

Divine Policy^{*}

The Impact of Religion in Government

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This Version: December 25, 2024

Abstract

How do strengthened church-state relations impact religiosity and social values? To examine, we exploit the staggered introduction of the faith-based initiatives across US states. Introduced by conservative Protestants in the 1990s, these policies aimed to improve conditions for faith-based groups and to increase their numbers. Our difference-in-differences analysis reveals that the initiatives managed to increase the number of faith-based nonprofits and to strengthen religiosity and conservative-religious social views – such as attitudes against LGBTQ+ and abortion. Effects were only felt by Protestants. Notably, 9% of Americans who were not regular churchgoers started attending monthly or more. Of the 10,274 new faith-based organizations during the period, 15% may have opened due to the faith-based initiatives. A back-of-the-envelope calculation suggests that these organizations may potentially have reached 8.2% of American Protestants. Effects are plausibly causal; we find no systematic differences prior to implementation, evidence is robust to using novel staggered-rollout designs, restricting comparison to contiguous counties, and to estimation based on triple differences exploiting religious group heterogeneity. Our results contribute to explaining US polarization and highlight consequences of tightened church-state relations.

JEL Classification: L31, K39, Z12, Z13, Z18.

Keywords: Religion, social views, policy, legislation, evangelicals, staggered roll-out.

^{*}We thank for helpful comments from Philipp Ager, Elliott Ash, Sascha O. Becker, Roland Benabou, Leonardo Bursztyn, Mark Chaves, James Fenske, Roger Finke, Oded Galor, Anthony Gill, Daniel Hungerman, Andrew R. Lewis, Chris Mills, Lorenzo Neri, Battista Severgnini, Anthony Tuckwell, Hans-Joachim Voth, and Asger Mose Wingender. We also thank seminar participants at Gothenburg University, Deakin University, the University of New South Wales, Monash University, University of Notre Dame, Ludwig Maximilian University of Munich, 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 are also grateful to participants at the APPC Public Choice conference at University of Western Australia in 2023, ASREC24Hours in 2020, the CEPR conference on The Economics of Religion in Venice 2019, CAGE's 10th Anniversary at the University of Warwick 2019, EEA in Manchester 2019, ASREC in Boston and Lund 2019, and DGPE Copenhagen 2018. We thank Rebecca Sager for kindly sharing her data on legislative changes with us. We also thank Pernille Birch, Carolina Branas, and Aisha Latif for invaluable research assistance. The paper was previously circulated with the title "God Politics". Jeanet Sinding Bentzen: Corresponding author, Department of Economics, University of Copenhagen. Email: jeanet.bentzen@econ.ku.dk. Alessandro Pizzigolotto: Department of Economics, University of Copenhagen. Email: alpi@econ.ku.dk. Lena Lindbjerg Sperling: Think Tank DEA, Copenhagen, Denmark.

Charities and faith-based groups fill needs that no welfare system, no matter how well-designed, can possibly fill. Our nation needs men and women who rescue children from gangs, who tutor children in failed schools, who visit the sick and the dying. In times of personal crisis, people do not need the rules of a bureaucracy; they need the help of a neighbor.

Speech by President George W. Bush, February 26th, 2002.¹

Grants or contracts with pervasively religious groups do aid, do promote, do foster religion with tax dollars, violating a core principle of the First Amendment. And in the process, those funds promote the theological assumptions, the spiritual message and the biases of the recipients.

Speech by Barry W. Lynn, the executive director of Americans United for Separation of Church and State, March 5th, 2003 (PewResearch, 2003).

1 Introduction

The US is notably religious among Western nations with faith deeply interwoven into the public sphere. At the same time, policies have been implemented that have strengthened relations between religion and government (Sager, 2010; Chaves, 1999; Lindsay, 2007). Among these policies, the faith-based initiatives had an explicit focus to "remove all unwarranted barriers inhibiting government partnerships with faith-based and grassroots charities," as stated in a White House report, "The Quiet Revolution" (2008). We examine whether this intensified presence of religion in government has influenced religiosity and conservative-religious social views.

We focus on the faith-based initiatives, whose key objective was to expand the number of faith-based nonprofits and to strengthen their links to government. Furthermore, the main initiators – the Evangelicals – have a particular focus on bringing Christian principles to bear on a range of social issues, such as abortion and same-sex marriage (Lindsay, 2007). Our hypothesis is that increasing the number of faith-based organizations would strengthen religiosity and associated conservative-religious views. Examining the staggered introduction of faith-based initiatives in a difference-in-differences design, we document three sets of effects: i) religiosity rises, ii) conservative-religious social views and associated outcomes strengthen, and iii) the number of faith-based organizations increases. Only the beliefs and views of Protestants were affected, while the views of other denominations and the non-affiliated were unchanged.

¹<https://georgewbush-whitehouse.archives.gov/news/releases/2002/02/20020226-11.html>.

The faith-based initiatives were introduced in the US since 1996 and onwards.² They involve a series of policies designed to improve conditions for faith-based groups whom were seen as discriminated against in the past and thought to provide better for the needy than the state, illustrated by the opening quote by George W. Bush (Carlson-Thies, 2001; Cnaan and Boddie, 2002; Olasky, 1992; Sager, 2010; Wineburg, 2007). For instance, the initiatives allowed religious groups to deliver social services without having to alter their religious character, as opposed to previously where publicly funded social services could be delivered only in secular surroundings (Chaves, 1999). As a result of the initiatives, many states now have faith-based offices and task forces charged with bridging the gap between government and the faith-based community (Chaves et al., 2004; Sager, 2010). The initiatives raised concerns about proselytizing, illustrated by the second opening quote.³ Some argued that the "first decades of the twenty-first century have witnessed an increased use of religious liberty as a warrant to justify conservative positions on social issues" (Jelen, Lewis and Djupe, 2018, 43). Others have noted that the initiatives were a cultural change that enhanced religion's visibility and influence in American public life, while strengthening the cooperation between church and state.⁴ A particular concern was that the policies would favor conservative Protestants, particularly the Evangelicals, the dominant religious group among the initiators (Chaves, 1999; Sager, 2010). We set out to test these concerns empirically.

The staggered and "quiet" top-down introduction of the faith-based initiatives provides a source of quasi-experimental variation in religion in government that we can leverage for causal identification. Enacted from above by a few dedicated individuals in the political elite as a "quiet revolution" – as was the title of the White House status report from 2008 – with very little notice or oversight, the initiatives do not seem to be a result of pressure from faith communities, nor did these communities support them initially (Hein, 2014; Sager, 2010; Carlson-Thies, 2001; White House, 2002). In an interview about a bill passed in 1997, a previous advisor to George Bush explained that "it was done very quietly, because we didn't want to draw undue attention to it or spark a bitter church-state separation debate" (Sager, 2010, 42).

We rely on the following datasets. To measure the staggered roll-out of the initiatives, we use information on 332 executive orders on faith-based initiatives introduced at different points in time across states between 1996 and 2009. These data were collected by Sager (2010) from the World's largest database on legal and public records-related information, LexisNexis. Our main measures of religiosity and attitudes are available for up to 44,758

²What we term faith-based initiatives include the Charitable Choice and the later faith-based initiatives.

³Wineburg (2007), www.nytimes.com/2009/08/01/us/01beliefs.html, www.nytimes.com/2009/03/01/opinion/01jacoby.html?_r=1&pagewanted=all

⁴Sager (2010, 5), Chaves and Wineburg (2010, 345), Wineburg (2007).

respondents from the General Social Survey (GSS) during the period 1987-2018. These data also have county identifiers, which enable comparison of pairs of neighboring counties on either side of a state border. To identify mechanisms, we elicit information on 321,000 nonprofit organizations, various state-level information, and details about the types of initiatives and activities of the main initiators that drive results. To measure potential outcomes of changed attitudes, we use data on the timing of laws restricting gay marriage and measures of gender gaps.

We first test the impact on religious beliefs. In a staggered difference-in-differences model, we document that the initiatives increased church attendance and strengthened respondents' religious affiliation and beliefs. The research design allows us to rule out various confounding factors. First, we account for state-specific characteristics fixed in time (e.g., geographic or institutional factors); second, we address differences across time that affect all respondents in a similar way (e.g., certain macroeconomic fluctuations); third, we consider trends in religiosity or conservatism affecting states differently (e.g., states that implemented the initiatives earlier may be on different secularization paths than those implementing later).⁵ There are no plausible differential trends in religiosity or the examined social values prior to the initiatives, addressing the concern that the initiatives were a response to rising religiosity (this refers to the examination of pre-trends). Fourth, in addition to state differences, we remove a large part of county differences (e.g., local geographic or institutional factors) by restricting analysis to comparison of pairs of counties on either side of a state border. Fifth, in a triple difference analysis, we exploit that effects are borne by Protestants. This specification leverages within state and year variation, eliminating the reliance on the state-level parallel trends assumption.⁶ We address recent critiques of staggered difference-in-differences estimators by using novel "stacked" difference-in-differences designs throughout (Cengiz et al., 2019; Goodman-Bacon, 2021; Sun and Abraham, 2021; De Chaisemartin and d'Haultfoeuille, 2020; Wing, Freedman and Hollingsworth, 2024).

We evaluate the size of the effects relative to the persuasion literature, which allows accounting for the fact that church attendance was already high before the initiatives. Our results suggest that 9% of Americans (who were not already attending church monthly or more often) started attending monthly or more often as a result of the initiatives. This ranks above the median persuasion rate computed among the best research papers on persuasion by DellaVigna and Gentzkow (2010).

The faith-based initiatives were not an isolated event that affected American society

⁵The listed confounding factors so far are taken into account with state fixed effects, time fixed effects, and state-by treatment-cohort fixed effects, respectively.

⁶The econometric specification of the latter includes state by event time fixed effects, see Braghieri, Levy and Makarin (2022) for a similar specification.

in vacuum. They were part of a broader movement by evangelical Protestant lawyers, scholars, and politicians with influential positions in state and federal governments (Black, 2004; Formicola, Segers and Weber, 2003; Sager, 2010; Chaves et al., 2004). We do not aim to disentangle this bundle, but instead regard the faith-based initiatives as a shock to the presence of religion in government. The 9% rise in church attendance should be seen as a result of this strengthened presence of religion in government, not as an isolated impact of the faith-based initiatives alone. Furthermore, the initiatives were implemented at state *and* federal levels. To estimate causal effects, we focus on state-level variation. We thus consider our results to be conservative estimates of the true impact of the strengthened ties between religion and government.

A central component of the initiatives may help explain results. They aimed at increasing the number of faith-based organizations. When faith-based organizations face reduced regulations, better networking and grant opportunities, and favorable conditions in the competition for social service delivery, we would expect i) a rise in the number of faith-based organizations and ii) a higher likelihood of fulfillment of their mission. While the missions of these faith-based organizations can contain secular elements, they also include spreading the gospel, deepening knowledge of Jesus, evangelizing communities, and guiding youth to a Christ-centered lifestyle. This may strengthen religiosity and associated values directly through the evangelization, but also through religious market mechanisms: The increased "supply" of religion through a larger number of faith-based organizations would predict strengthened religiosity (Azzi and Ehrenberg, 1975; Iannaccone, 1998; Iyer, 2016). Further, some missions include direct references to conservative-religious values, such as promoting alternatives to abortion and encouraging men to take on leadership roles within the household, in line with the views of Evangelical initiators.

Evidence supports these mechanisms. First, using data on one million US-based nonprofit organizations, we confirm that the initiatives increased the number of faith-based organizations. We define an organization as faith-based if it was categorized as religious by the NCCS or if religious terms entered its' name. To understand the size of the estimates, a back-of-the-envelope calculation shows that effects amount to 1608 additional faith-based organizations, which could have been in contact with 8.2% of American Protestants. Second, we identify a rise in the number of congregations in an alternative dataset from ARDA.com. Third, the rise in religiosity is primarily driven by "concrete laws" that improve conditions for faith-based organizations. An example of these laws were the implementation of faith-based representatives – so-called liaisons – on state advisory boards. These liaisons would, for instance, have weekly conference calls with faith-based liaisons from other states to facilitate the start-up of new programs. These programs could include reduced regulations for faith-based organizations or the

faith-based support of soup kitchens in prisons, for instance. Also, the results are partly caused by “program laws”, which involve the provision of government social services through faith-based organizations, such as the soup kitchens. Both concrete and program laws arguably increase the chances that missions of faith-based organizations are spread.

The faith-based initiatives allowed faith-based organizations to keep their religious symbols and messages when delivering government funded welfare services (Chaves, 1999). While this furthers the likelihood that religion is delivered as a by-product of social service delivery, it also gives rise to the concern that results are driven by a narrow segment of the population; the welfare recipients. We do not find support for this. Rather, the results seem to generalize to the full (Protestant) population. For instance, we do not observe larger effects for poorer or less educated individuals. Indeed, the impact of the faith-based initiatives reaches far beyond narrow social service delivery, as we shall see.

We proceed to identify the impact of the initiatives on social views associated with conservative-religious teachings. We examine using three types of data: The social views included in the GSS, data on gay marriage restrictions, and gender gaps computed using IPUMS data. The results on values are based on fewer observations and are weaker than the results on church attendance. Nevertheless, we find some evidence that the faith-based initiatives strengthened skepticism towards homosexuals and abortion and bolstered self-reported conservatism. We find no effects on science views or favoring prayer in schools and we find a strengthened emphasis on women’s rights. Interestingly, the latter is not manifested in actual outcomes, where we see rising gender gaps as a result of the initiatives. This discrepancy could be the result of a tendency for social desirability bias, which could be stronger among the religious (Paulhus and John, 1998; Bekkers and Wiepking, 2011). Views on homosexuals *do* manifest themselves in real outcomes. The initiatives doubled the mean likelihood of a state having restrictions on gay marriage.

Results inform the debate on the interplay between religion and government. Religion and politics were historically intertwined in legal systems, religious persecution, and decisions on religious vs. secular education, for instance. While early thinkers, such as Weber, Marx, and Nietzsche, warned about the use of religion for power (Weber, 1905; Marx, 1844; Nietzsche, 1887), later empirical research confirms the use of divine legitimacy throughout history (Djupe and Calfano, 2013; Hertzke et al., 2018; Jelen, 2006; Bentzen and Gokmen, 2023; Chaney, 2013; Kuran, 2012; Platteau, 2017; Rubin, 2017).⁷ As a consequence, some raise alarms over potential state-led proselytization (Finke, 1990; Monsma, 2000). In contrast, Durkheim posited that religion serves as a key pillar in shaping societal norms and ethics (Durkheim, 1912). In particular, religious groups have played a pivotal role in

⁷Others have examined the link between the state and religious freedom in the past (Gill, 2008; Johnson and Koyama, 2019).

shaping American culture and policy (Putnam and Campbell, 2012; Finke and Stark, 2005). Wald and Calhoun-Brown (2014) argued that religion is a factor that must be considered to fully comprehend American political life.⁸ The faith-based initiatives are an example of strengthened ties between religion and government and our results support the arguments that this coalition may strengthen the power of religion in society, influencing the views of followers.

Our analysis further contributes to explaining rising polarization. Putnam and Campbell (2012) interpret the rising religious polarization in the US along political lines: Religion is increasingly associated with the Republican Party, while the irreligious and Democrats vote in the opposite direction not to be associated with the Republicans.⁹ We offer an alternative explanation. The faith-based initiatives did not raise religiosity more for Republicans. Instead, polarization in our analysis arises from the fact that one part of the population embraced the religious messages involved with the faith-based initiatives, while the other continued secularizing. Putnam and Campbell (2012) also attribute the rising religious polarization since the 1960s to the societal changes of the sexual liberation movement in the 1960s. The authors argue that this movement led to the emergence of conservative religion, particularly evangelicalism, becoming increasingly involved in politics. The faith-based initiatives are a quantifiable part of this trend of evangelicalism in politics.

Our research also relates to research on religious missions and charities. Research has documented that missions raise religiosity in developing countries (Bryan, Choi and Karlan, 2021; Nunn, 2010). In his history of Christian missions, Robinson (1915) explains how building schools and hospitals was the most effective way for missionaries to convert locals to Christianity. We examine the impact of similar behavior in a Western nation. Research has also documented proselytizing in Islamic charities (summarized in Kuran (2018)). Similarly to the faith-based initiatives, Kuran notes that the rhetoric of Islamic charities suggests that they prioritize needs of the poor. Research shows, though, that their beneficiaries belong mostly to the middle class, underscoring that poor relief may not have been the main priority. Confirming this tendency for Protestants, we find no signs that effects are caused by the poor.

We further relate to literature examining the supply-side of differences in religiosity, suppliers being faith-based organizations or the state. Exploiting the implementation of blue laws across US states, Gruber and Hungerman (2008) documented that church attendance fell as shops were allowed to be open on Sundays, interpreting these blue laws

⁸See also Smidt, Kellstedt and Guth (2017) for an Oxford Handbook on religion and American politics.

⁹Poole and Rosenthal (1984, 2001); McCarty, Poole and Rosenthal (2016) document that the rising polarization in America follows a liberal-conservative ideological dimension. A burgeoning literature links the increasing polarizing to social media, e.g. review by Tucker et al. (2018).

as increased secular competition. By granting advantages to faith-based organizations, the faith-based initiatives reduced competition between secular and faith-based organizations. Empirical cross-country studies have documented a positive correlation between religious attendance and plurality of religions and lack of government regulation of churches (McCleary and Barro, 2006; Voas, Crockett and Olson, 2002; Fox and Tabory, 2008). McCleary and Barro (2006) found that the presence of an official state religion raised religiosity in a panel of 68 countries. They argue that subsidies flowing to organized religion increase the supply of religion. In our analysis, we can analyze this increased supply directly.

More generally, we contribute to a literature on the impact of laws on behavior and values. Gruber and Hungerman (2008) document that not only did the blue laws reduce church attendance, but they also increased drinking and drug use. Mocan and Pogorelova (2017), in their analysis of compulsory schooling laws in Europe during the 1960s and 1970s, identified a decrease in religiosity and superstition as a consequence of increased education. Other studies have revealed cultural backlash after certain laws, such as lower education levels and higher religiosity for Muslim girls after French bans of headscarves (Abdelgadir and Fouka, 2020), backlash after prohibiting German in US schools (Fouka, 2020), and after various US social policies during the past half-century (Wheaton, 2022). We document how certain policies may resonate more strongly with some segments of the population than with others, depending on their religion.

2 Background & Data on the Faith-Based Initiatives

Since the first policy under the faith-based initiatives was implemented in 1996, hundreds of faith-based policies have been implemented in the majority of US states. We will term them all "faith-based initiatives". The initiatives mainly dealt with relations between the government and so-called faith-based nonprofit organizations (FBOs), which include religious organizations (churches, mosques, synagogues, temples) and nonprofit organizations with a religious purpose. Although "faith-based and community organization" was the official rubric for the kind of organization targeted by the faith-based initiatives, initiative advocates, activists, and administrators envisioned congregations as a key type of faith-based and community organization (Chaves and Wineburg, 2010; Sager, 2010).

2.1 Rationale

The rationale behind the faith-based initiatives was two-fold: Faith-based groups i) were thought to be discriminated against in the past and ii) were seen as better at providing for the needy than the state (White House, 2008; Sager, 2010; Chaves, 1999; Formicola, Segers and Weber, 2003; Monsma, 2000). According to proponents, religion had been marginalized during the construction of the American welfare state. The Charitable Choice provision aimed to reverse this trend, ensuring that "religion would not be an alternative to government welfare but rather a supplement and even a partner" (Carlson-Thies, 2001, 110). The initiatives garnered further political support by highlighting the belief that faith-based organizations were better equipped to address the needs of the less fortunate compared to their secular counterparts (Carlson-Thies (1999); Cnaan and Boddie (2002); Sherwood (2000), Appendix A.1 lists examples of these main arguments). The majority of the public believed that closer collaboration between the government and religious groups would lead to better solutions for the social problems facing the United States, according to a public opinion poll from 1999 (U.S. General Accounting Office, 2002; Carlson-Thies, 2001). The main solutions offered by the faith-based initiatives were to increase the number of faith-based and community organizations, to relegate public welfare services through these organizations, and to remove barriers to partnership between them and the government.

2.2 Contents

The two largest groups of faith-based initiatives were the Charitable Choice provision and the Faith-Based and Community Initiatives (FBCI). They were implemented at the federal level and adopted at the state-level through executive orders. Our empirical analysis will exploit state-level variation, but understanding the federal initiatives is crucial for

understanding the initiatives adopted at the state-level.

The Charitable Choice provision – the first faith-based initiative – was part of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) signed into law by President Bill Clinton as part of the 1996 welfare reform. The provision had two main components. Charitable Choice enabled FBOs to receive federal funds without compromising their religious identity (Chaves, 1999). Previously, FBOs were expected to secularize their operations when providing publicly funded social services. In practice, this meant relaxing a series of regulations faced by FBOs. Furthermore, the provision required states that contract with nonprofit organizations for delivery of social services to include religious organizations as eligible contractees (Chaves, 1999).

The Faith-Based and Community Initiatives, implemented in 2001 by George W Bush, also reflected the President's belief that while government can marshal great resources in response to human need, it is best administered through faith-based groups (White House, 2008). The most successful elements of these initiatives, according to the 2008 White House status report "The Quiet Revolution", were:

- (i) Executive orders aimed at "leveling the playing field," meaning removing all unwarranted barriers inhibiting government partnerships with faith-based and grassroots charities. These executive orders included creating the White House Office of Faith-Based and Community Initiatives (OFBCI), five initial Centers for Faith-Based and Community Initiatives within federal agencies, and an agenda for the initiatives that "ended discrimination against faith-based and grassroots nonprofit organizations" (White House, 2008, 29). These efforts included removing regulations, rules, and procurement that were seen as discriminating against FBOs.
- (ii) Initiatives aimed at "vastly increasing the number of grassroots organizations partnering with government", including giving vouchers, mini-grants, training FBO leaders, and facilitating intermediary grantees.
- (iii) President Bush implemented the FBCI in 11 federal departments that administer human service programs. According to the "Quiet Revolution" report, this has resulted in strengthened FBO partnerships relating to issues such as distressed neighborhoods (US Department of Commerce), education (US Department of Education), crime reduction (US Department of Justice), employment (US Department of Labor), homelessness (US Department of Housing and Urban Development), substance abuse (US Department of Health and Human Services), and food security (US Department of Agriculture).
- (iv) The FBCI serves as a vehicle for the White House's compassion agenda. Examples include hosting monthly "Compassion in Action" events, the prisoner-reentry program

where returning offenders are linked with FBOs, or connecting at-risk youth with compassionate adults through FBOs.

- (v) Federal funding was sent to the states via direct grants to nonprofits (totaling \$14 billion in 2006) and to block grants (totaling more than the nonprofit grants) to local governments. The block grants are used by governors who "recognize faith- and community organizations as key allies in addressing the state's most pressing needs". More than two-thirds of state executives leverage such partnerships through state FBCI offices or liaisons (described in Section 2.3).
- (vi) Further initiatives were put in place to strengthen FBO-government relations at the state level. A main component in these initiatives were the faith-based liaisons.

2.3 Faith-based liaisons

The predominant means with which states adopted the federal initiatives was to create state-funded positions called faith-based liaisons (Sager, 2010). For instance, by 2008, 35 governors – 19 Democrat and 16 Republican – had offices or liaisons "dedicated to strengthening faith-based and community organizations" (White House, 2008). The primary policy goal of the liaisons was to link the faith-based organizations to the public social service sector (Chaves et al., 2004). Through interviews with 34 liaisons, Sager (2010) identified a three-part strategic plan of implementation by most liaisons. First, they worked to cut through the red tape between faith- and community leaders and the governor and state officials. Second, they developed clergy leadership advisory committees in which the clergy could meet face-to-face with the governor on a periodic basis to address issues and concerns of their cities. For instance, statewide interfaith steering commissions were formed, resulting in events such as prayer breakfasts. Third, the liaisons worked to pass on information from the federal agency center on faith-based initiatives and grant opportunities. Although the amount of money going to state faith-based appropriations has been increasing some, Sager (2010) found that the vast majority of the interviewed liaisons – 29 of 34 – had no fiscal support outside their salary. Instead, the main task of the liaisons was to encourage government employees to work toward the inclusion of faith-based groups in government-funded programs. The "liaisons became policy brokers and agents of cultural change" (Sager, 2010, 61).

2.4 Reduced regulations

A central component of the initiatives involved reduced regulations for FBOs. A prominent example is the Teen Challenge program, which offers Christian scripture-based drug rehabilitation (Sager, 2010). The Teen Challenge provided treatment to individuals struggling with drug addiction and thus fell under government regulations. In 1995, the Texas Commission on Alcohol and Drug Abuse threatened to shut down the Teen Challenge due to violations of state regulations. Critics argued that this was discrimination against faith. In response, the Teen Challenge Bill was passed in 1997, which granted religious treatment programs exemption from state regulation. These programs no longer had to meet standard criteria, such as employing licensed counselors, performing criminal background checks, adhering to state health and safety standards, or reporting incidents of abuse, neglect, or medication errors as mandated for secular treatment programs (Sager, 2010). Another example included in our dataset is Executive Order 13199, which aimed to eliminate "unnecessary legislative, regulatory, and bureaucratic barriers that hinder effective faith-based and community efforts to address social problems" (Sager, 2010, 32). This deregulation applied to both publicly and privately funded FBOs. In addition, the Charitable Choice provision allowed FBOs to maintain their faith-based hiring criteria (Sager, 2010; Jacobson et al., 2005).

2.5 Funding

The funding aspect of the initiatives has faced significant criticism due to the limited amount of funding that was allocated to faith-based organizations (Kuo, 2005; Chaves and Wineburg, 2010). The primary source of federal funding came from the Compassion Capital Fund (CCF), which had an annual budget of \$30 million in 2002, increasing to \$57.8 million in 2007 (Chaves and Wineburg, 2010, 344). This funding was distributed in the form of numerous mini-grants to faith-based and community organizations, with each grant amounting to a maximum of \$50,000 (Chaves and Wineburg, 2010). While the initiatives may not have provided "the resources to change lives" (Kuo, 2005), these mini-grants may have been sufficient to increase the number of FBOs. Indeed, the majority of nonprofit organizations are smaller organizations, with over one million organizations having annual revenues below \$50,000,¹⁰ indicating that the mini-grants could cover start-up costs for a new FBO.

Non-congregational grantees were often encouraged or required to develop partnerships with small, local FBOs. This meant that FBOs could benefit from the initiatives, even without receiving funding themselves. In general, the faith-based initiatives were

¹⁰<https://www.statista.com/topics/1390/nonprofit-organizations-in-the-us/>

designed to tap into the personal and holistic alternative given by congregations and other FBOs by redirecting resources from professional social service organizations (Chaves and Wineburg, 2010; Sager, 2010).

2.6 Evangelicals

The literature highlights the individual-specific nature of implementation. The initiatives were implemented from above by "a few dedicated individuals who strongly believe in the role of religion in social services" (Sager, 2010, 52). They "were pushed forward largely by evangelical Protestant lawyers, scholars, activists, and politicians" (Chaves et al., 2004, 45), (Carlson-Thies, 2001; Chaves, 1999; Sager, 2010). These evangelical activists held influential positions in both state and federal government and pursued the mission of including religion as an essential component of public policy and political life (Black, 2004; Formicola, Segers and Weber, 2003; Sager, 2010; Bartkowski and Regis, 2003; Conger and Green, 2002). Based on interviews with 34 liaisons, Sager (2010) found that these individuals were characterized by their dedication and religious commitment. They self-selected into their positions and had preexisting connections with predominantly conservative Christian religious communities. Additionally, they had personal contacts with the White House and faith-based leaders across various federal sectors. Other scholars have noted the evangelical roots of the initiatives (Lindsay, 2008; Monsma, 2006; Olasky, 1996; Smith and Emerson, 1998; Wright, 2009). For instance, among congregations in Atlanta, Georgia, Owens (2006) found that the attitudes of the clergy towards entanglement with the government and the ethnic composition of congregation members were the key predictors of willingness to seek public funding. Politicians in states that were more likely to implement faith-based policies differed in similar aspects. Some politicians simply found the idea of reintegrating religion into the public sphere appealing (Sager, 2010). In particular, Sager (2010) documents that states with evangelical Republicans among their politicians were more likely to implement faith-based initiatives.

2.7 A broader agenda

Some scholars argue that the faith-based initiatives were more than just an attempt at leveling the playing ground and caring for the needy. Instead, they were likely part of a broader agenda. Generally evangelical Christians have ascended into influential positions in American society, including politics and business (Lindsay, 2007; Sutton, 2014; Wilcox, 2018). Based on 360 interviews with Evangelical leaders in government and corporate America, Lindsay (2007) concludes that these leaders managed to raise in power, despite their low total number. Across a diverse America, these leaders created and expanded

a strong network held together by their common evangelical faith and their vision for how things ought to be in society. The faith-based initiatives may have served as part of their ambitious agenda of bringing "Christian principles to bear on a range of social issues" (Lindsay, 2007, 2). Indeed, the faith-based initiatives have been criticized for being aimed at increasing the presence of a certain brand of Christian religion in government rather than ameliorating the problems of poverty (Kuo, 2005; Kuo and DiIulio, 2008; Sager, 2010). Scholars argue that evangelicals have been the driving force behind debates over abortion and same-sex marriage (Lindsay, 2007; Wilcox, 2018; Fetner, 2008). In particular, opponents of the initiatives express concerns that they may result in discrimination against gay, bisexual, and transgender Americans.¹¹ We set out to test the actuality of these concerns empirically.

2.8 Heterogeneous treatment

Certain religious groups may have been particularly receptive towards the faith-based initiatives. First, since the initiators mainly adhered to the Evangelical religious tradition, their messages may have resonated more with segments of the population adhering to the same tradition. Second, African American congregations were particularly likely to pursue charitable choice opportunities (Chaves, 1999). Chaves outlines two main reasons for this tendency. The barrier between church and state in African American religion is – culturally and institutionally – lower than in other religious communities in the US (Pattillo-McCoy, 1998). Also, clergy in predominantly black churches enjoy greater power than their counterparts in predominantly white churches to initiate and implement congregational programs of their choosing (Lincoln and Mamiya, 1990). We will test heterogeneity of the impact of the initiatives along these denominational lines.

2.9 Testable predictions

Based on the reviewed literature and the available data, we formulate three testable predictions regarding the impact of the faith-based initiatives, illustrated in Figure 1. We expect impacts of the initiatives on the number of FBOs, religiosity, and conservative-religious views. First, we expect the number of FBOs to rise. Increasing the number of FBOs was a direct policy goal by President George Bush. Several initiatives may have directly facilitated establishing and maintaining faith-based organizations, such as reduced regulations and distributing mini-grants. More indirect initiatives include representation on government boards and the relegation of social service delivery from

¹¹E.g., <https://www.nbcnews.com/feature/nbc-out/civil-rights-groups-wary-trump-s-latest-faith-based-initiative-n872031>.

secular providers to religious organizations. Inclusion of faith-based organizations on government boards meant that they could further influence decisions on regulations and grants. Also, providing social services through FBOs could potentially offer them additional revenue streams and greater visibility in their neighborhoods, enhancing their ability to establish themselves and sustain their operations.

[FIGURE 1 ABOUT HERE.]

Second, we would expect the faith-based initiatives to increase the likelihood that FBOs achieve their mission. The majority of the faith-based organizations are ministries and churches, whose missions include spreading the word of Jesus and the Bible and to evangelize, for instance. We list examples of these missions in Table 1. These missions are obtained through the Nonprofit Explorer on the ProPublica website, <https://projects.propublica.org/nonprofits/>. We anticipate that this mission will reach a greater share of the population as a consequence of the faith-based initiatives for four key reasons: i) The growing number of faith-based organizations allows them to reach a broader segment of the population ii) the increased social service delivery through FBOs would extend their reach among recipients of these services, iii) permitting FBOs to provide these services while maintaining their religious identity would allow them to promote their mission to the social service recipients, iv) having representatives from FBOs on government boards would enhance their ability to suggest further initiatives to strengthen their position.

In other words, we would expect religiosity to rise. The link from an increased supply of religion (a greater number of FBOs or a better quality of their "product") to strengthened religiosity follows predictions by standard religious market models. Azzi and Ehrenberg (1975) model how individuals allocate their time and resources between religious and secular activities to maximize their current - and afterlife utility (Iannaccone, 1998; Iyer, 2016). A rising number of churches or a better quality of the "product" provided by churches can improve the match between potential followers and religious options by improved access to religious practices and by making the product more attractive. Consequently, this may intensify religious activity among followers and potentially strengthen their conservative-religious views. These predictions are further supported by existing research documenting rising religiosity as a consequence of Christian missions in the Philippines (Bryan, Choi and Karlan, 2021) and historical Africa (Nunn, 2010). We test whether something similar has occurred in a Western society.

Third, we expect certain social values to be influenced. While many missions of faith-based organizations involve conveying religious messages, another aspect focuses on influencing social values. Particularly promoting and preserving traditional family structures. By now a well-known example is USATransform (Ziklag), whose mission

includes "To educate and encourage individuals and organizations to advance positive outcomes in American culture". The organization follows a framework called the Seven Mountain Mandate, whose first two mandates include promoting a Christian worldview and advocating the continuation of traditional family structures. Other examples include the First Choice Center for Women, whose mission includes "To see the word of God birthed in the hearts of men and women and to make abortion unnecessary and undesirable in our region" and the Oaks of Righteousness whose mission includes "Development of male based curriculum for leadership in the home." If these missions are representative, we would expect a strengthening of traditional family values and views against abortion. These latter examples involve the faith-based organizations as a central transmitter of the particular social views. We could also imagine a more direct impact on social views of the evangelicals in government. Much like how symbolic policy spreads messages. In particular, advocates of the initiatives argue that they have been beneficial in reintegrating the faith-based voice into the public sphere (Sager, 2010).

[TABLE 1 ABOUT HERE.]

We set out to test these predictions empirically.

2.10 Data on the faith-based initiatives

State governments were not obliged to adopt policies endorsing the faith-based initiatives unless they explicitly discriminated against faith-based organizations (Sager, 2010). As a result, the implementation varied in terms of timing and extent across different states. For our primary analysis, we rely on data compiled by sociologist Rebecca Sager, which tracks the legislative changes and executive orders related to Charitable Choice and the subsequent faith-based initiatives issued by state governments between 1996 and 2009. This data was sourced from LexisNexis, an electronic database known for its comprehensive collection of legal and public records.¹² For robustness, we use data on the key institutions associated with the faith-based initiatives, such as the presence of faith-based liaisons, faith-based offices within state governments, and their grants (Table 3). For identification purposes, we focus on state-level changes, but the faith-based initiatives also involved

¹²For further details on the data collection, consult Appendix B.1 and Sager (2010). We refrain from attempting to add recent years to the data for two main reasons: First, the extraction from Lexis Nexis includes several choices to be made such as which exact terms to include etc. Using data collected by Sager is a way to secure objectivity. Second, if we were to add more recent years, more states would have adopted the faith-based initiatives, which means that the pool of never treated states shrinks, which again increases potential bias from staggered treatment (De Chaisemartin and d'Haultfoeuille, 2020; Callaway and Sant'Anna, 2021). In 2009 when our data ends, 44 out of 50 states had adopted one or more faith-based initiative.

federal laws, which may have had similar effects. From this perspective, our results can be considered conservative estimates.

Table 2 presents the legislative changes grouped into *Program laws* that involve the provision of government welfare through faith-based organizations, *Concrete laws* that improve overall conditions for faith-based organizations and enhance their access to government in general, and *Symbolic laws* that foster a supportive environment for faith-based organizations. Most of the program laws involve delivery of government welfare through faith-based organizations operating within correctional facilities. The concrete laws allocate positions to faith-based representatives on state advisory boards and distribute appropriations to faith-based organizations. For instance, Florida passed appropriation bills for teenage pregnancy prevention, while Ohio allocated funds for addressing child poverty and reducing out-of-wedlock births. The majority of the symbolic laws encourage government officials to collaborate with faith-based organizations. For instance, in 2004, Wyoming enacted a law stating 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, 99). The different types of laws are described in more detail by Sager (2010, ch.4).

[TABLE 2 ABOUT HERE.]

The first state to implement Charitable Choice policies was Texas in 1997 during the tenure of George W. Bush, driven by his belief in the efficacy of religious groups in addressing societal needs (Sager, 2010, 47). Another front runner state was Florida, governed by Jeb Bush, who shared a similar political inclination towards the initiatives as his brother, George W. Bush.¹³ By the year 2009, a total of 44 states had implemented at least one faith-based initiative (panel (a) of Figure 2). Panel (b) of Figure 2 shows the spatial distribution of the total number of faith-based initiatives implemented by 2009. The map reveals that these initiatives potentially mattered everywhere and were not restricted to certain states. Figure A1 depicts instead the first year of implementation, revealing a similar spread across states.

[FIGURE 2 ABOUT HERE.]

¹³The implementation experiences in these two states may diverge from those of other states and a concern is that this impacts results. Results are robust to excluding them. The working paper version of this paper (Bentzen and Sperling, 2020) excluded the states from the entire analysis with no change to the conclusions.

Regarding the timing of the different types of initiatives, concrete laws were always implemented before or in the same year as the program laws and most often before the implementation of symbolic laws (Figure A7).

3 Empirical Analysis

Our empirical analysis begins with modeling the impact of the faith-based initiatives on religious attendance and beliefs. To do so, we combine the data on faith-based legislative changes with the General Social Survey (GSS). The GSS has asked Americans about their socio-economic characteristics, social views, and practices, including their religious attendance and beliefs since 1972. The data includes state identifiers since 1973. The survey was conducted yearly until 1994 and in even years thereafter. To examine mechanisms, we use yearly information on 320,000 nonprofit organizations. We explain these data in Section 4.

3.1 Main religiosity measure

The GSS 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 a year, about once or twice a year, several times a year, about once a month, 2-3 times a month, nearly every week, every week, or several times a week. The original variable assumes values between 0 and 8, which we recode to values (increasing in steps of 0.125) between 0 and 1 to ease readability of results. An attendance score of 0.5 corresponds to attendance once a month, for instance. The GSS holds various measures of the strength of religious beliefs, whereof we choose the four measures available for at least 20,000 respondents (detailed below). All measures are described in detail in Appendix B.

3.2 Staggered treatment

Since treatment (having implemented a faith-based initiative) occurs at different points in time for different states, we would face potential issues with heterogeneous treatment effects if we were to estimate the relation between the faith-based initiatives and religiosity in a simple two-way fixed effects model (Goodman-Bacon, 2021; Sun and Abraham, 2021; De Chaisemartin and d'Haultfoeuille, 2020; Callaway and Sant'Anna, 2021). The problem arises since previously treated states would enter the comparison group for later-treated states. If the impact of the treatment is larger for early-treated states, the two-way fixed

effects estimates would be biased towards zero, whereas they would be overstated if the impact is larger for later-treated states.

To address this, we employ a design known as *stacked* difference-in-differences. The methodology follows the logic of alternatives, such as [Callaway and Sant’Anna \(2021\)](#), but allows us to examine individual- and organization-level data treated at a more aggregate level, examine individual-level treatment heterogeneity with respect to religious denominations, and to include survey weights at individual level.¹⁴ First seen in [Guryan \(2004\)](#) and gaining attention with [Cengiz et al. \(2019\)](#), the *stacked* difference-in-differences methodology has been exploited in several recent empirical applications ([Gormley and Matsa \(2011\)](#), [Deshpande and Li \(2019\)](#), [Fadlon and Nielsen \(2021\)](#), and [Jeffers \(2024\)](#), among others). The intuition is to assemble a set of sub-experiments – or sub-datasets – with respect to the treatment timing such that, within each treatment cohort, we compare units that are treated in the same year to units in a control group that remain untreated throughout the same event time window. Two states belong to the same treatment cohort if their first faith-based initiative was implemented in the same year. We end up with a sub-dataset for each treatment cohort. Since the faith-based initiatives were implemented every year between 1997 and 2009, we will have a sub-dataset for each of these years.

In each of these sub-datasets, we trim the data to be balanced with respect to the treatment unit (the state) over a fixed event time window, amounting to 10 years before treatment to 7 years after in our baseline specification. Each sub-dataset consists of states that are treated in the particular treatment cohort and the never treated states. Next, we stack the different sub-datasets into one dataset, which consists of all treatment cohorts with their respective comparison group, aligned over the same treatment timing. Since our specification always includes treatment-cohort fixed effects, we are exclusively comparing states treated in the same year with the control group (never-treated states in the baseline). This means that our treatment effects will be conceptually equivalent to treatment effects estimated for each treatment cohort using a linear regression applied to the sub-datasets ([Gardner et al., 2024](#); [Jeffers, 2024](#); [Wing, Freedman and Hollingsworth, 2024](#)).

To address the concern raised by [Wing, Freedman and Hollingsworth \(2024\)](#) that the stacked estimators using a fixed effects specification do not identify the target aggregate causal effects of all treatment cohorts, we apply their suggested weighting scheme throughout the analysis. The results are robust to estimation without these weights (Figure A8). Consult Appendix B.4 for details on the stacking and weighting.

¹⁴The results are robust to using various alternative estimators robust to staggered treatment by [Callaway and Sant’Anna \(2021\)](#), [Borusyak, Jaravel and Spiess \(2021\)](#), [De Chaisemartin and d’Haultfoeuille \(2020\)](#), and [Sun and Abraham \(2021\)](#), or the simple two way fixed effects estimator (see the working paper version of this paper).

3.3 Sample and period restrictions

Throughout the analysis, we exclude District of Columbia as it is not a state and we have limited information on individuals located in the state from the GSS. The GSS panel is unbalanced in the sense that surveyed individuals are not always representative of all states in all years. We balance the panel ensuring that each state is present before and after treatment in each treatment cohort c .¹⁵ This restriction means that we further loose Hawaii, Maine, New Hampshire and Utah in the GSS analysis. Figure A2 and Figure A3 (described in detail in Appendix B.4) illustrate the sample composition of the GSS baseline data by treatment cohort and the data structure of the final stacked data, respectively. In this sample of states, the last state to be treated in our GSS analysis is Washington, which is treated in 2006, meaning that 2006 is our latest treatment cohort. Since we analyze treatment in event times from 10 years before treatment to seven years after and since the GSS is conducted only in even years after 1994, our latest calendar-year observation is 2012 in the baseline GSS specification. Since the data on faith-based initiatives ends in 2009, results are potentially downward biased in the last three years of the analysis, as some of the never-treated control states potentially became treated in the meantime. When analyzing data for nonprofit organizations, we have data for all years and states, meaning that the last state is treated in 2009 (Maine). In that analysis, 2009 will be the last treatment cohort and 2016 will be the last calendar-year in the baseline analysis.

3.4 Event study DD estimates

To estimate treatment effects, we compare changes in outcomes of individuals located in states adopting the faith-based initiatives before and after their introduction to changes in outcomes of individuals in states that did not implement any faith-based initiatives. We formally estimate the effect of the introduction of faith-based initiatives using the following event-study specification:

$$y_{isct} = \sum_{\substack{j \in T \\ j \neq \tau}}^T \beta_j FBI_{sc} \times \mathbf{1}(t = j) + \delta_{sc} + \lambda_{ct} + \mathbf{X}'_{isct} \gamma + \varepsilon_{isct} \quad (1)$$

where y_{isct} is the observed outcome for an individual i interviewed in state s at event time t and belonging to the treatment cohort c . FBI_{sc} is an indicator variable equal to one when

¹⁵Results are robust to further balancing the sample by excluding states with “incomplete” waves – that we cannot fully follow for the entire pre-treatment and post-treatment period within a treatment cohort – or with less than 10 respondents, Table A9.

a faith-based initiative was implemented in state s in treatment cohort c , zero otherwise.¹⁶ $\mathbf{1}(t = j)$ is an indicator variable equal to one j years after treatment within the treatment cohort. T is the set of event time periods considered for the event study, where we omit τ , the event time just before the introduction of the faith-based initiatives.

The coefficients of interest, β_j , identify the effect of the faith-based initiatives at event time j , relative to the event time just before treatment. The comparison group in the baseline specifications are the never treated states, which include Delaware, Nebraska, New York, Rhode Island, South Dakota, and Vermont in the baseline specifications, cf. Figure A2 (the never-treated states are different when we evaluate treatment by liaisons or grants, cf. Figures A5 and A4). Results are robust to including the not-yet-treated states in the comparison group or to restricting the comparison group to the not-yet-treated (Figures A10 and A11).

δ_{sc} are state by treatment cohort fixed effects, meaning that we compare only changes in outcomes for individuals that are treated in the same treatment cohort and state. For instance, we only compare individuals in states who implemented their faith-based initiative in 1997 to the never treated states measured in the same event time window. λ_{ct} are treatment cohort by event time fixed effects, meaning that we compare only changes in outcomes within one treatment cohort and event time. \mathbf{X}_{isct} are individual-level controls for respondents' age, marital status, gender and religious denomination, and additional controls for robustness in some cases (e.g. education, political preferences, ethnicity, migration status, or public spending at state level, see Tables A3 and A7). Throughout, we cluster standard errors at the state level, the level of our treatment variation (results are robust to clustering at the state by treatment cohort level). We address potential spatial correlation by accounting for the spread of the faith-based initiatives in neighbor states (Table A10). Throughout, we estimate the equation using ordinary least squares with the weights proposed by Wing, Freedman and Hollingsworth (2024) for the identification of the correct aggregated ATTs and sampling weights for the GSS waves. The main results for categorical variables (e.g. church attendance) are robust to using a ordered logit (Table A6).

We estimate aggregate treatment effects with the equation:

$$y_{isct} = \beta^{pre} FBI_{sc} \times Pre_{ct} + \beta^{post} FBI_{sc} \times Post_{ct} + \delta_{sc} + \lambda_{ct} + \mathbf{X}'_{isct} \gamma + \varepsilon_{isct} \quad (2)$$

where $Post_{ct}$ is an indicator variable equal to one from the year of treatment onwards, zero

¹⁶The year of interview is the most detailed timing information available. 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 and Hungerman (2008) and Autor (2003). The results are robust to using the number of laws instead (Table A11).

otherwise. Pre_{ct} is an indicator variable equal to one for all time periods before treatment except for the latest time period prior to treatment, zero otherwise. In this specification, we compare effects to event time τ , the latest period before the year of introduction of the faith-based initiatives, mimicking the event study specification in Equation (1). $FBI_{sc} \times Pre_{ct}$ and $FBI_{sc} \times Post_{ct}$ are the interactions between the faith-based initiatives and the *Pre*- and *Post*-dummies, respectively. β^{post} captures the post effect, relative to event time τ . Note that β^{post} captures the post effect relative to the full pre-period average if we omit the $FBI_{sc} \times Pre_{ct}$ term (as done in some robustness checks).

Specifications in Equation (1) and (2) take account of all state-level confounders, either constant or varying across treatment cohorts. For instance, general prior state-level religiosity, poverty, public spending, etc. is accounted for with the state fixed effects and changes in these confounders within a state across treatment-cohorts are accounted for with the state by treatment cohort fixed effects.

Since we compare treated states to the never-treated states at the same event time within each of the treatment cohorts, omitted confounders can explain the DD results only if they are caused by events that occur at the same time as the faith-based initiatives. This is indeed plausible since the faith-based initiatives were likely part of a larger package of initiatives with the potential purpose of strengthening the same values as we examine. This is our reason for regarding the faith-based initiatives as a proxy for this movement, not as a precise measure of implementation of the faith-based initiatives. The identifying assumption in the DD specification is thus that the average change in outcome in the post-treatment time period would have been the same in individuals located in states with faith-based initiatives (or the associated bundle of initiatives) and individuals located in states without them, had it not been for the faith-based initiatives (or the associated bundle of initiatives). We validate this assumption in three broad ways. First, we examine whether states differed systematically prior to treatment (examining pre-trends). Second, we examine the differential timing of other associated events such as implementation of faith-based liaisons and the welfare reform (Section 3.6 and Tables A7 and A3). Third, we exploit the heterogeneity of treatment to estimate a triple difference (DDD) model.

3.5 Event study DDD estimates

Drawing on existing literature, we anticipate that the initiatives were more likely to impact Protestants, as this group includes Evangelicals, who were the primary proponents of the initiatives, and Black Protestants, who were the earliest to embrace the faith-based initiatives. We expect that non-Protestants are mostly unaffected by the initiatives. To allow for such heterogeneous treatment effects, we estimate the following triple difference

event study specification

$$\begin{aligned}
y_{irsct} = & \sum_{\substack{j \in T \\ j \neq \tau}}^T \beta_j FBI_{sc} \times \mathbf{1}(t = j) \times \mathbf{1}(r = Protestant)_{isct} \\
& + \delta_{src} + \lambda_{crt} + \alpha_{srt} + \mathbf{X}'_{irsct} \gamma + \varepsilon_{irsct}
\end{aligned} \tag{3}$$

and its equivalent aggregate model:

$$\begin{aligned}
y_{irsct} = & \beta^{pre} FBI_{sc} \times Pre_{ct} \times \mathbf{1}(r = Protestant)_{isct} \\
& + \beta^{post} FBI_{sc} \times Post_{ct} \times \mathbf{1}(r = Protestant)_{isct} \\
& + \delta_{src} + \lambda_{crt} + \alpha_{srt} + \mathbf{X}'_{irsct} \gamma + \varepsilon_{irsct}
\end{aligned} \tag{4}$$

where y_{irsct} is the outcome for an individual i belonging to the religious strata $r = \{\text{Protestant, non-Protestant}\}$ interviewed in state s at event time t and belonging to the treatment cohort c . Here, we allow the impact of faith-based initiatives to differ between Protestants and the rest with the indicator variable $\mathbf{1}(r = Protestant)_{isct}$ equal to one if the individual is a Protestant, zero otherwise. Protestants take up 56% of the sample, Catholics 24%, the unaffiliated 12%, and remaining groups 8%.

The coefficients of interest, β_j , capture the average change in outcomes for Protestants in states that implemented faith-based initiatives compared to Protestants in states that did not in the event time period j , relative to the average change in outcomes symmetrically for non-Protestants, with respect to the period before treatment. δ_{src} are state by religious strata by treatment cohort fixed effects, where the strata is being Protestant or not, meaning that we compare only changes in outcomes of Protestants in the same state treated with their first faith-based initiative in the same year. λ_{crt} are event time by religious strata by treatment cohort fixed effects, meaning that we compare only changes in outcomes for religious strata within the same treatment cohort and event time. α_{srt} are state by religious strata by event time fixed effects, assuring that we account for all variation across states, time-varying or not, for Protestants and non-Protestants separately. This includes state-level changes in religiosity for Protestants and non-Protestants prior to the initiatives, for instance. Average treatment effects are thus exclusively computed by differential effects of the faith-based initiatives for Protestants versus the rest.

The identifying assumption for the triple difference estimation is that the common trends assumption holds for both religious strata r (Protestants and non-Protestants), meaning that the average change in all post-treatment periods would have been the same between individuals with and without faith-based initiatives, had it not been for the

faith-based initiatives. Alternatively, any potential violation of parallel trends should be constant across strata, meaning they will cancel out with the triple difference (Strezhnev, 2023). We offer plausible evidence of parallel trends for the main results by taking the split sample event studies for both strata and showing pre-treatment coefficients for both groups.

A concern relating to the heterogeneous treatment model in Equation (3) is that the faith-based initiatives potentially influenced the composition of religious denominations. This would affect the interpretation of the results, since part of the impact on outcomes might cover denominational shifts. We do not find support for this when estimating Equation (1) with indicator variables for the different denominations as dependent variable. The faith-based initiatives did not influence the likelihood that respondents identify as Protestant or Catholic, nor did they impact the share of the population who identify with a religious denomination in general (Figure 3). This general absence of a shift is consistent with previous research findings. Other shocks such as earthquakes have been shown to increase religiosity, but even these large shocks also do not persuade nonbelievers, cf. Bentzen (2019). There is a tendency for the share of Protestants to fall and the share of Catholics to rise 6-7 years after treatment. This would be consistent with some Protestants not agreeing with the message by the faith-based initiatives and switching. This also means that we should be careful with the interpretation of the results in the last event time period as we move forward.

[FIGURE 3 ABOUT HERE.]

3.6 Validity checks of the FBI measure

Before we start our analysis, we conduct the following checks of the validity of our main measure of the faith-based initiatives – the executive orders. First, we exploit data across states and years on the main institutions behind the initiatives – the faith-based liaisons (FBL). These data were constructed by Sager (2010) based on interviews with the liaisons in 2006. In addition, Sager (2010) provides information on whether or not the state had a Office of faith-based initiatives (OFBCI) by the time of interview (2006) and the size of the grants held by the particular liaison by the time of interview. From these data, we construct three variables: FBL_{st} , which is an indicator variable equal to one from the year the state had their first faith-based liaison onwards, zero otherwise, $FBL_{st} \times OFBCI_s$, where $OFBCI_s$ is an indicator variable equal to one if the state had an OFBCI by 2006, and $FBL_{st} \times grant_s$, where $grant_s$ is the size of the grants of the liaison by 2006. We find that our measure of the faith-based initiatives predicts the implementation of liaisons, offices, and their grants (Table 3). The specification is equivalent to Equation (2) without β^{pre} ,

where the unit of observation is instead state-years and where we replace the dependent variable with the institutions and their grants.

Second, we check the timing of our main measure and the faith-based liaisons (Figure A6). The timing of the two is highly correlated. Further, for the vast majority of states (36 of 41 for which we have data on both), a faith-based initiative was implemented before a faith-based liaison, indicating that the faith-based initiative is the relevant treatment indicator.

Third, we use more detailed budget data available for 2006 from the White House official website.¹⁷ Since these data are only available for one year, results are cross-state correlations. We find that states that implemented the faith-based initiatives earlier or implemented more initiatives received more government funding for community- and faith-based organizations and through two of the largest initiatives– the Compassion Capital Fund and the Mentoring Children of Prisoners (Table A1). The results hold when accounting for regional fixed effects as a catch-all for broad state-differences.

Fourth, we document that our main results are robust to using instead the timing of implementation of the liaisons as treatment as part of our examination of mechanisms in Section 4, where we will also exploit additional information on the liaisons to elicit mechanisms.

[TABLE 3 ABOUT HERE.]

We take these results as reassuring in terms of the validity of our main measure of the timing of the faith-based initiatives.

3.7 Main results

To estimate the impact of the faith-based initiatives on church attendance, Figure 4 presents the main event study results of the DD and DDD analyses based on Equations (1) and (3) with church attendance as dependent variable. Baseline controls for gender, age, marital status, Protestant denomination are included throughout as well as state by treatment cohort and cohort by event time fixed effects in the DD estimates and state by religious strata by treatment cohort, cohort by religious strata by event time, and state by religious strata by event time fixed effects in the DDD estimates are included throughout. Panel (a) shows the DD estimates and panel (b) the DDD estimates. Panel (c) shows the DD estimates for Protestants and non-Protestants separately. For the aggregate treatment effects in a table, including controls consecutively, consult Table A3.

¹⁷<https://georgewbush-whitehouse.archives.gov/government/fbci/qr6.html>

Analysis of pre-trends. Crucially for our ability to estimate causal effects, none of the panels show signs of pre-trends, meaning that states do not differ systematically prior to treatment. For any omitted confounders to explain the relation between the faith-based initiatives and church attendance, they would have to correlate with church attendance and the roll-out of the faith-based initiatives, given the control variables and fixed effects. The lack of pre-trends indicates that church attendance does not vary in any systematic way prior to treatment, ruling out significance of such omitted confounders. If anything, states may be on a declining trend prior to treatment, compared to states that are never treated (although this is highly insignificant, panel a). Thus, if anything, our DD estimates can be regarded as lower-bound estimates.

This lack of pre-trends is consistent with the literature on the faith-based initiatives. In particular, there are a priori reasons to believe that the initiatives were not a response to population-level characteristics. First, religiosity of the initiators did not necessarily reflect religiosity of the population. In his description of the faith-based initiatives, [Carlson-Thies \(2001\)](#) observes that "Ironically, this legislative effort was not the result of pressure from the faith communities, nor did it receive much initial support from them." Religiosity of the Congress is also not associated with religiosity of the population. For instance, a 2017 study by [PewResearch \(2017\)](#) found that despite around a quarter of the population reporting religious unaffiliation, only one congressman identified as religiously unaffiliated. Second, the fact that these initiators focused on implementing the initiatives quietly to "not spark a bitter church-state separation debate" ([Sager, 2010](#), 42), illustrates the rather idiosyncratic nature of the initiatives. Third, even if implementation was a response to population level religiosity, it is not obvious whether implementation would be *more* or *less* likely in states with more religious populations. Intuitively, one could expect religious states to be more eager to embrace faith-based initiatives. However, in reality many faith-based organizations were reluctant to seek government funding out of fear of secularization ([Chaves, 1999](#); [Sager, 2010](#)). The director of the Washington Office of the Presbyterian Church (USA), for example, wrote that Charitable Choice "will harm religion's historic autonomy from government" and "cause religious institutions to be subject to government oversight and regulation" ([Chaves, 1999](#)).

[FIGURE 4 ABOUT HERE.]

We move on to interpret the impact of the initiatives on church attendance. Panel (a) of Figure 4 shows that the initiatives increased the overall level of church attendance only weakly (the aggregate post-effect is significant at the 10%-level). Panels (b) and (c) reveal that this effect is driven exclusively by rising church attendance among Protestants. Church attendance is unaffected for the non-Protestants, consistent with the idea that

the faith-based initiatives had a strong ideological component, which may not speak to the minds of people of different ideologies. Generally, laws that relate to ideological preferences may influence opponents differently than those who endorse the particular ideology (Abdelgadir and Fouka, 2020; Wheaton, 2022; Fouka, 2020). Further splitting the sample, we find that the rise in church attendance occurs exclusively among Evangelicals and African American Protestants, in line with the arguments of the reviewed literature that Evangelicals were among the initiators and African American churches were early to embrace the faith-based initiatives (Figure A12 and Table A4). The aggregate treatment effect of the faith-based initiatives on church attendance for Protestants is 0.086 (cf notes Figure 4). This means that having implemented one or more faith-based initiatives increased church attendance among Protestants by 8.6 percentage points, compared to the rest. This amounts to 20% of the average state-level church attendance or more than five times the average fall in church attendance during the period 1996-2012. Comparing the standardized betas (not shown), the impact size amounts to 70% of the difference in attendance rates between men and women. The effects are thus both statistically and economically important.

Post-treatment trajectory. Gauging the trajectory of the post effects in Figure 4, Protestants' church attendance rises in the first year after implementation, increases to the highest level 2-3 years after implementation, and stays nearly at this level throughout the period. This is consistent with the fact that the faith-based initiatives involved permanent institutional changes. Attempts to estimate additional post effects are challenged by the fact that the states in our never treated group probably get treated at some point after 2009, which will pull the estimate towards zero. We add two additional event-years in Figure A13, meaning that we estimate effects up to year 2014 for the latest-treated states. The impact on church attendance drops to become insignificant, which may be due to a wearing off of the impact of the initiatives or the fact that our data on the faith-based initiatives ends in 2009.

Non-linearities. The measure of church attendance is a categorical variable that increases in the intensity of church attendance. Estimating instead the impact of the initiatives on the separate church attendance categories reveals meaningful shifts between the categories. The initiatives pushed Protestant never- or annual churchgoers into attending monthly or weekly (Figure A14 and Tables A5-A6). The results are robust to using probit or logit instead of weighted-least squares (Tables A5-A6).

Contiguous county analysis. To further limit the set of potential omitted confounders, we restrict the sample to counties that neighbor a state border and compare counties in pairs on either side (Dube, Lester and Reich, 2010; Spenkuch and Toniatti, 2018). In this exercise, we thus compare respondents in arguably highly similar counties, only separated

by a state border. This is a highly restrictive exercise, since the GSS survey is far from conducted in all years in all counties. To increase the sample size, we add the not-yet-treated states to the comparison group. To estimate treatment effects, we pair respondents in treated counties with respondents in the comparison group (counties in states that never adopted the faith-based initiatives or implemented them after the considered comparison period). This restricts the sample to 28 county-pairs in 11 states, which makes it infeasible to estimate an event study specification as in Equation (1). Instead, we test for differences in church attendance with the following specifications, analogous to Equation (2) and (4) without β^{pre} and in a county-pair design:

$$y_{iknt} = \alpha_k + \delta_{nt} + \beta FBI_{kn} \times Post_{nt} + \mathbf{X}'_{iknt} \gamma + \varepsilon_{iknt} \quad (5)$$

$$y_{irknt} = \alpha_{rk} + \lambda_{kt} + \delta_{nrt} + \beta FBI_{kn} \times Post_{nt} \times \mathbf{1}(r = \text{Protestant})_{iknt} + \mathbf{X}'_{irknt} \gamma + \varepsilon_{irknt} \quad (6)$$

where y_{iknt} is the reported church attendance by a respondent i in county k of a county pair n in the calendar year t , and $r = \{\text{Protestant, non-Protestant}\}$ indicates the religious denomination in which it identifies. Since the cluster is fully nested in a higher level (state), we two-way cluster standard errors for state and county pair (Cameron, Gelbach and Miller, 2011). Table 4 presents the estimates of the two specifications. Even in this highly restricted setup, we confirm that church attendance among Protestants increased significantly more in the county treated with the faith-based initiatives, compared to its close neighbor. The effect sizes are similar to those documented for the full sample above. This rules out all confounders that vary smoothly across state borders.

[TABLE 4 ABOUT HERE.]

Alternative religiosity measures. A potential concern is that the rise in church attendance does not reflect an increase in peoples' *intrinsic* religiosity, ie., the intensity of their religious beliefs. In principle, these individuals may simply have gone to church to obtain social services. Having received the services, they depart without being influenced by the religious component of the visit. We proceed by estimating Equation (1) for the four additional measures of religious intensity available for at least 20,000 individuals in the GSS in Figure 5 (all five measure are highly correlated, cf correlation matrix in Table A8). Since most of these measures are available for much fewer individuals, we show results binned into periods of 4 years instead of 2 (the conclusion is unaltered if keeping the two-year bins). In order to have two pre-treatment and two post-treatment periods, we extend the pre-treatment period so that we regard an event study period encompassing 12 years before treatment to 7 years after treatment.

The measure available for the largest number of individuals (used in panel a), is respondents' self-expressed strength of religious affiliation, based on the question "Would you call yourself a strong [religious affiliation] or not a very strong [religious affiliation]?" Respondents can answer "no religion", "not very strong", "somewhat strong", or "strong". We bundle the answers "not very strong" and "somewhat strong" into one category, as we cannot rank them.¹⁸ We rescale the categorical values so that 0 indicates "no religion", 0.5 indicates "somewhat strong or not very strong", and 1 indicates "strong" religious affiliation. Panel (b) includes a measure based on answers to the question "Do you believe in an Afterlife?" We code yes as one and no as zero. Panel (c) includes a dummy equal to one if the respondent agrees that the Bible is the literal word of God (instead of being the inspired word of God or a book of Fables). Panel (d) includes a categorical variable measuring how often the respondent prays with possible answers ranging from never to several times a day. We rescale so that the categories take increments of 0.2 from 0 (indicating never) to 1 (several times a week). Conclusions are unaltered if using instead each of the individual categories of each measure as dependent variables.

[FIGURE 5 ABOUT HERE.]

Three of the four alternative measures of religiosity rise among Protestants after the implementation of the faith-based initiatives: Strength of religious affiliation, beliefs that the Bible is the word of God, and prayer intensity, whereas beliefs in an Afterlife is not affected. Consistent with previous research, the intensity of beliefs (strength of affiliation) seems to be more easily influenced by the faith-based initiatives, as opposed to whether or not individuals believe in an Afterlife. For instance, [Bentzen \(2019\)](#) documents that natural disasters strengthen the faith for those who already believe, but have no influence on non-believers. Belief in an Afterlife seems a particularly deep-rooted belief. The figures confirm the lack of pre-trends within 8 years before treatment. Afterlife beliefs and partly strength of affiliation may be slightly lower in treated states, indicating that treatment effects may be conservative.

3.8 Additional robustness

Generalizability. Figure [A15](#) presents binned added-variable plots for the aggregate DD specification in Equation (2) for the full sample and the sample split into Protestants and non-Protestants, where observations are binned into 100 equally-sized bins. The observations are scattered smoothly around the regression line, a sign of good model fit.

¹⁸If anything, we would have thought that "not very strong" indicated lower religious affiliation than "somewhat strong". However, the numerical category of "not very strong" is higher than that of "somewhat strong". Results are unchanged if we keep the original categories.

This means that the relation between the faith-based initiatives and church attendance is not driven by groups of observations or states. Thus, it is unsurprising that the initiatives increase churchgoing in all four major regions of the USA (Northeast, Midwest, West, South) and the Rust Belt (Table A9), although the impact is insignificant when restricting to the Rust Belt. DD effects are largest for the Northwest and West, whereas DDD effects are largest for the Midwest and South.

Controls. We show robustness of the results to the exclusion or inclusion of control variables (Table A3). In particular, results are not sensitive to the inclusion of the baseline controls for gender, marital status, age, and the Protestant dummy. The estimates on the baseline controls mimic what is found in the literature. For instance, we replicate the well-documented higher religiosity for women (Trzebiatowska and Bruce, 2012). Adding controls for income and education also does not impact results. Interestingly, both are positively associated with church attendance, although income is insignificant. We are not the first to show results contradicting the secularization hypothesis (Stark and Finke, 2000; Glaeser and Sacerdote, 2008; Iannaccone, 1998). Columns (9)-(12) further add controls for whether respondents identify themselves as Republican or African-American. While Republicans and African Americans attend church more often than the average, the impact of faith-based initiatives on church attendance remains unaltered.

Welfare reform. If the faith-based initiatives were implemented to reduce public spending and if changes in public welfare impacts changes in church attendance, this may bias our results. For instance, the first federal-level faith-based initiative (the Charitable Choice) was part of the 1996 Welfare reform. This is a concern for our analysis if all the following simultaneously hold: i) The state-level faith-based initiatives were implemented to cut down on public spending, ii) the initiatives thus coincided with a fall in public spending, and iii) if the rise in church attendance is a consequence of this potential reduction in public spending. We account for this in five distinct ways. First, our analysis includes state by treatment cohort fixed effects throughout, which capture any state-level confounders, constant or varying across treatment cohorts. This means that any confounder would have to change at the same time as the faith-based initiatives in our sample. Second, the DDD analysis additionally removes all state by event time factors, meaning that public spending and any other time-varying state-level confounder is fully accounted for. Third, we add a measure of state-level public spending as control in the DD specifications (columns 13-16 in Table A3). Public spending has no impact on church attendance and its inclusion does not change the impact of the faith-based initiatives on church attendance. Fourth, the impact is not larger for population groups that were potentially affected more than others by the 1996 welfare reform, such as foreign borns or the poor (Table A7). In particular, Hungerman (2005) found that US foreign borns were

more affected by the 1996 welfare reform. These checks show that public spending or the 1996 welfare reform are unlikely to explain results. This is consistent with the critique of the faith-based initiatives for not bringing the promised funding.

Further heterogeneity. Another concern is that Protestant denomination is proxying for another factor, which is the true driver of the differential (DDD) effects. To examine, we allow effects of the faith-based initiatives to vary with voting Republican, a dummy for above the 25th percentile income, and a dummy for above the 25th percentile education in two samples: The full sample and a sample restricted to Protestants (Table A7). We find no differential effects based on Republican voting or education, but interestingly, higher-income individuals are more likely to respond to the initiatives. This is consistent with the observation that Evangelicals from the elite were among the main initiators. Apparently, respondents of similar religion and income levels as the initiators respond more to the initiatives. The income effect vanishes, though, when restricting to Protestants, meaning that income does not explain the differential effect for Protestants.

Neighbor spillovers. Another concern is whether the effects on religious attendance is determined by an influx of more religious individuals from neighboring states instead of increased religiosity among the citizens living in the particular state. An effect driven by migration patterns would raise concerns whether the initiatives influenced the overall level of US religiosity. The testable implication is that religiosity should fall in response to the initiatives in neighboring states since the religious individuals move out of these states. We check in specifications mimicking Equation (2), where we add the interaction term $FBI_{sc} \times Post_{ct} \times Years_{sc}$ in Table A10, where $\#Years_{sc}$ equals the difference between implementation years between state s and their neighbor, $FirstYear_s - FirstYear_n$ if the neighbor implemented before state s , zero otherwise. We find that the interaction term is negative for Protestants, indicating that implementing a faith-based initiative has a smaller effect on Protestant church attendance when the neighboring state had already implemented an initiative. This means that, if anything, the initiatives *increase* religious attendance and beliefs in neighboring states.

4 Testing mechanisms

To test mechanisms, we exploit data on nonprofit organizations, churches and congregations, the types of faith-based initiatives, and the activities by the faith-based liaisons.

4.1 Increased number of faith-based organizations

We start by investigating whether the faith-based initiatives increased the number of faith-based nonprofits, a direct goal set by the initiators. The multiple mini grants and the ease on regulations for faith-based organizations might facilitate opening a faith-based organization and potentially prolong their survival time. This higher supply may explain the strengthened religiosity through either lower access costs to religion or a mechanism more like missionary work: Individuals consuming the service provided by the nonprofit organization are treated with religion as a by-product.

Our main database consists of nonprofit organizations in the US. We collected data on nonprofit organizations based in the US from the National Center for Charitable Statistics (NCCS) for the period 1990-2019. We start our period in 1990 due to a data break in this year. The NCCS provides information for the universe of nonprofit organizations in the US, except congregations or organizations with less than 25,000 USD in gross receipts.¹⁹ Since we are investigating the impact of the faith-based initiatives on faith-based nonprofit organizations, we restrict the sample to public charities. This means that we are considering operating public charities in the 501(c)(3) IRS subsection that are actively reporting receipts to maintain their tax-exempted status (results are robust to using the full sample of nonprofits, cf Figure A18).²⁰ Organizations enter the NCCS database when they file for nonprofit status. In some instances, the NCCS has gaps in filing years. We fill out these gaps by assuming that an organization exists if it filed in a previous and later year. We end up with an unbalanced panel of 321,563 nonprofit organizations (results are robust to examining a balanced sample at state-year level of the average number of faith-based organizations instead, cf Figure A20). Since the sample starts in 1990, we have a maximum of seven years in the pre-treatment period. We thus analyze event time windows of 7 pre-treatment years and 7 post-treatment years in the baseline specification. We prepare the data as described in Section 3.2, in the same way as we did with the GSS data. We are able to allocate nonprofit organizations to their state geocoding coordinates using their address, or in a combination of ZIP codes and county codes to the nearest feature available.

To measure whether or not an organization is faith-based, we combine two pieces of

¹⁹Even if we had data on these small organizations, we would not expect them to drive results. Research shows that most churches and small religious organizations do not have the capacity to receive and administer government grants to carry out social services (Chaves et al., 2004; Green, 2007). Through interviews, Sager (2010) found frustration among liaisons that meetings with small congregations did not yield results in terms of getting new religious groups into the social services fold. Nevertheless, we document effects on congregations at the state-level in Figure A29.

²⁰By focusing on the public charities, we remove nearly half of the sample. The excluded organizations are mainly 501(c)(4), 501(c)(5) and 501(c)(6), which are civic leagues, agricultural organizations, and business leagues, for instance.

information based on the classification of the organization and the name of the organization. The NCCS uses the National Taxonomy of Exempt Entities (NTEE) system to classify the nonprofit organizations by their activity, which are also followed by the IRS. The NTEE codes include 26 major groups, among which we use the *Religion-Related* category to identify religious organizations. This method classifies 5.7% of the organizations as religious.

The classification-based measure does not capture organizations that are built on religious values, but have another main purpose than religion, such as general fundraising or education. To include such organizations, we exploit information from the name of the organization to predict whether the organization is faith-based. We categorize an organization as faith-based if its' name contains religiously associated words. We identify these words from the excess frequency of the words in the names of organizations categorized as religious based on the NTEE categorization. For instance, the most frequent words in organizations that we categorize as religious are Christian, Ministry, Saint, and Church (cf. Figure 6). The list of top-50 words categorized as religious are provided in Figure A16. The results are robust to excluding the ten most frequent religious terms one at a time and altogether. This method categorizes 8.9 percent of the organizations as faith-based.

[FIGURE 6 ABOUT HERE.]

Not surprisingly, the measures based on names and the NCCS categories are highly correlated. For instance, the correlation coefficient between a dummy equal to one if the name contains one or more religious references and the religious categorization from the NTEEs is 0.55. In the sample, of the organizations that do not have a religious name, 94% are also not categorized as having a religious purpose. However, of the organizations that have a religious name, only 50% are categorized with a religious main purpose. This reflects that the names-based measure picks up organizations whose main purpose is not religious, at least not according to the NCCS. An example is the "Youth for Christ USA" (YFC) organization, who teach youth about Jesus in coffee shops and schools, present in 100 countries. Our names-based measure does not capture all religious organizations, though. Of the organizations categorized as religious based on their purpose, only 70% have a religious name. Our main measure therefore combines the two. We define an organization as religious if it is either categorized as religious according to the NTEE classification or has a name with one or more religious words. According to this measure, 13.6% of the organizations are faith-based.

We cannot distinguish whether organizations are Protestant or not, as rather few of the organizations have names with either distinctly Protestant or non-Protestant words.

Even if we had access to this information, it is not clear whether we would expect different effects for Protestant organizations, since the faith-based initiatives did not differentiate across faith.

Our baseline specification is equivalent to the DD specification in Equation (1), where i is a nonprofit organization treated in treatment cohort c and measured in event time $t \in [-7, 7]$. The dependent variable measures whether or not the particular organization is faith-based by an indicator variable equal to one if the organization is classified as religious according to the NTEE classification or has one or more religious words in their name. The baseline specification includes state by treatment cohort and treatment cohort by event time fixed effects and fixed effects for the length of the name of the organization. The parameter β_j captures the change in the share of religious nonprofit organizations after the implementation of the faith-based initiatives, relative to the change for the never treated organizations. We multiply by 100 to ease readability of the results.

Figure 7 shows the main results. Crucially, there seems to be no pre-trends; organizations do not differ systematically before treatment. However, after a faith-based initiative was implemented, the share of religious organizations rises up to 5 years after treatment, where-after it flattens out. By 7 years after treatment, the share of religious organizations had risen by 0.6 percentage points, amounting to 5% of the average share of faith-based organizations. The average post-treatment effect of 0.37 amounts to a third of the average rise in the share of faith-based organizations between 1996 and 2012.

[FIGURE 7 ABOUT HERE.]

The results are robust to using either of the definitions of a religious organization separately (Figure A17), using the full sample including private foundations, other organizations, and organizations with unknown classification (Figure A18), adding two years to the post-treatment period (Figure A19), or aggregating the data to the state-year level (Figure A20).

The results in Figure 7 may be due to an increase in the number of new faith-based organizations entering, fewer exiting, or a declining number of non-religious organizations. To examine these dynamics, we construct a balanced sample, where each organization is included throughout the period 1990-2012. To examine entry, we construct an indicator variable equal to one when the organization starts up, zero before. Likewise, exit is an indicator variable equal to one when the organization ceases to exist, zero before. With these variables as dependent variable, we estimate type (1) Equations, where β_j now reflects the impact of the faith-based initiatives on the share of organizations that started up or ceased to exist, respectively.

As a first step, we restrict the sample to the religious organizations in Figure 8. Again, crucially for our ability to estimate causal effects, we find no signs of pre-trends; prior to

treatment, the entry and exit rates do not differ systematically. After implementation of the faith-based initiatives, the number of new religious organizations entering rose significantly. In particular, by 7 years after treatment, the share of new religious organizations had risen by 5.3 percentage points as a consequence of the faith-based initiatives, which amounts to 15% of the average entry-rate. This means that the faith-based initiatives can explain 15% of the entry of all new faith-based organizations during the period. We find no effects on exit rates, except from the very end of the sample, which may simply be a mechanical cause of the many new organizations that entered.

[FIGURE 8 ABOUT HERE.]

Examining the non-religious organizations, we find no trend-break around the faith-based initiatives (Figure A23). The secular nonprofit organizations were on a rising trend before the faith-based initiatives and this trend continued after treatment. If anything, the upward trend among the secular nonprofits may be rising slightly after treatment, meaning that we can rule out a declining share of secular organizations as explanation for the rising share of faith-based organizations from Figure 7.

Alternative measure of religious supply. Since the dataset on nonprofit organizations does not include congregations, we use another dataset to check the impact on the supply of congregations. The Association of Religion Data Archives (ARDA) provides decadal data on the number of congregations and adherents by US states. We use the longitudinal dataset covering the years 1980, 1990, 2000, and 2010. The dataset provides information on multiple different congregations, which we aggregate into Catholics, Orthodox, Protestants, and Other religion.

We estimate DD estimations of type (1) and DDD estimations of type (3) with the number of congregations or adherents per capita as dependent variable. Estimates before treatment are calculated for event time $t \in [-20, -10)$ and estimates after treatment are calculated for event time $t \in [0, 10)$, both compared to event time $t \in [-10, -1]$. Hence, the time window goes from twenty years before the introduction of faith-based initiatives to nine years after. Results are shown in Figure A29. First, there seems to be no pre-trends (the blue dots represent the period before treatment). Next, the faith-based initiatives raised the number of adherents and congregations significantly by around 40 and 0.15 per 1,000 capita, respectively. Also, the rise in congregations occurred mainly among Protestants. This may be due to the fact that Protestant congregations take up a larger share of the total number of congregations or because the faith-based initiatives influenced Protestant congregations differentially. For adherents, we do not find statistical differences across Protestants and Catholics, which is consistent with the finding in the GSS data that the initiatives did not result in switching in or out of Protestant denominations.

In summary, our findings support the notion that the supply of religion has increased, as evidenced by the growing number of religious organizations.

4.2 Welfare

An alternative potential mechanism involves the poor going to church for material needs and becoming more religious as a by-product. To test, we note that if this was the main explanation, we would expect the following: First, the program laws – involving public welfare through the churches – should play a central role. Second, the effects should be driven by recipients of social welfare. We analyze each in turn.

We first exploit information on the types of initiatives; program laws, concrete laws, and symbolic laws. In this analysis, we examine how effects depend on the type of initiative implemented by constructing new treatment variables based on the type of initiative that was first implemented. This analysis is complicated by the differential timing of the initiatives with concrete laws preceding program laws, for instance (Figure A7). Thus, analyzing the program laws by a simple dummy for the year of the first program law would be violated by pre-trends caused by the concrete laws. Instead, we compare states whose first initiative was a program law to never-treated states only, excluding states whose first initiative was a concrete or symbolic law. We do so in panel c of Figure 9, showing the DDD estimates of the rise in church attendance among Protestants. Likewise for concrete laws in panel a and symbolic laws in panel b. Again, we find no signs of pre-trends, except for a marginally positive effect in $t \in [-6, -5]$ for the program laws, potentially contaminated by the fact that most program laws occur at the same time as concrete laws. All three types of laws raise church attendance, but most significantly the concrete laws. When analyzing all three types simultaneously, we confirm the stronger effects of the concrete laws, followed by the program laws, and find no significant effects of the symbolic laws (Table A12).

[FIGURE 9 ABOUT HERE.]

Next, if effects were driven by the poor receiving welfare by the churches, we would expect effects to be larger for the poor. We do not find such effects (Table A7). If anything, effects are larger for individuals with higher incomes. Thus, results are not driven by the typical welfare recipients.

The lack of explanatory power of the program laws or heterogeneities with respect to income is in line with the critique that the initiatives did not contribute with much additional welfare. These results are also consistent with arguments by other scholars emphasizing that the real impact of the faith-based initiatives was strengthened church-state relations (Sager, 2010; Chaves and Wineburg, 2010; Wineburg, 2007).

4.3 Faith-based liaisons

As a last examination of mechanisms, we exploit information on the activities of the faith-based liaisons – the central persons employed in state governments responsible for implementing the faith-based initiatives. We examine whether church attendance rises after the implementation of a faith-based liaison, the differential effects of the liaisons based on the size of their budgets, and we exploit information on the activities of the liaisons collected by Sager (2010) through interviews. This analysis is complicated by the fact that the faith-based liaisons most often started operating after the implementation of the first faith-based initiative (Figure A6). If the initiatives influenced church attendance independently of the liaisons, this would create pre-trends in an analysis with the faith-based liaisons as independent variable and church attendance as dependent variable. Indeed, we find positive pre-trends in these analyses, particularly for the Protestants (panels a, c, and e of Figure A25). Interestingly, we find no pre-trends for the grants (panels b, d, and f). Generally, we find slightly larger post-effects of the liaisons than when accounting for the size of their grants, again consistent with the complaints of lack of funds by the liaisons.

Next, we exploit information collected by Sager (2010) on the activities of the faith-based liaisons. In interviews with 33 liaisons in 2006, Sager (2010) examined which activities they engaged in. Most liaisons engaged in creating websites to inform the faith-based organizations about grant opportunities (28 of the 33 liaisons) and facilitating networks between state agencies and faith-based organizations (27). In addition, 22 were connected to the White House (12 were in frequent contact), 21 engaged in creating conferences for faith-based organizations, 20 had an office in the state directly under the governor, 18 had created advisory boards to focus on faith-based organizations, 16 had created technical assistance seminars or grant writing programs for faith-based organizations, 11 had engaged in start-up funds for faith-based organizations, 6 had an office in a state agency. In Table A14, we show difference-in-differences and triple difference estimates of the effect of the presence or absence of a specific activity in a faith-based liaison on church attendance of GSS respondents, compared to individuals in states without the presence of faith-based liaisons and relative to the year before the liaisons introduction. Overall, church attendance particularly rose in states where liaisons recruited volunteers for programs, had frequent contacts with the White House, and installed startup funds for FBOs. These activities all seem beneficial for starting up new faith-based organizations and thus support the finding of a rising number of faith-based start-ups.

To sum up, we find that the faith-based initiatives increased the supply of faith-based organizations and congregations. This is not entirely surprising in light of the stated mission of the initiatives; to increase the number of faith-based nonprofit organizations

and generally improve conditions for these organizations. Thus, our results simply provide support for the success of this mission. According to standard models of economics of religion, this higher supply would imply strengthened religiosity, consistent with our findings. We further find that the higher supply is driven by new organizations being established as a consequence of the faith-based initiatives and to a larger extent in states where liaisons engaged in recruitment groups for new initiatives, dealt with start-up funds for faith-based organizations, and were in frequent contact with the White House.

5 Social Views and Outcomes

The faith-based initiatives seem to have bolstered the role of religion among Americans. If this impact was sufficiently strong, we would expect a strengthening of certain social views associated with religious beliefs. More generally, social movements often work to re-frame debates and shape perceptions, especially if they manage to penetrate government (Andrews, 2001; Giugni, McAdam and Tilly, 1999; Jenkins and Eckert, 1986; McCammon et al., 2001; Piven and Cloward, 2012; Sager, 2010; Tarrow, 2011). Moreover, the implementers of the faith-based initiatives may have had a more general agenda of bringing Christian principles back into American life (Lindsay, 2007). These conservative religious groups view faith-based organizations as representing values that have been displaced in the modern world (Sager, 2010, 137). The rise in the number of faith-based organizations may thus have further reinforced social views associated with these religious groups.

To examine, we focus on a set of views that are particularly pronounced among Evangelicals. Restricting the choice set to social views documented in the GSS for at least 20,000 respondents, we end up with a set of social views against homosexuality, modern gender roles, science, abortion, and preferences for conservatism and prayer in public schools, all of which are more pronounced among Evangelicals on average, compared to the rest of the population (Table A15).²¹ These values are also more pronounced among the broader group of Protestants. Two of these views align with key policy areas expressed as particularly important among Evangelicals: Views against homosexuals and abortion (Lindsay, 2007).

We measure views against homosexuality using a categorical variable reflecting answers to the question concerning whether homosexual sex relations are "not wrong at all", "sometimes wrong", "almost always wrong", and "always wrong" (we scale the GSS variable *homosex* to take values 0, 0.33, 0.66, and 1). We measure views against working women by constructing a dummy variable equal to one if respondents disapprove of

²¹The 20,000 are set as a bar to limit our choice set. Since the GSS holds more questions on social values than on religiosity, we set the bar higher for the social values, compared to the religiosity measures.

working women in two of four of the following questions: "Do you approve or disapprove of a married woman earning money in business or industry if she has a husband capable of supporting her?", "It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family", "Tell me if you agree or disagree with this statement: Most men are better suited emotionally for politics than are most women," and "If your party nominated a woman for President, would you vote for her if she were qualified for the job?" (cf. Appendix B.3).²² We measure views against science using a dummy variable taking the value one if the respondent has "only some" or "hardly any" confidence in science and zero if the respondent has "a great deal" of confidence in science.²³ Views against abortion is measured by a dummy equal to one if the respondent expressed views against abortion for any of the reasons included in the survey, such as the woman was raped, is too poor to take care of the child, is unmarried, has serious health issues, does not want more children, or if the child is likely to have a serious defect. Politically conservative views are measured using a dummy variable equal to one if the respondent answered that they view themselves as conservative or extremely conservative, zero otherwise. Views supporting bible prayer in schools is based on a dummy variable equal to one if the respondent disapproves of a US Supreme Court ruling stating that public schools cannot require Bible reading.

For each of the values, we estimate DD equations of type (1) and DDD equations of type (3). The inclusion of state by treatment cohort and treatment cohort by event time fixed effects in the DD specifications eliminates variation in *levels* of unobservables across states, changes in unobservables across states and treatment cohorts, and general trends in the variables. The DDD specification additionally includes state by event time fixed effects, which additionally removes any variation in unobservables at the state-event time level. For instance, this takes care of the concern that states that are already more (or less) conservative or on a more conservative-trending path would be more likely to implement the initiatives. Since these data are available for much fewer individuals, we aggregate event times into brackets of four years, mimicking our analysis of alternative measures of religiosity, which also suffers from few observations. For most of the periods, this amounts to two years of GSS data.

²²There is large variation in responses to these questions. For instance, as many as 40% of respondents agree or strongly agree with the statement "It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family." On the other hand, 22% disapprove of working women and 12.4% would not vote for a female President candidate. Given these idiosyncrasies, we judge that a combination of responses reveal preferences for traditional gender roles better than the individual responses.

²³We find it infeasible to rank the two response categories "hardly any" and "only some" and we chose to aggregate them into one category. The results are unchanged if we keep the ranking from the survey, categorizing "hardly any" confidence as having less confidence in science, compared to "only some".

We find no signs of pre-trends in the DD specifications, except for views against women which has a large positive pre-trend and views against homosexuals which has a small negative pre-trend (Figure A27). This means that we should be cautious interpreting the post effects for these views.

Figure 10 shows the main DDD results. Both of the pre-trends cancel out, meaning that Protestants and non-Protestants were trending in similar ways before treatment. We find no signs of pre-trends for any of the views except that social views against science have a negative pre-trend in the DDD estimates, indicating that these results may be downward biased. Gauging the treatment effects, none of the social views are influenced in the period immediately after treatment, consistent with a slower impact than the effects on church attendance and the supply of faith-based organizations. However, four of the six views are influenced significantly in the last period 4-7 years after treatment. Three become more conservative; views against homosexuals and abortion and general conservative views. For instance, self-reported conservative views strengthen by 5.8 percentage points more for Protestants compared to the rest, which amounts to a third of the average share of conservatives. Interestingly, social views towards women become more progressive.

[FIGURE 10 ABOUT HERE.]

To examine whether these changes had real implications, we proceed to identify whether the change in social views was accompanied by a change in associated outcomes. For two of the views – skepticism towards homosexuality and traditional gender roles – we found direct measurable outcomes. During the period from 1998 to 2015, 31 states changed their constitutions to ban gay marriages, prior to *Obergefell v. Hodges* (data description in Section B.7 of the Appendix). We construct a dummy variable equal to one in the year the state implemented a constitutional ban on gay marriage and thereafter, zero otherwise. Using this dummy as dependent variable, we estimate DD estimates in type (1) Equations. These are presented in panel (a) of Figure 11. Prior to treatment with the faith-based initiatives, states were similar in terms of the likelihood of having banned gay marriages (*i.e.*, no pre-trends), but after treatment, we find higher likelihood of bans on gay marriages in treated states. This is consistent with the finding of strengthened social views against homosexuals in Figure 10.

To examine gender gaps, we use data from IPUMS on education and wage incomes for men and women. We compute gaps in wages and education levels in panels (b) and (c) of Figure 11 (results are robust to using gaps expressed as percentages of male wages or education, respectively, Figure A28). While there seem to be some breaks in the data for several of the education categories, we find no data breaks when observing the share of individuals with four years of college or more. This is therefore our preferred measure of

education and the one shown in panel (c). Before the faith-based initiatives, we find no significant differences between treatment group and control group in terms of gender gaps in wages or education (*i.e.*, no pre-trends). After treatment, though, gender gaps in wages and education start rising among the treated states, compared to the never treated states. These differences become significant around 2-3 years after treatment and remain high throughout the period. Although these DD results are not directly comparable to the DDD results of Figure 10, they may seem inconsistent with the finding of more liberal views on gender roles. We are not the first to document such inconsistencies between self-reported views and actual behavior. Although evidence is mixed, some research finds that social desirability bias is larger among the religious, who may have a stronger self-regard of morality (Regnerus and Uecker, 2007; Batson, Naifeh and Pate, 1978).

[FIGURE 11 ABOUT HERE.]

We conclude that social views aligning with policy areas central to Evangelicals strengthened in the aftermath of the faith-based initiatives: Views against abortion and homosexuals and general conservative views. While views on gender roles became more inclusive, actual gender gaps in education and wages increased.

6 Effect sizes

To grasp the size of the impact of the faith-based initiatives, we use insights from the persuasion literature (DellaVigna and Kaplan, 2007). Since church attendance rates were already high before the faith-based initiatives, a large share of treatment recipients were already persuaded. The persuasion rate measures persuasion among those who were not already convinced and refers to the proportion of individuals who change their attitudes, beliefs, or behaviors as a result of a persuasive message compared to those who were not exposed to the message, in this case the faith-based initiatives. In a setting with a binary behavioral outcome, the persuasion rate is computed as

$$f = 100 \times \frac{y_T - y_C}{e_T - e_C} \frac{1}{1 - y_0}, \quad (7)$$

which captures the effect of the persuasion treatment on the relevant behavior ($y_T - y_C$), adjusting for exposure to the message ($e_T - e_C$) and for the size of the population left to be convinced ($1 - y_0$) (DellaVigna and Gentzkow, 2010). To compare with a list of 24 persuasion rates computed by DellaVigna and Gentzkow (2010) based on 17 of the best research papers on persuasion, we consider binary outcomes. We focus on monthly or more frequent attendance, since the rise in church attendance was driven by rising weekly

and monthly attendance (Figure A14 and Tables A5-A6). The share of monthly or more frequent church attenders rose by 3.1 percentage points in the full population in response to the faith-based initiatives, relative to the control group ($y_T - y_C = 0.115$). After 1996, 68% of the respondents lived in state-years that had implemented at least one faith-based initiative ($e_T - e_C = 0.68$). Prior to the initiatives, 50% attended church monthly or more often ($1 - y_0 = 0.5$). The implied persuasion rate is $100 \times (0.031) / (0.68 \times 0.5) = 9\%$, which means that 9% of Americans who did not already attend church monthly or more often were persuaded by the treatment. This rate belongs among the 45% highest persuasion rates in the list by DellaVigna and Gentzkow (2010) and is at par with the persuasion rate of a randomized fund-raising campaign (List and Lucking-Reiley, 2002). While this is rather high, we note that the treatment period of 7 years of the faith-based initiatives is longer than most of the papers.

To evaluate whether the change in faith-based organizations can generate these sizable persuasion rates, we compute the persuasion rate among the nonprofit organizations, which amounts to $100 \times (0.00366) / (0.8 \times 0.89) = 0.5\%$. This is a rather low rate (among the 10% lowest persuasion rates in the DellaVigna-Gentzkow ranking). Nevertheless, the following - arguably, very crude - back-of-the-envelope calculation illustrates that this may amount to large total numbers of potentially treated individuals. As there are 321,563 million organizations, this would amount to an additional 1608 faith-based organizations.²⁴ If the size of the average faith-based organization in the NCCS data is the same as that of the average congregation, they would each serve 2390 persons yearly.²⁵ This implies that an additional 3.8 million individuals would potentially be served by a faith-based organization yearly. Within the sample, the average state is treated for three years after their first faith-based initiative, amounting to an average of 11.5 million individuals. Among the current 140 million Protestant Americans, these numbers indicate that 8.2% could have been associated with one of the new faith-based organizations. While indeed very crude, these numbers may contribute to our understanding of the large persuasion rates resulting from the faith-based initiatives.

²⁴We get a very similar number if we instead compute the number of new faith-based organizations based on the results in Figure 8: There are 28,620 faith-based organizations in our sample. 10,275 of these were established within our sampling period. According to our estimates, 15% of these entered due to the faith-based initiatives.

²⁵Chaves (2021). We presume the number is yearly. However, this is not directly clear from the data. The survey question in the Chaves (2021) dataset reads "How many persons would you say are associated in any way with the religious life of this congregation – counting both adults and children, counting both regular and irregular participants, counting both official or registered members and also participating nonmembers. What is the total number of persons associated with this congregation to any degree at all?"

7 Conclusion

The faith-based initiatives were a conservative religious movement aiming to strengthen the position of religion in the US. Proponents argued that faith-based organizations provide better for the needy than the secular state, while opponents feared the initiatives implicitly allowed faith-based organizations to proselytize for government funds. The initiatives seem to have altered the beliefs, practices, and social views of the American population towards stronger religious beliefs and associated conservative-religious social views.

We can understand these effects through the main purposes of the initiatives; to improve conditions for faith-based organizations and increase their numbers. The initiatives reduced regulatory burdens of faith-based organizations, facilitated their access to funding, encouraged government partnerships with them for social service delivery, and improved overall government engagement with faith-based organizations. Perhaps not surprisingly, we find that the initiatives increased the number of new faith-based organizations. In addition to standard religious market mechanisms, the rising number of faith-based organizations may also have strengthened the role of religion through proselytizing as argued by the opponents.

The general trend in the USA is secularization, equality between the sexes, and generally modernized social views. However, this average trend covers rising polarization. [Putnam and Campbell \(2012\)](#) document a general polarization between the religiously affiliated and the unaffiliated, arguing that a growing number of Americans leave religion due to an unease with the association between religion and conservative politics. The faith-based initiatives strengthened religiosity and conservative social views among the treated, but religiosity continued to fall and social views modernized among the untreated. The faith-based initiatives and the associated movement may thus help explain this development towards rising polarization.

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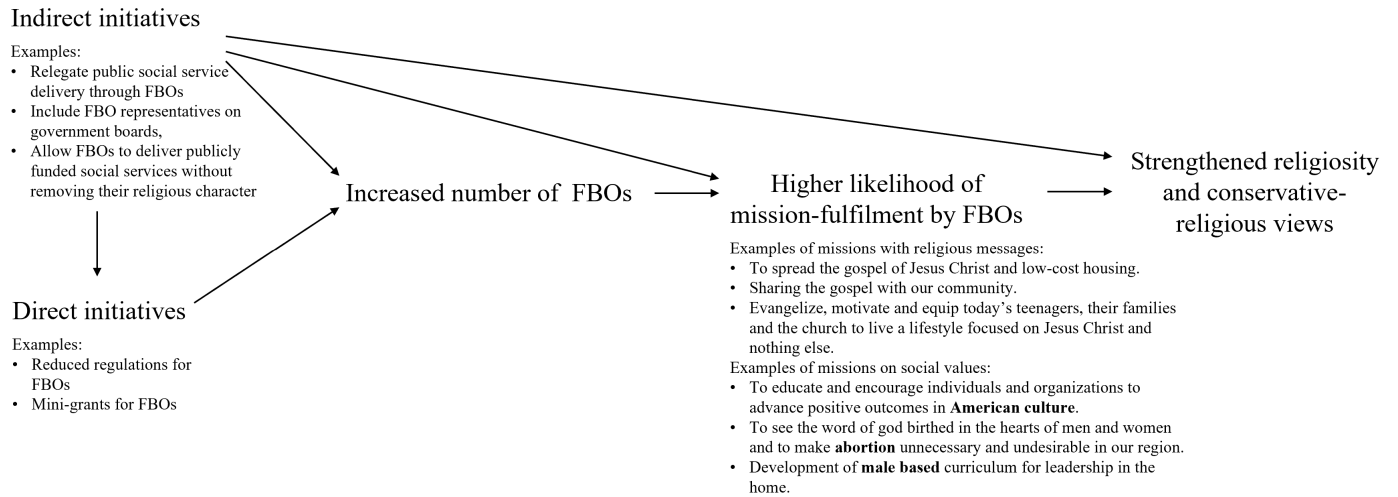
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Figures

Figure 1: Overview of testable predictions



Notes: Overview of testable predictions of the impact of faith-based initiatives on religiosity and conservative-religious views. The missions of the nonprofits are described in more detail in Table 1.

(a) Number of states with a faith-based initiative

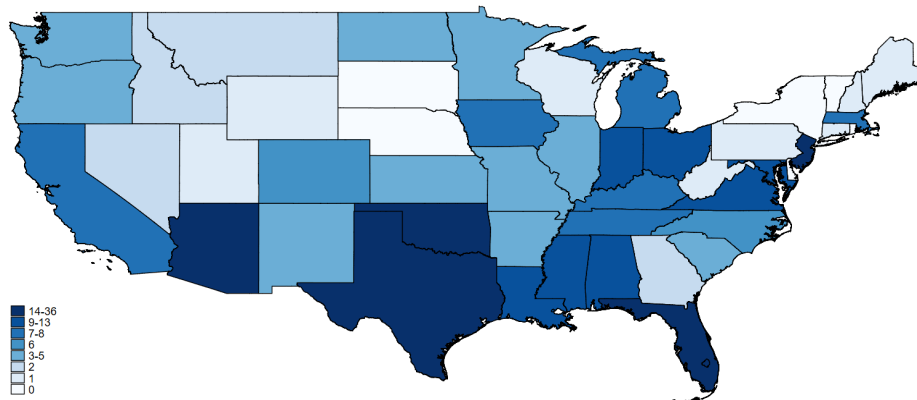
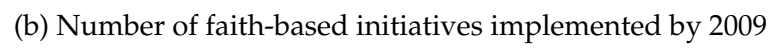
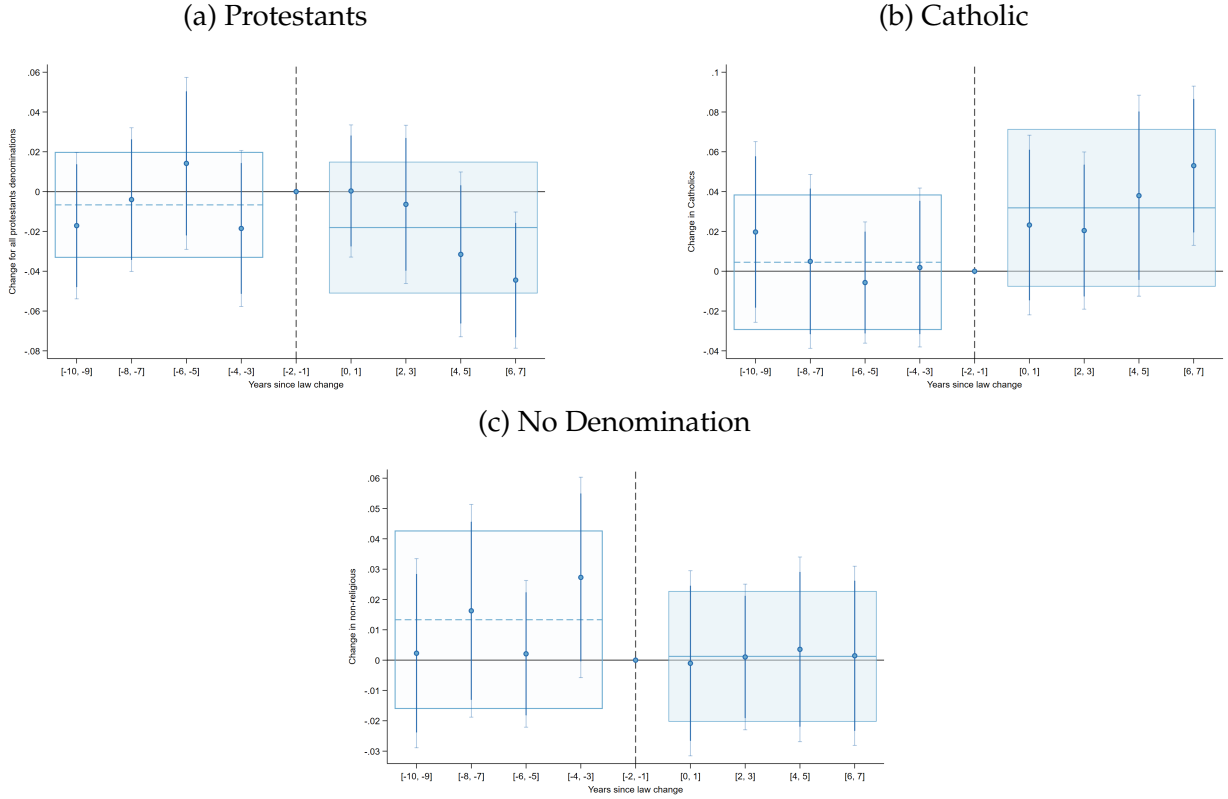


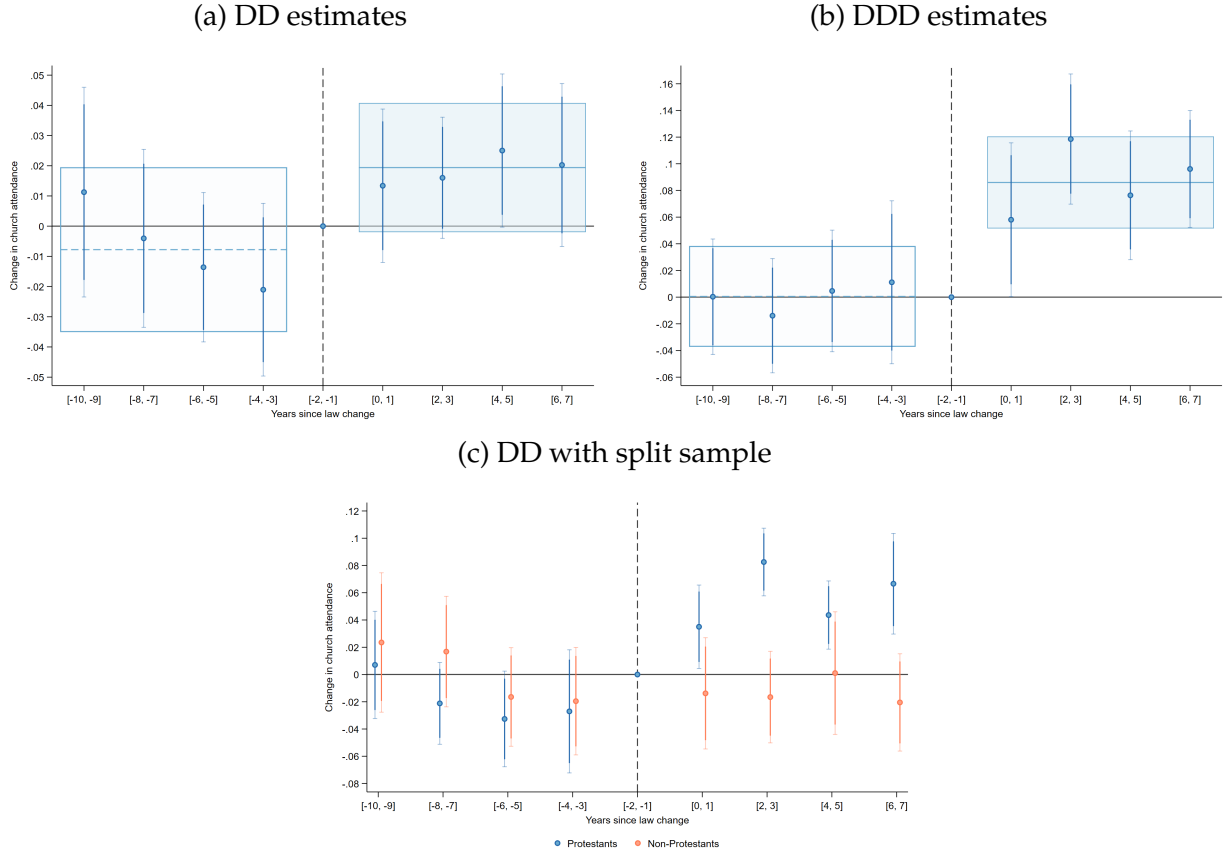
Figure 3: The impact of faith-based initiatives on the size of religious groups



Notes: Regression estimates for the effect of faith-based initiative on the likelihood that respondents from the General Social Survey (GSS) identify with a given religious denomination using our main sample as in Figure 4a. Each panel presents the difference-in-differences estimates in Equation (1) and the aggregate interactions in Equation (2) where the outcome is an indicator variable equal to one if the respondent identifies as Protestant in panel (a), Catholic in panel (b) or with no religious denomination in panel (c), and zero otherwise. The coefficients of interest represent the change in the likelihood of identifying with the indicated religious denomination, relative to the time period before the introduction of faith-based initiatives. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme described in [Wing, Freedman and Hollingsworth \(2024\)](#). Coefficients estimates on the event time interactions are plotted as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Coefficients estimates on the pre-treatment period and post-period aggregate interactions are indicated as lines, with their 95% confidence intervals shown as boxes. Standard errors are clustered at the state level.

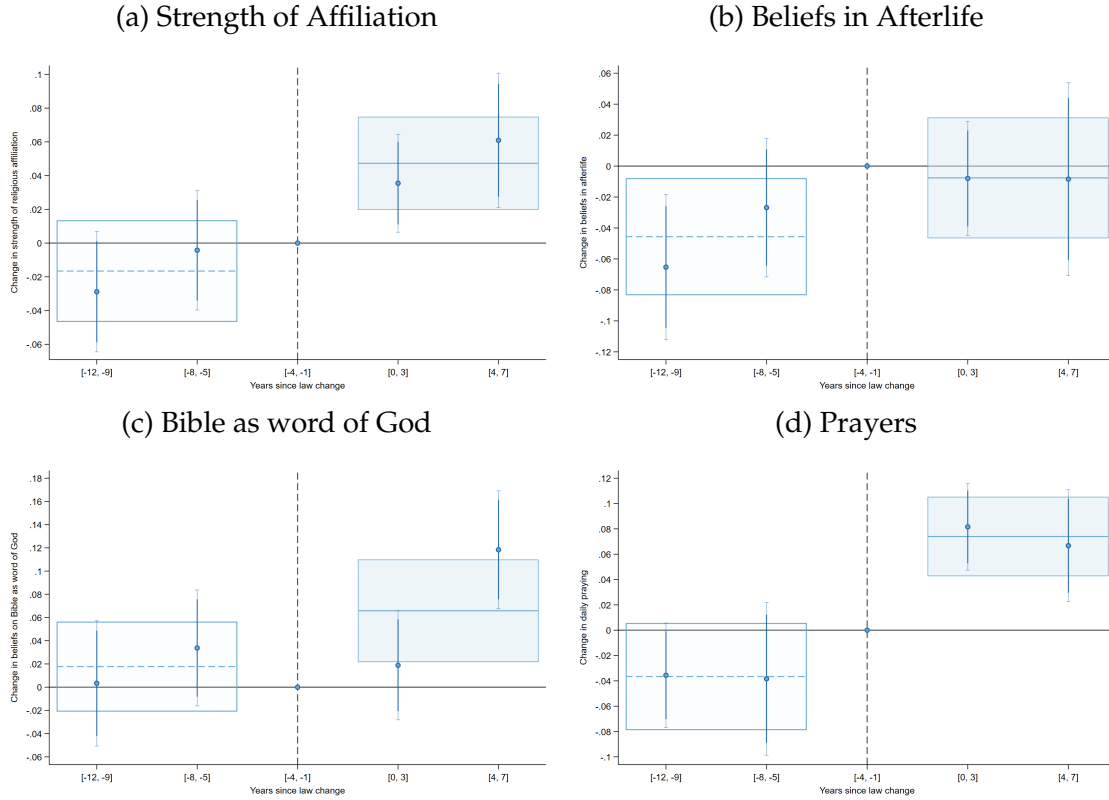
Result: The faith-based initiatives did not change the composition of religious groups, except for the last period 6-7 years after treatment, where some Protestants may have shifted to become Catholics. This means that we should be careful interpreting the last event period when moving forward.

Figure 4: The impact of the faith-based initiatives on church attendance



Notes: Regression estimates of the effect of faith-based initiatives on church attendance at the individual level using waves from the General Social Survey (GSS). We assemble the data as described in Section 3.2 using a fixed time window of ten years before and seven years after the implementation of a faith-based initiative and individuals from never-treated states as comparison group. The event timing is binned in two event time periods. The outcome variable is the frequency of religious attendance, rescaled between zero and one as explained in Section 3.1. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme described in Wing, Freedman and Hollingsworth (2024). Panel (a) presents the difference-in-differences estimates in Equation (1) and the aggregate interactions in Equation (2), representing the change in church attendance of individuals in states where a faith-based initiative was implemented, relative to individuals in states without the presence of faith-based initiatives. Individual-by-state-by-stack observations: 45,315; Average church attendance: 0.422; Change in church attendance post faith-based initiatives: -0.015. Aggregate post-treatment effect: 0.019 (*std. err.* = 0.011, $t = 1.828$). Panel (b) presents the triple difference estimates in Equation (3) and the aggregate interactions in Equation (4), describing the change in church attendance of Protestants in states that experienced a faith-based initiative compared to Protestants in states without the presence of faith-based initiatives, relative to equivalent change for non-Protestants. Average share of Protestants: 0.427; Aggregate post-treatment effect: 0.086 (*std. err.* = 0.017, $t = 5.022$). Panel (c) presents the difference-in-differences estimates in Equation (1), separately for Protestants and non-Protestants, illustrating the change in church attendance of individuals in states implementing a faith-based initiative, relative to individuals in the same religious group and in states not implementing it. **Protestants** – Average church attendance: 0.482; Change in church attendance post faith-based initiatives: 0.011. Aggregate post-treatment effect: 0.057 (*std. err.* = 0.011, $t = 4.959$). **Non-Protestants** – Average church attendance: 0.374; Change in church attendance post faith-based initiatives: -0.028. Aggregate post-treatment effect: -0.012 (*std. err.* = 0.016, $t = -0.793$). Coefficients estimates on the event time interactions are plotted as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Boxes: Coefficients estimates on the pre-treatment period and post-treatment period aggregate interactions are indicated as horizontal lines, with their 95% confidence intervals shown as boxes. Standard errors are clustered at the state level, since that is the level of our variation. **Result:** The faith-based initiatives raised churchgoing for Protestants. States did not differ systematically in terms of average church attendance prior to implementation. Church attendance of non-Protestants was unchanged.

Figure 5: The impact of the faith-based initiatives: alternative measures of religiosity



Notes: Regression estimates of the impact of the faith-based initiatives on religiosity measured using alternative measures than church attendance at individual level. Each panel presents separate triple difference estimates of the coefficients in Equation (3) and the aggregate interactions in Equation (4), where the data are assembled as described in Section 3.2 using a fixed time window of twelve years before and seven years after the implementation of a faith-based initiative and individuals from never-treated states as comparison group. While the event timing is binned in two event time periods, we estimate more aggregate coefficients pooling together two event time bins due to data restrictions. We express coefficients relative to the average change $\tau = [-4, -1]$ between one year and four years before the introduction of the faith-based initiatives. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme proposed by [Wing, Freedman and Hollingsworth \(2024\)](#). Panel (a): **Strength of affiliation** – Observations: 49,286; Mean dep. var.: 0.575; Average share of Protestants: 0.428; Change in dep. var. post faith-based initiatives: -0.026. Aggregate post-treatment effect: 0.047 (*std. err.* = 0.014, $t = 3.453$). Panel (b): **Beliefs in afterlife** – Observations: 32,516; Mean dep. var.: 0.753; Average share of Protestants: 0.444; Change in dep. var. post faith-based initiatives: 0.022. Aggregate post-treatment effect: -0.008 (*std. err.* = 0.019, $t = -0.395$). Panel (c): **Bible as the word of God** – Observations: 34,729; Mean dep. var.: 0.274; Average share of Protestants: 0.435; Change in dep. var. post faith-based initiatives: -0.020. Aggregate post-treatment effect: 0.066 (*std. err.* = 0.022, $t = 3.003$). Panel (d): **Prayers** – Observations: 28,755; Mean dep. var.: 0.606; Average share of Protestants: 0.429; Change in dep. var. post faith-based initiatives: 0.002. Aggregate post-treatment effect: 0.074 (*std. err.* = 0.016, $t = 4.754$). Coefficients estimates on the event time interactions are plotted as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Boxes: Coefficients estimates on the pre-treatment period and post-treatment period aggregate interactions are indicated as horizontal lines, with their 95% confidence intervals shown as boxes. Standard errors are clustered at the state level.

Result: Three of four alternative measures of religiosity also rise after the faith-based initiatives. States do not differ in terms of these measures prior to implementation, except that beliefs in Afterlife may have been somewhat lower 9-12 years before treatment.

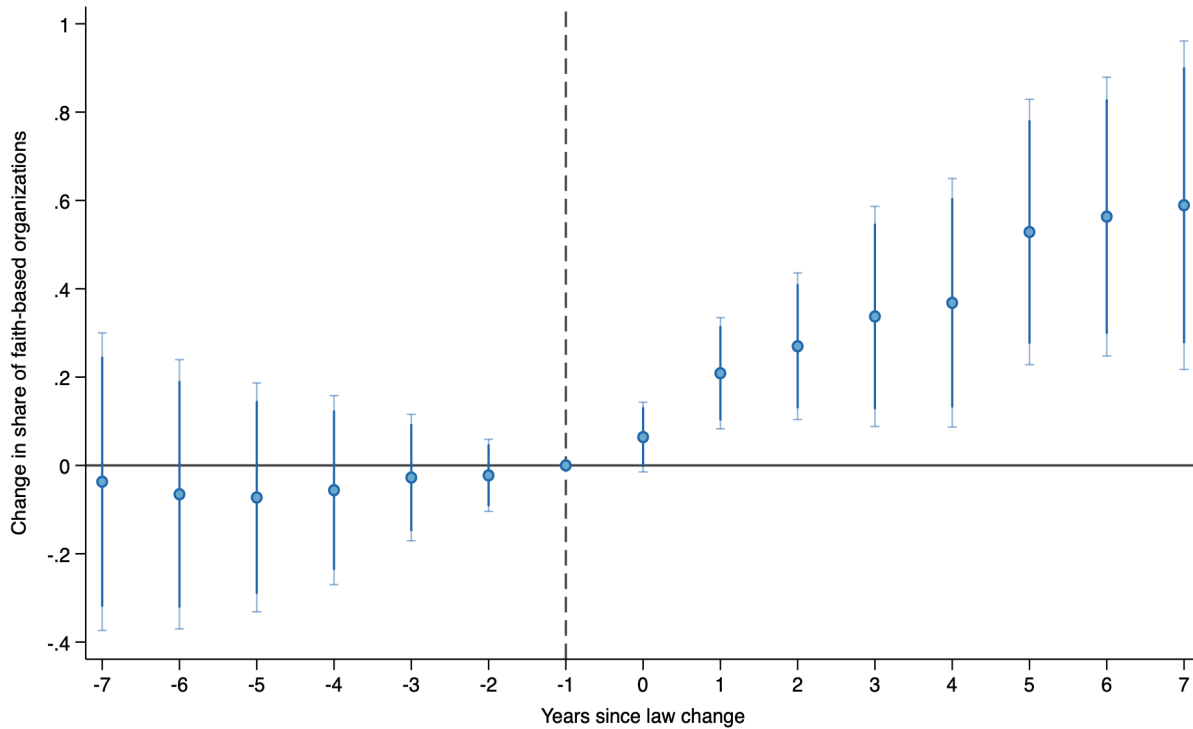
Figure 6: Composition of religious words in the names of nonprofit organizations



Notes: The wordcloud reports the most frequent religious words that we pick up in the corpus of the unique names of the nonprofit organizations in the collected sample after pre-processing, tokenization, and stemming of the strings, based on our bag-of-words of religious terms. The colours and the size of the words illustrate their frequency, indicated for the top term (in red), the next top five terms (in orange), the remaining top ten terms (in blue), the leftover top twenty terms (in light blue), and all other terms (in lighter blue).

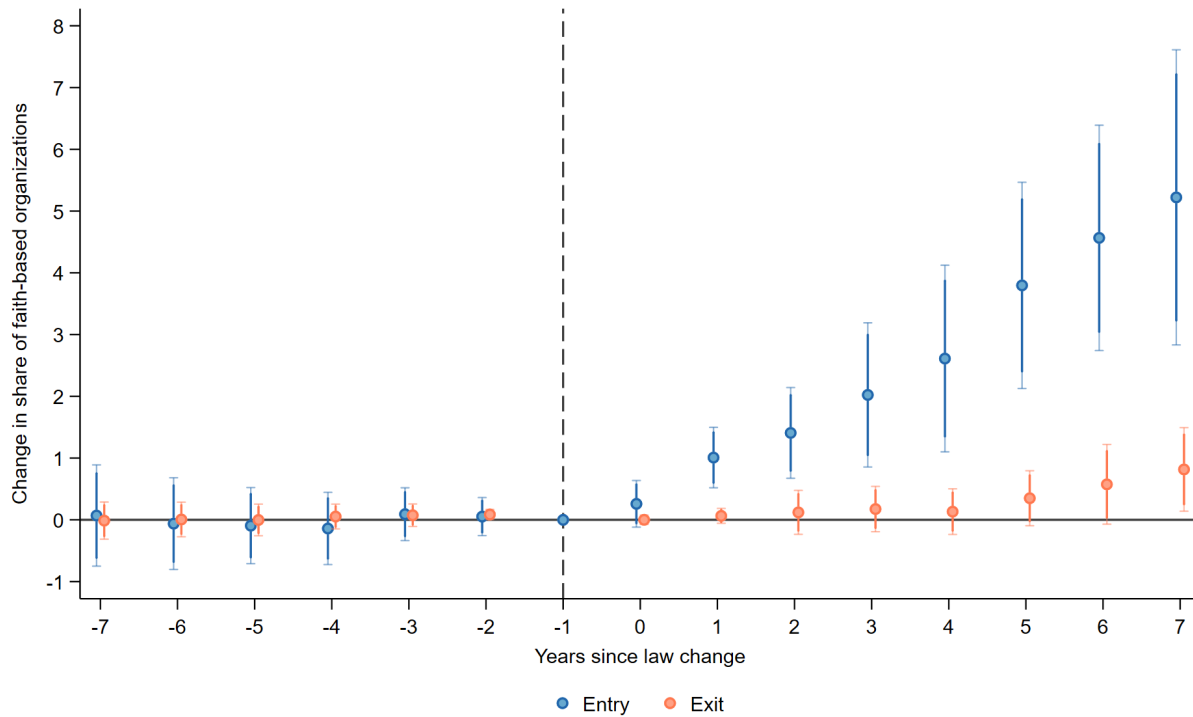
Result: The majority of the faith-based organizations were Christian ministries, missions, and churches.

Figure 7: The impact of faith-based initiatives on the presence of faith-based organizations



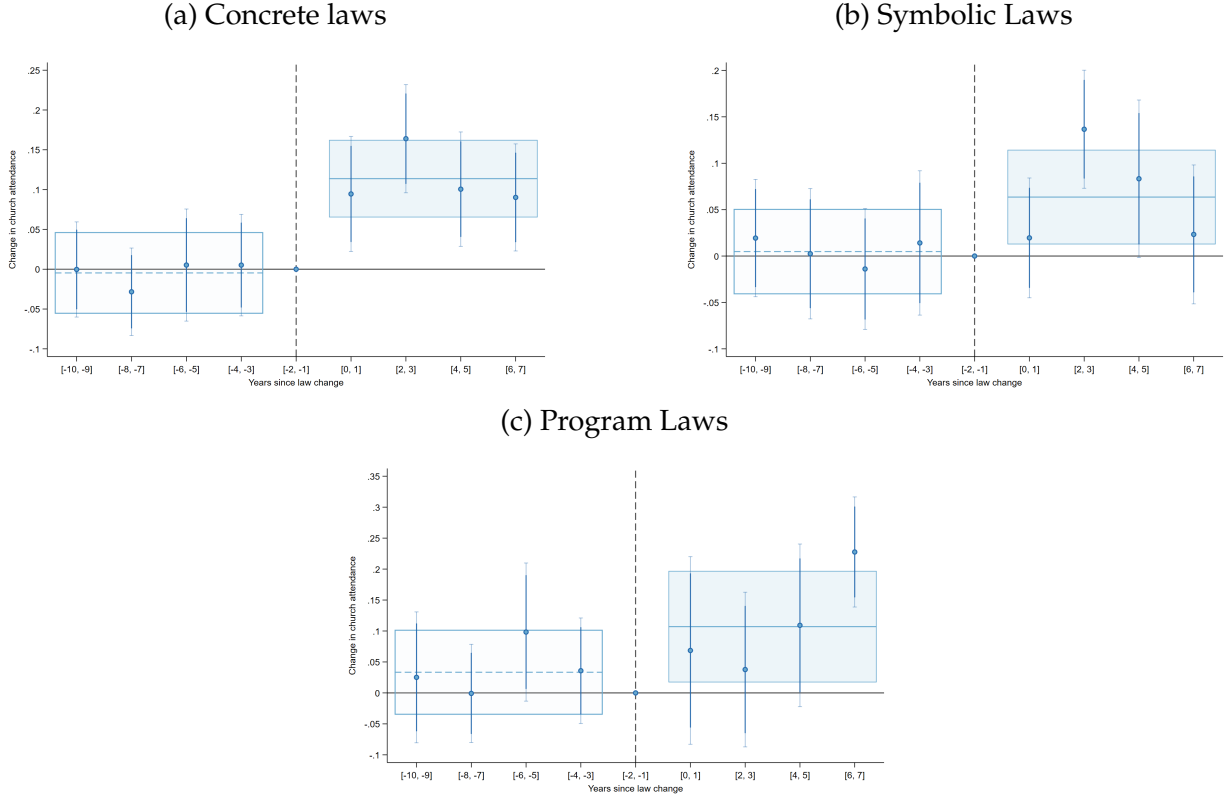
Notes: Regression estimates of the effect of faith-based initiatives on the presence of faith-based organizations. We present results of the difference-in-differences estimates of a version of Equation 1 at nonprofit organization level where the outcome is an indicator variable equal to one (rescaled to one hundred) if the nonprofit organization is categorized as a faith-based organization either by its NTEE code or by the presence of religious words in its name as described in Section 4.1, and zero otherwise. Sample: 7,092,224 organization-by-stack-by-year observations. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme proposed by Wing, Freedman and Hollingsworth (2024). We include fixed effects for the number of tokens in the organization’s name by treatment cohort. The coefficients of interest are interactions between an indicator variable flagging the occurrence of faith-based initiatives in the state of the nonprofit organization and event time dummies, relative to the omitted interaction in the event time before the introduction of the faith-based initiative within a treatment cohort, and they represent the differential probability (in percentage points) that nonprofit organizations from states implementing a faith-based initiative are faith-based organizations, relative to nonprofit organizations in states that remain without the presence of faith-based initiatives. Average share of faith-based organizations: 10.945%. Change in the share of faith-based organizations post faith-based initiatives: 1.166%. Aggregate post-treatment effect: 0.366 (*std. err.* = 0.112, $t = 3.264$). Coefficients estimates on the event time interactions are indicated as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Standard errors are clustered at the state level. **Result:** The faith-based initiatives increased the share of faith-based organizations, whereas there was no systematic difference in the probability of being a faith-based organization prior to implementation.

Figure 8: The impact of faith-based initiatives on faith-based organizations' dynamics



Notes: Regression estimates of the effect of faith-based initiatives on the dynamics of nonprofit organizations' entry and survival. Difference-in-differences estimates of a version of Equation (1) at faith-based organization level, identified among nonprofit organizations by its NTEE category or by the presence of religious words in its name, where the outcome is an indicator variable equal to one (rescaled to one hundred) from the time period in which the organization starts up (*entry*, in blue) or ceases to exist (*exit*, in orange), and zero otherwise or if the organization is incumbent throughout the period. The sample is the panel of the full history of faith-based organizations, re-balanced in a way that each organization is present throughout the event time window, with the only variation in the timing of entry or exit, using a fixed time window of seven years before and seven years after the occurrence of a faith-based initiative, and using nonprofit organizations in never-treated states as comparison group, for a total of 1,272,000 organization-by-stack-by-year observations. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme proposed by [Wing, Freedman and Hollingsworth \(2024\)](#). The coefficients of interest are interactions between an indicator variable flagging the occurrence of faith-based initiatives in the state of the nonprofit organization and event time dummies, relative to the omitted interaction in the event time before the introduction of the faith-based initiative within a treatment cohort, and they describe the differential probability (in percentage points) that faith-based organizations have to start their activities (or cease to exist), relative to faith-based organizations in states that do not experience faith-based initiatives. **Entry** – Average share of faith-based organizations starting up 35.940%. Change in the share of new faith-based organizations post faith-based initiatives: 35.925%. Aggregate post-treatment effect: 2.612 (*std. err.* = 0.589, $t = 4.436$). **Exit** – Average share of faith-based organizations exiting 2.580%. Change in the share of exiting faith-based organizations post faith-based initiatives: 3.525%. Aggregate post-treatment effect: 0.279 (*std. err.* = 0.589, $t = 1.527$). Coefficients estimates on the event time interactions are indicated as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Standard errors are clustered at the state level. **Result:** More new faith-based organizations were established in response to the faith-based initiatives. There were no differences in entry and exit rates before the initiatives.

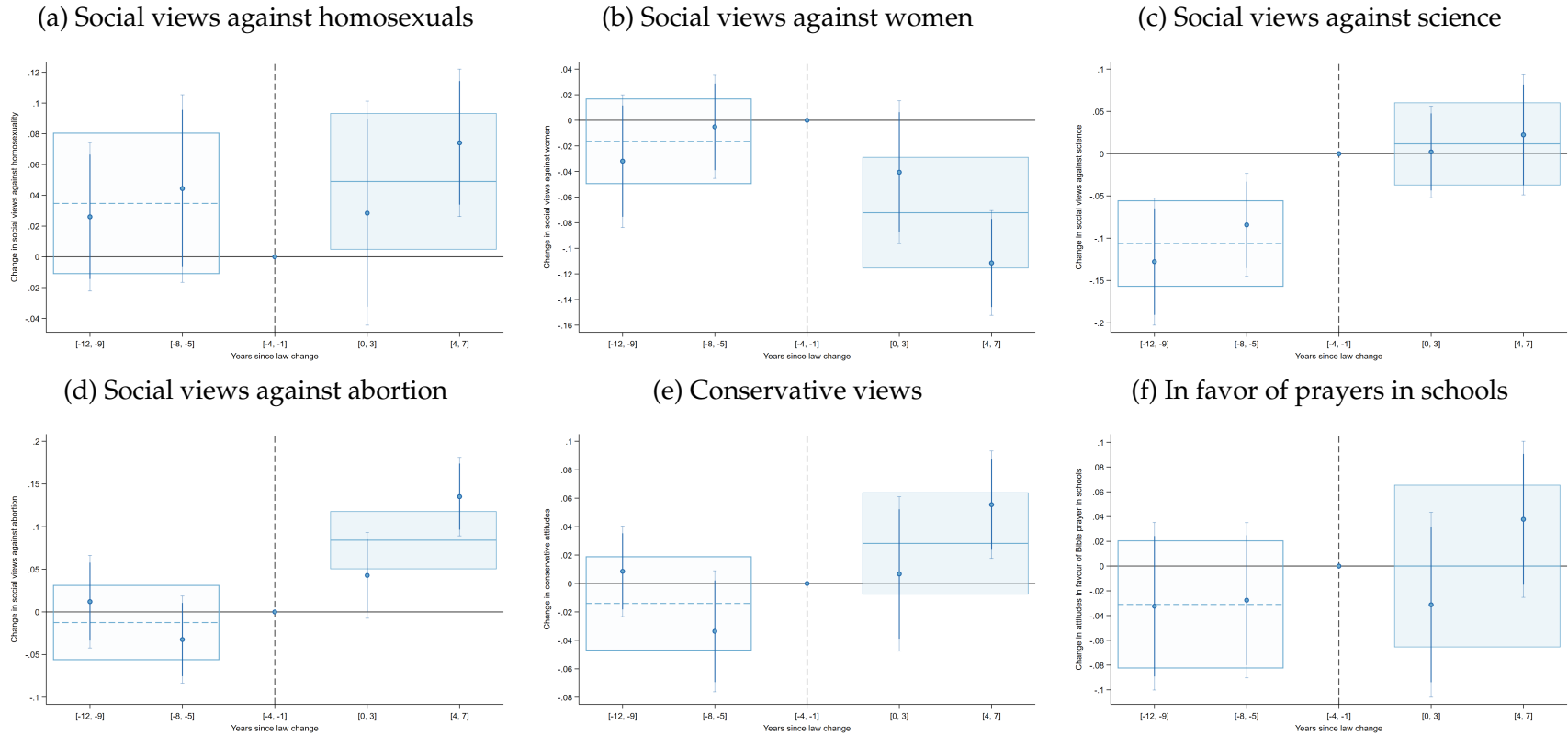
Figure 9: The impact of the faith-based initiatives on church attendance: heterogeneity of the first type of laws, DDD estimates



Notes: Regression estimates on the effect of the different types of faith-based initiatives on church attendance. Each panel shows triple difference estimates for a version of Equation (3) and the aggregate interactions in Equation (4). The treatment consists of an indicator variable on the presence of the indicated type of laws in the headers as the first faith-based initiative. We construct a different sample for each panel without including respondents from treated states that do not introduce as first law the indicated type of faith-based initiative, to avoid contamination in the post-treatment period. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme described in [Wing, Freedman and Hollingsworth \(2024\)](#). Panel (a): **Concrete law** as first initiative – Observations: 31,328; Average church attendance: 0.415; Change in church attendance post faith-based initiatives: -0.025. Aggregate post-treatment effect: 0.114 (*std. err.* = 0.024, $t = 4.836$). Panel (b): **Symbolic law** as first initiative – Observations: 21,118; Average church attendance: 0.423; Change in church attendance post faith-based initiatives: -0.026. Aggregate post-treatment effect: 0.064 (*std. err.* = 0.025, $t = 2.573$). Panel (c): **Program law** as first initiative – Observations: 16,405; Average church attendance: 0.402; Change in church attendance post faith-based initiatives: -0.022. Aggregate post-treatment effect: 0.107 (*std. err.* = 0.041, $t = 2.590$). Coefficients estimates on the event time interactions are plotted as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Coefficients estimates on the pre-treatment period and post-treatment period aggregate interactions are indicated as lines, with their 95% confidence intervals shown as boxes. Standard errors are clustered at the state level.

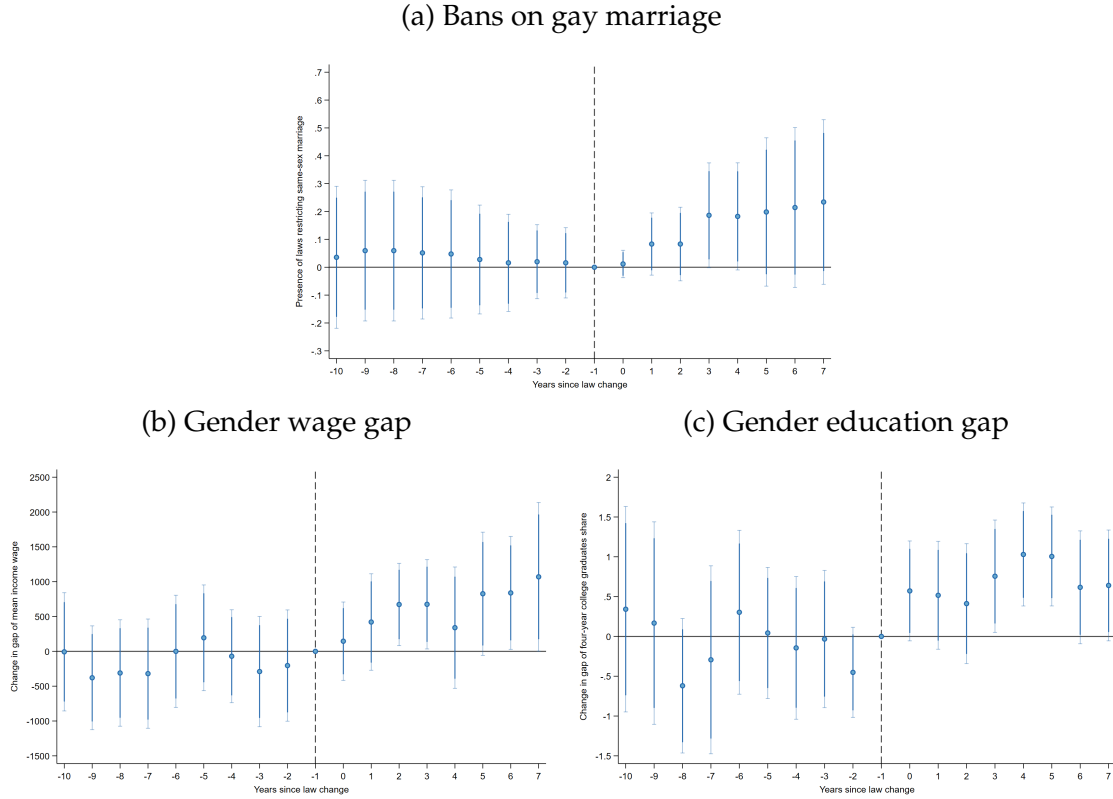
Result: The rise in church attendance was mainly driven by the concrete laws.

Figure 10: Impact of the faith-based initiatives on conservative-religious social views: DDD estimates



Notes: Regression estimates of the impact of the faith-based initiatives on social values. Each panel presents triple difference estimates as in Equation (3) and aggregate interactions in Equation (3), where data are assembled as described in Section 3.2 using a fixed time window of twelve years before and seven years after the implementation of a faith-based initiative. As for estimates in Figure 5, we estimate more aggregate coefficients in Equation (3) pooling together two event time bins, relative to the average change $\tau = [-4, -1]$ between one year and four years before the introduction of the faith-based initiatives. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme proposed in [Wing, Freedman and Hollingsworth \(2024\)](#). Panel (a): **Social views against homosexuals** – Observations: 29,950; Mean dep. var.: 0.620; Average share of Protestants: 0.451; Change in dep. var. post faith-based initiatives: -0.111. Aggregate post-treatment effect: 0.049 (*std. err.* = 0.022, $t = 2.228$). Panel (b): **Social views against women** – Observations: 28,343; Mean dep. var.: 0.189; Average share of Protestants: 0.434; Change in dep. var. post faith-based initiatives: -0.062. Aggregate post-treatment effect: -0.072 (*std. err.* = 0.022, $t = -3.342$). Panel (c): **Social views against science** – Observations: 27,440; Mean dep. var.: 0.551; Average share of Protestants: 0.436; Change in dep. var. post faith-based initiatives: -0.006. Aggregate post-treatment effect: 0.012 (*std. err.* = 0.024, $t = 0.476$). Panel (d): **Social views against abortion**: Observations: 33,641; Mean dep. var.: 0.608; Average share of Protestants: 0.443; Change in dep. var. post faith-based initiatives: 0.024. Aggregate post-treatment effect: 0.084 (*std. err.* = 0.017, $t = 4.991$). Panel (e): **Conservative views** – Observations: 43,856; Mean dep. var.: 0.165; Average share of Protestants: 0.439; Change in dep. var. post faith-based initiatives: 0.002. Aggregate post-treatment effect: 0.028 (*std. err.* = 0.018, $t = 1.581$). Panel (f): **Views in favor of prayers in schools** – Observations: 28,210; Mean dep. var.: 0.533; Average share of Protestants: 0.442; Change in dep. var. post faith-based initiatives: -0.018. Aggregate post-treatment effect: 0.000 (*std. err.* = 0.033, $t = 0.000$). Coefficients estimates on the event time interactions are plotted as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Boxes: Coefficients estimates on the pre-treatment period and post-treatment period aggregate interactions are indicated as horizontal lines, with their 95% confidence intervals shown as boxes. Standard errors are clustered at the state level. **Result:** Conservative-religious values singled out by Evangelicals (views against homosexuals, abortion, and general conservatism) seem to strengthen (particularly in the last period), while others weaken (views against women) and others are unchanged (views against science and favoring prayer in school). Prior to the initiatives, states do not differ in terms of most of the views. However, states were more progressive in terms of views on science, meaning that the post-effects here are under-estimated.

Figure 11: Effects of faith-based initiatives on state outcomes



Notes: Regression estimates of the impact of the faith-based initiatives on different outcomes at state level. Each panel shows difference-in-difference estimates of Equation (1) on balanced stacked data at state and year level assembled as described in Section 3.2 using a fixed time window of ten years before and seven years after the introduction of the faith-based initiatives. The coefficients of the presence of faith-based initiatives interacted with the time periods are expressed relative to the year before treatment. In panel (a), the outcome is an indicator variable equal to one in the presence of laws restricting same-sex marriage (bans). Average presence of same-sex marriage bans: 0.142; change in presence of same-sex marriage bans after faith-based initiatives 0.241; aggregate post-treatment effect: 0.149 (*std. err.* = 0.086, $t = 1.740$). In panel (b), the outcome is a gender wage gap expressed as the difference between the average wage at state level between male and female at a given time. Average gender wage gap: 11915.460; change in gender wage gap after faith-based initiatives 3,253.867; aggregate post-treatment effect: 623.736 (*std. err.* = 284.957, $t = 2.189$). In panel (c) the outcome is an education gender gap expressed as the difference between the average share of male with a four years college degree and the equivalent for female. Average education gender gap: 1.763; change in education gender gap after faith-based initiatives -2.730; aggregate post-treatment effect: 0.694 (*std. err.* = 0.236, $t = 2.941$). Coefficients estimates on the event time interactions are plotted as dots with their 90% (95%) confidence intervals drawn as thick (thin) vertical lines. Standard errors are clustered at state level.

Result: States are more likely to implement laws restricting gay marriage and see rising gender gaps in wages and education after implementation of the faith-based initiatives.

Tables

Table 1: Examples of missions of the faith-based nonprofit organizations

Social value	Mission	Organization
Christianity	To spread the Gospel of Jesus Christ and low cost housing.	Shepherd Ministries Inc.
	Centered around evangelism and sharing the gospel with our community.	We Will Go
	Evangelize, motivate and equip today's teenagers, their families and the church to live a lifestyle focused on Jesus Christ and nothing else.	Infocus Ministries Inc
	Spread the gospel of Jesus Christ by conducting religious worship services, preaching the word, and ministering through musical performances.	Steve & Mary Alessi Ministries Inc
Abortion	Providing truthful information to men, women, and families about adoption and the medical, emotional, and spiritual consequences of abortion.	Flowers For Heaven Inc
	Constructive alternatives to abortion and assisting women in crisis pregnancies. The mission of First Choice Center for Women, inc. is to see the word of god birthed in the hearts of men and women and to make abortion unnecessary and undesirable in our region.	First Choice Center for Women Inc
Traditional gender roles	Development of male based curriculum for leadership in the home and the church through small group mentoring and educating the family.	Oaks Of Righteousness Inc
	Under Christ, The Kings Universal call to serve, as men, pledge to unite and build men in the mold of a leader protector and provider, through education, formation, healing.	The Kings Men
Discipleship	We are developing relationships with teenagers in East St. Louis to inspire them to stay in school, further their education beyond high school, and bring them on as volunteers to our programs as mentors to other young people. Youth leadership development through religion based programs	Rebirth East Saint Louis
	To equip 7000 fathers to consistently lead their families in God's Word using ActorsBible by the year 2032. We envision fathers mentoring other fathers, who then mentor others, and so on to create a growing movement of men who lead well.	Inner-City Movement Inc
General culture	To educate and encourage individuals and organizations to advance positive outcomes in American culture.	USATransform (Ziklag)

Notes: Examples of missions of faith-based nonprofit organizations retrieved from the Nonprofit Explorer on the ProPublica website, <https://projects.propublica.org/nonprofits/>.

Table 2: The number of faith-based initiatives by type

Program laws	45
Prison	30
Youth/school	6
Drug/alcohol	9
Concrete laws	136
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
Symbolic laws	151
Office of Faith Based Initiative	11
Encourage the state to partner with FBOs	132
Create a faith-based advisory board	8
Total	332

Notes: Data on faith-based initiatives retrieved from LexisNexis for the period 1996-2009 by [Sager \(2010\)](#).

Table 3: Validity checks of law measure based on central faith-based institutions

Dependent variable:	Liaison	Office	Grant	Grant (\$1000)
	(1)	(2)	(3)	(4)
<i>Panel A. Faith-based initiative in year $t = 0$</i>				
$FBI_{sc} \times Post_{ct}$	0.200* (0.110)	0.264*** (0.055)	0.267*** (0.060)	479.382** (206.070)
Observations	2,196	2,196	2,196	2,196
State-Cohort FE	✓	✓	✓	✓
Event Time-Cohort FE	✓	✓	✓	✓
<i>Panel B. Faith-based initiative in year $t = 1$</i>				
$FBI_{sc} \times Post_{ct}$	0.233** (0.104)	0.267*** (0.055)	0.159*** (0.046)	280.896* (142.614)
Observations	2,196	2,196	2,196	2,196
State-Cohort FE	✓	✓	✓	✓
Event Time-Cohort FE	✓	✓	✓	✓

Notes: This table examines the relationship between our measure of faith-based initiatives and the implementation of both institutions and grants at state level. For columns 1-3, the dependent variable is an indicator variable equal to one if a state hosts at a given time the indicated institution in the header, and zero otherwise. In column 4, the dependent variable is the total grant amount in thousand dollars assigned to a state liaison at a given time. The sample is assembled as described in Section 3.2 for a balanced panel at state year level using a fixed time window of ten years before and seven years after the introduction of the faith-based initiatives. Each panel presents difference-in-differences estimates of a version of Equation (2) at state by event time by treatment cohort level. The coefficient of interest is the differential probability of having the specific institution, or the marginal change in grant amount, for states implementing faith-based initiatives after their implementation, compared to states that did not implement any. We express coefficients relative to the latest year before the faith-based initiatives, absorbing pre-treatment coefficients as in Equation (1) and aggregating the post-treatment period. The two panels differ for the timing of the treatment: while in Panel (a) we assume treatment to start in the year of implementation of the first faith-based initiative, in Panel (b) we consider the year after the first faith-based initiative as starting year. Regressions are estimated using ordinary least squares with sampling weights and the weighting scheme proposed by [Wing, Freedman and Hollingsworth \(2024\)](#). Standard errors are clustered at the state level. *, **, and *** indicate significance at the 10%, 5%, and 1% level.

Result: The timing and spread of the faith-based initiatives correlates with the timing and spread of the faith-based liaisons, their offices, and their grants.

Table 4: The impact of the faith-based initiatives on church attendance: specification using contiguous counties

	(1)	(2)	(3)	(4)
$FBI_{nk} \times Post_{nt}$	0.034 (0.031)		0.035 (0.028)	
$FBI_{nk} \times Post_{nt} \times Protestant_{inkt}$		0.116** (0.050)		0.124** (0.052)
Observations	4,188	4,158	4,178	4,148
Mean Dep. Var.	0.452	0.452	0.453	0.453
Share of Protestants	0.408	0.408	0.408	0.408
Number of States	11	11	11	11
Number of County Pairs	28	28	28	28
County Pair-Time FE	✓		✓	
County FE	✓		✓	
County-Protestant FE		✓		✓
County-Time FE		✓		✓
County Pair-Protestant-Time FE		✓		✓
Individual Controls			✓	✓

Notes: Regression estimates of the impact of the faith-based initiatives on church attendance matching respondents of the General Social Survey (GSS) from contiguous counties. The sample consists of respondents from pairs of contiguous counties separated by a state border, where we compare respondents in a county belonging to a state introducing the faith-based initiatives with respondents of a neighbour county belonging to a state that have not introduced them yet. When assembling the data, we trim the panel within a county pair to exclude years where the comparison group would get treated, to avoid contamination in the post-treatment period. In columns 1 and 3, we present estimates of the coefficient of interest in Equation (5) with and without individual controls, respectively. In columns 2 and 4, we show estimates of the coefficient of interest in Equation (6) with and without individual controls, respectively. Regressions are estimated using ordinary least squares with sampling weights at individual level. The different number of observations within no controls and controls is given by singleton observations dropped in the estimation. We two-way cluster standard errors at the state and county pair level. *, **, and *** indicate significance at the 10%, 5%, and 1% level.

Result: Even when restricting comparison to counties on either side of a state border, the faith-based initiatives seem to have increased church attendance.