we limit the potentially omitted factors further by restricting analysis to pairs of counties separated by a state border and by using the synthetic control method.

Another concern is that the legislative amendments went unnoticed by the public, and thus should not influence their beliefs or other outcomes. When describing how the initiatives were implemented, a former advisor for President Bush states that “it was done very quietly, because we didn’t want to draw undue attention to it or spark a bitter church-state debate.”<sup>47</sup> Thus, the reason why the initiatives went rather unnoticed by the public was not necessarily their lack of significance, but rather because they were implemented discretely. Therefore, the faith-based initiatives have been called the “quiet revolution”. Sager (2010) argues that

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<sup>45</sup>Sager (2010) notes that “Seeing members of black religious groups as potential allies, supporters of faith-based policies and practices have focused on wooing them in two ways. First, a large proportion of those appointed as FBLs are black clergy members [...]. Secondly, state-sponsored faith-based conferences have specifically targeted the black religious community.” Other scholars have noted the evangelical and African-American roots of the faith-based initiatives, e.g., Lindsay (2008); Monsma (2006); Olasky (1996); Smith & Emerson (1998); Wright (2009).

<sup>46</sup>Table 2, A.3, and A.4, column (8) of Tables 3 and 5, and Figures 4 and 5

<sup>47</sup>Sager (2010), p. 42.



this quiet revolution enabled state and federal institutions to create a myriad of faith-based practices, policies, and promises, enlarging the role played by religion in the public sphere. We set out to test whether this is borne out in the data.

## 4 Conceptual Framework and Testable Predictions

A few main explanations for why the faith-based initiatives would influence religious attendance and beliefs stand out. We summarize these explanations and set up testable predictions that we will test empirically.

The provision of government services through churches may have induced churchgoing through standard religious market mechanisms: When the benefits from churchgoing rise, more people go to church, much like the impact of missionary work. Since government welfare is directed more towards the poor, the testable prediction is that the effect of the faith-based initiatives on churchgoing is larger for the poor. Moreover, if this is the main mechanism, we expect that the results are primarily determined by initiatives that direct government welfare through the churches (program laws).

Improving conditions for FBOs through regulations, appropriations, and inclusion on government advisory boards potentially reduce the costs and increase the benefits involved with establishing faith-based organizations relative to secular ones. This would make it more worthwhile to establish FBOs and more likely that existing FBOs survive. The testable prediction is an increased number of FBOs.

The increased supply of FBOs may explain the increased religiosity through three main channels. First, the higher number of FBOs increases the supply of religion in the USA. As a result, the religious market model would predict an improved match-rate between potential follower and religion, increasing average religiosity as a result. Secondly, an increased supply increases the access to religion, reducing the marginal cost of going to church. Thirdly, many FBOs offer other services in addition to religion, such as education or alcohol rehabilitation. Thus, consumers of these services will most likely obtain religion as a by-product, much like missions. Indeed, Wineburg *et al.* (2007) have argued that the faith-based initiatives implicitly allowed FBOs who proselytize to receive government funds.

As opposed to the mechanism involving public welfare through the churches, this mechanism involving an increased supply of religion does not necessarily predict differential effects across socio-economic groups, depending on the purpose of these FBOs. Moreover, if this is the main mechanism, we expect the results to be determined by the laws that improve the environment for the FBOs (program laws and to some extent the symbolic laws).

Another mechanism is an increased demand for FBOs. Encouraging the government to contract with FBOs increases the average demand for religious organizations. This would im-

prove conditions for FBOs relative to secular nonprofit organizations, increasing their supply.

Last, the faith-based initiatives may have influenced religiosity in the same manner as symbolic policies. Edelman (1985) argues that many public policies amount to a series of symbols that appeal to certain groups, representing ideas and values that they hold deeply, thus reassuring group members of their beliefs.<sup>48</sup> Many of the faith-based initiatives can be viewed as such symbolic policies (Sager, 2010). If politicians openly praise religion, people may be more inclined to choose religion. If this is the primary mechanism, we expect the symbolic policies to drive the results. This mechanism also does not predict clear differential effects across socio-economic groups.

The legislative changes may seem insignificant, potentially producing only temporary effects. However, there is reason to believe that the initiatives may have implications for years to come. First, many of the legislative changes were permanent, such as establishing the government-based faith-based liaisons and offices responsible for contact with religious bodies. Secondly, the initiatives hold the potential to change the culture on church-state relations permanently. Thirdly, when more people go to church, the general benefit from churchgoing increases, which may draw even more people into church in the longer term.<sup>49</sup> We investigate the dynamics of the initiatives in Figures 4 and 5.

## 5 Empirical Analysis

Our empirical analysis begins with modeling the impact of the faith-based initiatives on religious attendance and beliefs. To undertake this analysis, we first combine the data on faith-based legislative changes with the General Social Survey (GSS). The GSS has asked respondents about their socio-economic characteristics, demographics, and various dimensions of their values set, including religious attendance and beliefs in most years since 1972.<sup>50</sup> We restrict the period of analysis to start in 1980 in order to have approximately equal pre and post treatment lengths, following McKenzie (2012).

Our measure of religious attendance is based on answers to the question "How often do you attend religious ceremonies?" Respondents can answer never, less than once per year, about once or twice per year, several times a year, about once a month, two to three times a month, nearly every week, every week, and several times a week. The original variable takes values between 0 and 8, which we recode to values between 0 and 1. An attendance score of 0.5 corresponds to attendance once a month. The GSS holds various measures of the intensity

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<sup>48</sup>Expanding on this work, Cobb & Elder (1972) argue that symbolic politics are important because "decision-makers actively engage in the manipulation of symbols and rationalize their action through them."

<sup>49</sup>Scheve *et al.* (2006).

<sup>50</sup>Since 1994, the GSS has only performed the survey in even years. Our two questions on religious attendance and beliefs used in our main analysis are asked in years 1980, 1982-1991, 1993, 1994, 1996, 1998, 2000, 2002, 2004, 2006, 2008, and 2010.

of religious beliefs, but one is available for much more respondents than the rest: Individuals’ self-expressed strength of religious affiliation, which will be our main measure of strength of religious beliefs.<sup>51</sup> The question reads ”Would you call yourself a strong [religious denomination] or not a very strong [religious denomination]?” Respondents can answer not very strong, somewhat strong, or strong. We bundle the answers ”not very strong” and ”somewhat strong” into one category, as these are impossible to rank. We check robustness of results with four additional measures of religious beliefs, available for at least 10,000 respondents in our sample. We use these data to estimate models of the form:<sup>52</sup>

$$religiosity_{its} = \gamma law_{t-1,s} + \kappa_s + \kappa_t + \delta law_{t+1,s} + \omega X_{its} + \lambda W_{t-1,s} + \varepsilon_{its} \quad (1)$$

where  $religiosity_{its}$  is the frequency of attendance at religious services in Section 5.2 and strength of religious affiliation in Section 5.3 for individual  $i$  at time  $t$  in state  $s$ . In our baseline model,  $law_{t-1,s}$  is a dummy variable equal to one if state  $s$  implemented one or more faith-based initiatives at time  $t - 1$  or previously, zero otherwise.<sup>53</sup> The results are robust to using the total number of laws (Table A.6). Our baseline model uses faith-based laws implemented in the previous year for two reasons: First, we do not know whether the individual was interviewed before or after legislative changes occurring in the same year as the interview, since the *year* of interview is the most detailed information available. Secondly, even if information on the month of interview were available, we do not necessarily expect that legislative changes alter behavior immediately. We investigate dynamics over the following years in Figures 4 and 5.

$\kappa$  are state and time fixed effects. This ”difference-in-difference” equation thus assesses whether implementing a faith-based initiative causes a deviation from the state mean of religious participation or beliefs relative to other states at the time.

$law_{t+1,s}$  is a dummy equal to one if the state implements a faith-based initiative in the next period. If  $\delta = 0$  then states do not differ systematically before implementing their first initiative in terms of changes in religiosity. This suggests that there are no pre-trends and is crucial for our identification strategy. We investigate this in an alternative way in Section 5.1.

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<sup>51</sup>Strength of religious affiliation is available for 33,662 respondents, while the measure with the second-largest number of respondents is beliefs in an afterlife available for 25,386 respondents. The latter is used for robustness. The particular GSS questions are described in Appendix A. Table A.5 shows the pairwise correlations between all measures of religiosity and Table A.2 shows the summary statistics.

<sup>52</sup>Throughout, we use appropriate survey weights. We cluster our standard errors at the state level, following Bertrand *et al.* (2004) and Gruber & Hungerman (2008). The results are similar if standard errors are instead clustered at the state-by-year level (cf. Table A.6). Throughout, we estimate the equation using OLS. The results are robust to using ordered logit or probit, cf. Table A.7.

<sup>53</sup>The choice of a dummy variable instead of the actual number of laws is based on the fact that the individual legislative changes vary greatly in strength and it is not clear whether ten small laws should have a larger impact than one large one. The choice follows Gruber & Hungerman (2008) and Autor (2003).

$X_{its}$  are individual-level controls. In the baseline specification, these include the respondents' age and dummies for their marital status and gender. In robustness checks, we add dummies for whether the respondent is Protestant, Catholic, African-American, foreign born, employed, or Republican, and measures of respondent's real family income, education, and number of children (Tables A.8 and A.9).  $W_{t-1,s}$  are time-varying confounders for state  $s$  at time  $t - 1$ . In the main analysis, these include state public spending per capita. For robustness, we also include the poverty rate, real GSP per capita, region-specific time trends, state-specific time trends, share of African-Americans, share of Protestants, mean respondent income, mean respondent education, and shares of Republican and/or evangelical politicians (Tables A.10, A.11, A.12, and A.13).<sup>54</sup> To avoid problems of mean reversion we include initial values of the dependent variables, interacted with time. To avoid problems of endogenous controls, we include the initial levels of our main control variables, interacted with time. The results are robust to these additions (Tables A.14 and A.15).

We find that the faith-based initiatives did not make non-believers go to church more (i.e., the extensive margin, cf. Table A.16). This reduces the set of explanations to those involving increased religiosity for those who already believe (i.e. the intensive margin). To homogenize our comparison group, we focus our attention on the intensity of beliefs and attendance rates for existing believers (the intensive margin). In practice, we exclude respondents without a stated religious affiliation in the main analysis (10 pct. of our sample). This results in an insignificant reduction in the variation in church attendance (from 0.115 to 0.106), suggesting that we are still explaining the main part of the variation in church attendance. Including the non-affiliated does not change the conclusions, cf. Table A.6. Our measure of strength of religious affiliation does not include those without a religious affiliation and this measure is therefore not affected by this decision. We investigate further the movements along the intensive vs extensive margins in Table 6.

## 5.1 Analysis of Pre-Trends

Our causal interpretation of the estimation of Equation (1) rests on the assumption that nothing else changed at the time of implementation of the faith-based initiatives that also caused an increase in church attendance or beliefs. We present various tests designed to check this assumption. They all explore more formally what Figure 1 illustrated in relation to church attendance: whether the curves are parallel before the legislative amendments. Equation (1)

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<sup>54</sup>Results are robust to all, except that when including state-specific trends, the p-value on the estimate on church attendance increases to 0.121 and religious affiliation to 0.186. If instead the less conservative regional trends were included, the p-values again drop to 0.009 and 0.014, respectively. Furthermore, due to lack of data on politicians for the early period, the sample falls below 9,000 individuals in the regressions including information on politicians. Here, the p-value of the estimate on church attendance increases to 0.112 in some regressions, while strength of religious affiliation stays significant at the 5-10% level throughout.

demonstrated one way to test these pre-trends, namely including the lead of the variable measuring the legislative changes. In addition, this section checks the pre-trends following the procedure used by Hornbeck & Naidu (2014).

In this section, we assume that the timing of the treatment is the year 1996, the year that the first faith-based initiative was implemented. In reality, the timing of the treatment varies across states, and we will relax the assumption in Sections 5.2 and 5.3. The rationale behind the analysis here is that the first implementations may have influenced neighboring states, and thus focusing on 1996 as the treatment year provides us with the cleanest test of pre-trends.

We first test whether states that implemented faith-based legislation earlier differed in terms of attendance rates, beliefs, and socio-economic variables in the period before implementation (1980-1994) compared to the states with late or no implementation:<sup>55</sup>

$$Y_{its} = \gamma lawyears_s + \kappa_t + \kappa_r + \omega X_{its} + \varepsilon_{its} \quad (2)$$

where  $Y_{its}$  is the characteristic being analyzed for individual  $i$  in state  $s$  measured at time  $t$  in the pre-period.<sup>56</sup>  $lawyears_s$  is the number of years state  $s$  has had one or more faith-based initiatives over the period 1996-2009. Higher values indicate that the state was an early implementer. The results are similar if the total number of laws implemented over the period are used instead (Table A.3). We choose the number of years since this is the variation used in the main analysis.

$\kappa_t$  are time fixed effects.  $\kappa_r$  are fixed effects for the four regions of the USA, included instead of state fixed effects since  $lawyears_s$  does not vary over time.<sup>57</sup>  $X_{its}$  are our baseline individual-level controls for respondent's age and dummies for their marital status and gender.

A value of  $\gamma$  different from zero indicates that states that implemented faith-based initiatives earlier differ systematically in terms of the levels of the examined characteristics compared to the late implementers.

Each of the characteristics  $Y$  are shown in the rows of Table 2. Column (1) shows the mean of the variables over the entire period of analysis 1980-2010 and column (2) the number of observations. Column (3) shows the means for the period 1980-1994 and column (4) the number of observations in this pre-treatment period. In column (5) and (6), each parameter

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<sup>55</sup>As the GSS was not sampled in the year 1995, the pre-period ends in 1994.

<sup>56</sup>For the majority of the variables, the unit of analysis is individuals, but when analyzing characteristics that vary only at the state-year level, this is the unit of analysis.

<sup>57</sup>The regions are the following: North East: Maine, Massachusetts, Rhode Island, Connecticut, New Hampshire, Vermont, New York, Pennsylvania, New Jersey, and Delaware. Midwest: Ohio, Indiana, Michigan, Illinois, Missouri, Wisconsin, Minnesota, Iowa, Kansas, Nebraska, South Dakota, and North Dakota. South: West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Arkansas, Louisiana, Maryland, and Oklahoma. West: Colorado, Wyoming, Montana, Idaho, Washington, Oregon, Utah, Nevada, California, Alaska, Hawaii, New Mexico, and Arizona

estimate represents one regression of Equation (2). Column (5) shows the estimates of  $\gamma$  without controls, i.e. the raw correlation between the particular characteristic in the period 1980-1994 and the timing of implementation in the following period. Column (6) shows the same correlations after including baseline controls for respondents' age, gender, and marital status, together with time and region fixed effects.

Table 2: Balancing checks of pre-trends and pre-levels

Characteristic, Y	1980-2010		1980-1994		1980-1994			
	Sample mean	N	Sample mean	N	Levels		Changes	
					Raw	Controls	Raw	Controls
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Attendance	0.472 (0.340)	39,355	0.529 (0.323)	17,826	-0.002*** (0.001)	-0.005*** (0.001)	-0.002 (0.002)	-0.001 (0.002)
Strength of affiliation	0.434 (0.496)	33,662	0.430 (0.495)	17,212	-0.003** (0.001)	-0.006*** (0.002)	-0.002 (0.003)	-0.003 (0.003)
Protestant	0.580 (0.494)	39,613	0.685 (0.464)	17,957	0.007*** (0.001)	-0.011*** (0.001)	0.000 (0.002)	0.000 (0.003)
Income	31.682 (29.554)	35,562	29.692 (25.900)	16,333	-0.0730 (0.068)	0.286*** (0.087)	-0.058 (0.166)	-0.081 (0.172)
Black	0.144 (0.351)	39,785	0.150 (0.357)	17,954	-0.005*** (0.001)	0.004*** (0.001)	0.000 (0.003)	0.001 (0.003)
Educational level	13.007 (3.090)	39,676	12.531 (3.117)	17,924	0.012* (0.006)	-0.012 (0.008)	-0.010 (0.021)	-0.008 (0.022)
Public Welfare spending	721.64 (478.31)	1,101	331.530 (210.368)	379	-2.768 (2.964)	-2.275*** (0.450)	-0.319 (0.825)	-0.641 (0.774)
Age	45.803 (17.444)	39,642	45.927 (17.796)	17,893	-0.023 (0.035)		0.033 (0.090)	
Married	0.507 (0.500)	39,766	0.5523003 (0.497271)	17,954	0.000 (0.001)		0.000 (0.002)	
Male	0.436 (0.496)	39,785	0.416 (0.493)	17,957	0.002 (0.001)		0.000 (0.002)	

Column (1) and (3) show sample means, columns (2) and (4) show number of observations. Each of the estimates in columns (5)-(8) represent the outcome of one OLS regression. Controls include region and year fixed effects, and measures of age, marital status, and gender. Robust standard errors, clustered at the state level, in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level. The unit of analysis in columns 1-6 is individuals, except for public spending, where the unit of analysis is state years. The unit of analysis in columns (7)-(8) are state-years and the number of observations is 429.

**Result:** None of the main dependent or control variables changed systematically before the faith-based initiatives were implemented.

Early implementers tend to have lower church attendance rates and a lower strength of affiliation, which is consistent with many faith-based organizations being reluctant to cooperate with the state in the beginning. Early implementing states also had lower public welfare spending per capita, which is consistent with the argument that some of the faith-based initiatives were intended to compensate for lower welfare spending.<sup>58</sup> Early implementers, however, also have higher average incomes (based on the GSS measure of family incomes), which seems to contradict this argument. Moreover, more African-Americans inhabit early implementing states, after accounting for the baseline controls, consistent with the literature. Early implementers had fewer Protestants after accounting for the baseline controls, which may contradict the sociology literature, which argued that evangelicals were more prone to implement the faith-based initiatives. This could also be because the remaining denominations in the broad group

<sup>58</sup>Public welfare spending is available at the state level, and thus the 379 observations indicate the number of state-years with public spending data available.

of Protestants pull in the opposite direction.

Since our baseline specification is a difference-in-difference model, our identification strategy does not hinge on similarity in the presented *levels* of the characteristics. Instead, our method requires that *changes* in the characteristics do not vary systematically with the legislative changes, i.e. there are no pre-trends. To investigate changes over time, we aggregate the data to the state-year level, and estimate the following regression:<sup>59</sup>

$$\bar{Y}_{ts} - \bar{Y}_{t-1,s} = \gamma \text{lawyears}_s + \kappa_t + \kappa_r + \omega \bar{X}_{ts} + \varepsilon_{ts} \quad (3)$$

where  $\bar{Y}$  and  $\bar{X}$  are state-year averages of the particular variables.  $\bar{Y}_{ts} - \bar{Y}_{t-1,s}$  is the change in the investigated characteristics from year  $t - 1$  to year  $t$ , all measured over the period 1980-1994.<sup>60</sup> Column (7) of Table 2 shows that the early implementers do not differ systematically from the late implementers prior to 1996 based on the annual changes in any of the included characteristics. Column (8) confirms this including the baseline controls.

Table 2 includes what we found to be the most obvious confounders based on the literature. In addition, Sager (2010) found that states that implemented faith-based initiatives were more likely to have Republican evangelical politicians and were more likely to be poorer. We confirm this using data on the religious denomination and chamber of state politicians, poverty rates, and GSP per capita, cf. Table A.4.<sup>61</sup> Crucially for our identification strategy, we find no differences in terms of *changes* in Republican and/or evangelical politicians, poverty rates, or GSP per capita.<sup>62</sup> The main results are robust to controlling for either of these variables (Tables A.12 and A.12). To further investigate whether the faith-based initiatives were used by the Republicans to attract voters, we use data on feeling or voting Republican (Tables A.26 and A.27).<sup>63</sup> We find no impact of the faith-based initiatives on either.

These analyses confirm what Figure 1 illustrated and is promising for our identification strategy: States do not differ systematically in terms of changes in key variables before the initiatives were implemented.

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<sup>59</sup>The same individuals are not surveyed over time. Instead we treat the state as the panel dimension in a so-called synthetic panel setup.

<sup>60</sup>The panel is unbalanced since every variable is not included in every survey year. For 75 pct. of the sample, the yearly change spans 1 year, while the change for the remaining 25 pct spans 2 years, except for two state-year observations where the change spans 3 and 12 years, respectively. The results are unaltered if we exclude state-years with spans above 2 years or above 1 year.

<sup>61</sup>Data on state politicians is downloaded from adherents.com, described in Appendix A.7, data on GSP per capita is from Bureau of Economic Analysis, and data on poverty rates is from the US Census Bureau. The latter two are described in Appendix A.9.

<sup>62</sup>These results are robust to using either the share of politicians or a dummy equal to one if the state had one or more Republican and/or evangelical politicians.

<sup>63</sup>One analysis is based on information from the GSS on whether respondents feel Republican or voted Republican in the last election. The second analysis is based on the American National Election Studies (ANES) with comparable information on voting behavior since 1992.

## 5.2 Church Attendance

Table 3 shows the impact of the faith-based initiatives on church attendance over the period from 1980 to 2010, i.e. estimation of Equation (1). All regressions include year of survey and state fixed effects. Column (1) demonstrates that average church attendance increased significantly after states implemented one or more faith-based laws. The result is robust to including the standard individual-level controls for respondents' age and dummies for their marital status and gender (column 2). The estimates on the control variables mimic what is otherwise found in the literature. For instance, the well-documented higher religiosity for women is replicated here.<sup>64</sup>

Table 3: The impact of faith-based initiatives on churchgoing

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable: Frequency of church attendance [0;1]								
Law <sub>t-1</sub>	0.027*** (0.010)	0.028*** (0.010)	0.026*** (0.009)	0.028*** (0.010)	0.032*** (0.011)	0.027*** (0.010)	0.025** (0.010)	0.019** (0.009)
Age		0.0017*** (0.000)	0.0018*** (0.000)	0.0021*** (0.000)	0.0017*** (0.000)	0.0017*** (0.000)	0.0017*** (0.000)	0.0017*** (0.000)
Male		-0.071*** (0.005)	-0.073*** (0.006)	-0.073*** (0.005)	-0.073*** (0.005)	-0.072*** (0.005)	-0.070*** (0.005)	-0.071*** (0.005)
Married		0.069*** (0.004)	0.061*** (0.004)	0.063*** (0.003)	0.069*** (0.004)	0.069*** (0.004)	0.073*** (0.004)	0.069*** (0.004)
Family income			32.1** (14.787)					
Education				0.011*** (0.002)				
Public welfare spending <sub>t-1</sub>					0.000041 (0.000)			
Protestant						-0.011 (0.009)		
Black							0.083*** (0.005)	
Law <sub>t+1</sub>								0.016 (0.012)
Adj. R <sup>2</sup>	0.024	0.056	0.058	0.065	0.058	0.063	0.063	0.056
N	34729	34624	31064	34556	29679	33145	34624	34624
Mean DV	0.52	0.52	0.52	0.52	0.51	0.52	0.52	0.52
Change in dependent variable 1996-2010: 0.010								

OLS estimates. All regressions include a constant and year of survey and state fixed effects. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives increased churchgoing. States did not differ systematically in terms of changes in churchgoing prior to implementation.

Having implemented one or more laws increases church attendance by 2.8 percentage points. This amounts to 5.4% of the mean level of church attendance or nearly three times the total increase in church attendance over the period 1996-2010.<sup>65</sup> Comparing the standardized betas, the difference in church attendance between states before and after they implement the faith-based initiatives amounts to around one-third of the well-known difference in attendance rates

<sup>64</sup>Trzebiatowska & Bruce (2012) summarize studies documenting that women are more religious than men.

<sup>65</sup>The change in church attendance from 1996 to 2010 is 0.010 and is calculated for the 30 states that had data on church attendance in both 1996 and 2010.



for men and women.<sup>66</sup> Thus, the effects are large, but not unreasonably so.

If the laws were implemented as a substitute for low welfare, poorer states might have been more likely to implement the laws. This could bias our estimates if income impacts religiosity.<sup>67</sup> Note that the previous section did not find evidence of the laws being driven by changes in these confounders. Nevertheless, we include controls for individual-level income in column (3) and education in column (4). The estimate on the faith-based laws remains unchanged. Interestingly, richer and more educated individuals attend church more often. We are not the first to show results contradicting the secularization hypothesis.<sup>68</sup> Average state-level public spending in the previous year is included in column (5). The result is maintained and public welfare spending per capita does not influence attendance significantly in this model. Further, the results are robust to excluding the early years where results are potentially more influenced by the 1996 welfare reform (cf. Table A.20). Moreover, the impact is not larger for population groups that were potentially affected more than others by the 1996 welfare reform.<sup>69</sup> We conclude that the results do not seem to be driven by reductions in welfare due to the 1996 welfare reform. Since income, education, and public spending are likely endogenous controls, these results should be interpreted with caution. Table A.14 demonstrates that the results are unaltered when controlling for the initial level of the particular controls, interacted with time.

The faith-based initiatives may have been primarily an evangelical movement, speaking particularly to the African-American evangelical population.<sup>70</sup> If the laws were implemented earlier in states with more African-Americans evangelicals and if these population groups were more religious, this could explain the results. The previous section showed that states with larger increases in these population groups did not implement the initiatives earlier. Nevertheless, we add dummies for whether the respondent belongs to a Protestant denomination (column 6) and/or is African-American (column 7). This does not alter the results. In line with the literature, we find that the laws increase mainly the religiosity of Protestants and/or African-Americans (Table A.17).

One may still be concerned whether the results are driven by something systematic about the states that implemented the faith-based initiatives earlier. To test this, the pre-trends analysis in Section 5.1 assumed that the pre-period was fixed at 1980-1994 for all states. In column (8), we relax this assumption and instead include the lead of the variable measuring implementation of the faith-based initiatives. The parameter on the lead measures the differ-

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<sup>66</sup>The standardized beta for  $law_{t-1}$  is 0.037, while the standardized beta for the male dummy is -0.11.

<sup>67</sup>For instance, the secularization hypothesis predicts that religiosity declines as societies modernize.

<sup>68</sup>See Stark & Finke (2000), Glaeser & Sacerdote (2008), and Iannaccone (1998) for discussions.

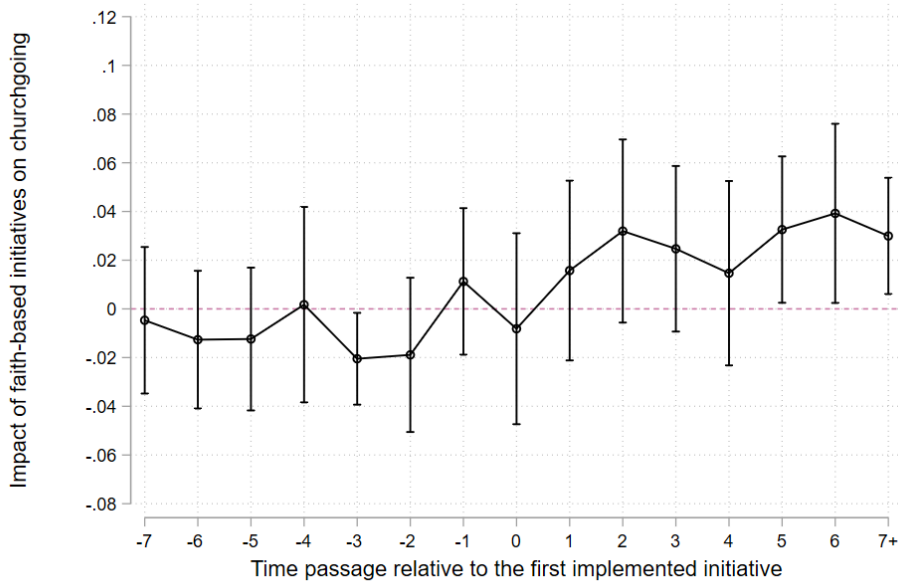
<sup>69</sup>Hungerman (2005) found that US foreign borns were more affected by the 1996 welfare reform. Table A.18 shows that the faith-based initiatives did not increase religiosity more in foreign borns. Neither did the initiatives increase religiosity more in states with more public spending (Table A.17).

<sup>70</sup>Sager (2010); Chaves & Wineburg (2010).

ence in changes in attendance rates between states that are about to implement a law and those that are not. There are no systematic differences, which further attests to the reliability of our identification strategy.

As a final check of potential differences prior to implementation and also as an investigation of the dynamics, we divide the law dummy into fifteen separate dummies depending on when the first law was implemented in Figure 4.<sup>71</sup> This specification includes seven leads and seven lags of the law dummy, each turned on only in the specific year, except for the last dummy, which is turned on 7 years after the first law and continually thereafter. The omitted category is the period prior to seven years before implementation of the first law.<sup>72</sup>

Figure 4: Difference in churchgoing before and after the first law



Note: OLS regression of churchgoing on seven leads and lags of the law dummy. Each estimate indicates the impact of implementing the first law in that particular lead or lag only, except for the final estimate to the right, which measures the impact on churchgoing seven years or more after the first law. The estimation includes baseline controls for age, marital status, gender, and year - and state fixed effects. The vertical bands represent the 95 percent confidence interval based on robust standard errors clustered at the state level.

**Result:** The faith-based initiatives increased churchgoing five years or more after implementation. States did not differ systematically prior to implementation.

The unbalancedness of the panel contributes to substantial differences in the precision of the estimates in Figure 4.<sup>73</sup> Nevertheless, the figure supports the common trends assumption and documents the increase in churchgoing in the aftermath of the legislative amendments. Church attendance increases the year after the first implementation, although the increase is not

<sup>71</sup>This procedure follows Autor (2003).

<sup>72</sup>Point zero in Figure 4 indicates the impact of faith-based initiatives in the year of implementation. The standard errors are quite large, which illustrates the problem that we cannot distinguish whether GSS respondents were asked before or after implementation of the faith-based initiatives in the year of interview.

<sup>73</sup>Particularly few respondents are observed 4 and 6 years after first implementation, producing more noise in these two estimates.

significant until 5 years after the first implementation. Point minus one shows the difference in changes in churchgoing between states that are about to implement a faith-based initiative in the following year and those that are not. The difference is not statistically different from zero. The same is true for years 2-7 before the legislative amendment, except that states seem to experience *falling* church attendance three years prior to implementation. The absence of positive pre-trends further attests to the reliability of our identification strategy. We note that the laws seem to have rather long-lasting effects on church attendance, which seems reasonable in that most laws induce a permanent institutional change.

To understand the nature of the shifts in attendance rates better, Table 4 documents the impact of the laws on the separate attendance categories. Each column is a separate regression where the dependent variable is a dummy variable for that attendance category. We bundle the eight categories of the religious services variable into four categories to ensure enough variation in each variable.<sup>74</sup> The laws reduce the share of individuals attending religious services never or almost never (column 1) and increase the share of those who attend weekly or annually. The laws thus induce those who belong to a denomination, but who previously did not attend church, to start going to church. The laws do not influence those who attend church monthly, which may cover relocation within the "monthly" category that we cannot observe. Alternatively, the "monthly" category may cover individuals who go to church primarily for holidays, baptisms, funerals, etc, and thus may be less affected by legislative amendments such as the faith-based initiatives.

Table 4: The impact of faith-based initiatives, by attendance level

	(1)	(2)	(3)	(4)
Dep var: Dummy equal to one if respondent attends religious services...	Never	Annually	Monthly	Weekly
$Law_{t-1}$	-0.055*** (0.011)	0.032*** (0.012)	-0.0020 (0.013)	0.025** (0.010)
Adj. R <sup>2</sup>	0.023	0.024	0.011	0.049
N	34624	34624	34624	34624
Mean DV	0.18	0.27	0.24	0.31

OLS estimates. All regressions include a constant and year of survey and state fixed effects, and respondent controls for age, marital status, and gender. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives increased the share of weekly and annual churchgoers and reduced the share of never-goers.

### 5.3 Religious Beliefs

The increased attendance rates do not necessarily cover a change in personal beliefs. To investigate, we now replace the dependent variable in Equation (1) with measures of the strength of religious beliefs. Table 5 indicates that the strength of religious affiliation increases after states implement one or more faith-based initiatives. The result is robust to including controls for gender, marital status, age, income, education, public spending, and dummies for whether the respondent is a Protestant and/or is African-American. Column (8) shows

<sup>74</sup>Keeping the eight different categories of attendance produces similar results.

that states that will implement a faith-based initiative in the following year are no different in terms of changes in religious beliefs compared to states that will not, giving confidence in our identification strategy.

The size of the estimate is economically significant. Taking the estimate in column (2) at face value, implementing one or more laws increases average strength of affiliation by 3.3 percentage points. This amounts to 7.4% of the average strength of affiliation or nearly three times the decline in strength of religious affiliation over the period 1996-2010.

Table 5: Impact of faith-based initiatives on religious beliefs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable: Strength of affiliation [0;1]							
Law <sub>t-1</sub>	0.030*** (0.010)	0.033*** (0.011)	0.025* (0.013)	0.033*** (0.012)	0.038*** (0.013)	0.033*** (0.012)	0.028** (0.011)	0.032** (0.013)
Age		0.0035*** (0.000)	0.0034*** (0.000)	0.0038*** (0.000)	0.0035*** (0.000)	0.0035*** (0.000)	0.0036*** (0.000)	0.0035*** (0.000)
Male		-0.099*** (0.008)	-0.096*** (0.008)	-0.100*** (0.008)	-0.097*** (0.008)	-0.099*** (0.008)	-0.096*** (0.008)	-0.099*** (0.008)
Married		0.035*** (0.007)	0.038*** (0.007)	0.031*** (0.007)	0.036*** (0.007)	0.035*** (0.007)	0.049*** (0.008)	0.035*** (0.007)
Family income			-19578.0 (12975.728)					
Education				0.0069*** (0.001)				
Public welfare spending <sub>t-1</sub>					0.00011*** (0.000)			
Protestant						0.0081 (0.009)		
Black							0.13*** (0.014)	
Law <sub>t+1</sub>								0.0012 (0.017)
Adj. R <sup>2</sup>	0.015	0.042	0.039	0.044	0.044	0.052	0.050	0.042
N	33660	33560	30139	33496	28785	32270	33560	33560
Mean DV	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Change in dependent variable 1996-2010: -0.012							

OLS estimates. All regressions include a constant and year of survey and state fixed effects. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

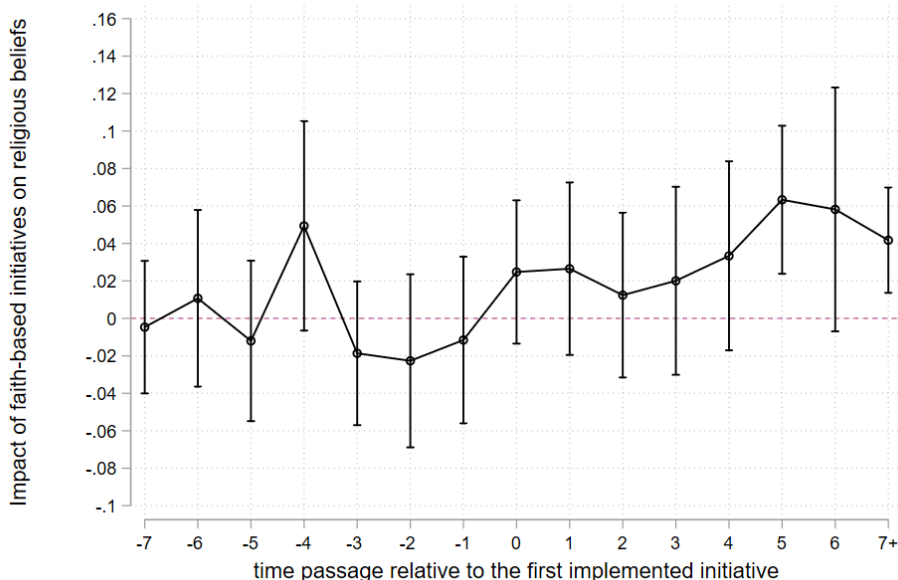
**Result:** The faith-based initiatives strengthened religious beliefs. States did not differ in terms of changes in beliefs prior to implementation.

Figure 5 illustrates the change in affiliation strength in the seven years before and after a state implements its first faith-based initiative. Again, the unbalancedness of the panel contributes to substantial noise across the different estimates.<sup>75</sup> Nevertheless, the figure supports the

<sup>75</sup>As for churchgoing, particularly few respondents are observed 4 and 6 years after first implementation, producing more noise in these two estimates.

common trends assumption and documents the increase in the strength of affiliation after the legislative amendments. As for churchgoing, the figure documents some persistence in religious beliefs: The strength of religious affiliation increases from five years after the first implementation and thereafter.

Figure 5: Difference in strength of religious beliefs before and after the first law



Note: OLS regression of strength of affiliation on seven leads and lags of the law dummy. Each estimate indicates the impact of a law in that particular lag or lead only, except for the final estimate to the right, which measures the impact on strength of affiliation seven years or more after the first legal amendment. The estimation includes baseline controls for age, marital status, gender, and year - and state fixed effects. The vertical bands represent the 95 percent confidence interval based on robust standard errors clustered at the state level.

**Result:** The faith-based initiatives strengthened religious beliefs after five years and beyond. States did not differ in terms of changes in beliefs prior to implementation.

Table 6 shows the impact of the faith-based initiatives on additional GSS measures of religious beliefs available for at least 10,000 respondents. One measure is a dummy variable (beliefs in an afterlife or not), while the remainder are categorical variables. We divide the categorical variables into dummy variables to examine further the effects along the intensive vs extensive margins.<sup>76</sup> One question asks how often respondents pray. They can answer in categories from never to several times a day. From this, we construct two indicators: One indicator is equal to one if respondents pray weekly or more often and zero otherwise (col 2), another is equal to one if respondents pray daily and zero otherwise (col 3). Another question asks whether respondents think the Bible is the actual word of God to be taken literally word for word, whether it is the inspired word of God where not everything should be taken literally, or whether it is an ancient book of fables, legends, history, and moral precepts recorded by men. From this, we construct two indicators: One is equal to one if respondents believe the

<sup>76</sup>Not all categories are shown in the table. The conclusion is robust to regressing on each of the original categories.

Bible to be the literal or inspired word of God, zero otherwise (col 4), another is equal to one if respondents believe the Bible to be the literal word of God, zero otherwise (col 5). A third question asks respondents whether they believe in God. They can answer no, do not know, do not believe in a personal God but believe in a higher power of some kind, believe in God sometimes, believe but in doubt, believe in God without doubt. From this, we construct three indicators: One is equal to one if respondents answer anything but no (col 6), another is equal to one if respondents either believe with certainty or with doubt (col 7), and the third indicator is equal to one if respondents are certain that God exists, zero otherwise (col 8). Table 6 shows that the lower categories are not affected for any of the measures. The laws do not persuade respondents who do not believe in an afterlife into believing in one, or those who pray only annually or never into praying more often, or those who believe the Bible is a book of fables recorded by men into believing it to be the word of God, or lead atheists or agnostics into believing in God.<sup>77</sup> Instead, the laws increased the likelihood that respondents pray daily, believe the Bible to be the literal word of God, and believe in God with certainty.

Table 6: The impact of faith-based initiatives on alternative measures of strength of beliefs

Dep var:	(1) Afterlife	(2) Prayer weekly or more often	(3) daily	(4) Bible is ... inspired word of God	(5) literal word of God	(6) or not	(7) Believe in God but in doubt	(8) certain God exists
$Law_{t-1}$	-0.012 (0.019)	-0.001 (0.017)	0.051*** (0.019)	0.012 (0.011)	0.037* (0.022)	-0.001 (0.009)	0.051** (0.024)	0.045* (0.023)
R2	0.019	0.065	0.099	0.025	0.066	0.011	0.033	0.055
N	22554	20479	20479	20391	20391	11542	11542	1154
Mean dep var	0.836	0.819	0.603	0.876	0.362	0.966	0.858	0.684

OLS estimates. All regressions include a constant and year of survey and state fixed effects, and respondent controls for age, marital status, and gender. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives strengthened the faith of believers, but did not change beliefs of non-believers.

These results are consistent with our finding that the initiatives did not increase religiosity of respondents without a religious denomination. Overall, the initiatives strengthened the faith of existing believers.

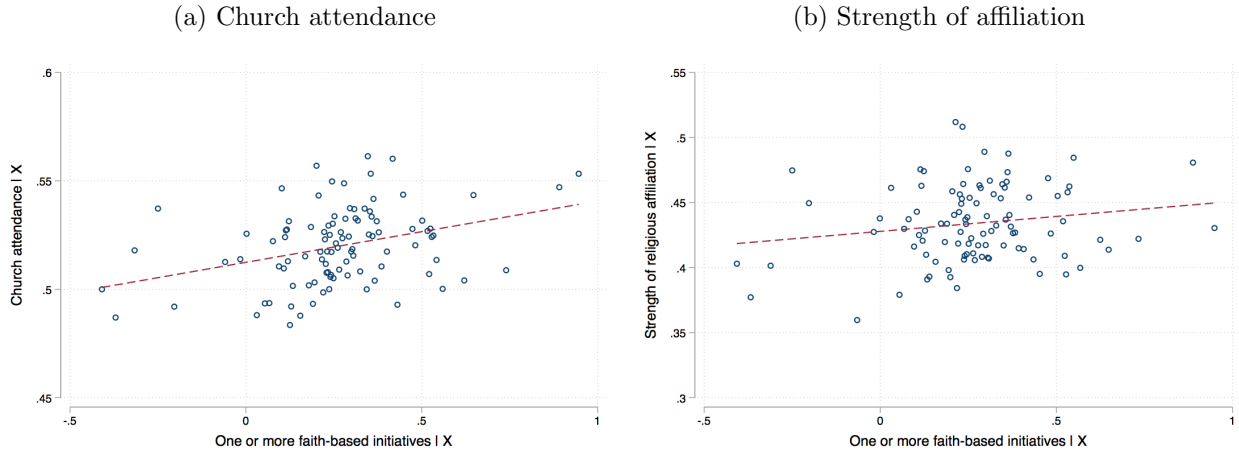
## 5.4 Further Robustness

Figure 6 shows added-variable plots of the main regressions including state- and year fixed effects together with controls for gender, marital status, and age, where observations are divided into 100 equally-sized bins. The results are not driven by a particular group of individuals. As a further check of homogeneity across space, we find that the laws increase

<sup>77</sup>Atheists and agnostics amount to merely 3.6 % of the respondents in this sample restricted to those with a religious denomination. This low number may also be the reason for the insignificance of the impact of the faith-based initiatives for this category.

churchgoing and strength of affiliation in all four major regions of the USA (Table A.19).

Figure 6: Binned added-variable plots of the impact of the laws on religiosity



Note: OLS regressions corresponding to column (2) of Tables 3 and 5. Individuals binned into 100 equally sized bins.

The pre-trend analyses give confidence that the results are not explained by something systematic that determined the faith-based initiatives. Nevertheless, unobserved differences may determine the results. We take two additional approaches to account for this. First, we restrict the sample to counties that neighbor a state border and compare counties in pairs on either side, following Dube *et al.* (2010). Econometrically, we estimate Equation (1) for the restricted sample of counties neighboring state borders and include county-pair fixed effects. Even in this comparison between arguably highly similar counties, we find that religious attendance and beliefs increase significantly more in the county where the faith-based initiatives were implemented earlier, compared to its' neighbor (columns (1) and (3) of Table 7). Columns (2) and (4) show that this is also the case when simply restricting the sample without including the county-pair fixed effects.

Secondly, we use the method of synthetic controls. This method compares an estimate of the counterfactual development in religiosity in the absence of legislative changes to the actual development in religiosity. To construct a synthetic control group, we restrict the sample to a balanced panel, which implies reducing the sample to 29 states over the period 1993-2010. As a result, the pre- and post periods consist of two years each.<sup>78</sup> The three baseline controls for age, marital status, and gender are included as predictors.

<sup>78</sup>The synthetic control estimation is implemented using the *synth\_runner* procedure by Galiani & Quistorff (2017) enabling several treatment units and times. The treated states are compared to a synthetic control group, which consists of states before they implement or states that never implemented. When calculating average religiosity of the control group, the states that are most similar to the treated states before implementation gain larger weights.

Table 7: The impact of faith-based initiatives in pairs of contiguous counties

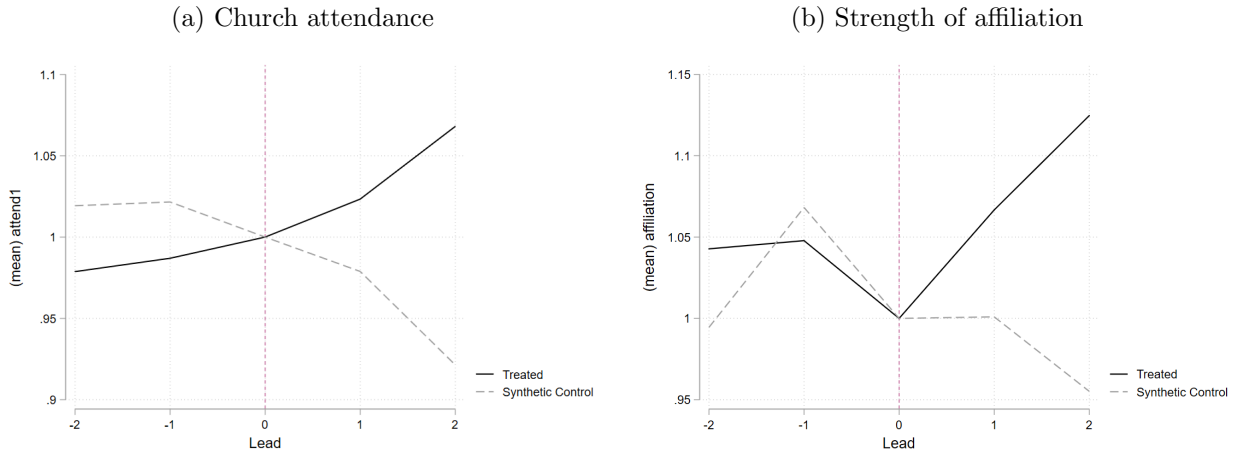
	(1)	(2)	(3)	(4)
Dep. var.:	Attendance [0;1]		Affiliation [0;1]	
$Law_{t-1}$	0.056** (0.026)	0.055** (0.022)	0.071** (0.032)	0.071*** (0.023)
Adj. R <sup>2</sup>	0.065	0.058	0.036	0.033
N	7117	7117	6937	6937
Contiguous county pair FE	Yes	No	Yes	No

OLS estimates. All regressions include a constant and baseline controls for respondents' age, gender, and marital status together with year of survey - and state fixed effects. Robust standard errors clustered at the state and county pair level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives increased religiosity, even when restricting comparison to pairs of neighboring counties.

Figure 7 documents that the actual development in either religiosity measure follows a relatively similar pattern compared to the treated group prior to treatment. However, around the time of treatment the curves start to diverge dramatically with the treated group experiencing much larger increases in religiosity. This provides greater confidence that our results are not determined by unobserved characteristics.

Figure 7: The impact of faith-based initiatives in a synthetic control panel



Note: Averages are taken across states without missing years. Included states are Alabama, Arizona, California, Colorado, Connecticut, District of Columbia, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Virginia, Washington, and Wisconsin. The dependent variable is normalized to 1 in period 0.

The two main institutions involved in the faith-based initiatives were the faith-based liaisons (FBL) and offices of faith-based initiatives (OFBCI). The FBL was the main person responsible for the faith-based initiatives at the state level and the OFBCI were offices to support their work. While these institutions only comprise a subset of the entire faith-based initiatives, they provide as a quasi robustness check of the laws-based measure. We use data on the presence of FBLs and OFBCIs based on Rebecca Sagers interviews with officials in all states (described in Appendix A.2).<sup>79</sup> We find that religious attendance and strength of beliefs increase when

<sup>79</sup>The legislative amendments correlate with 0.70 with the presence of a FBL and with 0.55 with presence



states hire a faith-based liaison, although the estimate on strength of beliefs is insignificant (cf. Table A.21). While the parameter estimate on beliefs remains unchanged, insignificance of the latter is caused by the larger standard errors, potentially due to the larger imprecision in the measures of institutions. Alternatively, insignificance may result from this particular institution not affecting beliefs. The OFBCI increases both religiosity measures further, but not significantly. Whether this is due to even poorer data quality or due to this institution not influencing religiosity is not possible to disentangle.

Yet another measure of the extent of the faith-based initiatives is their budgets. To our knowledge, comprehensive data on the budgets do not exist. However, through interviews of the FBLs, Rebecca Sager has collected data on the budgets of the FBLs and the appropriations relegated directly to the FBOs or to the OFBCIs. Both budget types increase attendance rates and beliefs in addition to the impact of the legislative changes, but the impact on beliefs is insignificant (cf. Table A.22). Again, whether insignificance is due to the high imprecision of the budget measures or due to budgets not influencing beliefs is not possible to disentangle in this analysis.

If the laws influence religiosity, they may also influence cultural values related to religiosity. Checking the impact on these cultural values thus serves as a robustness check of our results. Guiso *et al.* (2003) find that more religious individuals in the World Values Survey are more trusting of the government, are less willing to commit economic crimes, value hard work more, have more conservative views on the role of women, are more likely to be racist, and last, religious individuals raised in the dominant religion are less likely to trust other people. Using six similar measures from the GSS available for at least 10,000 observations, we find that views against homosexuality increased in the aftermath of the faith-based initiatives, while confidence in the scientific community and trust fell, consistent with our remaining findings.<sup>80</sup> The laws did not influence views on abortion, approval of women working, or whether respondents view themselves as conservative. This insignificance may result from these being more deeply rooted cultural beliefs. Overall, the faith-based initiatives strengthened three out of six cultural values associated with higher religiosity.

A concern is whether the effects on religious attendance and beliefs is determined by an influx of more religious individuals from neighboring states instead of increased religiosity for existing citizen. That would question the impact on the overall level of religiosity in the USA. The testable implication is that religiosity should fall in response to the initiatives in

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of an OFBCI. They also correlate with all of the three different types of laws presented in Table 1, slightly more with the concrete laws and the least with the program laws. This stems well with the stated contents of the laws and serves as a robustness check of our data. Last, having a FBL correlates with 0.64 with having an OFBCI.

<sup>80</sup>Table A.25, data descriptions in Data Appendix A. The relation between trust and religiosity is still debated in the literature.

neighboring states since the religious individuals move out of these states. We do not find evidence for this. On the contrary, we find that laws implemented in the neighboring state *increase* religious attendance and beliefs significantly (Table A.23). However, in keeping with the hypothesis that laws in ones own state are most important, the impact on religiosity in the neighboring state increases by much less than the laws in ones own state.

Another concern is whether the impact of the faith-based initiatives on religiosity is counteracted by a reduction in private contributions to the church in which case the impact on overall religiosity would be ambiguous.<sup>81</sup> A priori, we could also have expected the opposite: The more religious individuals may donate more as a way of honoring the church they now visit more often. If anything, we find support for the latter: the faith-based initiatives increase donations to religious organizations, although the impact is insignificant (Table A.24).<sup>82</sup>

## 5.5 Mechanisms

We proceed to investigate the mechanisms through which the faith-based initiatives may have increased religious attendance and beliefs by first dividing the faith-based initiatives into the three categories from Table 1: Program laws (providing welfare through FBOs), concrete laws (including faith-based personel on state advisory boards, increased appropriations, and fewer regulations for FBOs), and symbolic laws (encouraging the state to partner with FBOs).

Table 8: The impact of different types of faith-based initiatives

	(1)	(2)	(3)	(4)	(5)	(6)
	Frequency of church attendance [0;1]			Strength of affiliation [0;1]		
Program law <sub>t-1</sub>	0.0053 (0.011)			-0.012 (0.013)		
Concrete law <sub>t-1</sub>		0.020* (0.011)			0.015 (0.015)	
Symbolic law <sub>t-1</sub>			0.023*** (0.007)			0.019* (0.011)
Adj. R <sup>2</sup>	0.056	0.056	0.056	0.042	0.042	0.042
N	34617	34617	34617	33554	33554	33554

OLS estimates. All regressions include a constant and year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The main impact of the faith-based initiatives stems from the symbolic laws and to a lesser extent the concrete laws. Program laws did not impact attendance or beliefs.

In consistence with the critique that the faith-based initiatives did not contribute with the promised welfare improvements for the poor, Table 8 shows that the program laws do not influence religious attendance or beliefs. Consistent with this conclusion, we also find that

<sup>81</sup>Hungerman (2005) finds evidence of a crowding out mechanism between church attendance and contributions.

<sup>82</sup>For this analysis, we use the consumer expenditure survey (CEX) which is a survey of individuals asking how much they donate to charitable organizations.

the faith-based initiatives do not influence religious attendance and beliefs more for the lower income groups, which they should if the impact was driven by welfare benefits from churchgoing for the poor (Table A.17 and Figure A.2). Instead, Table 8 documents that the main impact of the faith-based initiatives stems from the symbolic laws and to a lesser extent also the concrete laws. This finding is consistent with the arguments by some sociologists that the real impact of the faith-based initiatives came from strengthened church-state relations.

The ease on regulations, increased appropriations, increased access for FBOs to the government, and strengthened ties between state and FBOs in general increased the benefits from establishing FBOs instead of secular nonprofit organizations. This would increase their numbers. This higher supply may explain the increased religiosity through either an increased match-rate between potential entrants into the religious market and religion, lower access costs to religion, or a mechanism more like missionary work: Individuals consuming the service provided by the nonprofit obtain religion and higher religiosity as a by-product.

To investigate whether the number of FBOs increased, we use data on the universe of nonprofit organizations in the USA from the National Center for Charitable Statistics (NCCS). The dataset includes information on whether an organization listed itself as a religious organization from a list of 25 different organization types. We use this as our first measure of religiosity. However, the measure does not capture religiously grounded organizations with the primary purpose of, for instance (religious) education. Therefore, we use the name of the organization to construct two additional measures: One indicator is equal to one if the name includes religious terms, such as "Christian" or "church". The last measure is the number of religious terms in the name.<sup>83</sup> 3.6% of US nonprofit organizations categorize themselves as having a religious primary purpose, 6.0% have a name with one or more religious terms.

Our preferred measure is based on the names, since the organizations with religious terms in their names, but who do not register themselves as being a religious organization, certainly seem to have a religious purpose. Examples of organizations that did not register as a religious organization are "Youth for Christ USA" (YFC) who meet in coffee shops and schools with young people who allegedly need Jesus and "Young Men's Christian Association" (YMCA) aims to put Christian principles into practice through athletic activities or classes. Both are examples of global organizations, present in 100 and 120 countries, respectively. We multiply the measures with 100 to ease presentation of our results.

Table 9 shows that the number of organizations with a stated religious primary purpose or a

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<sup>83</sup>See further details on these data in Appendix A.6. The full list of religious terms is documented in Table A.1 for all 11 mio. nonprofit organizations. Table A.29 documents that the effect is robust to excluding the ten most frequent religious terms one at a time. The table also documents the impact for each of the top-ten terms separately. The three measures of a religious nonprofit organization are highly correlated. The two name-based measures correlate with 0.94, while the category-based measure correlates with 0.51 with the number of religious words and with 0.49 with the dummy variable.

religious name increased in the aftermath of the faith-based initiatives (columns 1-6). Columns (7)-(9) document that the larger number of FBOs is primarily driven by the concrete laws, which include the direct actions to improve conditions for FBOs (fewer regulations, more appropriations, and including faith-based representatives on advisory boards). Thus, these laws seem to make it more worthwhile to establish religious nonprofit organizations compared to secular ones. In support of these findings, we also document that the faith-based initiatives increased the number of churches and to a lesser extent the number of adherents (Table A.28).<sup>84</sup> The main result is not driven by a few organizations, cf. Figure A.3.

Table 9: The impact of faith-based initiatives on the number of faith-based nonprofits

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent var.	Religious org		Religious name number		Religious name dummy				
Laws included	All	All	All	All	All	All	Program	Concrete	Symbol
Law <sub>t-1</sub>	0.146** (0.069)	0.138* (0.072)	0.357*** (0.076)	0.342*** (0.075)	0.298*** (0.078)	0.284*** (0.065)	0.076 (0.194)	0.188** (0.078)	0.149 (0.122)
Private	N	Y	N	Y	N	Y	Y	Y	Y
R <sup>2</sup>	0.005	0.007	0.004	0.005	0.004	0.006	0.006	0.006	0.006
N	7,778,252	7,778,252	8,044,850	8,044,850	8,044,850	8,044,850	8,044,850	8,044,850	8,044,850
Mean dep. var	3.289	3.289	6.494	6.494	5.693	5.693	5.693	5.693	5.693

OLS estimates across nonprofit organizations. The dependent variables (all multiplied by 100) are: A dummy equal to one if the organization has reported itself as being a religious organization (columns 1-2), number of religious words in the organization's name (columns 3-4), and a dummy equal to one if the name includes one or more religious words (columns 5-9). The law dummy is based on all faith-based initiatives in columns 1-6, but restricted to only program laws, concrete laws, and symbolic laws respectively in columns 7-9. All regressions include a constant and time and state fixed effects. The variable Private is equal to one if the organization is private, zero otherwise. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives increased the number of FBOs. This is primarily due to the concrete laws.

Since the increases in religious attendance and beliefs were only partly explained by the concrete laws and mainly driven by the symbolic laws, the increased supply of FBOs can only account for part of the increased religiosity. According to other scholars, a result of these symbolic policies was a strengthened role of religion in the public. While an increased supply of FBOs is certainly one step in this direction, we investigate an additional mechanism: Whether or not politicians' religious denomination is publicly available information. The idea is that as religion increases in importance, politicians may use it more extensively to obtain public support. Using data on the religious denomination of state politicians, we code a dummy equal to one if a state has one or more politicians with an "unknown" or "unspecified" religious denomination.<sup>85</sup> Table 10 documents that states are less likely to have one

<sup>84</sup>This analysis is based on longitudinal state-level data on churches and church membership in 1980, 1990, 2000, and 2010 (see Appendix A for further details).

<sup>85</sup>Downloaded from adherents.com, described in Appendix A.7. Significance of the results falls if we instead of a dummy use the share of politicians with an "unknown" or "unspecified" religious denomination. In this specification, only the regression restricting to symbolic laws is significant. Indeed, fluctuations in the shares can be random, while fluctuations in whether or not the state has politicians with an unspecified religious denomination seems less driven by randomness.

or more politicians without a publicly known religious denomination after implementing the faith-based initiatives. This is driven exclusively by the symbolic laws (columns 6-8). This suggests that encouraging a more friendly environment for the faith community has also encouraged politicians to use religion more extensively.<sup>86</sup> The main result is not driven by few observations, cf. Figure A.4.

Table 10: The impact of faith-based initiatives on the likelihood that politicians' religion is publicly known

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Laws included	All	All	All	All	All	Program	Concrete	Symbol
$Laws_{t-1}$	-0.11** (0.055)	-0.11* (0.056)	-0.10* (0.056)	-0.12** (0.059)	-0.11** (0.056)	-0.092 (0.087)	-0.076 (0.056)	-0.17** (0.066)
Democrat politicians, share		0.14 (0.202)						
Republican politicians, share			-0.15 (0.206)					
Protestant politicians, share				-0.21 (0.265)				
Catholic politicians, share					0.17 (0.247)			
$R^2$	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.48
N	235	235	235	235	235	235	235	235

OLS estimates across state-years. All regressions include time and state fixed effects. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives increased the likelihood that state politicians had a publicly known religious denomination. This result is driven by the symbolic laws.

Overall, the faith-based initiatives seem to have increased the supply of religious organizations and politicians, by increasing the benefits from establishing religious organizations and by symbolically strengthening the ties between church and state.

## 5.6 Well-being

If religious providers are more effective in providing social services as argued by proponents of the faith-based initiatives, the conditions for the poor should improve in the aftermath of the initiatives. However, using data on state-level indicators of well-being, Table 11 documents that the faith-based initiatives did not influence state-level poverty rates, public welfare, public health, deaths by overdoses, alcohol or other causes of death or crime rates (data described in Data Appendix A.9).

<sup>86</sup>An alternative interpretation is that politicians, like the general population, simply became more religious with the initiatives.

Table 11: The impact of faith-based initiatives on state level well-being

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Poverty	Public welfare	Public health	Correction	Deaths by OD	Deaths by alcohol	Violent crimes	Other deaths
$Law_{t-1}$	0.56 (0.473)	18.7 (38.916)	3.61 (13.162)	6.97 (5.936)	-7.26 (53.746)	-9.22 (17.815)	-6.45 (37.422)	371.8 (446.186)
Adj. $R^2$	0.77	0.93	0.77	0.87	0.91	0.99	0.89	1.00
N	1278	1061	1061	1061	551	558	1278	558
Mean DV	12.9	716.4	116.7	96.5	519.1	382.6	472.9	43553.1

OLS estimates. All regressions include year of survey and state fixed effects. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives had no impact on poverty or health measures.

In addition, Table 12 shows no significant effects of the faith-based initiatives on hours worked, a dummy indicating less than 20 hours worked, real family income, educational attainment, a dummy indicating high educational attainment, job satisfaction, financial satisfaction or self-reported improvements in ones financial situation.<sup>87</sup> The initiatives seem to have increased the share of working individuals marginally, but also to have reduced happiness marginally.<sup>88</sup>

Table 12: The impact of faith-based initiatives on individual well-being

Panel (a)						
	(1)	(2)	(3)	(4)	(5)	(6)
	Hours of work	Work < 20 hours	Working	Family income	Education	Edu. > high school
$Law_{t-1}$	-0.092 (0.608)	0.011 (0.008)	0.024* (0.014)	1.15 (1.486)	-0.075 (0.108)	-0.021 (0.022)
Adj. $R^2$	0.073	0.018	0.17	0.13	0.097	0.073
N	20952	20952	34895	31283	34826	34826
Mean DV	41.1	0.070	0.62	34.9	12.9	0.48

Panel (b)				
	(7)	(8)	(9)	(10)
	Satisfied with financial situation	Better financial situation	Happy	Satisfied with job
$Law_{t-1}$	-0.0047 (0.013)	0.0065 (0.012)	-0.018* (0.010)	0.0014 (0.008)
Adj. $R^2$	0.029	0.064	0.028	0.018
N	31506	31456	31392	24845
Mean DV	0.74	0.38	0.89	0.86

OLS estimates. All regressions include year of survey and state fixed effects, and the controls for age, marital status, and gender. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The faith-based initiatives had no impact on most measures of individual well-being.

We conclude that the faith-based initiatives did not increase well-being. Whether the lack of well-being improvements is due to inefficiency of the particular FBOs or to insufficient funding relegated by the faith-based initiatives is beyond the scope of this analysis.

<sup>87</sup>The GSS has multiple measures of well-being. We chose the variables with the most non-missing observations. See further data description in Appendix A.

<sup>88</sup>The p-values of these two dependent variables remain smaller than 0.1 when correcting for multiple hypothesis testing using the Reif (2018) procedure.

## 6 Conclusion

The faith-based initiatives are a range of legislative changes implemented across the USA since 1996. They enabled provision of government welfare by faith-based organizations in religious settings, increased the benefits from establishing faith-based organizations, and strengthened the ties between church and state.

We document that religious attendance and beliefs increased as a result. This does not seem to have been due to the initiatives having channeled public welfare through the churches which then became more attractive as welfare distributors. This is not surprising given that the initiatives were later criticized for not providing the promised amount of resources. Instead, the initiatives increased the benefits from being a religious organization or politician. As a result, the supply of religion increased, both in terms of more religious nonprofit organizations and more politicians with publicly known religious denominations. This provides empirical support for the arguments by sociologists that the initiatives increased the role of religion in the public.

The increased supply of religious organizations potentially increases religiosity much like religious missions do: More services provided by nonprofit organizations will come with a religious by-product, thus increasing the likelihood that a consumer of the particular service will be treated with religion as well. Alternatively, the increased number of religious nonprofits increase the access to religion. Likewise for the politicians: Politicians flagging their religion more openly increase the likelihood that the populace is treated with religion, but potentially also changes the culture to be more open towards religion, much like symbolic politics.

The main political arguments for the faith-based initiatives were securing religious freedom and the idea was that religious organizations provide better for the needy than the state. In contrast with the latter, we find that general well-being did not increase. It seems that the political emphasis on providing for the needy did not drizzle down through the nonprofit organizations to the populace in the form of increased well-being. Instead, the initiatives managed to alter the beliefs and practices of the American population towards stronger religious beliefs.

Our results further our understanding of the recent surge in religiosity in certain US states. Since many of the nonprofit organizations operate internationally, the results may even help explain the rise in religiosity in other places around the world, which could form the basis for future research. More generally, our results document how politics can influence the personal values and beliefs of individuals.

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# Appendix

## A Data Description

### A.1 The faith-based initiatives

Rebecca Sager collected data on nine types of legislation passed over the period 1996-2007, using key words such as “faith-based” and “Charitable Choice” to determine how many such practices had become incorporated into legislation (Sager (2010), p. 24). Data for each piece of legislation included the date of passage, its sponsor, and the complete text of the bill. Sager coded legislative acts by category and year of passage. LexisNexis was also a source of information on liaison positions that were created by law or an executive order from the governor. This data included the date of appointment, an official description of the position, and the means by which each FBL was appointed.

### A.2 The faith-based institutions

The information on FBL and OFBCI used in Table A.21 is based on interviews of officials in all states performed by Rebecca Sager in 2004/2005 revealing whether the state had an FBL and/or an OFBCI at the time of interview, the year of establishment of the FBL, and details on their operations (Sager (2010)). The majority of states had an FBL and an OFBCI at the time of interview, but the timing of their implementation varies across states and a few did not have one yet. We exclude data without information on the year of establishment. The dataset also includes information on their budgets, but unfortunately these data are not comparable: Some FBLs state that their budget is zero, some that the budget includes their salary, and some state an amount. Whether the latter amount includes funding in addition to their salary is not evident from the budget.

### A.3 The GSS variables

The additional variables from the GSS used in the extensive analyses are presented below. The summary statistics of all variables can be found in Table A.2.

**Afterlife:** Variable name: postlife. Question: “Do you believe there is a life after death?”

Answers: no, yes

**Bible:** Variable name: bible. Question: “Which of these statements comes closest to describing your feelings about the Bible?” Answers: “The Bible is the actual word of God and is to be taken literally, word for word”, “The Bible is the inspired word of God but not everything in it should be taken literally, word for word”, “The Bible is an ancient book of fables, legends, history, and moral precepts recorded by men” (converted to a dummy equal to one if actual word of God)

**Pray:** Variable name: pray. Question: “How often do you pray?” Answers: several times a day, once a day, several times a week, once a week, less than once a week, never (converted to a dummy equal to one if several times a day)

**God:** Variable name: god. Question: "Which statement comes closest to expressing what you believe about God?" Answers: "I don't believe in God", "I don't know whether there is a God and don't believe there is a way to find out", "I don't believe in a personal God, but I do believe in a Higher Power of some kind", "I find myself believing in God some of the time, but not at others", "While I have doubts, I feel that I do believe in God", "I know God really exists and I have no doubt about it" (converted to a dummy equal to one if know God really exists)

**Religious affiliation:** Variable name: relig. Question: "What is your religious preference?" Answers: Protestant, Catholic, Jewish, Some other religion, No religion.

**Religion in which raised:** Variable name: relig16. Question: "In what religion were you raised?" Answers: Protestant, Catholic, Jewish, Some other religion, No religion.

**Switcher:** Dummy equal to one if "Religious affiliation" is different from "Religion in which raised"

**Fundamentalist:** Variable name: fund. No question, but a classification of the affiliation to which the respondent belong

**Against homo:** Variable name: homosex. Question: "What about sexual relations between two adults of the same sex - do you think it is always wrong, almost always wrong, wrong only sometimes wrong, or not wrong at all?" (converted to a dummy equal to one if the answer is any degree of wrong)

**Against abortion:** Variable name: abany. Question: "Please tell me whether or not you think it should be possible for a pregnant woman to obtain a legal abortion if the woman wants it for any reason?" Answers: no, yes

**Female work.** Variable name: fework. Question: "Do you approve or disapprove of a married woman earning money in business or industry if she has a husband capable of supporting her?" Answers: disapprove, approve

**Confidence in science:** Variable name: consci. Question: "I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them? Scientific Community" (converted to a dummy equal to one if the answer is great deal of confidence)

**Conservative:** Variable name: polviews. 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 people might hold are arranged from extremely liberal—point 1—to extremely conservative—point 7. Where would you place yourself on this scale?" (converted to a dummy equal to one if answer is conservative or extremely conservative).

**Trust:** Variable name: trust. Question: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" (converted to a dummy equal to one if answer is can trust).

**Republican** Variable name: partyid. Question: "Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?" (converted to a dummy equal

to one if republican)

**Voted:** Variable name: presXX. "Now in XX, you remember that YY ran for President on the Democratic ticket against WW for the Republicans, and ZZ as an Independent. Do you remember for sure whether or not you voted in that election?" (XX referring to the year of the most recent presidential election) (converted to a dummy equal to one if yes)

**Voted republican:** Variable name: presXX. Question: " Did you vote for YY, WW, or ZZ?" (converted to a dummy equal to one if answer is the republican candidate)

**Hours:** Variable name: hrs1. Question: "Last week were you working full time, part time, going to school, keeping house, or what? If working, full time or part time: How many hours did you work last week, at all jobs?"

**Working:** Variable name: wrkstat. Question: "Last week were you working full time, part time, going to school, keeping house, or what?" (converted to a dummy equal to one if working, full time or part time)

**Education:** Variable name: educ. Question: What is the highest grade in elementary school or high school that you finished and got credit for? IF FINISHED 9th-12th GRADE OR DK\*: Did you ever get a high school diploma or a GED certificate? Did you complete one or more years of college for credit—not including schooling such as business college, technical or vocational school? IF YES: How many years did you complete? Do you have any college degrees? (IF YES: What degree or degrees?) Answer: Integers between 0 - 20.

**High education:** Variable name: educ. Converted to a dummy equal to one if equal to or above 13 (educational level above high school)

**Satisfied with financial situation:** Variable name: satfin. Question: "We are interested in how people are getting along financially these days. So far as you and your family are concerned, would you say that you are pretty well satisfied with your present financial situation, more or less satisfied, or not satisfied at all?" (converted to a dummy equal to one if satisfied)

**Better financial situation:** Variable name: finalter. Question: "During the last few years, has your financial situation been getting better, worse, or has it stayed the same?" Answers: Better, worse, Stayed same. (converted to a dummy equal to one if better)

**Happy:** Variable name: happy. Question: "Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?" (converted to a dummy equal to one if very happy or pretty happy)

**Satisfied with job:** Variable name: satjob. Question: "On the whole, how satisfied are you with the work you do—would you say you are very satisfied, moderately satisfied, a little dissatisfied, or very dissatisfied?" (converted to a dummy if very or moderately satisfied)

## A.4 Additional individual level data

**Charitable giving.** The Consumer Expenditure Survey (CEX) collects data on a nationally representative set of households on their expenditures. The data includes expenditure on charitable giving, among which religious donations have a separate category. The data is collected

at household level and the respondents are interviewed throughout the year. Respondents are asked how much they have donated over the past year. There are considerable breaks in the data and we are therefore only using the time period from 1996-2001. The data is in current value USD. Due to a few implausibly large donation amounts, we censor total giving at 99 percent of those donating a positive amount.

**Voting behavior.** The American National Election Studies (ANES) provide data on voting behavior at the past presidential elections including socio-economic characteristics such as age, marital status, gender, race, and self-identified political opinion. There was however a data break in 1992, which means that our period of analysis starts in 1992 for these data (Ansolabehere *et al.*, 2006).

## A.5 Religious congregations and membership

The county and state level data on religious congregations and memberships are provided by the Association of Religion Data Archives (ARDA). We use the longitudinal data set covering the years 1980, 1990, 2000, and 2010. The data covers 302 religious groups, and includes information on total population, religious tradition, number of adherents, and number of congregations.

## A.6 Nonprofit organizations

The data on nonprofit organizations is from the National Center for Charitable Statistics (NCCS). The dataset contains the universe of nonprofit organizations in the US. Organizations report their purpose on a A-Z scale, including groups such as "Arts, Culture, and Humanities", "Education", and "Religion Related, Spiritual Development". We code the latter as a religious organization. As additional indicators of a religious organization, we count the number of religious terms in the name of the organization. These religious terms are listed in Table A.1, sorted by their frequency. "ministr", "christ", and "church" are the most frequent religious terms included in the names of nonprofit organizations. 1.4% of all nonprofit organizations in the USA are given a name where "ministr" enters, 1.3% have "christ" in their name, while 0.5% have "church" in their name. A concern is that the terms ministry or ministries may refer to non-religious endeavours. However, 64% of the organizations with "ministr" in their name, also categorize themselves as primarily a religious organization. We exclude the top-ten religious terms one at a time in Table A.29. The results are unchanged.



Table A.1: List of religious words included in the names of nonprofit organizations

Term	Obs	Mean	SD	Term	Obs	Mean	SD
ministr	11195646	0.01402	0.1176	shalom	11195646	0.00019	0.0137
christ	11195646	0.01364	0.1160	adventis	11195646	0.00018	0.0136
church	11195646	0.00540	0.0733	orthodox	11195646	0.00017	0.0128
hope	11195646	0.00351	0.0591	cristo	11195646	0.00014	0.0120
jew	11195646	0.00304	0.0551	muslim	11195646	0.00013	0.0116
evangel	11195646	0.00214	0.0462	pentecostal	11195646	0.00011	0.0104
faith	11195646	0.00200	0.0446	prophe	11195646	0.00010	0.0100
catholic	11195646	0.00182	0.0426	tao	11195646	0.00010	0.0099
baptis	11195646	0.00174	0.0417	protestant	11195646	0.00010	0.0098
templ	11195646	0.00163	0.0404	calvin	11195646	0.00009	0.0097
lutheran	11195646	0.00160	0.0400	believe	11195646	0.00009	0.0096
grace	11195646	0.00127	0.0356	witnes	11195646	0.00009	0.0095
bibl	11195646	0.00125	0.0354	sikh	11195646	0.00007	0.0086
methodist	11195646	0.00119	0.0345	hindu	11195646	0.00007	0.0085
saint	11195646	0.00112	0.0334	dharma	11195646	0.00006	0.0080
presbyterian	11195646	0.00106	0.0325	holiness	11195646	0.00006	0.0075
holy	11195646	0.00072	0.0269	jain	11195646	0.00005	0.0072
episcopal	11195646	0.00068	0.0260	messiah	11195646	0.00005	0.0070
god	11195646	0.00068	0.0260	judais	11195646	0.00004	0.0061
gospel	11195646	0.00063	0.0251	zen	11195646	0.00004	0.0061
chapel	11195646	0.00051	0.0226	preach	11195646	0.00004	0.0060
jesus	11195646	0.00047	0.0217	anglican	11195646	0.00003	0.0059
religio	11195646	0.00046	0.0214	taoist	11195646	0.00003	0.0051
missionary	11195646	0.00044	0.0209	bautist	11195646	0.00002	0.0049
worship	11195646	0.00039	0.0198	jehova	11195646	0.00002	0.0045
testament	11195646	0.00038	0.0194	oracle	11195646	0.00002	0.0045
buddh	11195646	0.00036	0.0191	mormon	11195646	0.00002	0.0044
islam	11195646	0.00036	0.0189	martyr	11195646	0.00002	0.0042
pray	11195646	0.00035	0.0187	mosque	11195646	0.00001	0.0035
minister	11195646	0.00034	0.0183	catolic	11195646	0.00001	0.0034
praise	11195646	0.00032	0.0180	puritan	11195646	0.00001	0.0031
congregation	11195646	0.00032	0.0178	muhammad	11195646	0.00001	0.0030
sacred	11195646	0.00030	0.0172	sunni	11195646	0.00001	0.0029
torah	11195646	0.00027	0.0164	quran	11195646	0.00001	0.0029
spiritual	11195646	0.00026	0.0160	shia	11195646	0.00001	0.0026
crusade	11195646	0.00023	0.0153	belief	11195646	0.00000	0.0016
bethlehem	11195646	0.00023	0.0151	apocalyp	11195646	0.00000	0.0010
bless	11195646	0.00022	0.0150	scientolog	11195646	0.00000	0.0010
disciple	11195646	0.00022	0.0149	almighty	11195646	0.00000	0.0008
allah	11195646	0.00021	0.0145	hadith	11195646	0.00000	0.0003
lord	11195646	0.00021	0.0145	muhammed	11195646	0.00000	0.0003
iglesi	11195646	0.00021	0.0144				

Sorted by the share of the total number of nonprofits.

## A.7 Politicians' religious denomination

The data on the religious denomination of state officials in the Senate or the House of Representatives is from the adherents.com. The dataset holds information on party, faith, chamber, and year for individual state officials. We code state officials as non-religious, when their faith is reported as "unknown" or "unspecified". After aggregating the data to the state-year level, we code a state-year as non-religious if one of the state-officials were non-religious.

## A.8 Appropriations

The data on appropriations was gathered by Sager (2010) from the LexisNexis database. The dates are the dates of passage, not necessarily the dates of funding. Sager identified 16 states that were granted a total of 42 grants over the period 1998-2007, summing to \$70 million.

## A.9 Additional state level variables

**GSP per capita:** Gross state product per capita. Annual data in constant chained 1997 USD. Source: the Bureau of Economic Analysis (BEA).

**Poverty rate:** Available in the years 1989, 1993, 1995-2010. The variable used is the percent of population in poverty using all ages. Source: the US Census Bureau, Small Area Income and Poverty Estimates (SAIPE)

**Public spending per capita:** Covers direct welfare expenditure per capita at the state level. Expenditure on Public Welfare, Health, and Corrections in current USD. Source: US Census Bureau, Annual Survey of State Government Finances and Census of Governments.

**Cause of death:** State level cause of death data is provided by the Centers for Disease Control and Prevention, U.S: Department of Health and Human Services. The data includes the underlying cause of death in the years 1999-2017.

**Crime rates:** The data on state level crime rates are provided by FBI, Uniform Crime Reports, prepared by the National Archive of Criminal Justice Data. We use the variable estimated violent crime rate.

## B Additional descriptives

### B.1 Introductory figure

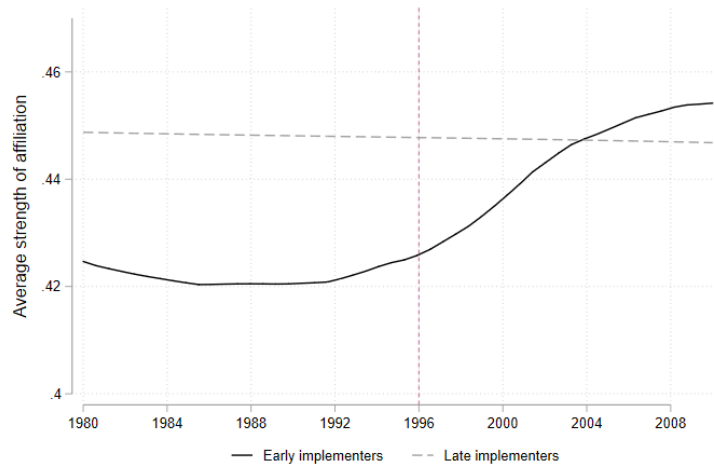
Figures 1 and A.1 show average church attendance and strength of affiliation calculated across two groups of states at every point in time between 1980 and 2010. To construct the figures, we first restricted the sample to include only states that had at most two missing years over the period. This reduced the sample to 29 states. Next, we calculated the median year of first implementation, which is 2001. 10 states implement their first faith-based initiative in the year 2001, and we cannot divide the states into two equally sized groups if we split on this year. Instead, we draw on information from the total number of legislative changes to split the 10 median states in two. We end up with 14 early implementing states and 15 late implementers. The early implementers are Alabama, Arizona, California, Colorado, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, New Jersey, Ohio, Oklahoma, and Virginia. The late implementers are Connecticut, District of Columbia, Georgia, Illinois, Kansas, Minnesota, Missouri, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Tennessee, Washington, and Wisconsin.

## B.2 The budgets of the faith-based initiatives

The Charitable Choice provision initially encompassed the Temporary Assistance for Needy Families (TANF), the main federal welfare money which the state can spend on a variety of services. In 2000, Charitable Choice was included in the Substance Abuse and Mental Health Services Administration's (SAMHSA) block grant. Eventually, the provision was expanded to other programmes and block grants, like Welfare-to-Work and the Community Services Block Grant (CSBG) (Carlson-Thies (2001)). The Department of Health and Human Services was established in 2001 offering funding specifically to small faith- and community-based organizations through its Compassion Capital Fund (CCF) established in 2002 with an annual budget of \$30 million in 2002, increasing to \$57.8 million in 2007 (Kramer *et al.*, 2005; Chaves & Wineburg, 2010). The CCF has awarded hundred of mini-grants (up to \$50,000) directly to local faith-based and community organizations.

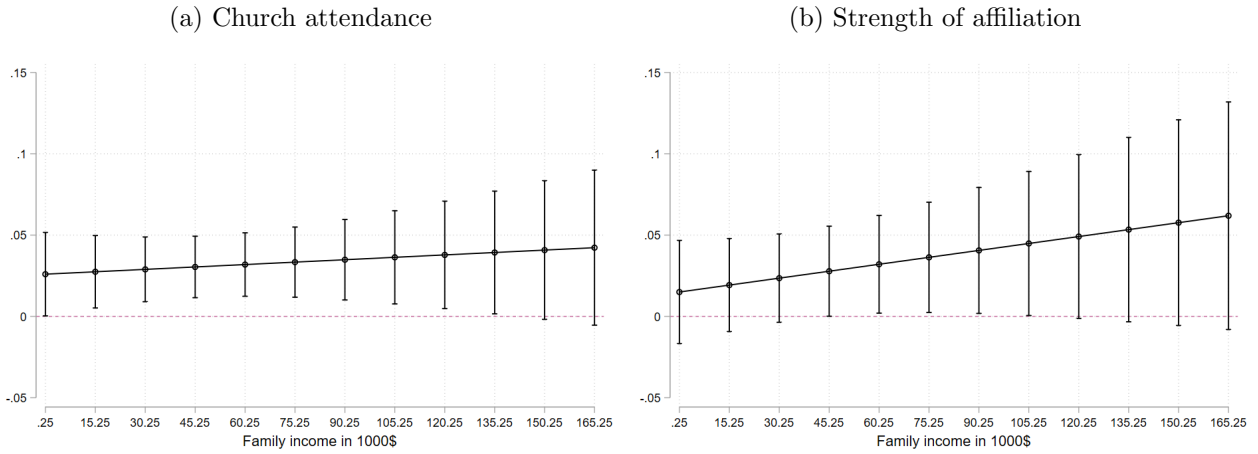
## C Additional tables and figures

Figure A.1: Average strength of affiliation depending on the timing of implementation



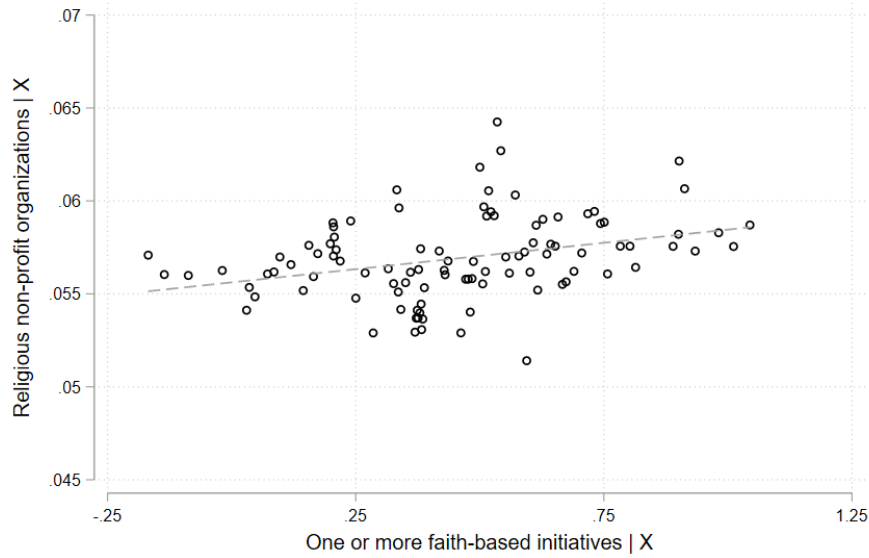
Note: Early implementers are states that implement their first faith-based initiative before the median implementation year, while late implementers implement their first initiative after this year. The lines represent the kernel-weighted local polynomial regression of the weighted state means of strength of affiliation. The rather straight line for the late implementers cover large fluctuations in the raw averages of strength of affiliation.

Figure A.2: The impact of the faith-based initiatives across income groups



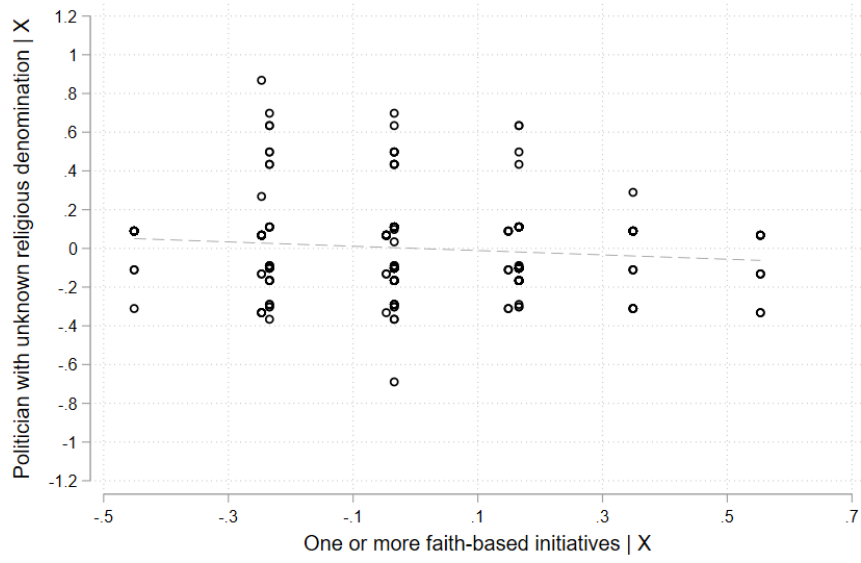
Note: OLS regressions corresponding to column (3) of Tables 3 and 5, including an interaction term with family income and with education.

Figure A.3: Binned scatterplot of the impact of the faith-based initiatives on the supply of religious non-profits



Note: OLS regression corresponding to column (6) of Table 9, where state and year fixed effects are controlled for, together with a dummy for whether the organization is private. Observations are binned into 100 equally sized bins.

Figure A.4: Added variables plot of the impact of the faith-based initiatives on the likelihood that politicians' religion is unknown



Note: OLS regression corresponding to column (1) of Table 10, , where state and year fixed effects are controlled for.

Table A.1: Number of faith-based laws implemented by state over time

	96	97	98	99	00	01	02	03	04	05	06	07	08	09	Total
alabama	0	0	0	0	0	2	0	0	1	2	2	2	3	1	13
alaska	0	0	0	0	0	1	0	0	1	0	0	3	1	0	6
arizona	0	2	0	2	3	0	1	2	3	4	3	4	1	2	27
arkansas	0	0	0	0	0	0	0	0	0	1	0	3	0	1	5
california	0	1	0	1	2	1	0	0	0	1	0	0	1	0	7
colorado	0	0	0	0	3	0	1	0	1	1	0	0	0	0	6
connecticut	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
delaware	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
florida	0	1	2	1	7	6	4	3	4	3	1	3	1	0	36
georgia	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
hawaii	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
idaho	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
illinois	0	0	0	0	0	0	0	1	0	1	0	1	0	2	5
indiana	0	0	0	0	0	1	0	3	1	2	1	1	0	4	13
iowa	0	0	0	0	0	1	0	1	1	0	0	0	2	2	7
kansas	0	0	0	0	0	0	0	1	1	0	1	0	0	1	4
kentucky	0	0	1	0	1	0	0	0	0	2	1	0	0	2	7
louisiana	0	0	0	1	0	2	1	1	2	0	2	0	2	1	12
maine	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
maryland	0	0	0	0	0	1	0	2	1	1	2	2	0	0	9
massachu.	0	0	0	0	1	1	1	1	1	0	1	1	1	0	8
michigan	0	1	0	1	1	0	0	2	1	0	0	0	0	1	7
minnesota	0	0	0	0	0	1	0	1	0	0	0	1	1	0	4
missis.	0	0	0	0	0	0	0	2	2	0	1	2	1	3	11
missouri	0	0	0	0	0	0	0	0	1	0	1	1	1	1	5
montana	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
nebraska	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nevada	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
new h.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
new jersey	0	0	1	1	1	2	3	1	2	2	2	1	1	4	21
new mexico	0	0	0	0	0	0	0	3	0	1	0	0	1	0	5
new york	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
north c.	0	0	0	0	0	1	0	0	0	2	0	0	2	1	6
north dakota	0	0	0	0	0	0	0	0	0	3	0	1	0	1	5
ohio	0	0	0	0	0	2	0	2	0	4	0	0	0	1	9
oklahoma	0	0	0	0	0	1	3	3	1	0	0	5	2	0	15
oregon	0	0	0	0	0	2	0	1	1	0	0	0	0	1	5
pennsylvania	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
rhode island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
south carolina	0	0	0	0	0	0	0	0	0	2	1	1	1	0	5
south dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tennessee	0	0	0	0	0	0	0	0	0	2	2	1	1	2	8
texas	0	1	0	4	0	2	0	3	0	3	0	6	0	7	26
utah	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
vermont	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
virginia	0	0	0	0	0	1	2	0	1	0	4	2	1	1	12
washington	0	0	0	0	0	0	0	0	0	0	3	1	1	0	5
west virginia	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
wisconsin	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
wyoming	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	6	5	11	19	32	17	34	28	38	29	45	28	40	332

Table A.2: Summary statistics for the GSS variables 1980-2010

Variable	Obs	Mean	Std. Dev.	Min	Max
Attendance	39,355	0.47	0.34	0	1
Strength of affiliation	33,662	0.43	0.50	0	1
Protestant	39,613	0.58	0.49	0	1
Catholic	39,613	0.24	0.43	0	1
No religion	39,613	0.12	0.32	0	1
Married	39,785	0.51	0.50	0	1
Age	39,642	45.80	17.44	18	89
Male	39,785	0.44	0.50	0	1
Black	39,785	0.14	0.35	0	1
Educational level	39,676	13.01	3.09	0	20
Work status	39,773	2.97	2.41	1	8
Believe in afterlife	25,386	0.80	0.39	0	1
Bible the word of God	23,402	0.33	0.47	0	1
Pray	23,391	0.56	0.49	0	1
Know god exists	13,401	0.62	0.48	0	1
Fundamentalist	38,105	0.32	0.46	0	1
Switcher	40,341	0.22	0.41	0	1
Foreign born	38,315	0.08	0.27	0	1
Republican	39,569	0.26	0.44	0	1
Number of children	39,672	1.89	1.75	0	8
Voted Republican	40,341	0.27	0.45	0	1
Voted	33,395	0.71	0.45	0	1
Against homo	23,190	0.76	0.42	0	1
Against abortion	24,798	0.59	0.49	0	1
Female work	15,168	0.81	0.39	0	1
Confidence in science	23,725	0.42	0.49	0	1
Conservative	34,879	0.18	0.38	0	1
Trust	25,613	0.37	0.48	0	1
Hours of work	24,262	41.36	14.32	0	89
Work less than 20 hours	24,262	0.07	0.25	0	1
Working	39,773	0.61	0.49	0	1
Real family income	35,562	31.68	29.55	0	146
Educational level	39,676	13.01	3.09	0	20
Educational level above high school	39,676	0.49	0.50	0	1
Satisfied with financial situation	35,736	0.73	0.44	0	1
Better financial situation	35,673	0.38	0.48	0	1
Happy	35,603	0.88	0.33	0	1
Satisfied with job	28,378	0.85	0.35	0	1

Excluding Texas and Florida

Table A.3: Pre-differences across the number of faith-based initiatives

Characteristic, Y	1980-1994			
	Levels		Changes	
	Raw (1)	Controls (2)	Raw (3)	Controls (4)
Attendance	0.000 (0.000)	0.000 -(0.001)	0.000 (0.001)	0.000 (0.001)
Strength of affiliation	0.000 (0.001)	0.000 -(0.001)	-0.001 (0.002)	-0.001 (0.002)
Protestant	0.005*** (0.001)	0.000 -(0.001)	0.000 (0.001)	0.000 (0.001)
Income	-0.182*** (0.047)	0.000 -(0.048)	-0.033 (0.100)	-0.002 (0.101)
Black	0.001*** (0.001)	0.000 -(0.001)	0.000 (0.002)	0.000 (0.002)
Educational level	-0.011** (0.004)	0.000 -(0.005)	-0.001 (0.013)	0.003 (0.013)
Public Welfare spending	-1.808*** (0.321)	0.403* (0.238)	-0.340 (0.515)	-0.28 (0.466)
Age	-0.042 (0.026)		0.002 (0.055)	
Married	0.000 (0.001)		0.055 (0.000)	
Male	0.000 (0.001)		0.000 (0.000)	

Each of the estimates represent the outcome of one OLS regression. Controls include region and year fixed effects, and controls for age, marital status, and gender. Robust standard errors in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.



Table A.4: Pre-differences for additional measures

Characteristic, Y	1980-1994			
	Levels		Changes	
	Raw (1)	Controls (2)	Raw (3)	Controls (4)
Republican state politician share	0.010* (0.005)	0.009 (0.007)	0.013** (0.005)	0.009 (0.006)
Evangelical state politician share	0.006 (0.005)	0.006 (0.005)	0.003 (0.003)	0.001 (0.004)
Republican and evangelical share	0.006* (0.004)	0.004 (0.004)	0.007* (0.004)	0.003 (0.004)
Republican state politician dummy	0.009** (0.004)	0.013** (0.007)	0.001 (0.003)	-0.000 (0.005)
Evangelical state politician dummy	0.017** (0.007)	0.011 (0.007)	0.000 (0.004)	-0.002 (0.004)
Republican and evangelical dummy	0.026*** (0.008)	0.025*** (0.009)	0.001 (0.004)	-0.003 (0.004)
State poverty rate	0.172*** (0.061)	0.020 (0.051)	-0.003 (0.050)	0.033 (0.034)
State GSP per capita	-35.437 (47.941)	115.172 (75.690)	-2.269 (6.833)	2.269 (5.069)

Unit of observation is state-years. Each of the estimates represent the outcome of one OLS regression. Controls include region and year fixed effects. The number of observations in rows 1-3 is 92 in columns (1)-(2) and 46 in columns (3)-(4); in row 4 it is 144 in columns (1)-(2) and 96 in columns (3)-(4); in row 5 it is 704 in columns (1)-(2) and 660 in columns (3)-(4). Robust standard errors in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.5: Pairwise correlation between the measures of religiosity

	Attendance	Affiliation	Afterlife	Bible	Praying	God
Attendance	1					
Affiliation	0.5311*	1				
Afterlife	0.1646*	0.1391*	1			
Bible	0.2257*	0.2213*	0.0549*	1		
Praying	0.3485*	0.3335*	0.1305*	0.2175*	1	
God	0.3340*	0.3133*	0.2065*	0.3608*	0.2903*	1

Note: \* indicates significance at the 1% level.

Table A.6: Main results for different measures, samples and clustering levels

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent variable:		Attendance at religious services					Strength of religious affiliation			
Law <sub>t-1</sub> measures	Number laws	Dummy	Dummy	Dummy	Dummy	Number laws	Dummy	Dummy	Dummy	Dummy
Law <sub>t-1</sub>	0.005*** (0.001)	0.028*** (0.010)	0.026*** (0.008)	0.019* (0.010)	0.028*** (0.008)	0.003* (0.001)	0.033*** (0.011)	0.027** (0.011)	0.033*** (0.011)	0.033*** (0.013)
Sample includes Texas and Florida	No	No	Yes	No	No	No	No	Yes	No	No
Sample includes non affiliated	No	No	No	Yes	No	No	No	No	Yes	No
Clustered standard errors	State	State	State	State	Stateyear	State	State	State	State	Stateyear
Adj. R <sup>2</sup>	0.056	0.056	0.055	0.082	0.056	0.042	0.042	0.039	0.042	0.042
N	34617	34617	38770	39227	34617	34617	33554	37587	33556	33554

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. The dependent variable is attendance at religious services in columns (1)-(5) and strength of religious affiliation in columns (6)-(10). The independent variable is a dummy variable equal to one if one or more laws have been implemented (the standard measure used throughout the paper), except columns (1) and (6) where the number of laws implemented are used. The sample excludes Texas and Florida throughout (the standard), except in columns (3) and (8) that do not exclude the two states. The sample excludes respondents without a religious affiliation throughout (the standard), except columns (4) and (9) that include the non-affiliated. Robust standard errors clustered at the state level in parentheses throughout (the standard), except columns (5) and (10) where standard errors are clustered at the state-by-year level. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

**Result:** The main results are robust to using the number of laws, including Texas and Florida, including the non-affiliated, and to clustering at the state-by-year level.

Table A.7: Main results using different estimation techniques

	(1)	(2)
Dependent variable	Attendance at religious services	Strength of religious affiliation
Estimation technique	Ordered logit	probit
$Law_{t-1}$	0.162*** (0.054)	0.086 (0.031)
Pseudo R <sup>2</sup>	0.0142	0.033
N	34617	33554

All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.8: The impact of the faith-based initiatives on church attendance, additional individual-level controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Dependent variable: Frequency of church attendance [0;1]						
$Law_{t-1}$	0.027*** (0.010)	0.028*** (0.010)	0.028*** (0.010)	0.027*** (0.010)	0.028*** (0.010)	0.029*** (0.010)	0.028*** (0.010)
Employed	0.0090** (0.004)						
Republican		0.063*** (0.007)					
Degree			0.029*** (0.003)				
Catholic				0.041*** (0.007)			
Number of children					0.012*** (0.002)		
Foreign born						0.044*** (0.013)	
Republican and Protestant							0.057*** (0.008)
Adj. R <sup>2</sup>	0.056	0.064	0.066	0.059	0.059	0.058	0.061
N	34615	34490	34555	34617	34549	33441	34490

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.9: The impact of faith-based initiatives on intrinsic religiosity, additional individual-level controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Dependent variable: Religious affiliation [0;1]						
Law <sub>t-1</sub>	0.033*** (0.011)	0.031** (0.012)	0.033*** (0.012)	0.033*** (0.012)	0.032*** (0.011)	0.029** (0.011)	0.031** (0.012)
Employed	-0.020** (0.008)						
Republican		0.058*** (0.010)					
Degree			0.022*** (0.004)				
Catholic				-0.041*** (0.012)			
Number of children					0.013*** (0.002)		
Foreign born						0.032*** (0.010)	
Republican and Protestant							0.062*** (0.011)
Adj. R <sup>2</sup>	0.042	0.045	0.044	0.043	0.044	0.043	0.044
N	33553	33432	33493	33554	33491	32378	33432

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.10: The impact of faith-based initiatives on church attendance, additional state-level controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable: Frequency of church attendance [0;1]							
Law <sub>t-1</sub>	0.027*** (0.010)	0.027*** (0.010)	0.028*** (0.010)	0.028*** (0.010)	0.027*** (0.009)	0.023** (0.009)	0.020 (0.012)	0.028*** (0.011)
Share black <sub>t-1</sub>	0.021 (0.010)							
Share protestants <sub>t-1</sub>		-0.0065 (0.021)						
Mean family income <sub>t-1</sub>			-27.1 (20.163)					
Mean educational level <sub>t-1</sub>				-0.00083 (0.001)				
Poverty rate <sub>t-1</sub>					0.0012 (0.002)			
GSP <sub>t-1</sub>						-1.72** (0.797)		
State times trends							Yes	
Region times trends								Yes
Adj. R <sup>2</sup>	0.056	0.056	0.056	0.056	0.056	0.053	0.057	0.056
N	34617	34617	34617	34617	33260	25050	34617	34617

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.11: The impact of faith-based initiatives on strength of beliefs, additional state-level controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable: Religious affiliation [0;1]								
Law <sub>t-1</sub>	0.034*** (0.012)	0.031** (0.012)	0.033*** (0.011)	0.032*** (0.011)	0.033*** (0.010)	0.024** (0.011)	0.022 (0.016)	0.030** (0.015)
Share black <sub>t-1</sub>	-0.066 (0.012)							
Share protestants <sub>t-1</sub>		-0.033 (0.030)						
Mean family income <sub>t-1</sub>			-86.0 (56.106)					
Mean educational level <sub>t-1</sub>				-0.0020 (0.002)				
Poverty rate <sub>t-1</sub>					0.0028 (0.003)			
GSP <sub>t-1</sub>						-2.59** (1.096)		
State times trends							Yes	
Region times trends								Yes
Adj. R <sup>2</sup>	0.042	0.042	0.042	0.042	0.042	0.037	0.042	0.042
N	33554	33554	33554	33554	32214	24242	33554	33554

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.12: The impact of faith-based initiatives on churchgoing, controls for politicians

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Religious attendance						
Law <sub>t-1</sub>	0.032* (0.017)	0.029+ (0.018)	0.030* (0.018)	0.029+ (0.017)	0.030* (0.018)	0.029+ (0.018)
Republican politician <sub>t-1</sub>	-0.075 (0.053)			-0.026*** (0.006)		
Evangelical politician <sub>t-1</sub>		-0.041 (0.068)			-0.048*** (0.008)	
Republican and evangelical politician <sub>t-1</sub>			-0.084 (0.075)			-0.031 (0.052)
R <sup>2</sup>	0.052	0.051	0.052	0.051	0.051	0.051
N	8757	8757	8757	8757	8757	8757

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.13: The impact of faith-based initiatives on churchgoing, controls for politicians

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Strength of religious affiliation						
Law <sub>t-1</sub>	0.045** (0.018)	0.043** (0.020)	0.045** (0.020)	0.045** (0.020)	0.045** (0.020)	0.044** (0.020)
Republican politician <sub>t-1</sub>	-0.024 (0.094)			0.089*** (0.014)		
Evangelical politician <sub>t-1</sub>		-0.081 (0.098)			-0.054 (0.055)	
Republican and evangelical politician <sub>t-1</sub>			-0.089 (0.064)			0.008 (0.022)
R <sup>2</sup>	0.032	0.032	0.032	0.032	0.032	0.032
N	8576	8576	8576	8576	8576	8576

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.14: Impact of faith-based initiatives on religious attendance, initial levels

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Frequency of church attendance [0;1]						
Law <sub>t-1</sub>	0.026*** (0.008)	0.025*** (0.008)	0.026*** (0.008)	0.025*** (0.008)	0.026*** (0.009)	0.030*** (0.009)
Attendance <sub>1980</sub> X Year	-0.0076*** (0.002)					
Black <sub>1980</sub> X Year		0.0032 (0.003)				
Education <sub>1980</sub> X Year			0.00014 (0.000)			
Income <sub>1980</sub> X Year				0.000032 (0.000)		
Protestants <sub>1980</sub> X Year					-0.00038 (0.001)	
Pub. spend. cap. <sub>1980</sub> X Year						0.0000098** (0.000)
Adj. R <sup>2</sup>	0.055	0.055	0.055	0.055	0.055	0.057
N	38230	38230	38230	38230	38230	36084

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.15: The impact of faith-based initiatives on intrinsic religiosity, initial levels

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Strength of affiliation [0;1]						
Law <sub>t-1</sub>	0.027** (0.010)	0.027** (0.011)	0.027** (0.011)	0.027** (0.011)	0.028** (0.011)	0.033*** (0.011)
Affiliation <sub>1980</sub> X Year	-0.0054* (0.003)					
Black <sub>1980</sub> X Year		0.0020 (0.004)				
Education <sub>1980</sub> X Year			0.00025 (0.000)			
Income <sub>1980</sub> X Year				0.000031 (0.000)		
Protestants <sub>1980</sub> X Year					-0.00094 (0.002)	
Pub. spend. cap. <sub>1980</sub> X Year						0.0000094 (0.000)
	0.040	0.040	0.040	0.040	0.040	0.040
N	37066	37066	37066	37066	37066	34985

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.16: The impact of faith-based initiatives on the size of religious groups

	(1)	(2)	(3)	(4)	(5)	(6)
	Protestant	Catholic	Other religion	Fundamentalist	Switcher	No religion
Law <sub>t-1</sub>	-0.0346** (0.013)	0.00951 (0.013)	-0.00156 (0.007)	-0.00828 (0.016)	0.0191** (0.008)	0.00723 (0.008)
Adj. R <sup>2</sup>	0.163	0.0983	0.0266	0.151	0.0813	0.0624
N	39486	39486	39642	37983	39642	39486
Mean DV	0.570	0.254	0.0421	0.315	0.218	0.115
Mean change in DV	-0.176	-0.009	0.058	-0.085	0.169	0.127

OLS estimates. All regressions include year of survey and state fixed effects, individual baseline controls, and the initial level dependent variable interacted with time. The sample includes also the ones with no affiliation in all columns. The variable Switcher indicates that the current religious affiliation is different from the religion in which the respondent was raised. The variable Fundamentalist indicate whether the respondent belongs to a denomination categorized as fundamentalist. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.17: Heterogeneous effects across individual characteristics I

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Frequency of church attendance [0;1]					Strength of affiliation [0;1]				
Law <sub>t-1</sub>	0.030** (0.013)	0.084** (0.037)	0.0034 (0.029)	-0.020 (0.015)	0.019* (0.010)	0.015 (0.016)	0.016 (0.035)	0.062* (0.036)	-0.015 (0.015)	0.021* (0.012)
Family income	0.36** (0.143)					-0.29 (0.181)				
Income X Law <sub>t-1</sub>	-0.100 (0.196)					0.27 (0.240)				
Education		0.012*** (0.001)					0.0066*** (0.001)			
Educational level X Law <sub>t-1</sub>		-0.0042* (0.002)					0.0013 (0.002)			
Public Welfare spending <sub>t-1</sub>			0.092 (0.309)					1.37*** (0.486)		
Public spending <sub>t-1</sub> X Law <sub>t-1</sub>			0.34 (0.304)					-0.28 (0.423)		
Protestant				-0.033*** (0.010)					-0.015* (0.008)	
Protestant X Law <sub>t-1</sub>				0.079*** (0.010)					0.080*** (0.014)	
Black					0.071*** (0.006)					0.12*** (0.016)
Black X Law <sub>t-1</sub>					0.047*** (0.013)					0.062*** (0.020)
Adj. R <sup>2</sup>	0.058	0.065	0.058	0.059	0.064	0.039	0.044	0.044	0.043	0.050
N	31059	34549	29672	34617	34617	30136	33490	28779	33554	33554

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. The Rust Belt includes Pennsylvania, Ohio, Michigan, Missouri, Indiana, West Virginia, Wisconsin, New York, and Illinois. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.18: Heterogeneous effects across individual characteristics II

Dependent variable:	(1)	(2)	(3)	(4)
	Frequency of church attendance [0;1]		Strength of affiliation [0;1]	
Law <sub>t-1</sub>	0.019 (0.012)	0.027*** (0.010)	0.029** (0.013)	0.033*** (0.012)
Number of laws <sub>t-1</sub>	0.0038** (0.002)		0.0014 (0.001)	
Foreign born		0.038*** (0.013)		0.044*** (0.012)
Foreign X Law <sub>t-1</sub>		0.017 (0.013)		-0.037** (0.017)
Adj. R <sup>2</sup>	0.056	0.058	0.042	0.043
N	34617	33441	33554	32378

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.19: Heterogeneous effects across regions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Frequency of church attendance [0;1]					Strength of affiliation [0;1]				
$Law_{t-1}=1$	0.030*** (0.010)	0.031*** (0.011)	0.024** (0.011)	0.025** (0.010)	0.034*** (0.010)	0.036*** (0.011)	0.033** (0.013)	0.029** (0.013)	0.030*** (0.011)	0.032** (0.013)
$Law_{t-1}=1 \times NE=1$	-0.015 (0.022)					-0.030** (0.014)				
$Law_{t-1}=1 \times MW=1$		-0.011 (0.009)					-0.0015 (0.013)			
$Law_{t-1}=1 \times W=1$			0.012 (0.009)					0.010 (0.014)		
$Law_{t-1}=1 \times S=1$				0.0086 (0.014)					0.0088 (0.016)	
$Law_{t-1}=1 \times Rust=1$					-0.020* (0.011)					-0.00056 (0.013)
r2.a	0.056	0.056	0.056	0.056	0.056	0.042	0.042	0.042	0.042	0.042
N	34624	34624	34624	34624	34624	33560	33560	33560	33560	33560

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.20: The impact of faith-based initiatives on attendance and religiosity excluding years

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Excluded years	1997	1997-1998	1997-1999	1997-2000	2009	2008-2009	2007-2009	2006-2009
Panel A. Dependent variable: Attendance at religious services								
$Law_{t-1}$	0.030*** (0.010)	0.025** (0.010)	0.021** (0.010)	0.018* (0.010)	0.028*** (0.010)	0.028*** (0.010)	0.027** (0.010)	0.029*** (0.011)
Adj. R <sup>2</sup>	0.059	0.059	0.059	0.059	0.056	0.054	0.053	0.054
N	29020	27302	26695	24971	34552	34368	34136	33359
Panel B. Dependent variable: Strength of affiliation								
$Law_{t-1}$	0.034*** (0.012)	0.034** (0.013)	0.030** (0.013)	0.030** (0.013)	0.034*** (0.011)	0.034*** (0.011)	0.032*** (0.012)	0.034*** (0.012)
Adj. R <sup>2</sup>	0.045	0.046	0.045	0.046	0.042	0.040	0.040	0.040
N	28147	26486	25892	24227	33490	33315	33093.000	32352

OLS estimates. All regressions include year of survey and state fixed effects and individual baseline controls. The sample excludes states that implemented their first faith-based initiative in 1997 (col 1), 1997 or 1998 (col 2), 1997, 1998, or 1999 (col 3), 1997, 1998, 1999, or 2000 (col 4), 2009 (col 5), 2008 or 2009 (col 6), 2007, 2008, or 2009 (col 7), or 2006, 2007, 2008, or 2009 (col 8). Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.21: The impact of central faith-based institutions on religious attendance and beliefs

	(1)	(2)	(3)	(4)
Dependent variable:	Church attendance		Strength of affiliation	
$FBL_{t-1}$	0.027*** (0.007)	0.021** (0.008)	0.020 (0.016)	0.014 (0.016)
$OFBCI_{t-1}$		0.014 (0.012)		0.014 (0.020)
Adj. R <sup>2</sup>	0.055	0.055	0.041	0.041
N	25585	25585	24786	24786

OLS estimates. All regressions include year of survey and state fixed effects, and individual level controls age, male, married. The data period is from 1980 to 2006. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.22: The impact of central faith-based institutions on FBL budgets and appropriations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	attendance		strength of affiliation		attendance		strength of affiliation	
FBL budgets <sub>t-1</sub> (mio.\$)	0.008*** (0.002)	0.006*** (0.002)	0.004 (0.004)	0.001 (0.004)				
Appropriations <sub>t-1</sub> (mio.\$)					0.057** (0.021)	0.040*** (0.013)	0.026 (0.032)	0.016 (0.039)
Laws <sub>t-1</sub>		0.032** (0.012)		0.035** (0.015)		0.034** (0.013)		0.020 (0.026)
R <sup>2</sup>	0.055	0.055	0.041	0.042	0.064	0.064	0.054	0.054
N	25585	25585	24786	24786	12531	12531	12204	12204

OLS estimates. All regressions include year of survey and state fixed effects, and individual level controls age, male, married. The data period is from 1980 to 2006. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.23: The impact of faith-based initiatives implemented in neighboring states

	(1)	(2)
Dependent variable:	Attendance	Affiliation
Law <sub>t-1</sub>	0.025*** (0.009)	0.029*** (0.010)
Law neighbor <sub>t-1</sub>	0.0100** (0.004)	0.014** (0.005)
Adj. R <sup>2</sup>	0.056	0.042
N	34617	33554
Mean Dep var	0.52	0.43

OLS estimates. All regressions include year of survey and state fixed effects, and individual level controls age, male, married. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.24: The impact of faith-based initiatives on religious donations

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	Giving dummy			Total religious donations		
Law <sub>t-1</sub>	0.004 (0.004)	0.004 (0.004)	0.003 (0.004)	9.453 (13.110)	9.337 (13.103)	12.202 (14.091)
Number of adults in CU		0.001 (0.002)	0.000 (0.002)		10.446* (5.446)	7.122 (5.590)
CU income			0.002*** (0.000)			11.483*** (1.894)
Adj. R <sup>2</sup>	0.016	0.016	0.016	0.011	0.011	0.012
N	96256	96256	86182	96256	96256	86182
Mean Dep var	0.080	0.080	0.081	103.220	103.220	104.488

OLS estimates. The dependent variable is a dummy equal to one if the household donates above zero to religious organizations in columns (1)-(3) and the total amount donated to religious organizations in columns (4)-(6). All regressions include year of survey and state fixed effects, and respondent controls for age, marital status, and gender. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.



Table A.25: Impact of faith-based initiatives on cultural attitudes

	(1)	(2)	(3)	(4)	(5)	(6)
	Against homo	Against abortion	Female work	Confidence in science	Conservative	Trust
$Law_{t-1}$	0.033** (0.014)	-0.0042 (0.014)	0.0010 (0.027)	-0.029** (0.013)	0.016 (0.012)	-0.042** (0.017)
Adj. R <sup>2</sup>	0.10	0.039	0.043	0.021	0.12	0.051
N	20543	21972	13663	20930	34905	22454
Mean DV	0.80	0.62	0.81	0.42	0.29	0.38

OLS estimates. All regressions include year of survey and state fixed effects, and respondent controls for age, marital status, and gender. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.26: Impact of faith-based initiatives on voting behavior using GSS

	(1)	(2)
Dependent variable	Voted republican	Voted
$Law_{electionyear-1}$	-0.017 (0.018)	0.0071 (0.015)
Adj. R <sup>2</sup>	0.10	0.071
N	34897	29509

OLS estimates. All regressions include year of survey and state fixed effects, and respondent controls for age, marital status, and gender. The laws are now lagged one year compared to the last election year. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.27: Impact of faith-based initiatives on voting behavior using ANES

	(1)	(2)	(3)
Dependent variable	Voted republican	Conservative	Voted
$Law_{electionyear-1}$	0.00059 (0.045)	-0.036 (0.035)	-0.014 (0.041)
Adj. R <sup>2</sup>	0.084	0.045	0.063
N	8251	9887	12772

OLS estimates. All regressions include year of survey and state fixed effects, and individual baseline controls. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.28: Impact of faith-based initiatives on the number of churches and adherents

	(1)	(2)	(3)	(4)
Dep var:	Number of churches		Number of adherents	
$Law_{t-1}$	1.07*** (0.392)	1.52*** (0.519)	53.3* (28.604)	61.8 (37.735)
Total population		0.025*** (0.009)		0.46* (0.262)
Adj. $R^2$	0.88	0.90	0.95	0.95
N	196	196	196	196
Mean DV	6.09	6.09	266.6	266.6

OLS estimates across state-years. All regressions include a constant and year and state fixed effects. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.

Table A.29: Impact of faith-based initiatives on the share of religious nonprofits

Religious term:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	ministr	christ	church	hope	jew	evangel	faith	catholic	baptis	templ
Panel A: The dependent variable is equal to one if the name includes the particular term										
Law <sub>t-1</sub>	0.156*	0.038**	0.030	0.045*	-0.004	-0.007	0.018*	0.021*	0.003	-0.0001
	(0.086)	(0.017)	(0.024)	(0.023)	(0.008)	(0.007)	(0.010)	(0.011)	(0.006)	(0.013)
R <sup>2</sup>	0.007	0.002	0.001	0.001	0.002	0.001	0.000321	0.0005	0.001	0.001
N	8044850	8044850	8044850	8044850	8044850	8044850	8044850	8044850	8044850	8044850
Mean DV	1.242	1.332	0.539	0.308	0.305	0.206	0.190	0.185	0.161	0.163
Panel B: The dependent variable excludes the particular term										
Law <sub>t-1</sub>	0.170***	0.254***	0.262***	0.249***	0.288***	0.290***	0.272***	0.266***	0.285***	0.284***
	(0.055)	(0.064)	(0.058)	(0.058)	(0.068)	(0.068)	(0.064)	(0.060)	(0.068)	(0.069)
R <sup>2</sup>	0.003	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
N	8044850	8044850	8044850	8044850	8044850	8044850	8044850	8044850	8044850	8044850
Mean DV	4.689	4.570	5.459	5.417	5.392	5.540	5.545	5.518	5.593	5.544

OLS estimates across nonprofit organizations. All regressions include a constant, year and state fixed effects, and a control for whether the organization is private. The dependent variable in Panel A is a dummy equal to one if the name of the organization includes the particular term. The dependent variable in Panel B is a dummy equal to one if the name of the organization includes either of the terms listed in A, except the particular term. Robust standard errors clustered at the state level in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% level.