Religion, Identity, and Preferences

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Abstract

This paper examines the causal effect of Catholic identification on political preferences, gender norms, and group behavior. Using clergy abuse scandals as exogenous variation in Catholicism, we analyze data from millions of U.S. college freshmen and county-level voting records. We find that de-identification with the Catholic church leads to more progressive views on social issues and gender norms, but more conservative stances on healthcare and military spending. Overall, secularization causes a leftward shift in political orientation. Catholic de-identification also reduces engagement in other group activities. As individuals disaffiliate from Catholicism, they increasingly identify with their social class, polarizing economic preferences between income groups.

Keywords: Religion, Identity, Political Preferences, Social Norms, Group Behavior, Secularization

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1 Introduction

People's identities are often centered around social categories such as politics, race, and religion (Akerlof and Kranton, 2000; Shayo, 2009). These identities carry behavioral prescriptions that influence people's norms, values, and behaviors. Economists increasingly recognize that incorporating identity into economic analysis is important for understanding topics such as labor market discrimination (Giuliano et al., 2011; Åslund, Hensvik and Skans, 2014; Bagues et al., 2017), productivity (Bandiera et al., 2005; Hjort, 2014), and human capital formation (Gershenson et al., 2016; Lavy et al., 2018).

Among the various markers of identity, religion stands out as one of the oldest and most influential categories, governing behavior for billions of people (Iannaccone, 1998; Alesina and Giuliano, 2015; Guiso et al., 2006; McCleary and Barro, 2006; Arruñada, 2010). Hence, religious identity plausibly influences a wide spectrum of personal preferences, ranging from views on personal liberties and family relations to attitudes toward economic policies and civic engagement (Basten and Betz, 2013; Laliotis and Minos, 2022). Understanding this influence is important because such preferences eventually determine electoral outcomes, economic decision-making, social cohesion, and institutional development. Despite this importance, however, causal evidence on these relationships remains scarce (Iyer, 2016).

This paper aims to fill this gap by providing causal evidence on the effect of Catholic identification in the United States on policy preferences, gender norms, societal attitudes, and group-oriented behaviors. The main empirical challenge is the non-random nature of religious identification. Individuals often select their religious identity based on observed and unobserved factors such as economic status, geographic location, personal life experiences, and cultural compatibility. Since these factors likely also affect political preferences, it is unclear whether any observed correlation between religion and our outcome variables is merely a spurious consequence of omitted variables, or represents a genuine causal connection. To overcome the empirical challenge, we use clergy scandals in the Catholic church as a source of exogenous variation in people's affiliation with the Catholic church (Hungerman, 2013;

Bottan and Perez-Truglia, 2015).

As a first step, we provide detailed evidence that scandals cause a decline in Catholicism. Using individual-level data for millions of US Freshmen and employing a staggered difference-in-differences identification strategy, we find that scandals reduce Catholic identification by 1.0 to 1.2 percentage points and church attendance by 1.0 percentage point. Importantly, this decline represents secularization rather than denominational shifting, as those who disaffiliate typically become non-religious, contrasting with the reallocation effects observed by Hungerman (2013). The impact of scandals is heterogeneous, with stronger secularizing effects among individuals from low-income or less-educated families, for whom the church often serves as an important source of social support and protection. We observe similar secularization trends in terms of county-level Catholic school enrollment and overall religious identification following scandals, which is consistent with the findings of Bottan and Perez-Truglia (2015). Taken together, these results show how clergy abuse scandals within the Catholic Church accelerate secularization

Next, we use the observed reduction in affiliation with the Catholic church caused by scandals to examine how Catholicism affects policy preferences. Using both a staggered difference-in-differences design and an instrumented difference-in-differences approach, we find that Catholic de-identification makes individuals adopt more progressive positions on issues like abortion rights, redistribution, same-sex marriage, immigrant rights, and employer drug testing. However, they adopt more conservative views on universal health care and military spending. These mixed effects make it unclear whether secularization shifts people toward the Democratic or Republican party.

To assess the overall impact of Catholicism on political ideology, we estimate how Catholic identification influences individuals' self-reported position on the political spectrum. Our results show that individuals who de-identify with Catholicism move nearly two points to the left on a five-point political scale, indicating that progressive shifts in personal and moral attitudes outweigh conservative shifts in economic and foreign policy. This leftward

shift extends to county-level outcomes, where clergy scandals cause increased support for progressive candidates and higher financial contributions to Democrats. The magnitude and direction of this change are particularly noteworthy given the relatively even political split among U.S. Catholics, with 48% leaning Republican and 47% leaning Democratic (Smith, 2020).

We then provide evidence that this liberal shift extends to gender norms. In particular, our findings indicate that losing Catholicism leads to the adoption of more progressive norms about marriage, raising a family, sexual entitlement, and the woman's role in the household. The effects are particularly pronounced for attitudes towards early marriage and traditional gender roles in the workforce.

Additional analyses show that losing Catholicism dissuades individuals from participating in group activities, even secular ones. This result suggests that religion contributes positively to the formation of social capital even beyond the confines of the church (Putnam, 2000).

Our findings point to a fundamental shift toward individualism as Catholic identification declines. The movement toward more progressive positions on personal liberties, more flexible gender roles, and away from group-oriented behaviors suggests that Catholic de-identification may cause a transition from communal to individualistic value systems.

To interpret our results, we draw on insights from the identity economics literature (Akerlof and Kranton, 2000; Shayo, 2009; Bonomi et al., 2021; Gennaioli and Tabellini, 2023). This framework posits that individuals, by identifying with a particular group, internalize the norms of that group, and value outcomes benefiting fellow group members. Consequently, religious identification shapes personal, moral, and political preferences, as adherents tend to align with the dominant views of their faith. Identities are not fixed, however, and individuals switch between competing identities based on factors such as the relative status of those identities (Shayo, 2009). Because events like clergy scandals undermine religious institutions' moral authority, they diminish the utility of religious identification, and induce adherents to adopt one of their alternative identities such as class or race. These identity

shifts, in turn, cause individuals to internalize the norms and values of their new group, and increase support for policies favoring their newly adopted in-group members.

We provide suggestive evidence that scandals cause a shift towards class identification, as low-income individuals who disaffiliate from Catholicism become more supportive of policies that disproportionately benefit fellow lower-class individuals such as redistribution, drug legalization, criminal rights, and universal healthcare. For high socioeconomic class individuals, policy preferences move in the exact opposite direction towards positions that tend to favor richer groups. This divergence suggests an increased alignment with class interests following disaffiliation with the Catholic church. We find limited evidence of de-identification leading to stronger racial or gender identification.

Our identification strategy, which relies on clergy scandals as a source of exogenous variation in identification with the Catholic church, may raise concerns about the external validity of our findings. These scandals constitute a clear negative shock that revealed corruption in a previously revered institution, which may be different from more conventional sources of secularization. However, there are reasons to believe that our results have broader applicability. First, we replicate our main results using county-level measures of Catholicism and local election results. Second, our event study plots reveal that changes in religious affiliation and associated attitudes unfold gradually over time, rather than exhibiting sharp discontinuities following scandals. This evolution suggests a process of re-evaluation that is characteristic of secularization more broadly, rather than impulsive reactions to negative news, which tend to be more drastic. Last, the loss of trust in religious institutions due to clergy scandals may be analogous to other cases of institutional failure, such as political corruption scandals (Bowler and Karp, 2004; Maier, 2011; Rose-Ackerman and Palifka, 2016). Consequently, our results might also be informative of how individuals respond to negative information about other institutions such as the judiciary, the media, or the government.

Our findings contribute to several important strands of the literature. First, we add to the literature on the institutional and cultural determinants of preferences. Although preferences

have traditionally been treated as fixed and exogenously determined in economic models (Stigler and Becker, 1977), an emerging body of research highlights how preferences can be shaped by external forces like institutions, social norms, life experiences and environmental factors (Bowles, 1998; Alesina and Fuchs-Schündeln, 2007; Tabellini, 2008; Henrich et al., 2010; Nunn and Wantchekon, 2011; Fehr and Hoff, 2011; Malmendier and Nagel, 2011; Alesina and Giuliano, 2015; Fouka, 2020). We build on and extend this literature by providing novel evidence on how a foundational societal institution like religion has a causal impact in molding preferences across personal, moral, economic and political domains.[1]

We also contribute to the literature on the relationship between religion and politics. A large body of research in political science demonstrates a strong correlation between religious identification and voting behavior, with a tendency for religious individuals to favor conservative parties (Lijphart, 1979; Leege and Welch, 1989; Gill, 2001; Green, 2007; Woodberry, 2012; Dills and Hernández-Julián, 2012; Basten and Betz, 2013; Grzymala-Busse, 2012; Fowler, 2018). Enke (2020); Enke et al. (2023) find that individual differences in moral universalism—the extent to which individuals apply the same moral values and principles to all people regardless of their social or group affiliations—strongly predict political attitudes, with religiosity being a key factor promoting more communitarian value systems. Despite this well-established correlation, however, causal evidence remains scarce, and some have argued that the observed correlation results from reverse causality or omitted variable bias (Patrikios, 2008; Margolis, 2018; Campbell et al., 2018).[2] Our findings provide some of the first causal evidence that individuals who de-identify with Catholicism shift toward the left.

Our paper contributes to a growing literature using Catholic clergy abuse scandals as a source of exogenous variation in religiosity. Prior work has examined how scandals affect

[1] See e.g. Guiso et al. (2003); Stegmueller et al. (2012); Stegmueller (2013) for correlational evidence.

[2] One exception is Gerber et al. (2016), who use Blue Law repeals to show that religion causally affects turnout. In contrast to their findings, however, we find no effect of religion on turnout. One potential reason is that Gerber et al. (2016) focus on changes in religiosity induced by a pull factor from the secular side (increased shopping opportunities), whereas we focus on a push factor from the religious side (abuse scandals). It is possible that pull factors that decrease religiosity similarly decrease other civil actions, whereas push factors do not.

religious market dynamics and denominational switching (Hungerman, 2013), charitable giving and Catholic school enrollment (Bottan and Perez-Truglia, 2015; Dills and Hernández-Julián, 2012), religious participation (Esparza, 2020), and state welfare provision (Dills and Hernández-Julián, 2014). Relatedly, Basten and Betz (2013) use variation in historical religious composition to study the effects of religion on political preferences. We leverage new individual-level data for millions of respondents to study the effect of disaffiliating with the Catholic church on a range of preferences including political preferences, voting behavior, gender norms, and group membership.

A growing body of literature examines the relationship between religion and gender-related attitudes and outcomes. Guiso et al. (2003) and Seguino (2011) find that religious individuals, particularly Muslims, tend to hold more conservative views on women's roles. However, Clingingsmith et al. (2009) and Meyersson (2014) demonstrate that religious practices and religious rule can also promote more progressive gender norms. Within Christianity, denominational differences emerge: Nunn et al. (2014) shows that Catholic missionary activities in Africa were less effective in promoting female education compared to Protestant missions, aligning with the Protestant emphasis on literacy. Similarly, Becker and Woessmann (2008) find that Protestantism reduced the gender education gap in 19th century Prussia. These studies suggest that Catholicism may promote more conservative gender attitudes than Protestantism, although the overall effect of religion on gender norms remains ambiguous. We contribute to this literature by providing causal evidence on a broader range of gender-related attitudes, including views on marriage, sexual entitlement, women's workforce participation, family importance, and casual sex, and by showing a clear conservative shift.

We furthermore provide new insights into the relationship between religious affiliation and social capital. In particular, we examine the effect of religion on other group activities such as joining sports teams or fraternities/sororities. Recent work in economics has examined the concept of 'groupiness', which is an individual's propensity to exhibit group-oriented

preferences (Kranton and Sanders, 2017; Kranton et al., 2020). A priori, the effect of religious de-identification on group membership is ambiguous. If group-orientation represents a fixed individual trait, the decline in religious participation may increase involvement in other social groups, as people reallocate their demand for group attachment. Alternatively, religion itself may nurture group-orientation, in which case declining Catholicism could lower the desire to affiliate with collectives. Our results support the latter, as we find that losing one's Catholic identity reduces the propensity to join athletic teams, college clubs, and fraternities. This suggests that religious engagement may have important positive spillovers in terms of cultivating broad social capital, and that secularization could lead to a general decline in group-oriented behavior.

More broadly, we contribute to the literature examining the causal effects of religion on economic and social outcomes. A growing body of research uses natural experiments and instrumental variable analyses to identify how religiosity impacts behavior. This work has established causal effects of religion on economic performance (Barro and McCleary, 2003; Gruber, 2005; Bryan et al., 2021), risky behaviors like alcohol and drug use (Gruber and Hungerman, 2008), subjective well-being (Campante and Yanagizawa-Drott, 2015), charitable giving (Hungerman, 2013; Bottan and Perez-Truglia, 2015), political participation (Gerber et al., 2016), and social attitudes (Clingingsmith et al., 2009). Our study advances this literature by providing comprehensive causal evidence on how religious identification shapes political preferences, gender norms, and broader social values. This evidence is particularly relevant given ongoing secularization trends in many developed economies, where religious influence declines as societies modernize (Wilson, 2016; Berger, 2011).

The rest of the paper proceeds as follows. Section 2 provides background on Catholic creed, as well as on the clergy sexual abuse scandals in the Catholic Church. Section 3 describes our data sources and empirical strategy. Section 4 presents our main results on the causal impact of religion on political preferences, gender norms, other societal attitudes, and group-oriented behaviors. Section 5 concludes by discussing the implications of our findings

for understanding the societal consequences of secularization trends and highlighting avenues for future research.

2 Background

2.1 Catholic Creed and Public Policy

Catholic social teaching provides a framework for understanding how religious affiliation might influence policy preferences. This framework rests on four key principles that could shape political and social attitudes: human dignity, sanctity of life, social solidarity, and stewardship (Curran, 2002).

The principle of human dignity, derived from the belief that humans are created in God's image, emphasizes individual worth while simultaneously stressing collective responsibility (Benestad, 2011). This tension between individual rights and communal obligations could influence policy preferences in multiple domains. For instance, Catholics might support social welfare programs based on communal responsibility while opposing certain individual liberties that conflict with Church doctrine.

The Church's emphasis on the sanctity of life shapes its position on several contentious policy issues (Pope John Paul II, 1995). This principle is the main driver of opposition to abortion, euthanasia, capital punishment, and war. The doctrine of solidarity—which emphasizes moral obligations to the disadvantaged—could influence economic policy preferences (Hollenbach, 2002). This principle potentially drives support for progressive taxation, welfare programs, and aid to developing nations. Similarly, the Church's teaching on environmental stewardship as a moral imperative might affect preferences regarding climate change policy and resource conservation (Scheid, 2015). Some of these examples illustrate how religious doctrine can generate policy preferences that do not clearly align with traditional left-right political divisions.

It is important to stress that the translation of Catholic doctrine into adherents' policy

preferences is far from automatic, and unlikely to be homogeneous. Individual Catholics may interpret teachings differently or weigh competing principles differently when forming policy views. Moreover, the extent to which religious affiliation actually shapes policy preferences remains an empirical question, as individuals might self-select into religious traditions that advocate similar policy preferences as the individual possesses. The following sections address this question by examining the causal effect of de-identification with Catholicism on various political and social attitudes.

To guide our analysis of which attitudes are most likely affected by Catholic identification, we first document the cross-sectional associations between Catholicism and political beliefs. While Catholic affiliation could plausibly influence attitudes across many domains, ranging from family formation and moral regulation to redistribution and government size, economic theory provides limited guidance on which specific beliefs constitute the core "treatment" delivered by religious participation.

Using General Social Survey data spanning 1972-2021 ($N \approx 60,000$), we estimate the partial correlation between Catholic identification and 24 policy outcomes, conditioning on demographic characteristics (age, gender, education) and survey wave fixed effects. To quantify the relative importance of different policy domains, we implement a dominance analysis that decomposes the incremental explanatory power of each outcome for predicting Catholic identity beyond baseline demographic controls.

The results in Appendix A1.1 show a clear hierarchy in the strength of associations. Moral and personal issues, including attitudes toward abortion, divorce, and homosexuality, account for approximately 50% of the total predictive power in distinguishing Catholics from non-Catholics. Economic policy preferences and spending priorities contribute 20% collectively, while general ideological self-placement on the liberal-conservative spectrum contributes essentially zero. This pattern indicates that Catholic identity is empirically characterized by a specific constellation of moral commitments rather than a broad political orientation.

These cross-sectional associations inform our expectations about where causal effects of religious de-identification are most likely to manifest. We anticipate the strongest treatment effects on moral and personal issues that align closely with Church teachings on the sanctity of life and traditional family structure. Effects on economic preferences may be more modest and potentially heterogeneous, reflecting both the Church's social solidarity doctrine and the less central role these issues play in Catholic identity. The following sections examine these predictions by estimating the causal effect of de-identification with Catholicism on political preferences, gender norms, and broader social attitudes.

2.2 Clergy Abuse Scandals

Since the mid-1980s, the Catholic Church in the United States has experienced repeated revelations of sexual abuse committed by members of its clergy. The number of allegations increased rapidly after the Boston Globe published a series of articles in 2002 detailing accusations against the defrocked priest John Geoghan and his long record of sexually abusing children (Globe, 2002). These reports also brought to light the fact that Catholic Church officials were aware of the abuse but did not act to stop it. The articles triggered a surge of accusations of abuse across the country (Hungerman, 2013). Additional details were released in 2018 following a detailed grand jury report on clerical sexual abuse in six Pennsylvania dioceses, outlining offenses by over 300 priests against more than 1,000 child victims that occurred over many decades (Pennsylvania Grand Jury, 2018). The report also described a pattern of cover-ups by church leaders and criticized bishops for taking measures to avoid public scandal rather than protecting victims (Pennsylvania Grand Jury, 2018).

According to reports commissioned by the United States Conference of Catholic Bishops and conducted by the John Jay College of Criminal Justice, approximately 4% of Catholic priests who served in the U.S. between 1950-2002 faced substantiated accusations of child sexual abuse (John Jay College of Criminal Justice, 2004; Terry et al., 2011). The vast majority of the alleged abuses took place between 1960 and 1990, with a peak in the 1970s.

However, most of the accusations were reported decades later, with the peak number of allegations coming in the early 2000s (John Jay College of Criminal Justice, 2004).

The U.S. Catholic Church has taken some steps to address the scandal, including adopting a 'zero tolerance' policy and preventing accused priests from having contact with parishioners (United States Conference of Catholic Bishops, 2002). However, the Church has faced criticism for an insufficient response to the crisis (Formicola, 2016). Some argue that aspects of the Church's structure, the requirement of celibacy for priests, and the male-only priesthood have contributed to the pervasiveness of abuse, while others point to broader societal changes in attitudes toward sexual behavior since the 1960s (Plante, 1999).

The repeated revelations of abuse and the perceived failures in the Church's response have led to a significant crisis for Catholicism in the United States. Numerous dioceses have filed for bankruptcy due to abuse-related costs, and the Church has paid over $3 billion in lawsuit settlements and other expenditures related to the crisis (The Guardian, 2023). In addition to these direct costs, the scandals have potentially imposed even greater costs by harming the reputation of the Church, weakening adherents' religious faith and participation, and eroding public trust in the institution (Bottan and Perez-Truglia, 2015).

3 Data and Empirical Strategy

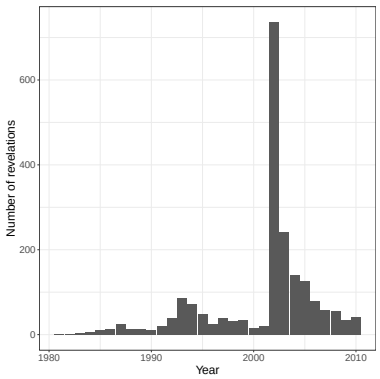
3.1 Data

We obtain data on the occurrence and timing of abuse scandals in the Catholic church from Bottan and Perez-Truglia (2015).[3] Their database covers more than 3,000 scandal revelations between 1980 and 2010, which is the end-point of our analyses. The list of scandals is based on the records published by Bishop Accountability, cross-checked with newspaper articles and court documents. The reported date of the scandal is based on the first newspaper mention rather than the actual date of the abuse. In other words, we consider the effect

[3]We thank the authors for kindly sharing their data.

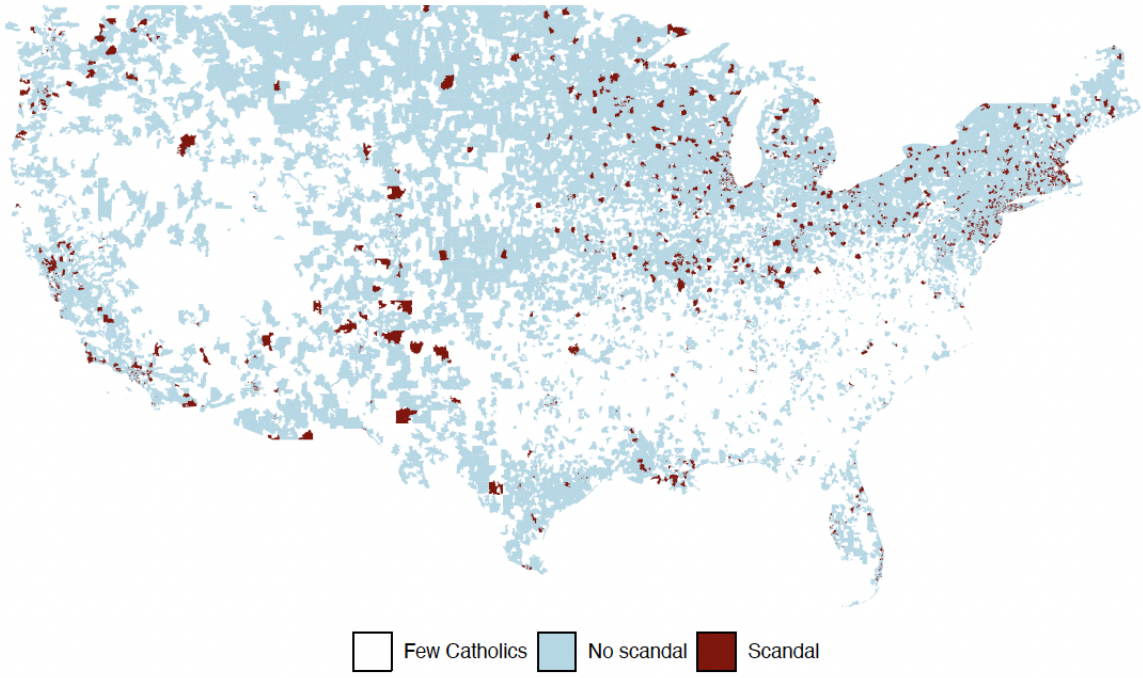
of abuse being revealed, rather than abuse occurring. The main justification for focusing on revelations is that the revelation date of clergy abuse scandals represents a significant information shock to the public, whereas the date of the actual abuse is mostly private information. For each scandal, we know the exact zip code and county in which it took place. Figure 1 shows the frequency of scandal revelations over time. The main peak is in 2002, coinciding with the Boston Globe revelations. Figure 2 shows a map of scandals across the United States, showing that scandals are widespread across the country.

Figure 1: Frequency of scandal revelations per year



Notes: The figure shows the number of revealed clergy scandals per year.

Figure 2: Map of scandals



Notes: The figure shows the incidence of clergy scandals across the United States. Zip codes with a clergy scandal are coded in red, non-scandal zip codes are in blue. Zip codes with less than 10% Catholics or missing data are in white.

We furthermore use data from the CIRP Freshman Survey (TFS). The TFS is an annual survey of first-year college students in the US, which provides insights into their attitudes, beliefs, and aspirations about a wide range of issues. The survey is a repeated cross-section that is conducted by UCLA's Higher Education Research Institute and has been running since 1966. The survey asks respondents about their own religious affiliation and their parents' religious affiliation. Our main religion measure is an indicator variable that takes the value of 1 if an individual identifies as Catholic, and 0 otherwise. We additionally consider an indicator variable for whether they identify as religious or not. Individuals report their policy preferences on issues such as abortion, gay rights, and redistribution on a four-point scale, ranging from 'strongly disagree' to 'strongly agree', and their political orientation on a five-point scale from 'far right' to 'far left'. Respondents additionally answer a set of questions about gender-related issues, society more generally, and group-oriented behaviors.

Appendix A1.2 provides an overview of all questions we analyze. Respondents also report their home zip code, which is the zip code in which they lived before going to college. In addition, we have information on a number of demographic and socioeconomic background characteristics such as ethnicity, gender, parents' income, and parents' education.[4] As shown in Figure A4, the TFS sample broadly resembles the general population along several key dimensions, while exhibiting some systematic differences. In particular, respondents in the TFS are more likely to be White, and are substantially more educated than the population at large. These differences are expected given that the TFS focusses on college students. Consequently, our results should be interpreted as most representative for this population, which is an important and policy-relevant group in its own right.

While this potentially limits the external validity of our results, we supplement the TFS data with several county-level data sets. From the Longitudinal Religious Congregations and Membership File, we obtain the fraction of people who are registered as Catholics between 1980 and 2010 (Grammich et al., 2018). This survey, designed and carried out by the Association of Statisticians of American Religious Bodies (ASARB), measures the numbers of adherents across 302 religious groups for all US counties. It is conducted once every decade. We obtain the number of Catholic school and Catholic school students for each county from the Private School Survey (see also Bottan and Perez-Truglia (2015)).[5] The Private School Survey is a biannual census of all private schools in the US, and our data ranges from 1989 to 2010. We consider the number of schools and students per capita. To measure county-level political orientation, we obtain Democrat and Republican vote shares in all presidential, senate, and House elections between 1980 and 2010 from David Leip's Election Atlas (Leip, 2022), as well as the turnout rates in each of those elections. We obtain county-level political donations to Democrat and Republican candidates from the Database on Ideology, Money in Politics, and Elections (Bonica, 2015). Here, we calculate the total

[4]Parents' income is a student's best guess for their parents' total yearly income, reported in one of 30 categories.

[5]Most students enrolled in Catholic schools belong to Catholic families according to the National Catholic Educational Association.

Table 1: Summary statistics

	No scandal	Scandal
Religious	0.845	0.837
Catholic	0.291	0.400
Catholic mother	0.314	0.429
Catholic father	0.299	0.414
Mother went to college	0.468	0.444
Father went to college	0.522	0.503
Political orientation	3.058	3.126
White	0.775	0.733
Female	0.556	0.555
Observations	6,642,400	1,762,565

Notes: The table gives summary statistics for the Freshmen Survey data. The first column shows data for individuals from zip codes that did not experience a scandal, and the second column shows data for individuals from zip codes that experienced at least one scandal. *Religious* is a binary variable that takes the value of 1 if the individual identifies by any religion other than 'none'. *Catholic* is a binary variable that takes the value of 1 if they identify as Catholic. *Catholic mother/father* take the value of 1 if the individual's mother or father identify as Catholic, respectively. *Mother/Father went to college* take the value of 1 if an individual's mother or father went to college. *Political orientation* is an individuals political orientation on a five-point scale from far right (1) to far left (5). *White* takes the value of 1 if the individual identifies as White. *Female* takes the value of 1 if the individual identifies as female. *Observations* gives the total number of respondents. The third column shows the p-value for a two-sided t-test for the difference between the first and second columns.

amount of donations to Democrats, Republicans, and in total for all US zip codes, and log-transform each of these values.

Table 1 gives summary statistics for the TFS data. Our full data set comprises 8,404,965 college freshmen between 1982 and 2010. Of these, 6,642,400 students are originally from zip codes that never experienced a clergy abuse scandal (no-scandal zips), whereas 1,762,565 students are from zip codes with at least one scandal (scandal zips). In both types of zip codes, approximately 84% of individuals are religious. Among those who are from scandal zips, approximately 40% identify as Catholic, compared to only 29% who are from non-scandal zips, indicating that scandals are relatively likely to occur in areas with large numbers of Catholics. Parents' education levels, students' racial composition, and gender ratios are approximately equal in scandal and no-scandal areas.

Table A1 in the Appendix gives the average policy preferences, gender norms, and societal attitudes of Catholics, non-Catholic religious people, and non-religious people. In general, Catholics hold more conservative positions than atheists on the vast majority of issues.

3.2 Empirical Strategy

Our empirical strategy builds on the notion that clergy scandals reduce Catholic identification (Bottan and Perez-Truglia, 2015; Esparza, 2020). To test this, we use a difference-in-differences framework that compares changes in Catholicism within areas that experienced scandals to changes in areas without scandals.[6] We extend the approach of Bottan and Perez-Truglia (2015) in two important ways. First, we use individual-level data on religious identification from TFS rather than relying solely on county-level proxies. Second, we address potential bias in difference-in-difference estimators with staggered timing by using recent advances in the econometric literature that address the problem of negative weights (Goodman-Bacon, 2021; Sun and Abraham, 2021; Callaway and Sant'Anna, 2021; Borusyak et al., 2021; Gardner, 2022). Our baseline specification is:

$$R_{ict} = \tau D_{ct} + \Omega \mathbf{X_{ict}} + \mu_c + \mu_t + \varepsilon_{ict} \tag{1}$$

where R_{ict} is an indicator that equals 1 if individual i from zip code c identifies as Catholic in year t. D_{ct} is an indicator equal to 1 if a scandal has been revealed in zip code c by year t. Zip codes remain treated for the duration of the sample period following a scandal. $\mathbf{X_{ict}}$ is a vector of individual controls including college selectivity, gender, race, parental education, and family income.[7] μ_c and μ_t are zip code and year fixed effects. We cluster standard errors at the home zip code level. For treated individuals, we examine a 7-year window before and after scandal revelations, inclusive.[8] It is important to re-iterate that treatment depends on the zip code where an individual lived before going to college, rather than the zip code where they currently live. Since the survey is conducted in the first week of college, however, being from a treated zip code almost automatically implies that the treatment started while the person was still living there.

[6] We additionally examine the effect on identifying as religious in general.

[7] Section 4.6 demonstrates that our results are robust to excluding these covariates.

[8] The results are highly similar when we consider 5-year or 10-year windows.

To estimate Equation (1), we apply the estimator developed by Gardner (2022).[9] This approach estimates the zip code and time fixed effects μ_c and μ_t using only untreated/not-yet treated observations, yielding estimates $\hat{\mu}_i$ and $\hat{\mu}_t$ that are then used to residualize the outcome variable as $\tilde{Y}_{it} = Y_{it} - \hat{\mu}_i - \hat{\mu}_t$. Treatment effects τ^k are estimated by regressing $\tilde{Y}_{it}$ on D_{it}^k via GMM, producing asymptotically correct standard errors.[10]

Identification relies on the parallel trends assumption, which holds that absent scandals, outcomes would have developed along the same path for treated and untreated individuals. We assess this assumption by estimating a dynamic specification that allows us to test for differential pre-trends:

$$R_{ict} = \sum_{k=-L}^{K} \tau^k D_{ct}^k + \Omega \mathbf{X_{ict}} + \mu_c + \mu_t + \varepsilon_{ict} \tag{2}$$

Here, D_{ct}^k indicates that zip code c in year t is k years away from a scandal. The coefficients τ^{-L} to τ^{-2} capture pre-treatment effects and provide a test of the parallel trends assumption. Equation (2) also allows us to trace out the evolution of treatment effects over time. For our main estimates, we furthermore show the sensitivity of our results to potential violations of the parallel trends assumption (Rambachan and Roth, 2023).

A potential issue is the possibility that scandals in one zip code may also reduce Catholicism in neighboring areas, which can generate divergent trends. Indeed, if scandals are spatially correlated (i.e., more likely to occur in certain regions than in others), regions with high treatment probabilities will both have faster declines in Catholicism (because relatively many neighboring zip codes are already treated, with secularization spilling over into the region itself), and higher chances of being treated themselves. To address this issue, we expand the treatment definition to include zip codes for which a scandal took place within a 50km radius of the zip code.[11]

[9] Our estimations use the *did2s* package in R (Butts, 2021).

[10] Section 4.6 shows the results for an alternative estimation method (Callaway and Sant'Anna, 2021). All main conclusions remain unchanged.

[11] Section 4.6 presents robustness checks using alternative radii, with our widest treatment definition

In the second step of our analysis, we use this quasi-experimental variation in Catholicism to estimate its effect on a range of policy preferences, political orientation, gender norms, other societal values and beliefs, and group behavior. To do so, we use the following two-stage least squares difference-in-differences (2SLS-DD) framework that uses clergy scandals as an instrument for Catholicism:

$$Y_{ict} = \beta \hat{R}_{ict} + \Gamma \mathbf{X_{ict}} + \mu_c + \mu_t + \varepsilon_{ict} \tag{3}$$

$$R_{ict} = \gamma D_{ct} + \Pi \mathbf{X_{ict}} + \alpha_c + \alpha_t + \nu_{ict} \tag{4}$$

Where $\hat{R}_{ict}$ is instrumented Catholicism from the first-stage, estimated in Equation 4, and Y_{ict} is the outcome variable of interest. For identification, the 2SLS-DD approach requires parallel trends, treatment effect homogeneity, as well as the exclusion restriction assumption that scandals impact our outcomes only through their effect on Catholic identification. Given that the validity of the 2SLS-DD estimates relies on strong assumptions, we supplement our 2SLS-DD estimates with reduced form difference-in-differences estimates for the effect of scandals on Catholics' preferences, using the identification strategy outlined earlier. The reduced-form results can be interpreted as the local effect of scandal exposure on our outcomes of interest, rather than the effect of Catholicism.

A key concern regarding the exclusion restriction is that clergy scandals may affect preferences and beliefs of both Catholics and non-Catholics. For instance, scandals might undermine institutional trust in other religious groups, potentially altering views on government's role in society. To address this concerns, we examine how scandals affect the preferences and beliefs of Jewish individuals. Another issue is that our estimates may capture effects not only on those who completely disaffiliate from Catholicism but also on those who remain nominally Catholic while becoming less devout. Although this would not change the

(75km) exhibiting the smallest pre-trend deviations. However, this broader definition likely underestimates the true treatment effect, as the intensity of scandal impacts presumably diminishes with distance. Consequently, we focus on the 50km radius for our main analyses, balancing identification concerns with effect size estimation. Importantly, our key findings remain qualitatively unchanged when using the 75km specification.

direction of our estimates, it may change the magnitude. Last, scandals may affect other outcomes such as charitable giving (Bottan and Perez-Truglia, 2015), which could indirectly influence political orientations. Although we cannot fully dismiss this channel, the impact is likely small, as the effect on donations is not very large, and there is little evidence that charitable donations affect people's policy positions.

Finally, to address external validity concerns, we supplement the individual analysis with a county-level investigation of the effect of scandals both on religion and on political outcomes such as voting, turnout, and political donations.[12] To do so, we re-estimate Equations (1) and (2) with counties as the unit of analysis. Here, we control for income-per-capita, population size, fractions of Whites and Blacks, and the fractions of the population that are below 25 or between 25 and 64 [13]

4 Results

4.1 Effect of Scandals and Catholicism

We begin our analysis by examining the impact of clergy sexual abuse scandals on religious identification. As our main measure of identifying with the Catholic church, we consider whether an individual self-identifies as Catholic. We additionally consider their parents' religious identification, and whether an individual attended church last year.[14]

Table 2 presents our baseline estimates. Exposure to a clergy scandal in a freshman's home zip code reduces the likelihood of Catholic identification by 1.2 percentage points ($p < 0.001$). We observe comparable declines in Catholicism among both parents.[15] Moreover, the

[12]Here we omit the spillover correction as counties are roughly 10 times larger than zips, and spillovers are less likely to be an issue.

[13]Bottan and Perez-Truglia (2015) suggest that zip-codes are a better approximation of local communities than counties. Counties are on average larger in population, such that only a relatively small share of a county's population will be exposed to a scandal. We therefore control for population size in all our estimations. Precint-level election results, which could theoretically be mapped to zip codes, are only available from 2016 onward.

[14]Because the survey asks about last year's church attendance rather than this year's, we shift treatment back by one year for this analysis.

[15]Note that we focus on scandals in the freshman's home zip code. Hence, we should expect similar effects

Table 2: Baseline results for the effect of scandals on Catholicism

	Catholic	Catholic father	Catholic mother	Church attendance
Scandal	-0.012^{***}	-0.011^{***}	-0.010^{***}	-0.010^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Zip fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	3,400,550	3,220,341	3,305,588	3,727,101

Notes: The table shows the baseline difference-in-difference estimates for the effect of clergy scandals on Catholicism. The outcome variable in column 1 is whether an individual identifies as Catholic, in column 2 whether an individual's father identifies as Catholic, in column 3 whether the mother identifies as Catholic, and in column 4 whether the person went to church last year. *Scandal* is an indicator variable that takes the value of 1 for all years after a zip code has experienced a clergy scandal. Standard errors are clustered at the home zip code level and given in parentheses. Asterisks denote significance at the 0.01 (***), 0.05 (**) and 0.1 (*) level. Treatment effects are estimated using the method outlined in Gardner (2022).

effect extends to religious practice, with individuals being 1.0 percentage points less likely to attend church following a scandal ($p < 0.001$).

Figure 3 displays the dynamic treatment effects, showing a persistent decline in Catholic identification for both freshmen and their parents following scandal revelations. Church attendance also shows a steady downward path. Importantly, we observe no clear violations of the parallel trends assumption in the pre-treatment period. Nevertheless, we provide additional robustness checks in Section 4.6.

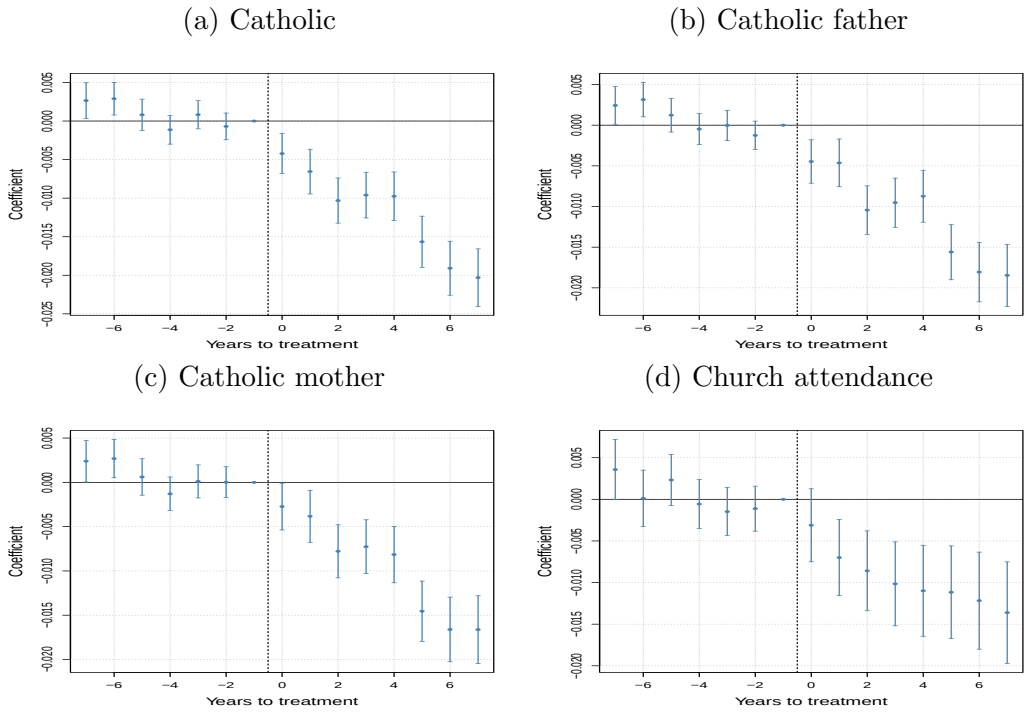
To ensure these effects are consistent with secularization rather than people merely switching between denominations, we also examine the effect on overall religiosity, and identification with non-Catholic religions. Results in Table A12 and Figure A27 in the Appendix confirm that scandals lead to a general decline in religious identification, rather than only realignment to other denominations. While the effect on overall religiosity is smaller and noisier, it remains highly statistically significant ($\beta = -0.005$; $p < 0.001$). We therefore interpret our subsequent results as capturing the consequences of Catholics becoming non-religious.[16]

The magnitude and persistence of our effects are particularly noteworthy given that re-

for parents and children.

[16]Appendix A1.5.8 shows all our main results using 'religious' as the treatment variable instead of 'Catholic'. All important conclusions are the same.

Figure 3: Dynamic effects of scandals on Catholicism



Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on Catholicism. The outcome variables measure whether the respondent is Catholic (Panel A), whether their father is Catholic (Panel B), whether their mother is Catholic (Panel C), and whether they attended church last year (Panel D). *Relative time to treatment* measures years to treatment, which is given by the year of the first revelation of a clergy scandal in a zip code. Control variables are college selectivity, gender, race, parental education, and family income. Error bars depict 95% confidence intervals. All effects are estimated using the method outlined in Gardner (2022). Standard errors are clustered at the home zip code level. For treated units, we consider a time window from 7 years before to 7 years after the scandal revelation.

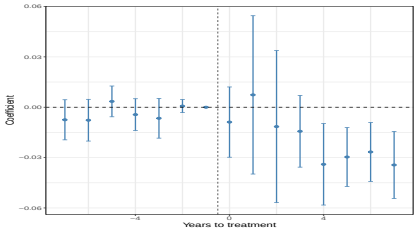
ligious affiliation tends to be highly stable and is often considered a core component of cultural identity (Iannaccone, 1998; Alesina and Giuliano, 2015). Our findings demonstrate how institutional failures can meaningfully accelerate broader patterns of secularization by undermining trust in religious organizations, even among traditionally stable Catholic communities. The similar magnitude of effects across students and parents indicates that these identity shifts can occur across generations and age groups. This interpretation aligns with sociological theories that emphasize how erosion of trust in religious institutions can accelerate broader patterns of secularization (Berger, 2011).

To corroborate our individual-level findings and extend them to the broader population, we analyze county-level data on Catholic adherents, schools, and students. Figure 4 presents

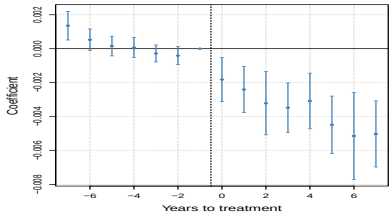
these results, showing significant declines across all measures. These results are in line with previous work on the effect of scandals on Catholic schools (Dills and Hernández-Julián, 2012; Bottan and Perez-Truglia, 2015). We find no clear indication of parallel trend violations. Although the confidence intervals for the adherents' analysis are wide because the decennial nature of the data, the overall effect remains negative and significant, and quantitatively similar to our freshmen estimates. These results indicate that our freshmen results extend to the general population.

Figure 4: Dynamic effect of scandals on Catholicism, county-level data

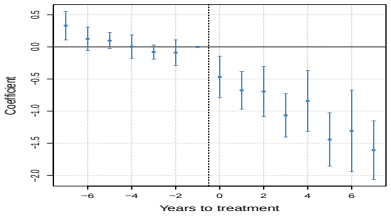
(a) Catholic adherents



(b) Catholic schools



(c) Catholic students



Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on county-level Catholicism. *Catholic adherents* gives the fraction of individuals in a particular county that identifies as Catholic. *Catholic schools* is the number of Catholic schools in a county. *Catholic students* is the number of students attending Catholic schools. Standard errors are clustered at the county level. All effects are estimated using the method outlined in Gardner (2022). Standard errors are clustered at the county level. Panel A uses an extended 20-year pre-and-post window, because the standard 7-year window does not provide sufficient data points to estimate all coefficients reliably, given that the data are decennial. Other definitions are as in Figure 3.

To provide further insights into the relationship between scandals and secularization, we examine heterogeneity in treatment effects across various demographic and geographic dimensions. For our individual-level analysis, we examine variation in treatment effects by gender, parental education, and parental income. For the county-level analysis, we consider heterogeneity by pre-treatment political orientation, income-per-capita, and population den-

sity.[17] We again remove all questions for which the confidence intervals exceed 5.

Table A3 presents individual-level heterogeneity results. We find that the secularizing effect of scandals is more pronounced among more vulnerable populations—specifically, individuals who are Black, from low-income families, and whose parents have lower levels of education.[18] Several explanations for this heterogeneity are plausible. More vulnerable groups may rely more heavily on religious institutions for social support and community resources, making scandals more consequential for their overall well-being and identity. Alternatively, individuals from higher socioeconomic backgrounds may have more resources to rationalize scandals or face higher social and economic costs from disaffiliation, leading to greater resistance to changing their religious identification. Taken together, the observed pattern suggests that socioeconomic factors play an important role in shaping individuals' responses to institutional failures within religious organizations.

Table A4 presents county-level heterogeneity results, revealing significant variation along geographic and political lines. The secularizing impact of clergy scandals is substantially larger in counties that were Democrat-leaning and densely populated in 1980. This aligns with the notion that such environments are often characterized by greater openness to change and less deference to traditional institutions (Jost, 2017). Urban settings, with their diverse populations and exposure to varied ideologies, may facilitate easier transitions away from religious affiliations following scandals. The stronger effect in Democrat-leaning counties could reflect a political climate more conducive to questioning established religious institutions. Interestingly, we find no significant differences in scandal effects based on county-level income per capita. This suggests that the aggregate economic conditions of an area may be less influential than its political leanings or urbanization in determining responses to religious

[17] Because our later analyses demonstrate that scandals affect, among other things, voting choices, we base our heterogeneity tests on pre-scandal values from 1980. For political orientation, we classify counties as Republican if the Republican party received at least 50% of the votes in the 1980 presidential election, and as Democrat otherwise. For income per capita, we split counties by above vs. below median income in 1980. For density, we consider above and below median density in 1980.

[18] The subset of Hispanic students in our sample is too small to reliably estimate effects for this group. Hence, we focus on Black vs. White comparisons.

scandals.

4.2 Effect of Catholicism on Political Preferences

Our analysis now turns to examining how Catholic identity shapes political preferences across a wide range of policy domains. As emphasized in Section 2.1, Catholic doctrine stresses principles such as the sanctity of life, social justice, and care for the poor, which could theoretically align with either conservative or progressive policy positions depending on the specific issue. For instance, the Church's pro-life stance and traditional views on family structure might induce conservative positions on abortion and same-sex marriage. Conversely, its emphasis on social justice and care for the marginalized could translate into support for more progressive economic policies or environmental protections.

To empirically assess how Catholic identity influences political views, we examine preferences across 19 distinct policy domains. These span a broad spectrum of contentious issues including abortion, same-sex marriage, immigrant rights, environmental protection, affirmative action, and wealth redistribution, allowing us to examine different aspects of Catholic creed and public policy preferences.

Respondents rate their stance on each issue using a four-point scale, ranging from 'strongly disagree' to 'strongly agree'. To isolate the causal impact of Catholic affiliation on these preferences, we employ the 2SLS difference-in-differences approach described in Section 3.2, instrumenting treatment (Catholic identification) with exposure to clergy scandals. This method allows us to move beyond mere correlations and identify how losing one's Catholic identity directly affects political views. We remove outcomes for which the confidence intervals exceed -5 or 5 to focus on our most precise estimates. We additionally report reduced form estimates of the effect of scandals, which require weaker identifying assumptions but are more difficult to interpret.

The results, presented in Figure 5, reveal that Catholic identification influences political preferences in ways that largely align with Catholic social teachings. On issues central

to traditional Catholic doctrine, we find that Catholic identification crafts preferences consistent with that doctrine. For instance, Catholicism makes people more likely to support prohibiting homosexuality ($\beta = 1.60$, $p < 0.001$) and oppose legalizing abortion ($\beta = -2.39$, $p < 0.001$), reflecting the Church's emphasis on traditional family values and the sanctity of life. This is also signified by Catholicism's influence on preferences for reducing military spending ($\beta = 2.63$, $p < 0.001$). Similarly, on social and economic issues Catholicism leads to stronger support for providing national health care ($\beta = 0.62$, $p = 0.001$) and increasing environmental protection ($\beta = 0.41$, $p = 0.036$), aligning with the Church's teachings on human dignity and stewardship of creation. Taken together, these findings suggest that the Catholic Church effectively shapes adherents' views across a range of policy domains.

Figures A19 to A21 show the reduced form estimates for the effect of scandals on preferences. The event study plots reveal highly similar results to the 2SLS-DD results, and few pre-trend violations. As such, under weaker identifying assumptions, we show that scandals causally affect several important policy preferences.

To address potential concerns about multiple hypothesis testing across our various policy domains, we also apply Bonferroni corrections to our results. Although this correction might be overly conservative (Hochberg, 1987), our findings remain statistically significant for four key policy views—attitudes towards homosexuality, abortion, military spending, and taxing the wealthy.[19]

Our instrumental variable estimates should be interpreted carefully, considering the nature of the compliers in our setting. These estimates represent the local average treatment effects for individuals whose religious affiliation changes in response to clergy scandals. This group likely differs from the average Catholic, potentially having weaker initial attachments to the Church. This selection may either amplify or mute the observed effects. On one hand, compliers could exhibit larger treatment effects because those who change their religious af-

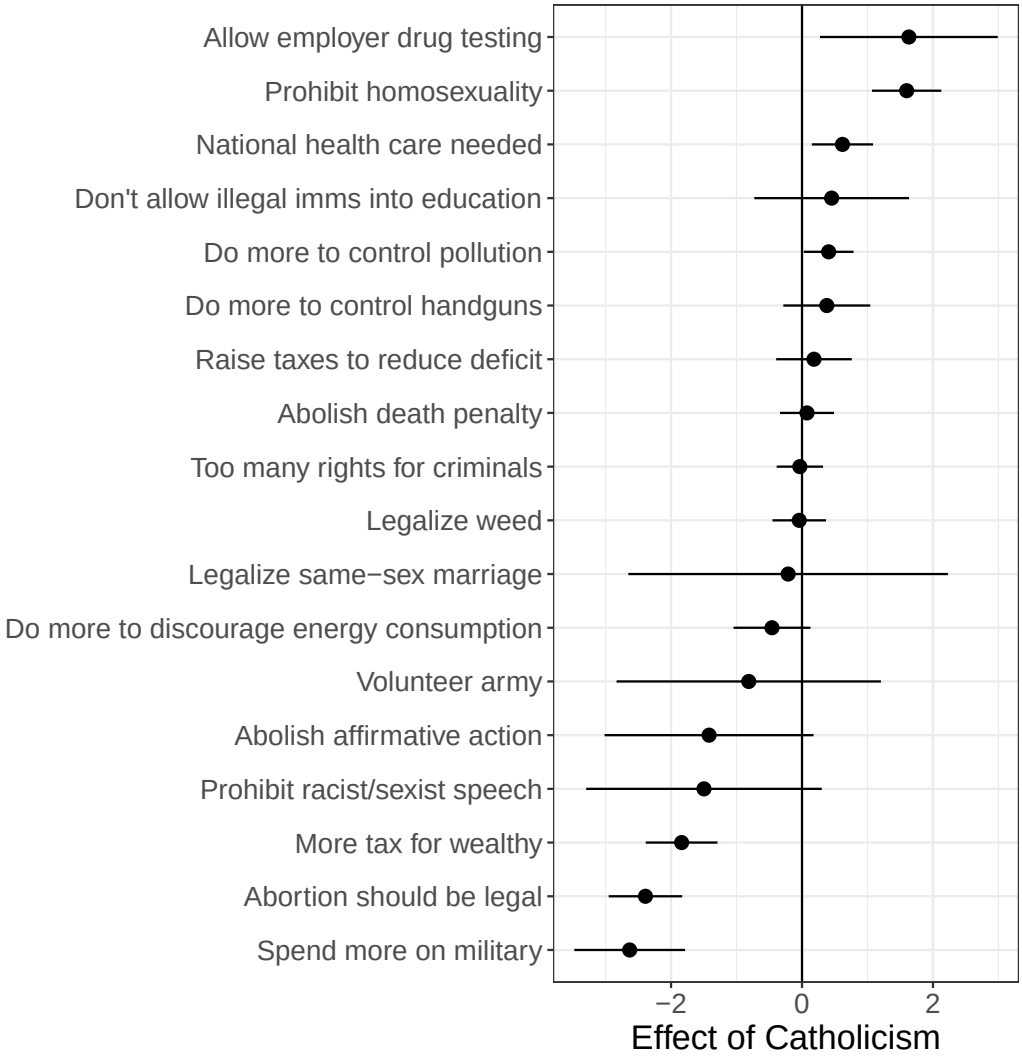
[19] A Bonferroni correction adjusts the significance threshold by dividing the original significance level (0.05) by the number of tests. In total, we use 32 outcome variables in Sections 4.2 to 4.4, resulting in a new threshold of 0.0016 for determining statistical significance.

filiation in response to scandals may be more prone to critically re-evaluating their beliefs across multiple domains, leading to more pronounced shifts in policy preferences. Conversely, they might display smaller effects if their initial attachment to Catholic teachings was already weak, or if they were nominal Catholics before the scandals, making disaffiliation more a formal acknowledgment of pre-existing views than a substantial shift in beliefs. Consequently, while our IV approach may provide valid causal estimates for this specific subpopulation, caution is warranted in generalizing these effects to the broader Catholic population or interpreting them as the average causal effect of religious affiliation on political and social attitudes.

One interpretation of these findings is that religious de-identification generates a shift toward more individualistic values and away from communal moral frameworks. The stronger support for personal liberties—as evidenced by more progressive positions on abortion rights and same-sex marriage, among others—reflects an emphasis on individual autonomy over traditional religious prescriptions. Similarly, the decreased opposition to drug legalization suggests greater acceptance of personal choice in matters of consciousness and behavior. However, this individualistic turn appears selective rather than universal: the increased support for redistribution and environmental protection among those who disaffiliate suggests that losing religious identity does not necessarily lead to wholesale rejection of collective obligations. Instead, individuals appear to recalibrate their moral compass, moving from religiously-prescribed communal norms toward secular frameworks that balance individual freedoms with social responsibilities. An alternative explanation is that the Catholic Church provides substantial social services, so that when lower-income individuals disaffiliate from the Church, they may lose access to these services, which could increase their demand for government-provided alternatives.

Given that Catholicism makes people adopt more conservative stances in some domains, and more progressive stances in others, the overall impact of Catholicism on political alignment is not immediately clear. We therefore also estimate the effect of Catholic identity on

Figure 5: Effect of Catholicism on policy preferences



Notes: The figure shows the estimated effect of Catholicism on policy preferences. Each dot represents the estimated effect of Catholicism on preferences, where Catholicism is instrumented by whether a clergy scandal has occurred in an individual's home zip code. All effects are estimated using the 2SLS-DD method outlined in Section 3.2. Error bars represent 95% confidence intervals. Standard errors are clustered at the home zip code level. Detailed descriptions of all survey questions are given in Appendix A1.2.

political orientation, measured on a five-point scale from 'extreme right' to 'extreme left'. The results, shown in Table 3 indicate a significant rightward shift associated with Catholicism. Specifically, we find that Catholic identification causes a two-point move to the right on this five-point scale. This effect is both statistically significant ($p < 0.001$) and economically sizable, suggesting that the conservative influence of Catholicism on social issues far

Table 3: Effect of Catholicism on political orientation

	Right-Left Scale
Catholic	-1.925^{***}
	(0.246)
Zip fixed effects	Yes
Year fixed effects	Yes
Controls	Yes
Observations	3,783,021

Notes: The table displays the estimated effect of Catholicism on political orientation, measured on a 5-point scale from *Extreme right* to *Extreme left*. Treatment effects are estimated using the 2SLS-DD approach outlined in Section 3.2. Other definitions are as in Table 2.

outweighs its more progressive leanings on certain other matters such as military spending. The analogous reduced-form estimates indicate that the revelation of a local clergy scandal shifts individuals 0.014 points ($p < 0.001$) to the left.

This is further evidenced by Figure A3, which plots the correlation of GSS measures with the corresponding scandal effect (and their confidence intervals). The figure shows a positive gradient, indicating that outcomes where Catholics differ most from non-Catholics in the general population are precisely those where scandal exposure has the largest effects. This provides important external validation: scandals shift preferences toward non-Catholic norms on the very dimensions where Catholic distinctiveness is greatest.

To enhance the external validity of our results, we extend our analysis to county-level political outcomes. Here, we examine the impact of clergy scandals on Democratic vote shares, voter turnout, and political donations. This approach allows us to capture the aggregate effects of religious de-identifiation on concrete voting behavior, complementing our individual-level attitudinal findings. We use the staggered difference-in-differences methodology described in Section 3.2.

Consistent with our individual-level results, we find that clergy scandals, which reduce Catholic identification, lead to significant increases in Democratic vote shares across all levels of government (Figure A8, Panel A). The magnitude of this effect is substantial, ranging from a 2.8 percentage point increase in House elections to a 3.8 percentage point increase in Senate elections (all $p < 0.001$). While we find some evidence of a pre-trend violation for presidential

elections, there is no such evidence for the other two election types. Section 4.6 shows the sensitivity of these estimates to parallel trend violations. These findings suggest that the leftward shift in political orientation associated with religious disaffiliation translates into tangible changes in voting behavior.

Interestingly, we find no significant effect of scandals on voter turnout rates (Panel B) with no evidence of pre-trend violations for turnout. This result contrasts with previous literature suggesting a positive relationship between religiosity and civic engagement (Gerber et al., 2016). One potential explanation for this discrepancy is that Gerber et al. (2016) focus on changes in religiosity induced by a pull factor from the secular side (increased shopping opportunities), whereas we examine a push factor from the religious side (abuse scandals). It is possible that pull factors decrease civic engagement more broadly, while push factors do not. These results are also somewhat inconsistent with the interpretation that scandals reduce trust in institutions more broadly, as a reduction in institutional trust would likely imply lower turnout rates (Grönlund and Setälä, 2007).

Finally, we observe a significant realignment in political donations following clergy scandals (Panel C). Donations to Democratic candidates increase, while contributions to Republican candidates decrease. This shift in financial support further corroborates our political alignment results and re-iterates the impact of religious disaffiliation on political behavior.

To further unpack the relationship between religion and political preferences, we explore heterogeneous treatment effects across various demographic and geographic dimensions. This analysis allows us to identify which groups are most influenced by religious affiliation in shaping their political views, potentially providing insights into the mechanisms through which religion impacts political attitudes.

Our investigation is guided by two complementary hypotheses. First, we posit that the influence of religion may be inversely related to the availability of alternative sources of meaning and community. Individuals with diverse social networks and secular institutions may be less reliant on religion to shape their worldviews. Second, we consider the possibility of

Table 4: Effect of scandals on county-level political outcomes

	Dem. vote share (pres.)	Dem. vote share (Senate)	Dem. vote share (House)
Panel A: Voting			
Scandal	0.031***	0.038***	0.028***
	(0.002)	(0.005)	(0.006)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	13,610	18,292	26,747
	Turnout rate (pres.)	Turnout rate (Senate)	Turnout rate (House)
Panel B: Turnout			
Scandal	0.001	0.002	−0.0002
	(0.001)	(0.002)	(0.002)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	13,608	18,292	26,985
	Donations (Dem.)	Donations (Rep.)	Donations (total)
Panel C: Political donations			
Scandal	0.122***	−0.065**	−0.033
	(0.033)	(0.027)	(0.021)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	49,910	52,451	55,756

Notes: The table shows the estimated effect of clergy scandals on county-level voting outcomes (Panel A), turnout rates (Panel B), and political donations (Panel C). In Panel A, the outcome variables in columns 1-3 are the Democrat vote share in presidential elections, the Democrat vote share in Senate elections, and the Democrat vote share in House of Representatives elections. In Panel B, the outcome variables are turnout rates in the same three elections. In Panel C, the outcome variables are donations to Democrat candidates (log), donations to Republican candidates (log), and total political donations (log). Standard errors are clustered at the county level. Treatment effects are estimated using the method outlined in Gardner (2022). All other definitions are as in Table 2.

identity substitution: as individuals disengage from religious identity, they may increasingly identify with other salient group characteristics such as gender, socioeconomic status, or race, potentially adopting the political preferences associated with these alternative identities.

Figure A5 reveals striking gender differences in how Catholicism shapes political attitudes.[20] Most notably, the effect of Catholicism on opposition to homosexuality is nearly four times larger for males ($\beta = 2.69$; $p < 0.001$) than for females ($\beta = 0.71$; $p = 0.024$). This substantial gap suggests that religious teachings on sexuality may resonate more strongly with men, perhaps due to differences in how gender roles are internalized within religious contexts. Additionally, we find that Catholicism exerts a stronger influence on men's attitudes

[20]County-level heterogeneity results for the effect of scandals on voting, turnout, and political donations are available upon request.

towards abortion, criminal rights, and immigration. Despite this heterogeneity, however, we find little evidence that people who lose their religion shift their main identity towards gender (see Section 4.3 for further evidence).

Socioeconomic status, as measured by parental income, also moderates the impact of Catholicism on political attitudes (Figure A5). Interestingly, we observe divergent effects of religion on redistribution. Catholicism significantly increases support for redistribution among the poor, but tends to decrease redistributive preferences among the rich, although the latter effect is not statistically significant. This divergence is consistent with a shift from religious identity to class identity, as both groups appear to shift their altruism to those of similar income levels.

We also find divergent effects along income lines for other issues. For example, Catholicism increases support for drug legalization and criminal rights among lower-income respondents but decreases it among higher-income individuals. This pattern may reflect differing experiences with criminal enforcement across socioeconomic strata. Similarly, while Catholicism generally increases support for universal health care, these effects are more pronounced among lower-income respondents. All these results point towards stronger class identification.

When examining heterogeneity by mother's education, we find relatively uniform effects across different categories (Figure A5). Additional analyses, shown in Appendix A1.4, provide little evidence for people switching to racial identification when they secularize.

4.3 Effect of Catholicism on Gender Norms

Many argue that the Catholic Church plays a significant role in shaping societal norms on gender roles and family structure (Guiso et al., 2003; Becker and Woessmann, 2008; Seguino, 2011; Nunn et al., 2014). To quantify this influence causally, we examine the effect of Catholic identification on five key dimensions of gender-related attitudes: attitudes towards marriage during college, sexual entitlement, women's role in the workforce, the importance of raising

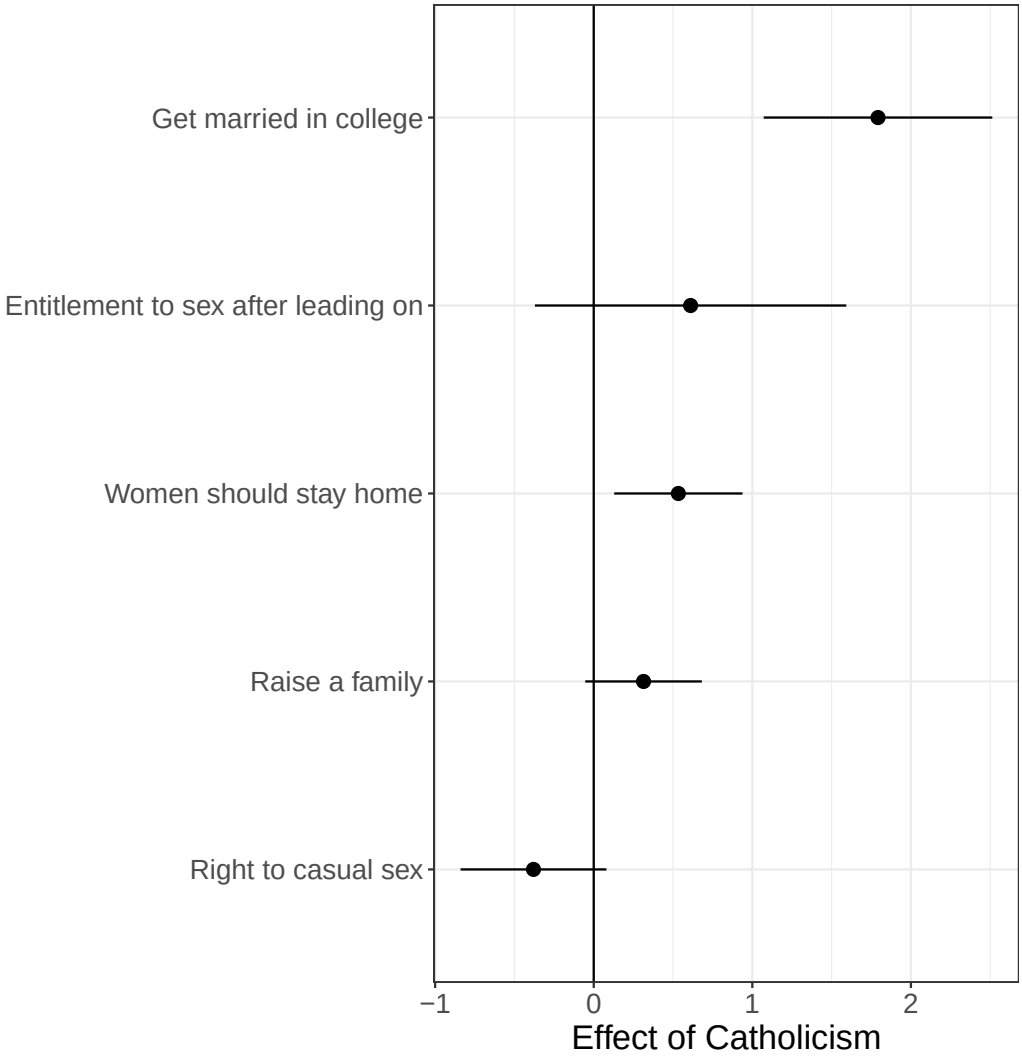
a family, and views on casual sex. We employ our 2SLS difference-in-differences estimator, instrumenting Catholic identification with exposure to clergy scandals, to investigate how religious de-identification affects these gender-related beliefs. Figure A22 in the Appendix shows event study plots for the effect of scandals on gender norms.

Figure 6 presents our findings, showing that Catholicism consistently fosters more conservative gender attitudes. The effects are particularly pronounced for attitudes towards early marriage and traditional gender roles in the workforce. Specifically, Catholic identification significantly increases the likelihood of planning to marry during college ($\beta = 1.79$, $p < 0.001$) and strengthens the belief that women should prioritize homemaking over paid employment ($\beta = 0.53$, $p = 0.010$).[21] While the effects on attitudes towards sexual entitlement, family importance, and casual sex are directionally consistent with more conservative views, these estimates are either non-significant or marginally significant.

Similar to the findings in the previous section, the observed pattern of results suggests that religious de-identification promotes a more individualistic conception of gender roles, one that emphasizes personal choice over traditional religious prescriptions for family life. The reduced support for early marriage and women's confinement to domestic duties among those who disaffiliate indicates a shift away from religiously-prescribed life trajectories toward more flexible, individually-determined paths. This interpretation is reinforced by the directional (though not always statistically significant) effects on attitudes toward casual sex and family formation, which suggest greater acceptance of personal autonomy in intimate relationships and life choices. The emergence of more progressive gender attitudes following religious de-identification aligns with a broader transition from communal religious frameworks—which often prescribe distinct roles for men and women—toward more individualistic value systems that emphasize personal agency in determining one's life course, a shift that recent research suggests may help reduce victim-blaming attitudes and gender-based violence (Bermek et al., 2023).

[21] The former remains significant under a Bonferroni correction but the latter does not.

Figure 6: Effect of Catholicism on gender norms



Notes: The figure shows the estimated effect of Catholicism on gender norms. Detailed descriptions of all survey questions are given in Appendix A1.2. All definitions are as in Figure 5.

Perhaps surprisingly, Figure A6 shows that these effects are relatively similar between genders. Although the treatment effects are more often statistically significant for males, the estimates for males and females are not statistically different from each other. This result provides evidence against the notion that people switch to gender as their main identity, as such a shift would require that secularizing men adopt more traditional values, whereas women adopt less traditional ones. For the other heterogeneity dimensions, we also find little

systematic heterogeneity.[22]

4.4 Effect of Catholicism on Societal Beliefs and Attitudes

Beyond gender norms, we explore the influence of Catholicism on broader societal beliefs and attitudes. We focus on four dimensions: (i) the tension between personal values and legal obedience, (ii) beliefs about individual agency in societal change, (iii) perceptions of ongoing racial discrimination, and (iv) attitudes towards political dissent. Figure A22 in the Appendix shows event study plots for the effect of scandals.

Figure 7 presents our findings. In contrast to our results on gender norms, we find that the effect of Catholic identification is statistically indistinguishable from zero for all four domains (all $p > 0.301$). For beliefs about individual capacity to change society and perceptions of racial discrimination, we obtain precisely estimated null effects. While the confidence intervals are wider for attitudes towards law obedience and political dissent, the point estimates remain close to zero.

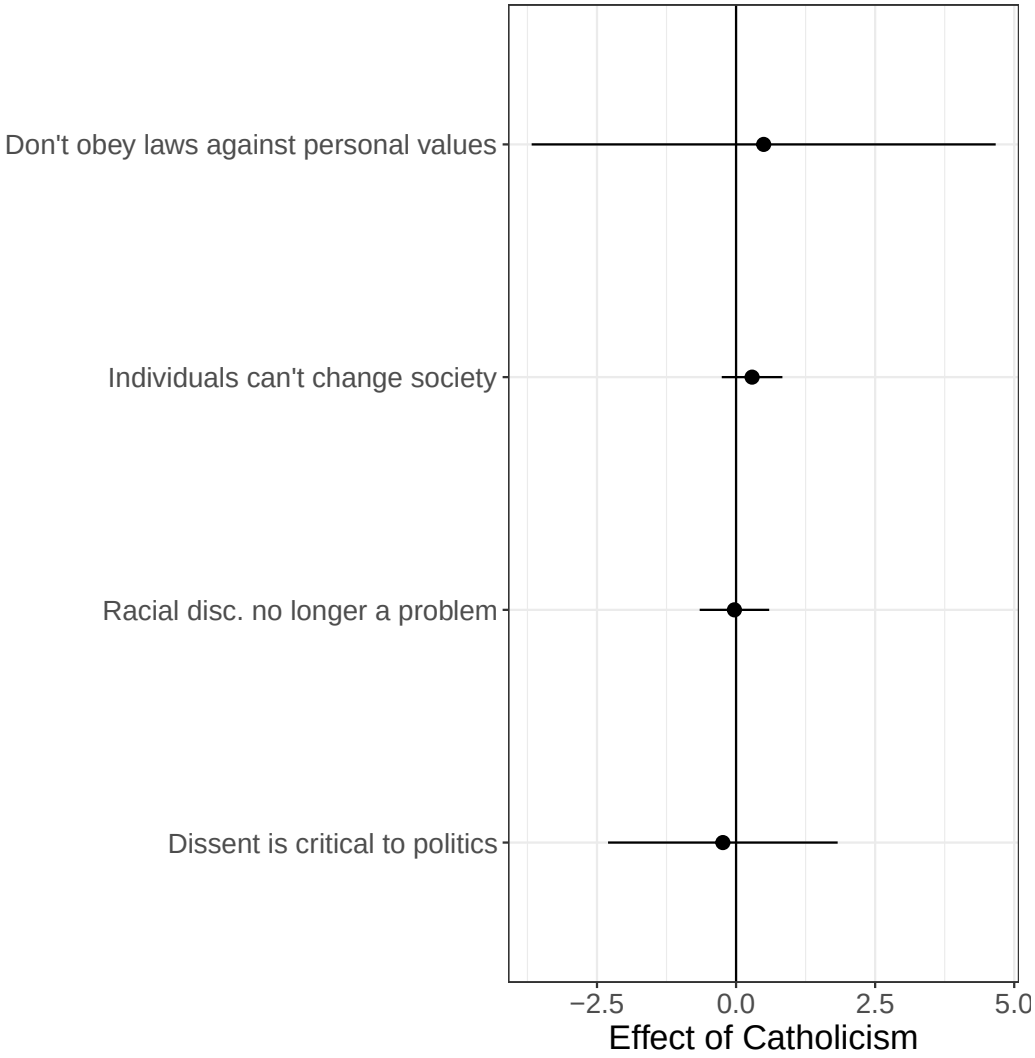
This pattern holds across various demographic subgroups, as shown in Figure A7, which reveal no meaningful heterogeneity in these null effects. Figure A7 also reveal no meaningful heterogeneity between groups. Taken together, these results suggest that the influence of Catholicism on societal beliefs is relatively domain-specific; while Catholic affiliation strongly shapes policy preferences and gender-related attitudes, its impact appears limited in other areas

4.5 Effect of Catholicism on Group Membership

An interesting question that emerges from our analysis is how religious participation relates to broader patterns of group engagement. In particular, we address the question whether religious de-identification affects the likelihood of joining other groups. To empirically investigate the relationship between religion and group membership, we estimate the effect

[22]Some estimates are missing because the end-points of the confidence intervals are below -5 or above 5.

Figure 7: Effect of Catholicism on other social norms



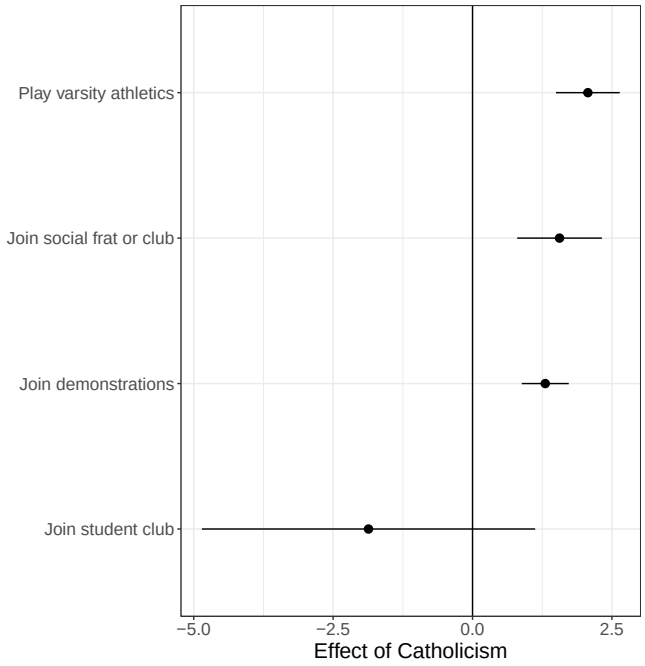
Notes: The figure shows the estimated effect of Catholicism on societal norms and beliefs. Detailed descriptions of all survey questions are given in Appendix A1.2. All definitions are as in Figure 5.

of Catholicism on the probability of joining various student groups (sports, student clubs, demonstrations, or fraternities) using our 2SLS-DD approach.

Figure 8 presents the results. We find a positive and statistically significant effect of religious identification on the likelihood of playing varsity athletics ($\beta = 2.07$, $p < 0.001$), joining demonstrations ($\beta = 1.30$, $p < 0.001$), and joining a social fraternity or club ($\beta = 1.56$, $p < 0.001$), but not on joining a student club ($\beta = 1.87$, $p = 0.221$)[23]. These results

[23]All three estimates remain significant using Bonferroni corrections.

Figure 8: Effects of Catholicism on intended participation in group activities



Notes: The figure shows the estimated effect of Catholicism on the proclivity to join group activities. Each dot represents the estimated effect of Catholicism on the intention to join a group activity, where Catholicism is instrumented by whether a clergy scandal has occurred in an individual's home zip code. All other definitions are as in Figure 5. Appendix A1.2 provides more detailed descriptions of the survey questions.

suggest that losing one's religious affiliation reduces the overall propensity to engage in group activities. This finding is particularly striking given the time demands and potential satiation of group-membership needs one might expect from religious involvement.

These findings suggest that the individualistic turn associated with religious de-identification extends beyond attitudes and beliefs to affect social engagement. The reduced propensity to join group activities among those who disaffiliate indicates that the weakening of religious identity may erode not just specific communal commitments but the very inclination toward collective forms of social organization.

Our evidence further challenges the notion that group-oriented behavior is a stable trait, as proposed by Kranton and Sanders (2017); Kranton et al. (2020), instead indicating that religious participation may actively cultivate a desire for group-based activities more broadly. One potential explanation for this phenomenon is that religious communities foster a general

sense of belonging and social connection that translates into other group settings. The shared values, norms, and experiences within religious groups may engender a greater affinity for the structure and purpose of organized activities in general. Alternatively, the skills and preferences developed through religious participation—such as cooperation, shared goal-setting, and community-mindedness—may be particularly well-suited to other forms of group engagement.

4.6 Robustness Checks

To ensure the validity of our main findings, we conduct a series of robustness checks. These checks address potential concerns about sample composition, spillover effects, parallel trends violations, estimation methods, and the sensitivity of our results to various specification choices.

First, as an alternative identification approach, we employ an exposure design that leverages variation in pre-existing Catholic populations across counties. We construct our exposure measure by interacting each county's 1980 Catholic population share with the national cumulative count of clergy scandals in each year.[24][25] The underlying identification assumption is that areas with historically larger Catholic populations should experience stronger effects from nationwide clergy abuse revelations, regardless of scandal location, while counties with lower Catholic presence serve as natural controls. This approach mitigates concerns about spatial spillovers, since it relies on predetermined Catholic shares rather than the geographic distribution of scandals.

Figures A9 and A10 demonstrate that this alternative identification strategy produces results that largely corroborate our baseline findings. Specifically, we continue to find evidence that scandal exposure generates leftward shifts in political orientation, increases support for abortion rights and homosexuality, raises preferences for military spending, and strengthens

[24]We obtain county-level Catholic population shares from the Longitudinal Religious Congregations and Membership File and match these to zip codes.

[25]The cumulative scandal count represents the total number of revealed scandals across the United States up to each given year.

backing for redistributive taxation. Regarding gender norms, we replicate the progressive movement away from marriage during college and toward more accepting views of casual sex, though we now detect modest conservative shifts in attitudes toward women's role in the family. Results for other societal attitudes remain broadly consistent with our main findings.

Second, we examine whether clergy scandals alter the composition of college freshmen from affected zip codes. If scandals disproportionately deter students from certain backgrounds from attending college, our main results could reflect changes in student composition rather than changes in preferences or norms. We estimate the impact of scandals on student characteristics such as gender, race, parental education, and family income. As shown in Table A6, we find no significant effects on most characteristics. The sole exception is a small (0.3 percentage point) decrease in the likelihood of having a college-educated father. Given that lower parental education is typically associated with more conservative views, this composition change would, if anything, bias our estimates towards zero, suggesting our main results may slightly understate the true effects.

Third, we vary the assumed radius of scandal spillover effects from our baseline of 50km, to either 25km or 75km. Tables A7 and A8 and associated figures Figures A11 and A12 demonstrate that our key findings remain robust to these alternative specifications.[26] As expected, the 25km specification shows slightly more pre-trend divergence than our baseline model, while the 75km specification shows less, confirming the importance of accounting for spillovers to satisfy the parallel trends assumption.

Fourth, we assess the sensitivity of our first-stage results to potential violations of the parallel trends assumption using the smoothness restrictions (SR) approach developed by Rambachan and Roth (2023). We report so-called breakdown values, which measure the maximum allowable change in trend slope (M) for which the result remains significant, and compare them to pre-treatment benchmarks: $\bar{M}_{pre}$ (average pre-trend non-linearity) and the more conservative M_{pre}^{max} (maximum pre-trend non-linearity).

[26]The second-stage results are available upon request.

For religion (Figure A13), effects on Catholic identification and Catholic father are robust to large pre-trend deviations ($M > \bar{M}_{pre}$). However, Catholic mother and church attendance, while significant under exact parallel trends ($M = 0$), yield breakdown values below $\bar{M}_{pre}$, indicating sensitivity to trend deviations smaller than the average observed in the pre-period.

For preferences (Figure A16), legal abortion and military spending are highly robust; their breakdown values exceed even the conservative M_{pre}^{max} benchmark. Conversely, political orientation is significant at $M = 0$ but somewhat sensitive to non-linearities below the average pre-trend. Other preference outcomes show similar sensitivity. Note that M_{pre}^{max} is a highly conservative standard driven by the single largest, potentially noisy, pre-treatment swing, whereas $\bar{M}_{pre}$ better reflects typical trend smoothness.

For county-level religion outcomes (Figure A14), the effects on Catholic schools and Catholic students are highly robust. The Catholic population share is not significant even under exact parallel trends ($M = 0$), which is to be expected considering the data are decennial. For county-level political outcomes (Figure A15), the Democratic vote share in Presidential and House elections are robust to $\bar{M}_{pre}$ and M_{pre}^{max} respectively. Turnout measures are not significant even under parallel trends as in main results. Political donations are significant at $M = 0$ but sensitive to small trend deviations.

Fifth, we assess the validity of the exclusion restriction assumption in our 2SLS-DD estimates. A key concern is that scandals might affect other religious groups, for example by undermining general institutional trust. To address this, we examine the effect of clergy scandals on the political preferences, gender norms, and societal attitudes of Jewish individuals. We focus on this group because Catholics are unlikely to switch to Judaism, and Jews are plausibly least likely to disaffiliate with their religion based on scandals in the Catholic Church. Figures A17 and A18 demonstrate that scandals have negligible effects on the political preferences, gender norms, or other societal attitudes of Jewish individuals. Out of 29 outcomes examined, only two show statistically significant effects, which is consistent with what we would expect by chance alone. Moreover, as shown in Table A9, scandals do

not affect the likelihood of individuals identifying as Jewish. These findings suggest that the effects of scandals are largely confined to those whose religious affiliation changes (i.e., Catholics), supporting the validity of our exclusion restriction.

Sixth, we compare our main 2SLS-DD estimates measuring the effect of Catholicism on outcomes to difference-in-differences that measure the effects of scandals. It is important to note that our IV estimates are simply rescaled versions of our scandal estimates, with the scaling factor determined by the first-stage effect of scandals on Catholic identification. Figures A19 to A23 show the event study plots for the effect of scandals on preferences. The observed consistency with our main results suggests that our findings are not artifacts of our instrumental variable strategy.

Seventh, we re-estimate our models using the difference-in-differences method of Callaway and Sant'Anna (2021) as an alternative to our primary approach based on (Gardner, 2022). The main difference between Gardner (2022) and Callaway and Sant'Anna (2021) is that the former makes comparisons relative to all pre-treatment periods, whereas the latter only to the last pre-treatment period (see e.g. Roth et al., 2023, for a more detailed discussion). We allow for a control group consisting of both never-treated units and not-yet-treated units.[27] We report baseline estimates that correspond to the weighted average of all group-time average treatment effects with weights proportional to group size, as well as plots for the dynamic treatment effects. Tables A10 and A11 and associated figures Figures A25 and A26 show that this alternative method produces results largely consistent with our main findings.

Eighth, we replace our main treatment variable 'Catholic' (does an individual identify as Catholic) with an alternative treatment 'religiosity', which measures whether an individual identifies with any religion or not. The first-stage results in Table A12 and fig. A27, and the second-stage results in Figures A28 and A29 provide highly similar findings to our main specification.

Last, we address remaining concerns about potential confounding factors that could in-

[27]For computational tractability, we consider the specification without covariates (besides zip and year fixed effects). However, as we show next, including covariates does not materially alter our results.

fluence our results. For example, there is a possibility that large-scale scandal revelations might coincide with other significant events, such as the September 11 terrorist attacks. If these external events have disproportionate effects in areas where scandals occur (e.g., regions with higher Catholic populations) compared to areas without scandals, it could lead to misidentification of scandal effects.

To address these and other potential concerns about the comparability of treated and control zip codes, we implement a nearest-neighbor matching procedure using pre-treatment characteristics from 1980. For each treated zip code, we identify the five most similar control zip codes based on four variables measured in 1980: (1) share of Catholics, (2) Republican vote share in the 1980 election, (3) personal income per capita, and (4) population density.[28] We then subset our data to only include treated zip codes and matched control zip codes, reducing our sample size by approximately 50%.[29] This robustness check serves two purposes. First, it mitigates concerns about sample imbalance. Second, it addresses the possibility that large-scale revelations, such as the Boston Globe exposé in 2002, may have caused trend breaks in areas with e.g. high Catholic populations, potentially violating the parallel trends assumption even in the absence of pre-trend differences. The results for the matched sample in Table A14 and Figures A30 and A31 are highly consistent with our main findings, thus reducing concerns about sample unbalance.

5 Conclusion and Discussion

This study provides causal evidence on the impact of religious identification on political preferences, gender norms, societal beliefs and group behavior. Leveraging clergy scandals as an exogenous shock to religious identification and using data for millions of US freshmen, we find that decreased Catholic identification leads to significant shifts in political ideology and

[28] These variables are measured at the county level. To calculate zip-level values, we take the average value across all counties in which a zip code is located.

[29] For the effects of scandals on outcomes, we only report the reduced form estimates because the confidence intervals of the 2SLS-DD often exceed -5 or 5.

policy preferences. Our analysis shows that religious de-identification causes individuals to adopt more progressive positions on personal and moral issues such as abortion rights, same-sex marriage, redistribution, and drug policy. Simultaneously, it leads to more conservative views on universal healthcare and military spending. These divergent effects add up to a substantial leftward shift in overall political orientation, with individuals moving nearly two points to the left on a five-point scale. These individual-level attitudinal changes are corroborated by county-level voting behavior and political contributions. Clergy scandals generate higher vote shares and campaign donations for progressive candidates. We find little impact on voter turnout, suggesting the primacy of preference changes over participatory effects.

In addition to political preferences, we find that religious de-identification leads to more progressive gender norms, particularly regarding women's roles in the workforce and attitudes towards marriage. Our findings provide causal evidence for the often-hypothesized conservative influence of religion on gender attitudes, suggesting that the decline of religious affiliation may be a driving force behind evolving societal views on gender roles.

Our investigation of group memberships reveals that religious de-identification reduces the propensity to join other social groups and organizations. This finding challenges the notion that group-orientation is a stable personality trait, instead suggesting that religious participation may actively cultivate a desire for group-based activities more broadly. The implications of this result are significant, as it suggests that secularization may have broader consequences for civic engagement and social capital formation. As societies become increasingly secular, we may observe a general decline in group-oriented behavior, potentially affecting everything from voluntary organizations to community associations. This highlights an important and often overlooked aspect of secularization: its potential to reshape not just individual beliefs, but also patterns of social interaction and community engagement.

Our findings point to a fundamental shift toward individualism as religious identification declines. The movement toward more progressive positions on personal liberties, more

flexible gender roles, and away from group-oriented behaviors suggests that religious de-identification may accelerate a broader transition from communal to individualistic value systems. While this individualistic turn manifests most clearly in attitudes toward personal autonomy and social choices, it does not lead to wholesale rejection of collective responsibilities, as evidenced by sustained support for e.g. redistributive policies. Rather, the evidence suggests that as individuals move away from religiously-prescribed communal frameworks, they adopt more flexible ethical systems that emphasize individual agency while maintaining certain collective commitments.

To explain these results, we draw on insights from the identity economics literature (Shayo, 2009; Bonomi et al., 2021). In particular, we show that individuals who de-identify with Catholicism appear to identify more strongly with their socioeconomic class. This is reflected in divergent effects on redistribution and criminal justice preferences between high and low-income individuals, suggesting that as religious identity wanes, class identity may become more salient in shaping political attitudes. This identity substitution may partly explain the policy preference changes we document. Interestingly, we do not find evidence of increased identification with other salient social categories like race, gender, other religious denominations, or political parties.

Our analysis centers exclusively on individuals who lose their religious affiliation rather than those who gain it. This focus is important for several reasons. First, it aligns with broader secularization trends observed in many developed countries, making our findings particularly relevant for understanding contemporary political dynamics. Second, it allows us to isolate the effects of religious disaffiliation from other potential confounding factors that might be associated with religious conversion. However, this approach also has limitations. By focusing solely on religious loss, we cannot definitively conclude whether the effects we observe are symmetrical for those gaining religion. The process of losing religion may involve unique psychological and social dynamics that differ from religious adoption. Moreover, our findings may not fully capture the broader effects of religion on political preferences, as we do

not observe variation in religious intensity among those who remain affiliated. Despite these limitations, however, our results provide valuable insights into how the loss of a significant cultural identity—in this case, religion—can reshape political attitudes.

Some other caveats are worth noting. First and foremost, our analysis focuses on a specific religious group (Catholics) in the United States, relying primarily on data from college freshmen. Catholics are also somewhat unique in the United States in that they do not clearly align with either major political party (Brooks and Manza, 2004; Grzymala-Busse, 2012; Fowler, 2018). While we corroborate key findings with aggregate county-level data, the generalizability to other faith traditions and cultural settings merits further investigation.

Second, while we provide suggestive evidence for certain mechanisms like identity substitution, we cannot definitively rule out all alternative explanations. For example, scandals could cause a general loss of trust in institutions, or a shift toward more secular, modernist values beyond just the decline in religious practice. A more cautious interpretation of our results would therefore be that clergy scandals, rather than losing religiosity, cause a progressive shift in attitudes and behaviors. Additional research could aim to test the channels driving our results more directly.

Notwithstanding these limitations, our study provides clear evidence on the causal effect of religious identification on personal, moral and political values. The results highlight the importance of institutional factors and identities in shaping societal beliefs and behaviors. As such, our findings suggest a need for economic models that better incorporate the role of institutions and culture in preference formation.

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A1 Appendix

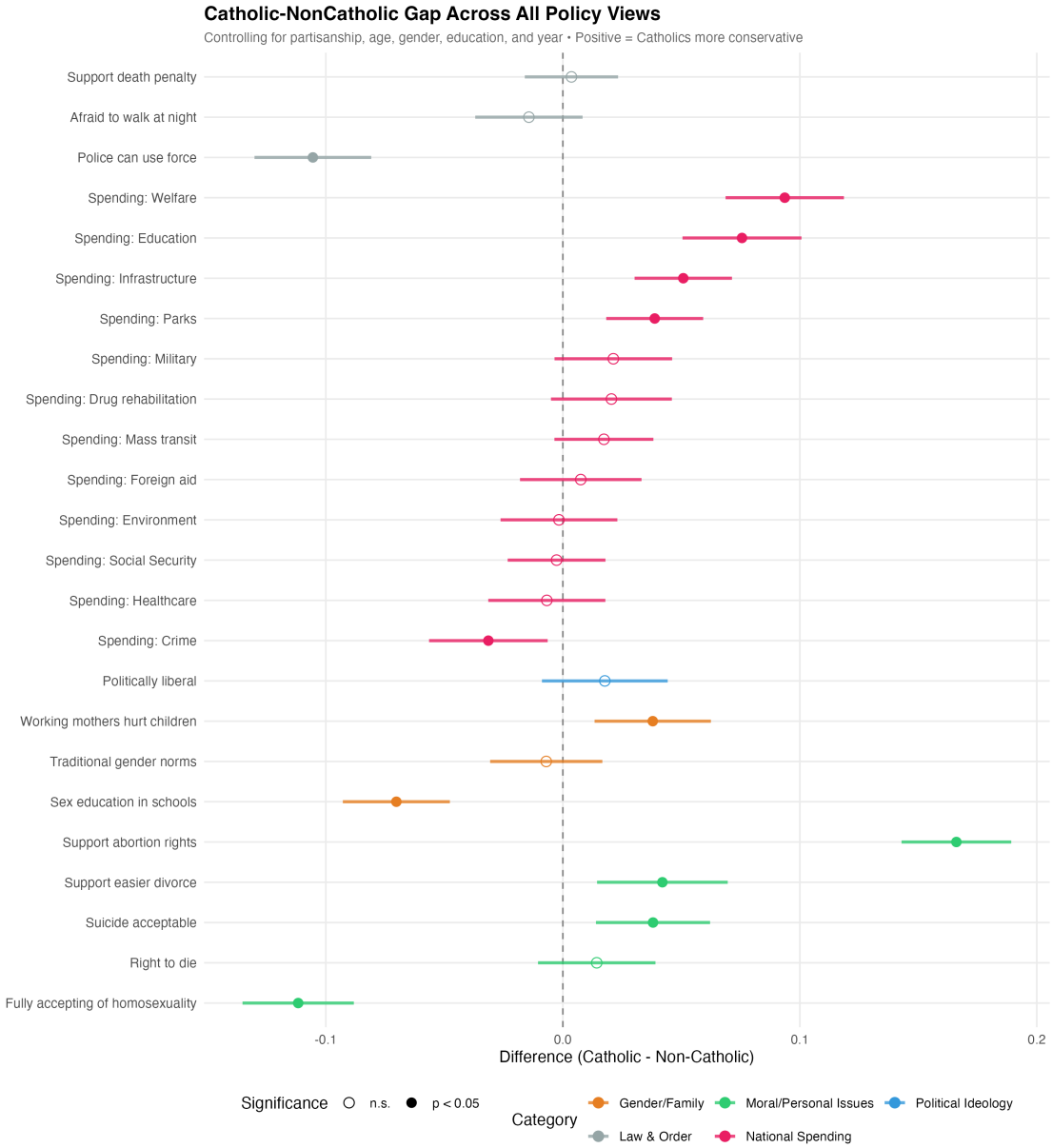
A1.1 Catholic Identity and Attitudes

Our analysis uses data from the General Social Survey (GSS), a nationally representative cross-sectional survey of U.S. adults conducted by NORC at the University of Chicago. We pool observations from 1972-2021, yielding approximately 60,000 respondents with valid Catholic identification data and responses to at least one political attitude question. The 24 policy outcomes span four broad domains: Moral/Personal Issues (4 items: abortion rights, suicide acceptability, easier divorce, and acceptance of homosexuality); Gender/Family (2 items: working mothers hurt children, traditional gender norms); National Spending (10 items: crime, healthcare, Social Security, environment, foreign aid, mass transit, military, drug rehabilitation, parks, infrastructure, education, and welfare); Law & Order (1 item: police use of force); and Political Ideology (1 item: liberal-conservative self-placement).

Figure A1 displays estimated Catholic-non-Catholic differences from OLS regressions controlling for age, gender, education, and survey wave fixed effects, with positive values indicating more conservative views (recoded). The largest statistically significant gaps appear on sex education in schools, acceptance of homosexuality, views on working mothers, and traditional gender norms—all domains directly addressed in Catholic social teaching. Catholics exhibit modestly more conservative positions on some spending items (welfare, education) and more liberal positions on others (police funding, infrastructure), consistent with the Church's mixed economic doctrine combining social solidarity with traditional moral views. The weak association with general ideological self-placement suggests Catholic socialization operates through specific issue positions rather than wholesale adoption of left-right political frameworks.

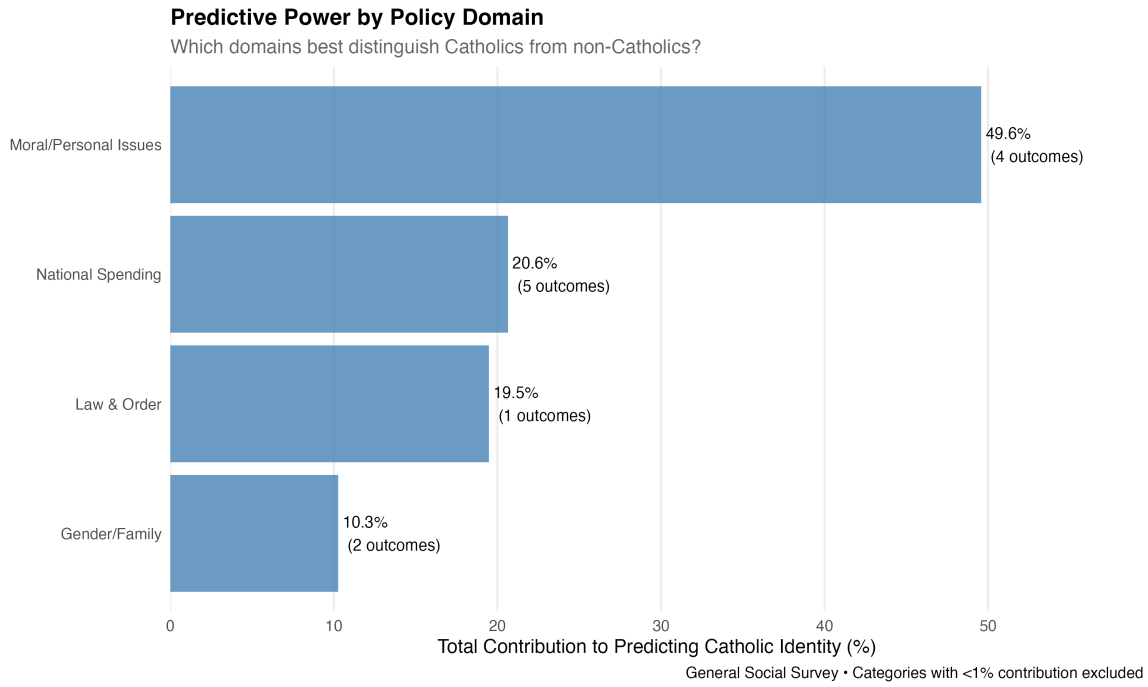
Figure A2 quantifies which policy domains best distinguish Catholics from non-Catholics using dominance analysis, which decomposes each domain's incremental contribution to predicting Catholic identity beyond demographic controls. Moral and personal issues account for approximately 50% of total predictive power despite comprising only four outcomes, while national spending preferences contribute 20% collectively and liberal-conservative self-placement contributes essentially zero (excluded from figure due to $< 1\%$ contribution). These cross-sectional patterns inform our expectations about where causal effects of religious de-identification should manifest: we anticipate the largest treatment effects on moral issues aligned with Church teachings and more modest effects on economic preferences. The instrumental variables estimates in Results test these predictions by examining whether abuse crisis-induced declines in Catholic identification causally shifted attitudes across policy domains.

Figure A1: Catholic-Non Catholic Differences Across Policy Views



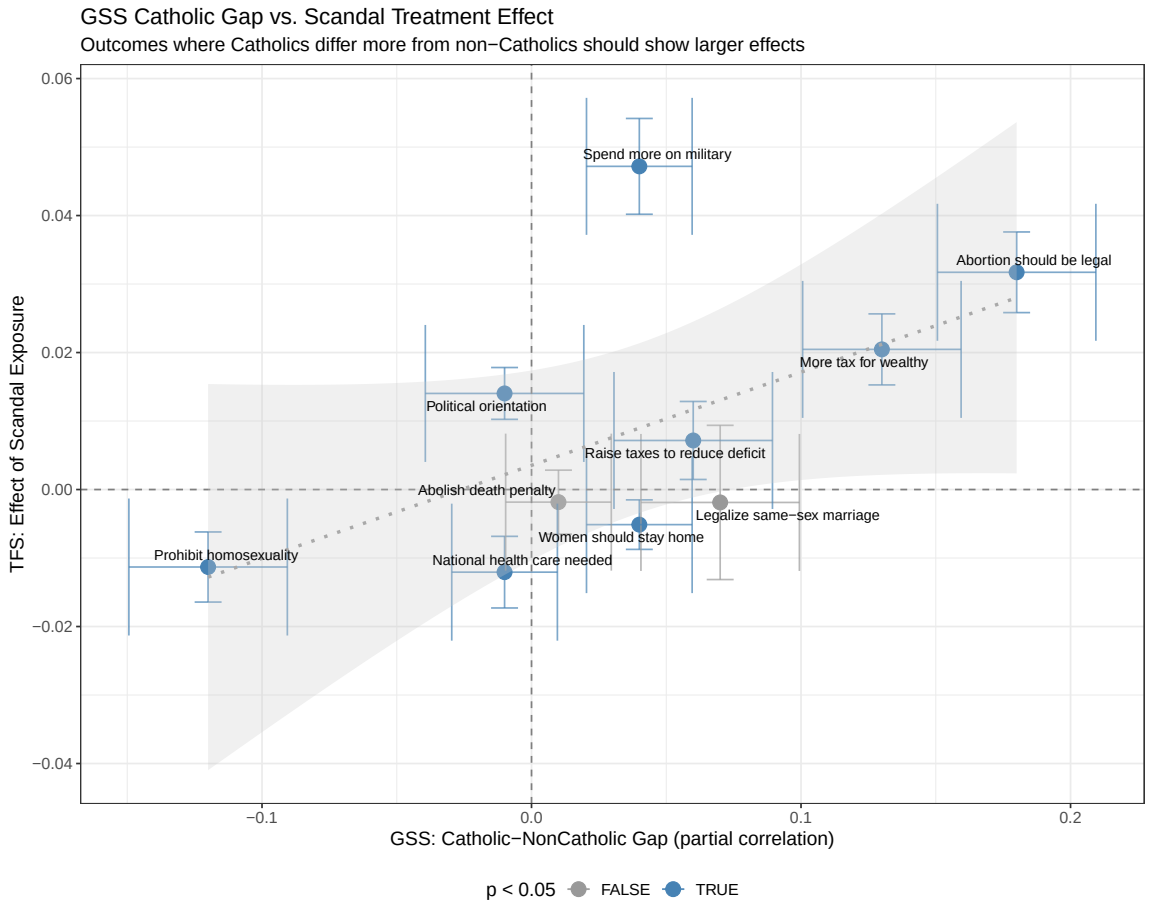
*Notes:*Figure displays estimated coefficients from OLS regressions of standardized policy outcomes on Catholic identity indicator, controlling for partisanship, age, gender, education, and survey wave fixed effects. Positive values indicate more conservative policy views. Error bars represent 95% confidence intervals with standard errors clustered by year. Data from General Social Survey, 1972-2021.

Figure A2: Predictive Power by Policy Domain



Notes: Figure shows the percentage contribution of each policy domain to predicting Catholic identity beyond demographic controls (age, gender, education, and survey wave). Dominance analysis estimates each domain's incremental explanatory power when added to the baseline model. Categories contributing less than 1% are excluded. Data from General Social Survey, 1972-2021.

Figure A3: Predictive Power by Policy Domain



Notes: Figure shows the correlation of GSS measures on the x-axis with the corresponding scandal effect (coefficients on Fig 2) on Y-axis with its confidence interval for the matching (or closest) measure.

A1.2 Additional Details Data

The table below provides a description of all the questions of the Freshmen Survey that we analyze.

Panel A: Political Preferences	
Question	**Description**
Abortion should be legal	Abortion should be legal
More tax for wealthy	Wealthy people should pay a larger share of taxes than they do now
Prohibit racist/sexist speech	Colleges should prohibit racist/sexist speech on campus
Abolish affirmative action	Affirmative action in college admissions should be abolished
Volunteer army	The county should have a volunteer army
Do more to discourage energy consumption	The federal government should do more to discourage energy consumption
Legalize same-sex marriage	Same-sex couples should have the right to legal marital status
Legalize weed	Marijuana should be legalized
Too many rights for criminals	There is too much concern in the courts for the rights of criminals
Abolish death penalty	The death penalty should be abolished
Raise taxes to reduce deficit	The federal government should raise taxes to reduce the deficit
Do more to control handguns	The federal government should do more to control the sale of handguns
Do more to control pollution	The federal government is not doing enough to control environmental pollution
Don't allow illegal imms into education	Undocumented immigrants should be denied access to public education
National health care needed	A national health care plan is needed to cover everybody's medical costs
Prohibit homosexuality	It is important to have laws prohibiting homosexual relationships
Allow employer drug testing	Employers should be allowed to require drug testing of employees or job applicants

Panel B: Gender Norms	
Question	**Description**
Right to casual sex	If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short period time
Raise a family	Indicate the importance of raising a family
Women should stay home	The activities of married women are best confined to the home and family
Entitlement to sex after leading on	Just because a man thinks that a woman has 'led him on' doesn't entitle him to have sex with her
Get married in college	What is your best guess as to the chances that you will get married while in college

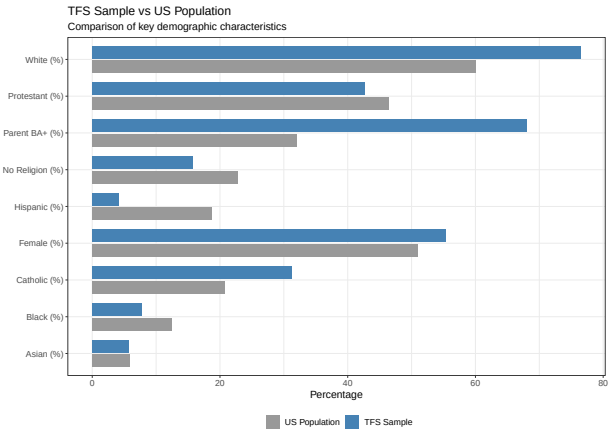


Figure A4: Comparison of key demographic characteristics of TFS sample with the US Census

Panel C: Societal Beliefs and Attitudes	
Question	**Description**
Dissent is critical to politics	Dissent is a critical component of the political process time
Racial disc. no longer a problem	Racial discrimination is no longer a major problem in America
Individuals can't change society	Realistically, an individual can do little to bring about changes in our society time
Don't obey laws against personal values	People should not obey laws which violate their personal values

Panel D: Group Activities	
Question	**Description**
Join student club	What is your best guess as to the chances that you will join a student club
Join demonstrations	What is your best guess as to the chances that you will join demonstrations
Join social frat or club	What is your best guess as to the chances that you will join a social fraternity or club
Play varsity athletics	What is your best guess as to the chances that you will play varsity athletics

Table A1: Average preferences, norms and beliefs per religious group

Description	Catholic	Non-Catholic religious	Non-religious
Get married in college	1.81	1.95	1.79
Raise a family	3.11	3.10	2.69
Political orientation	3.02	2.99	3.42
National health care needed	2.86	2.81	2.98
Abortion should be legal	2.39	2.56	3.35
Address global warming	2.89	2.82	3.15
Abolish affirmative action	2.64	2.55	2.62
Right to ban extreme speakers	2.06	2.14	1.93
Prohibit racist/sexist speech	2.76	2.78	2.61
Dissent is critical to politics	2.73	2.75	2.91
Allow employer drug testing	3.04	3.14	2.81
Spend more on military	2.08	2.12	1.83
Allow adoption by gays/lesb	3.16	2.93	3.61
Grading in HS too easy	2.57	2.63	2.73
Right to casual sex	2.29	2.15	2.79
Prohibit homosexuality	2.02	2.21	1.57
Entitlement to sex after leading on	3.53	3.57	3.56
Legalize weed	1.93	1.88	2.45
Volunteer army	2.71	2.73	3
Don't obey laws against personal values	2.21	2.20	2.30
Racial disc. no longer a problem	1.86	1.84	1.76
Individuals can't change society	2	1.98	2.06
Legalize same-sex marriage	2.74	2.45	3.33
Women should stay home	1.74	1.76	1.54
Mostly pecuniary benefits to education	2.77	2.74	2.58
Abolish death penalty	2.13	2.01	2.14
Do more to control pollution	3.12	3.11	3.33
Do more to control handguns	3.21	3.13	3.17
Do more to discourage energy consumption	2.91	2.91	3.03
Raise taxes to reduce deficit	2.05	2.07	2.22
Too many rights for criminals	2.78	2.78	2.60
Belief in just world	3.21	3.14	2.88
Don't allow illegal imms into education	2.50	2.51	2.33
More tax for wealthy	2.71	2.68	2.82

Notes: The table shows the average value for all main outcome variables for Catholics (column 1), Non-Catholic religious people (column 2), and non-religious people (column 3). Full definitions of all survey questions are given in Appendix A1.2.

A1.3 Additional Tables and Figures for Effect of Scandals on Catholicism

Table A2: Baseline effect of scandals on Catholicism, county-level data

	Catholic adherents	Catholic schools	Catholic students
Scandal	-0.008^{**}	-0.004^{***}	-1.041^{***}
	(0.004)	(0.001)	(0.136)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	8,008	19,283	19,283

Notes: The table shows the estimated effect of clergy scandals on county-level measures for Catholicism. *Catholic adherents* gives the fraction of individuals in a particular county that identifies as Catholic. *Catholic schools* is the number of Catholic schools in a county. *Catholic students* is the number of students attending Catholic schools. Control variables are income-per-capita, population size, fractions of Whites and Blacks, and the fractions of the population that are below 25 or between 25 and 64. Standard errors are clustered at the county level. All other definitions are as in Table 2.

Table A3: Effect of scandals on Catholicism, individual heterogeneity

	Catholic	Catholic father	Catholic mother	Church attendance
Panel A: Female				
Scandal	-0.011^{***}	-0.010^{***}	-0.009^{***}	-0.011^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Observations	1,843,024	1,737,228	1,790,096	2,010,120
Panel B: Male				
Scandal	-0.014^{***}	-0.012^{***}	-0.010^{***}	-0.009^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Observations	1,549,301	1,475,115	1,507,345	1,707,202
Panel C: Mother no college				
Scandal	-0.014^{***}	-0.014^{***}	-0.012^{***}	-0.018^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Observations	1,859,881	1,755,472	1,803,211	2,037,158
Panel D: Mother college				
Scandal	-0.003^{**}	-0.002	0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.002)
Observations	1,567,178	1,489,816	1,527,879	1,720,195
Panel E: Low income				
Scandal	-0.016^{***}	-0.017^{***}	-0.015^{***}	-0.016^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Observations	1,916,479	1,811,669	1,863,465	2,084,439
Panel F: High income				
Scandal	-0.005^{***}	-0.004^{**}	-0.002	-0.010^{***}
	(0.002)	(0.002)	(0.002)	(0.003)
Observations	1,507,313	1,430,394	1,464,519	1,668,762

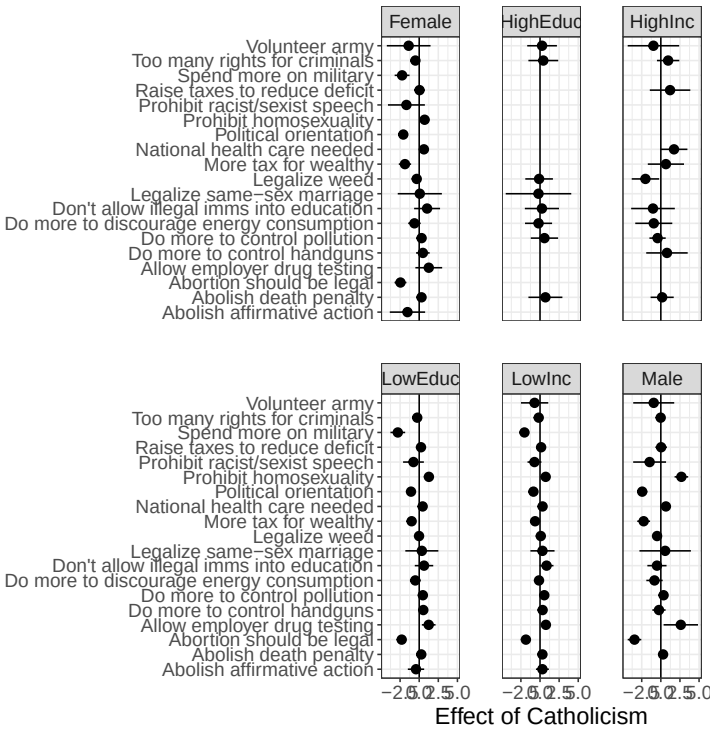
Notes: The table shows heterogeneous treatment effects of clergy scandals on Catholic identification (columns 1-3) and church attendance (column 4). Each panel represents a different subgroup: females (A), males (B), mother's education (C-D), and family income (E-F). All regressions include zip code fixed effects, year fixed effects, and individual-level controls. Other definitions are as in Table 2.

Table A4: Baseline results for effect of scandals on Catholicism, county-level heterogeneity

	Catholic adherents	Catholic schools	Catholic students
Panel A: Democratic counties			
Scandal	−0.010	−0.005***	−1.309***
	(0.008)	(0.001)	(0.223)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	2,936	7,364	7,364
Panel B: Republican counties			
Scandal	−0.008*	−0.003***	−0.899***
	(0.005)	(0.001)	(0.175)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	5,033	11,807	11,807
Panel C: Rich counties			
Scandal	−0.007	−0.004***	−1.022***
	(0.004)	(0.001)	(0.159)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	3,646	10,301	10,301
Panel D: Poor counties			
Scandal	−0.020*	−0.003**	−0.859***
	(0.011)	(0.001)	(0.249)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	4,356	8,972	8,972
Panel E: High density counties			
Scandal	−0.007*	−0.004***	−1.245***
	(0.004)	(0.001)	(0.146)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	3,649	11,775	11,775
Panel F: Low density counties			
Scandal	−0.013	−0.002	−0.280
	(0.011)	(0.001)	(0.212)
County fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	4,353	7,498	7,498

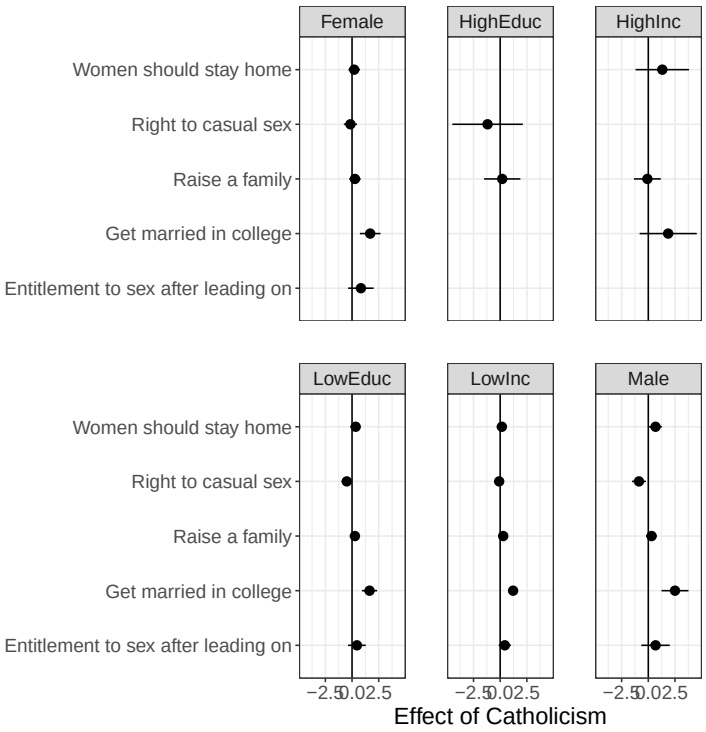
Notes: This table shows heterogeneous treatment effects of clergy scandals on county-level measures of Catholicism. The outcome variables are the fraction of county residents identifying as Catholic (column 1), the number of Catholic schools per capita (column 2), and the number of students in Catholic schools per capita (column 3). Each panel represents a different subgroup of counties: Panel A shows effects for Democrat-leaning counties, Panel B for Republican-leaning counties (based on 1980 presidential election results), Panel C for counties with above-median income per capita in 1980, Panel D for counties with below-median income per capita in 1980, Panel E for counties with above-median population density in 1980, and Panel F for counties with below-median population density in 1980. Other definitions are as in Table A2.

Figure A5: Heterogeneous effects of Catholicism on policy preferences



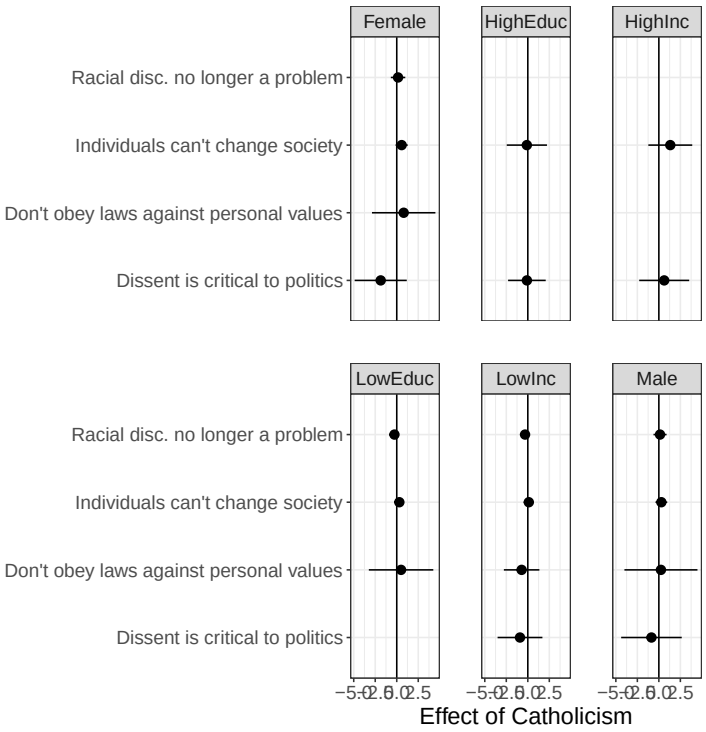
Notes: The figure shows the heterogeneous treatment effects for the effect of Catholicism on policy preferences. The panels show the results separated by gender (male vs. female), mother's education level (college vs no college), and family income (high vs. low). The left and right windows show the effects for females and males, respectively. All other definitions are as in Figure 5.

Figure A6: Heterogeneous effects of Catholicism on gender norms



Notes: The figure shows the heterogeneous treatment effects for the effect of Catholicism on gender norms. All other definitions are as in Figure 5 and Figure A5.

Figure A7: Heterogeneous effects of Catholicism on other societal norms and attitudes



Notes: The figure shows the heterogeneous treatment effects for the effect of Catholicism on other societal norms and preferences. All other definitions are as in Figure 5 and Figure A5.

A1.4 Shifts to Racial Identification

To examine whether people shift their identity from religion to race, we draw on literature that documents the tendency for people to exhibit racial homophily in social interactions (see e.g. McPherson et al., 2001; Currarini et al., 2010; Patacchini and Zenou, 2016; Alan et al., 2023). If losing religious identity causes people to identify more strongly with their race, we might expect an increase in the desire to socialize with others of the same racial background. Moreover, stronger identification with race should lead to policy preferences that benefit one's own race. For minorities, this would arguably be affirmative action. We test these predictions by estimating the effect of Catholicism on people's intention to socialize with other racial groups in college, and their aspiration to promote racial understanding, and consider heterogeneity between races in the effect of Catholicism on support for affirmative action.

Table A5 gives the results. Contrasting the main prediction, Panel A shows no evidence that decline in Catholic identity affects racial homophily. Panel B furthermore shows that the effect of Catholicism on affirmative action is similar for Whites and Blacks.[30] We do find some evidence that losing Catholicism leads to a stronger desire to promote racial understanding. Collectively, however, these result mostly suggest that race did not become

[30]Although the effect is only statistically significant for Whites, the effect for Whites not different from that for Blacks.

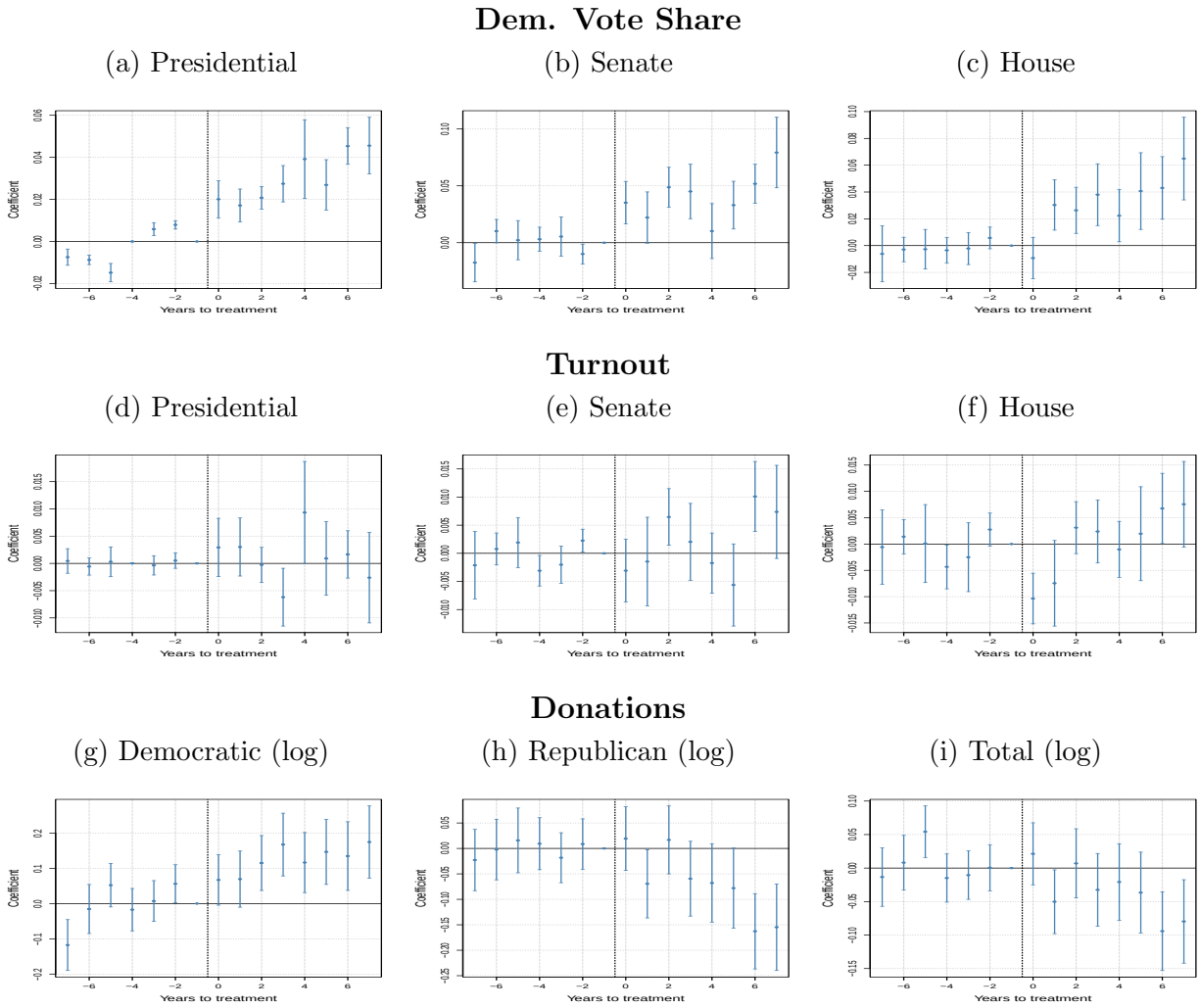
a stronger source of identity for people who disaffiliated from the Catholic Church in response to clergy scandals.

Table A5: Effect of Catholicism on race identification

	Socialize with other races	Promote racial understanding
Panel A: Race-based preferences		
Catholic	0.075	-0.488^{**}
	(0.779)	(0.206)
Zip fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Controls	Yes	Yes
Observations	1,070,029	3,569,067
	Abolish affirmative action (Whites)	Abolish affirmative action (Blacks)
Panel B: Affirmative action		
Catholic	-2.647^{***}	-1.921
	(1.024)	(5.125)
Zip fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Controls	Yes	Yes
Observations	1,320,142	108,383

Notes: The table displays the estimated effect of Catholicism on racial identification. In Panel A, the outcome variable in the left column is whether an individual intends to have other-race friends, and the right column's outcome variable is whether the individual aspires to promote racial understanding. Treatment effects are estimated using the 2SLS-DD approach outlined in Section 3.2. Other definitions are as in Table 2.

Figure A8: Dynamic effect of scandals on political outcomes



Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on county-level political outcomes. All definitions are as in Figure 3 and Table 4.

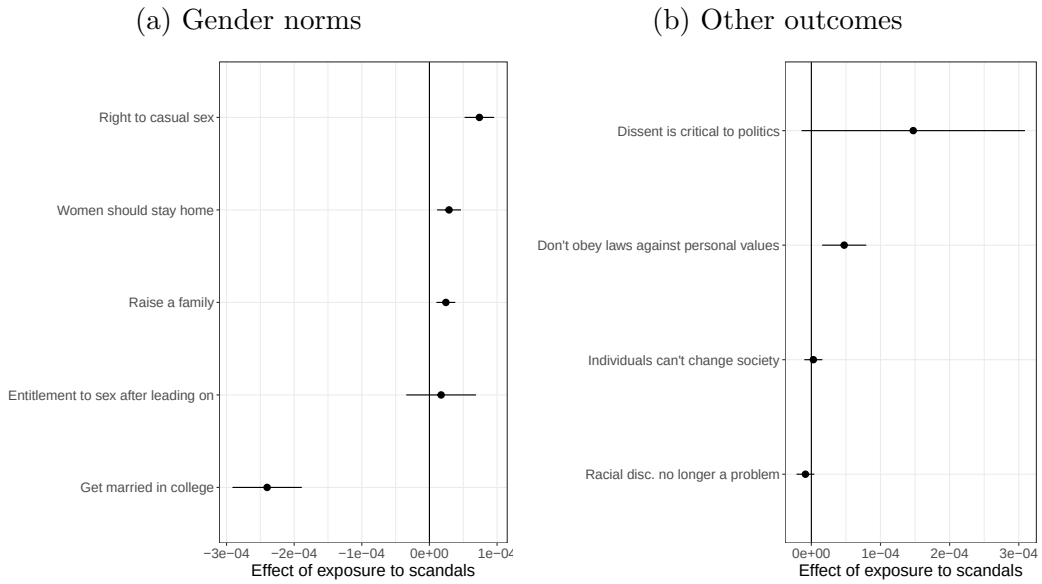
A1.5 Robustness checks

A1.5.1 Exposure design

Figure A9: Effect of exposure to scandals on policy preferences

Notes: The figure shows the estimated effect of exposure to scandals on policy preferences. The main treatment variable is an interaction between an area's share of Catholics in 1980, and the cumulative number of clergy scandals in the US. Other definitions are as in Figure 5.

Figure A10: Effect of exposure to scandals on gender norms and other outcomes



Notes: The figure shows the estimated effect of exposure to scandals on gender norms and other societal attitudes. The main treatment variable is an interaction between an area's share of Catholics in 1980, and the cumulative number of clergy scandals in the US. Other definitions are as in Figure 5.

A1.5.2 Composition of students

Table A6: Baseline results for effect of scandals on composition of students

	Sex	Black	Father college	Mother college	Income
Scandal	0.002^{*}	-0.0001	-0.003^{***}	0.001	0.023
	(0.001)	(0.001)	(0.001)	(0.001)	(0.016)
Zip fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes
Observations	3,511,287	3,511,287	3,556,100	3,526,324	3,511,287

Notes: The table shows the baseline difference-in-difference estimates for the effect of clergy scandals on the composition of freshmen students. *Sex* is a dummy variable that takes the value of 2 if a student is female and 1 otherwise. *Black* is a dummy variable that takes the value of 1 if a student is Black. *Father college* and *Mother college* take the value of 1 if the student's father/mother went to college, and 0 otherwise. *Income* is a student's best guess about their parents income, reported in one of 30 categories. All other definitions are as in Table 2.

A1.5.3 Different spillover thresholds

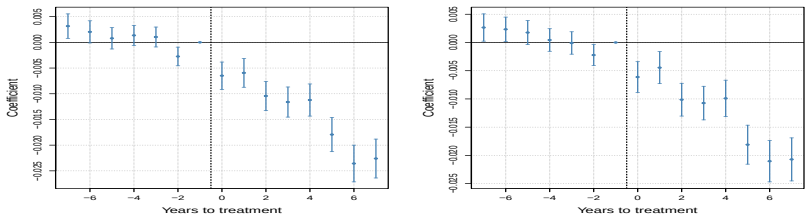
Table A7: Effect of scandals on Catholicism, 25km spillover

	Catholic	Catholic father	Catholic mother	Church attendance
Scandal	-0.014^{***}	-0.013^{***}	-0.012^{***}	-0.007^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Zip fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	4,106,303	3,886,908	3,990,929	4,335,043

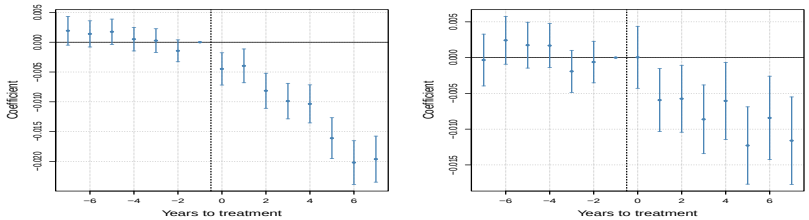
Notes: The table shows the estimated effects of clergy scandals on Catholicism, using a maximum 25km spillover distance instead of 50km. All other definitions are as in Table 2.

Figure A11: Dynamic effects of scandals on Catholicism, 25km spillover

(a) Catholic (b) Catholic father



(c) Catholic mother (d) Church attendance



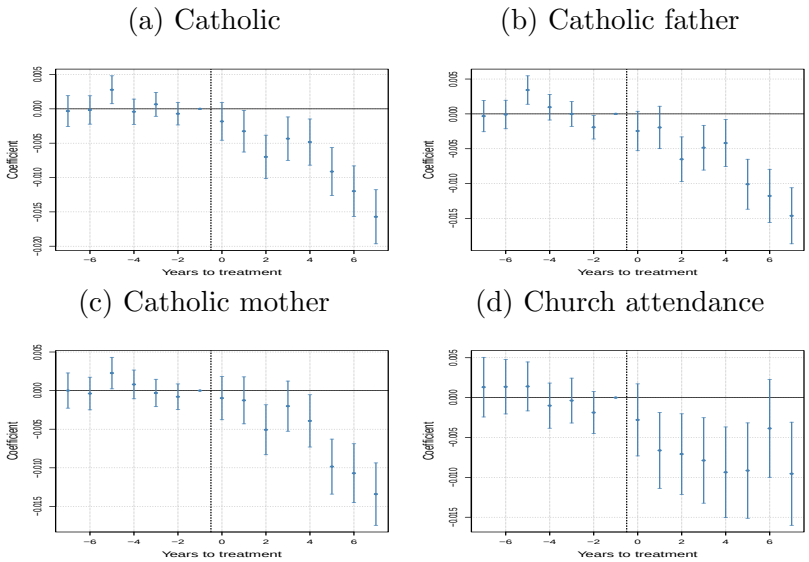
Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on Catholicism, using a maximum 25km spillover distance instead of 50km. All definitions are as in Figure 3.

Table A8: Effect of scandals on Catholicism, 75km spillover

	Catholic	Catholic father	Catholic mother	Church attendance
Scandal	-0.007^{***}	-0.007^{***}	-0.006^{***}	-0.007^{***}
	(0.001)	(0.001)	(0.001)	(0.002)
Zip fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	3,023,032	2,862,855	2,939,003	3,401,454

Notes: The figure shows the estimated effect of Catholicism on other societal norms and beliefs, using a maximum 75km spillover distance instead of 50km. All other definitions are as in Table 2.

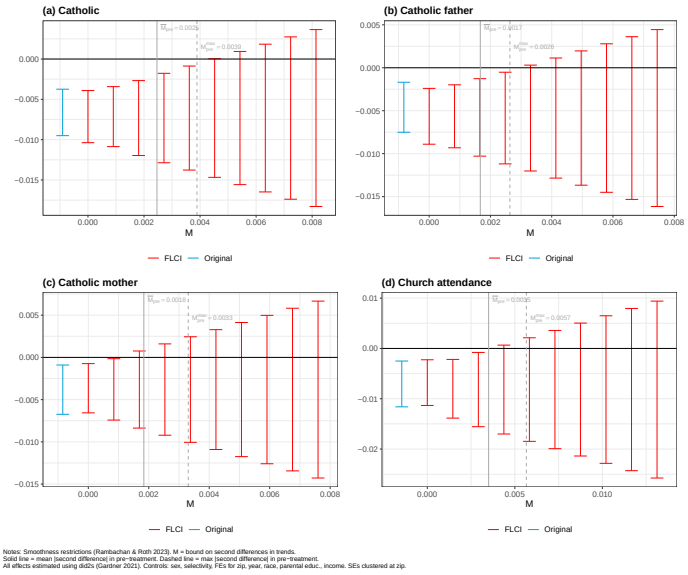
Figure A12: Dynamic effects of scandals on Catholicism, 75km spillover



Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on Catholicism, using a maximum 75km spillover distance instead of 50km. All definitions are as in Figure 3.

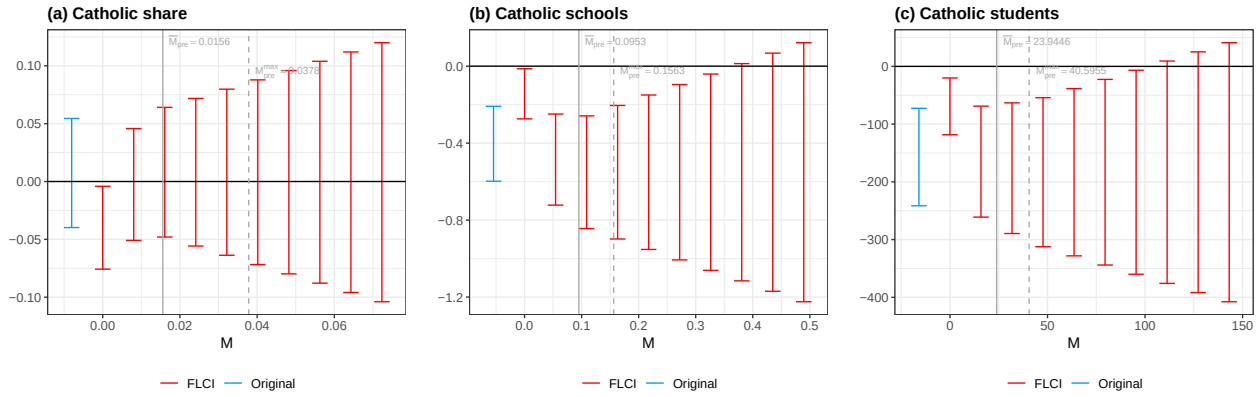
A1.5.4 Credible approach to parallel trends

Figure A13: Smoothness restrictions approach to parallel trends, Catholicism



Notes: The figure shows the sensitivity to parallel trend violations of the treatment effect estimates for the effect of scandals on Catholicism, using the smoothness restrictions (SR) approach of Rambachan and Roth (2023). M bounds the second differences in trends, capturing deviations from linear extrapolation of pre-trends. "Original" shows the conventional confidence interval; "FLCI" shows the fixed-length confidence interval robust to smoothness violations of magnitude M. All effects are estimated using did2s (Gardner, 2022) with the same specification as Table 2.

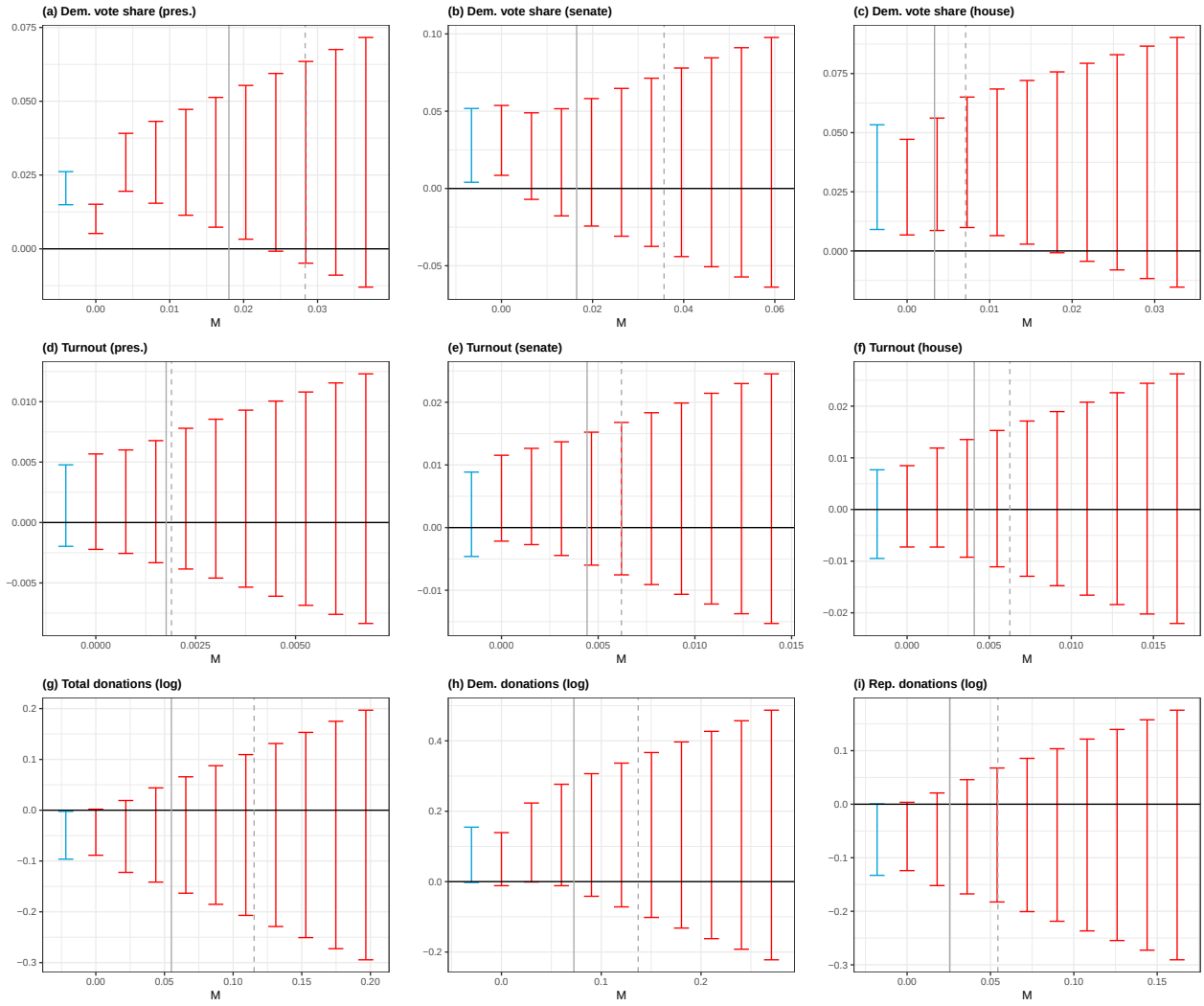
Figure A14: Smoothness restrictions approach to parallel trends, Preferences



Notes: Smoothness restrictions (Rambachan & Roth 2023). M = bound on second differences in trends.
Solid line = mean |second difference| in pre−treatment. Dashed line = max |second difference| in pre−treatment.
All effects estimated using did2s (Gardner 2021). Controls: log income p.c., population, demographics. FEs: county, year. SEs clustered at county.

Notes: The figure shows the sensitivity to parallel trend violations of the treatment effect of scandals on county level religious outcomes, using the smoothness restrictions (SR) approach of Rambachan and Roth (2023). M bounds the second differences in trends, capturing deviations from linear extrapolation of pre-trends. "Original" shows the conventional confidence interval; "FLCI" shows the fixed-length confidence interval robust to smoothness violations of magnitude M. All effects are estimated using did2s (Gardner, 2022) with the same specification as Table 4.

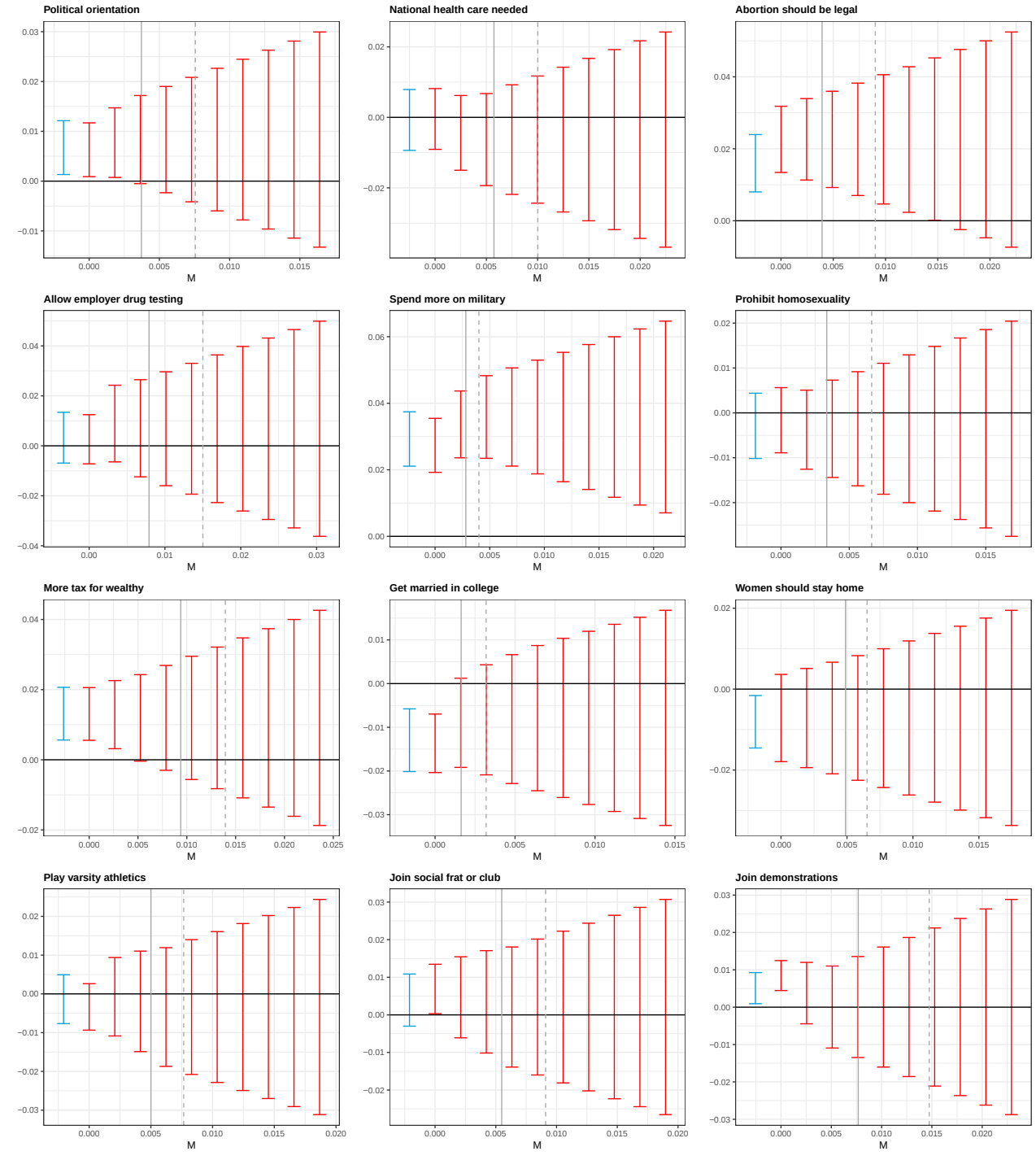
Figure A15: Smoothness restrictions approach to parallel trends, Preferences



Notes: Smoothness restrictions (Rambachan & Roth 2023). M = bound on second differences in trends.
Solid line = mean |second difference| in pre−treatment. Dashed line = max |second difference| in pre−treatment.
All effects estimated using did2s (Gardner 2021). Controls: log income p.c., population, demographics. FEs: county, year. SEs clustered at county.

Notes: The figure shows the sensitivity to parallel trend violations of the treatment effect of scandals on county level religious outcomes, using the smoothness restrictions (SR) approach of Rambachan and Roth (2023). M bounds the second differences in trends, capturing deviations from linear extrapolation of pre-trends. "Original" shows the conventional confidence interval; "FLCI" shows the fixed-length confidence interval robust to smoothness violations of magnitude M. All effects are estimated using did2s (Gardner, 2022) with the same specification as Table 4.

Figure A16: Smoothness restrictions approach to parallel trends, Preferences



Notes: The figure shows the sensitivity to parallel trend violations of the treatment effect of scandals on preferences, using the smoothness restrictions (SR) approach of Rambachan and Roth (2023). M bounds the second differences in trends, capturing deviations from linear extrapolation of pre-trends. "Original" shows the conventional confidence interval; "FLCI" shows the fixed-length confidence interval robust to smoothness violations of magnitude M. All effects are estimated using did2s (Gardner, 2022) with the same specification as Table 2. Graph includes preferences that have significant results in main analysis

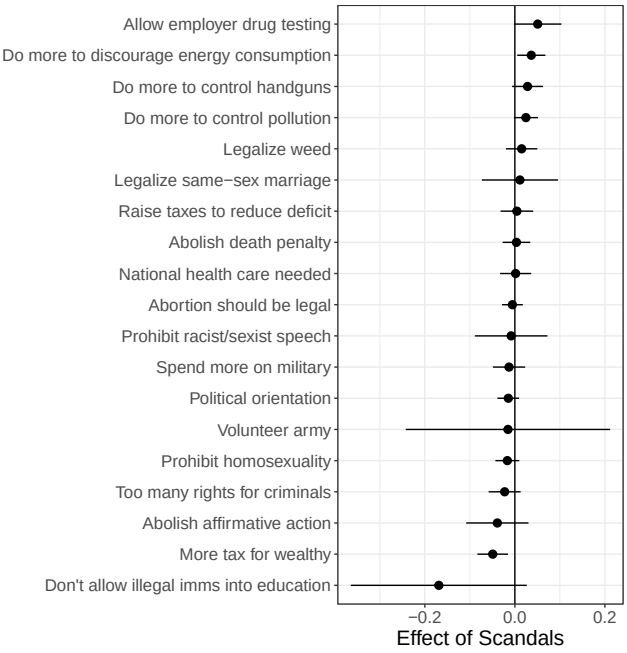
A1.5.5 Effect of scandals on Jewish people

Table A9: Effect of scandals on Judaism

	Jewish
Scandal	0.0004
	(0.0004)
Zip fixed effects	Yes
Year fixed effects	Yes
Controls	Yes
Observations	3,511,287

Notes: The table shows the estimated effects of clergy scandals on Judaism. All other definitions are as in Table 2.

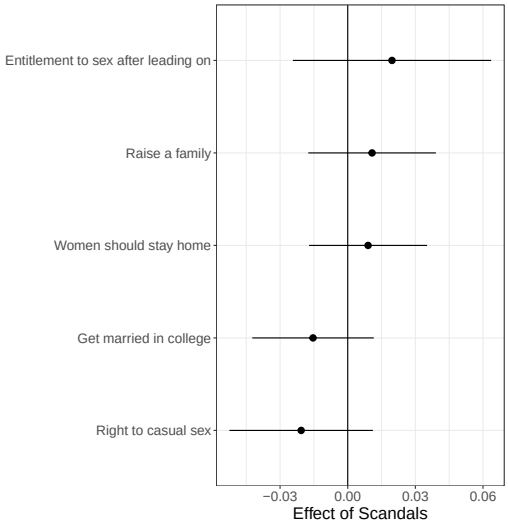
Figure A17: Effect of scandals on policy preferences, Jewish people



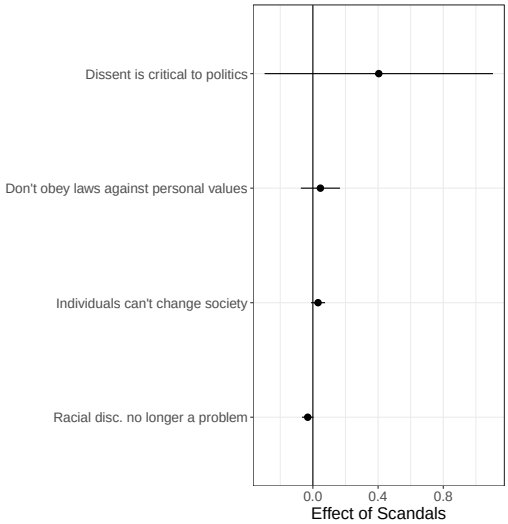
Notes: The figure shows the estimated effect of clergy scandals on policy preferences for Jewish people. Treatment effects are estimated using the staggered difference-in-differences method outlined in Section 3.2. Other definitions are as in Figure 5.

Figure A18: Effect of scandals on norms, Jewish people

(a) Gender norms



(b) Other outcomes

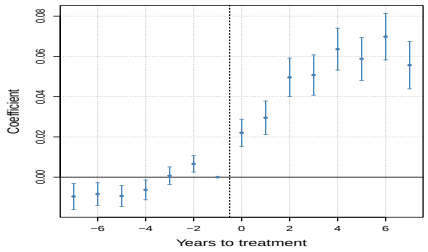


Notes: The figure shows the estimated effect of clergy scandals on gender norms and other attitudes for Jewish people. Treatment effects are estimated using the staggered difference-in-differences method outlined in Section 3.2. Other definitions are as in Figure 5.

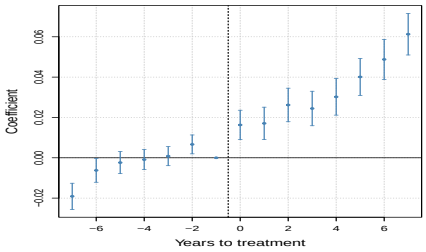
A1.5.6 Reduced form estimates for main outcomes

Figure A19: Event study plots for effect of scandals on political preferences (1)

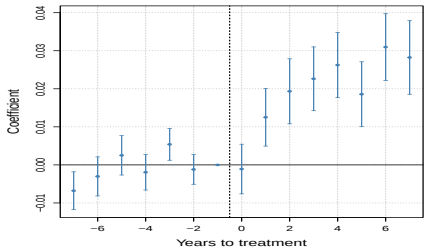
(a) Spend more on military



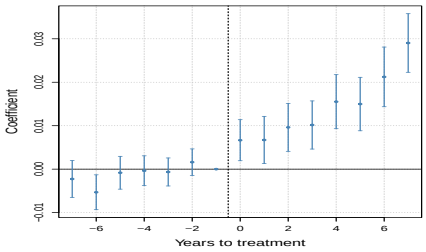
(b) Abortion should be legal



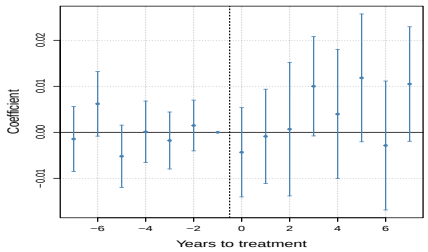
(c) More tax for wealthy



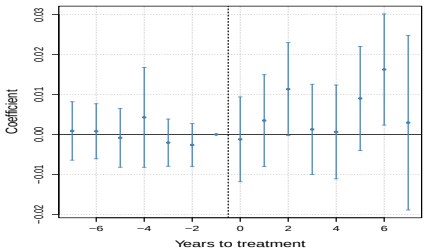
(d) Political orientation



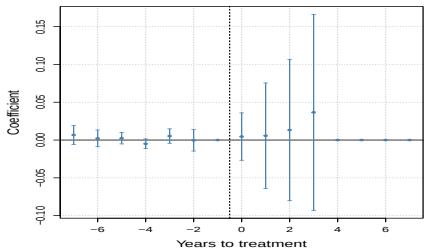
(e) Prohibit racist/sexist speech



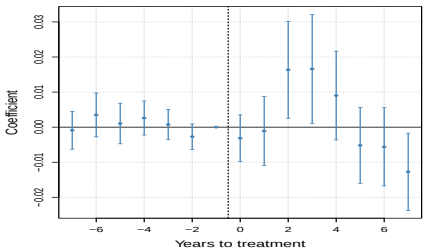
(f) Abolish affirmative action



(g) Volunteer army



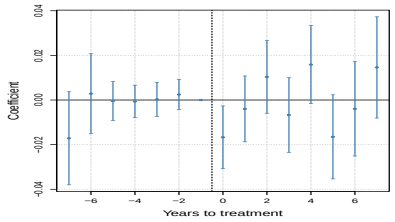
(h) Do more to discourage energy consumption



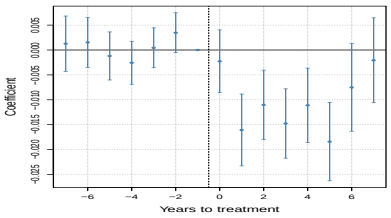
Notes: This figure shows the estimated effect of scandals on political preferences. Each subplot represents a different view, with the effect size on the y-axis and time relative to treatment on the x-axis. Error bars represent 95% confidence intervals.

Figure A20: Event study plots for effect of scandals on political preferences (2)

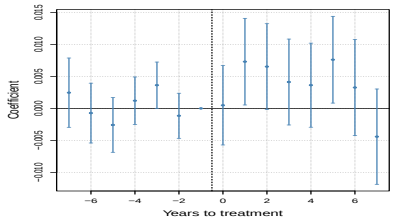
(a) Legalize same-sex marriage



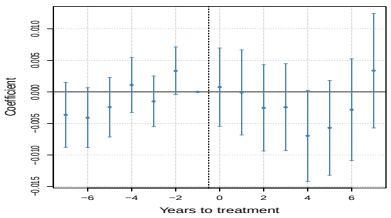
(b) Legalize weed



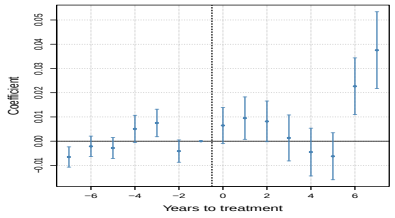
(c) Too many rights for criminals



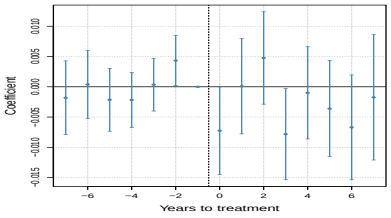
(d) Abolish death penalty



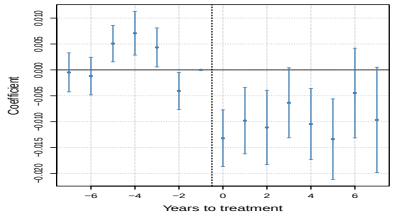
(e) Raise taxes to reduce deficit



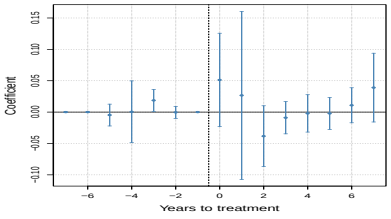
(f) Do more to control handguns



(g) Do more to control pollution



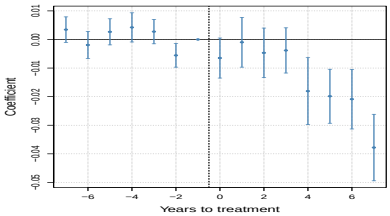
(h) Don't allow illegal imms into education



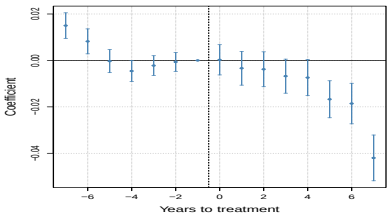
Notes: This figure shows the estimated effect of scandals on political preferences. Each subplot represents a different view, with the effect size on the y-axis and time relative to treatment on the x-axis. Error bars represent 95% confidence intervals.

Figure A21: Event study plots for effect of scandals on political preferences (3)

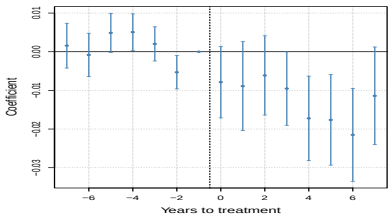
(a) National health care needed



(b) Prohibit homosexuality



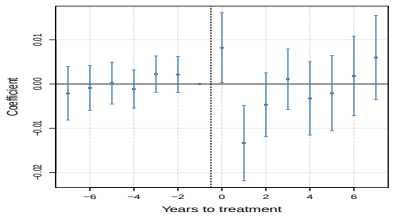
(c) Allow employer drug testing



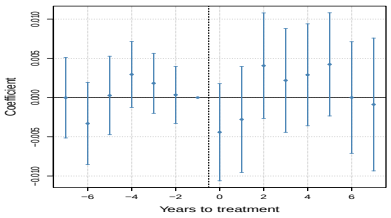
Notes: This figure shows the estimated effect of scandals on political preferences. Each subplot represents a different view, with the effect size on the y-axis and time relative to treatment on the x-axis. Error bars represent 95% confidence intervals.

Figure A22: Event study plots for effect of scandals on gender norms

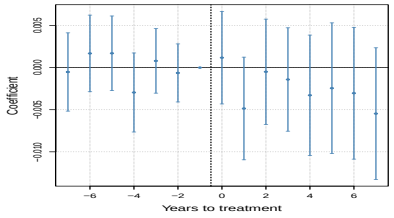
(a) Right to casual sex



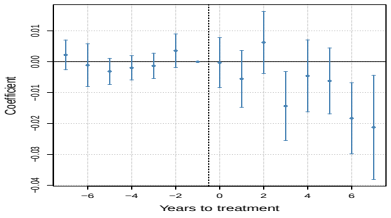
(b) Raise a family



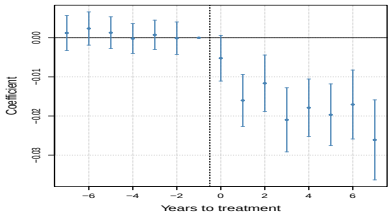
(c) Women should stay home



(d) Entitlement to sex after leading on



(e) Get married in college

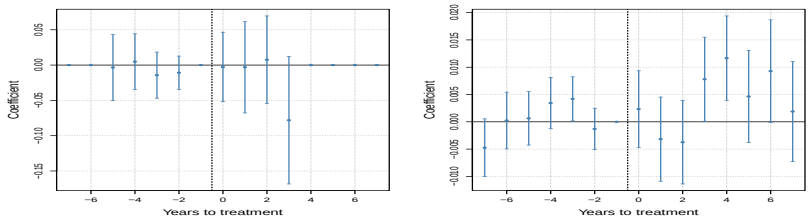


Notes: This figure shows the estimated effect of scandals on gender norms. Each subplot represents a different view, with the effect size on the y-axis and time relative to treatment on the x-axis. Error bars represent 95% confidence intervals.

Figure A23: Event study plots for effect of scandals on societal beliefs and attitudes

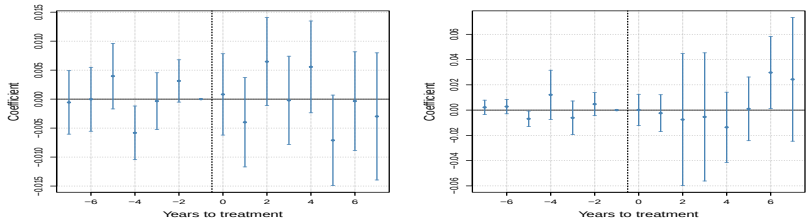
(a) Dissent is critical to politics

(b) Racial disc. no longer a problem



(c) Individuals can't change society

(d) Don't obey laws against personal values



Notes: This figure shows the estimated effect of scandals on various social views. Each subplot represents a different view, with the effect size on the y-axis and time relative to treatment on the x-axis. Error bars represent 95% confidence intervals.

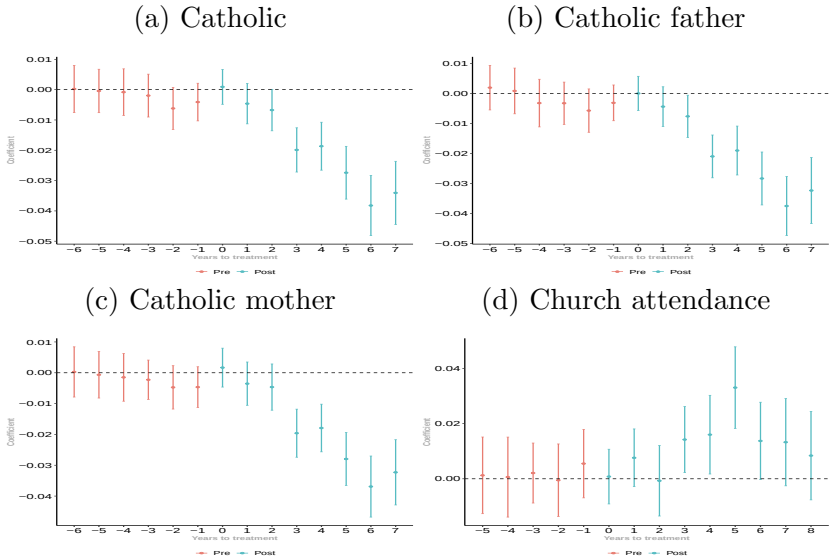
A1.5.7 Alternative estimation method

Table A10: Effect of scandals on Catholicism, Callaway and Sant'Anna (2021)

	Catholic	Catholic father	Catholic mother	Church attendance
Scandal	-0.018^{***}	-0.017^{***}	-0.019^{***}	0.012^{***}
	(0.002)	(0.002)	(0.002)	(0.004)
Zip fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the baselines difference-in-differences estimates for the effect of clergy scandals on Catholicism, estimated using the methodology outlined in Callaway and Sant'Anna (2021). Other definitions are as in Table A2.

Figure A24: Dynamic effects of scandals on Catholicism, Callaway and Sant'Anna (2021)



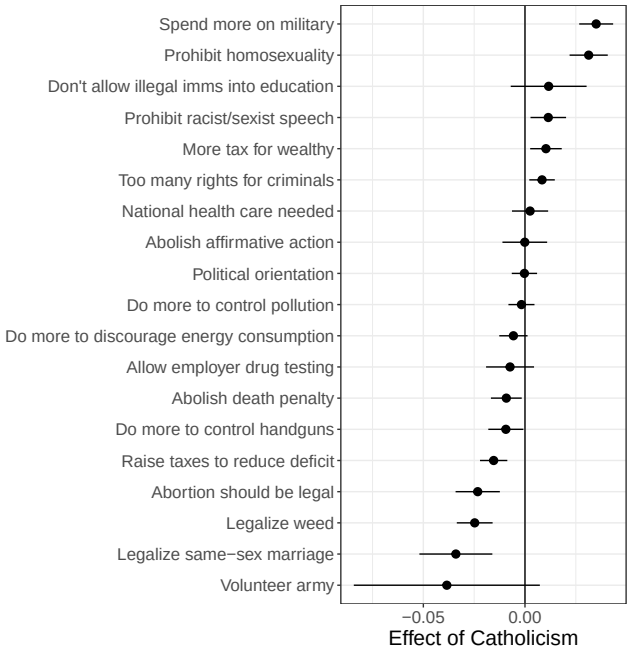
Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on Catholicism, estimated using the methodology outlined in Callaway and Sant'Anna (2021). Other definitions are as in Figure 3.

Table A11: Baseline results for effect of scandals on county-level outcomes, Callaway and Sant'Anna (2021)

	Catholic adherents	Catholic schools	Catholic students
Panel A: Catholicism			
Scandal	-0.018^{***}	-0.003^{***}	-0.823^{***}
	(0.003)	(0.001)	(0.132)
Zip fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
	Dem. vote share (pres.)	Dem. vote share (Senate)	Dem. vote share (House)
Panel B: Voting			
Scandal	0.025^{***}	0.031^{***}	0.024^{***}
	(0.002)	(0.006)	(0.007)
Zip fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
	Turnout rate (pres.)	Turnout rate (Senate)	Turnout rate (House)
Panel C: Turnout			
Scandal	0.002^{*}	-0.005^{*}	-0.003
	(0.001)	(0.003)	(0.002)
Zip fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes
	Donations (Dem.)	Donations (Rep.)	Donations (total)
Panel D: Political donations			
Scandal	0.221^{***}	0.030	0.025
	(0.049)	(0.038)	(0.023)
Zip fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Notes: The table shows baseline difference-in-differences estimates for the effect of clergy scandals on county-level outcomes, estimated using the methodology outlined in Callaway and Sant'Anna (2021). Panel A shows the effects on Catholicism, Panel B on election outcomes, Panel C on turnout, and Panel D on political donations. Other definitions are as in Table A2.

Figure A25: Effect of Catholicism on policy preferences, Callaway and Sant'Anna (2021)

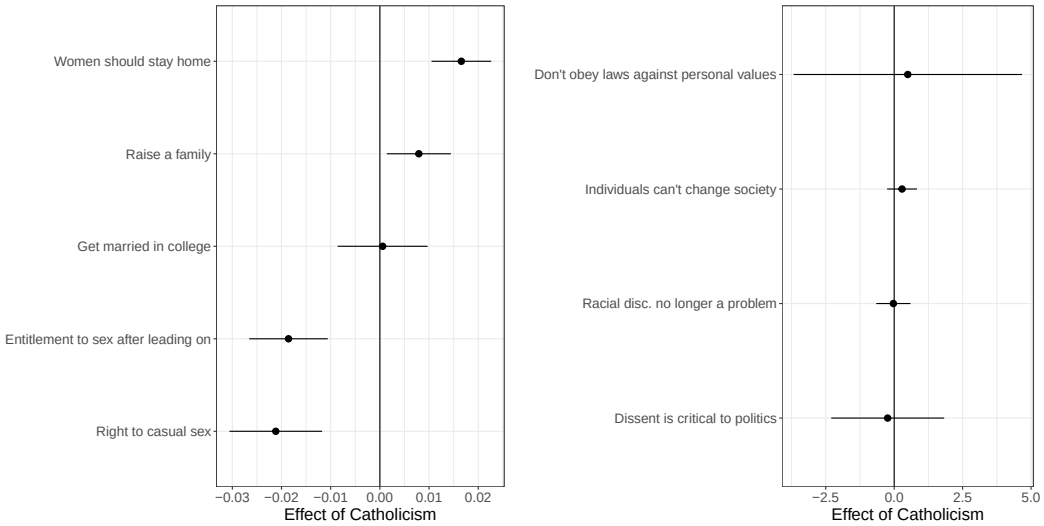


Notes: The figure shows the estimated effect of Catholicism on policy preferences, estimated using the methodology outlined in Callaway and Sant'Anna (2021). All definitions are as in Figure 5.

Figure A26: Effect of Catholicism on gender norms and other outcomes, Callaway and Sant'Anna (2021)

(a) Gender norms

(b) Other outcomes



Notes: The figure shows the estimated effect of Catholicism on gender norms and other societal outcomes, estimated using the methodology outlined in Callaway and Sant'Anna (2021). All definitions are as in Figure 6.

A1.5.8 Religiosity Instead of Catholicism

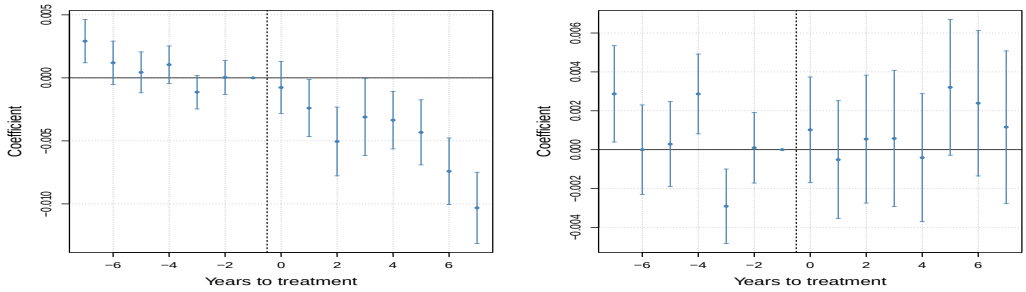
Table A12: Baseline results for effect of scandals on overall religiosity

	Religious	Non-Catholic religious
Scandal	−0.005***	0.001
	(0.001)	(0.001)
Zip fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Controls	Yes	Yes
Observations	3,400,550	3,511,287

Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on overall religiosity (left column) and non-Catholic religiosity (right column). All definitions are as in Table 2.

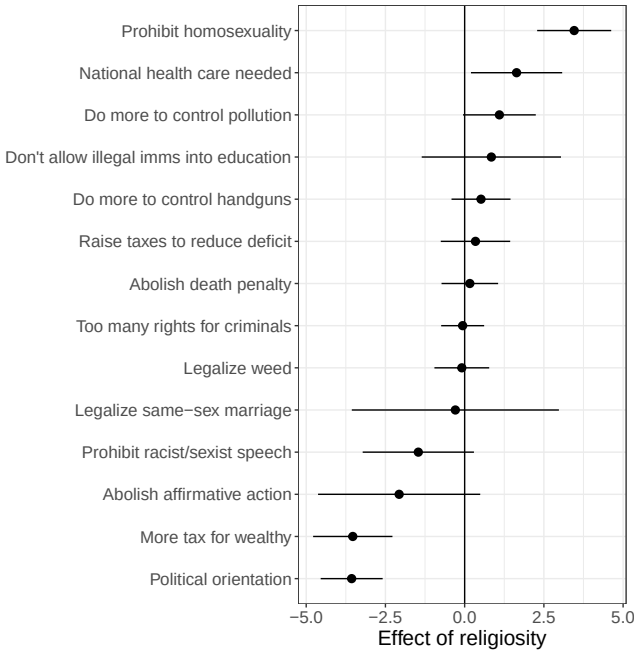
Figure A27: Dynamic effects of scandals on overall religiosity

(a) Religious (b) Non-Catholic religious



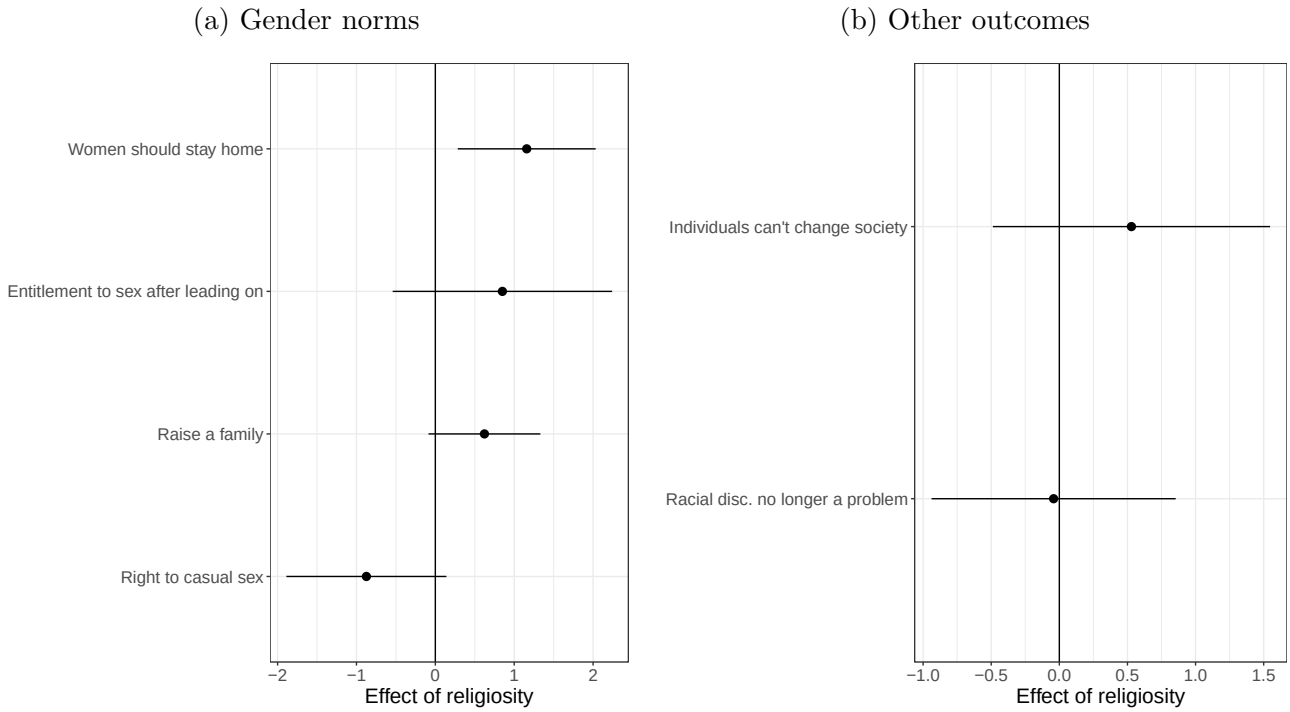
Notes: The figure shows the dynamic treatment effects for the effect of clergy scandals on overall religiosity (Panel A), and other religions (Panel B). All definitions are as in Figure 3.

Figure A28: Effect of religion on policy preferences



Notes: The figure shows the estimated effect of religiosity on policy preferences. The main explanatory variable is whether an individual identifies as religious. All definitions are as in Figure 5.

Figure A29: Effect of religion on gender norms and other outcomes



Notes: The figure shows the estimated effect of religiosity on gender norms and other societal norms and beliefs. The main explanatory variable is whether an individual identifies as religious. All definitions are as in Figure 6.

A1.5.9 State-Level Clustering

Table A13: Main results with State-level clustering

	Catholic	Catholic father	Catholic mother	Church attendance
Scandal	-0.012^{***}	-0.011^{***}	-0.009^{***}	-0.010^{**}
	(0.002)	(0.002)	(0.002)	(0.005)
ZIp fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	3,375,473	3,195,217	3,280,389	3,699,135

Note: *p<0.1; **p<0.05; ***p<0.01

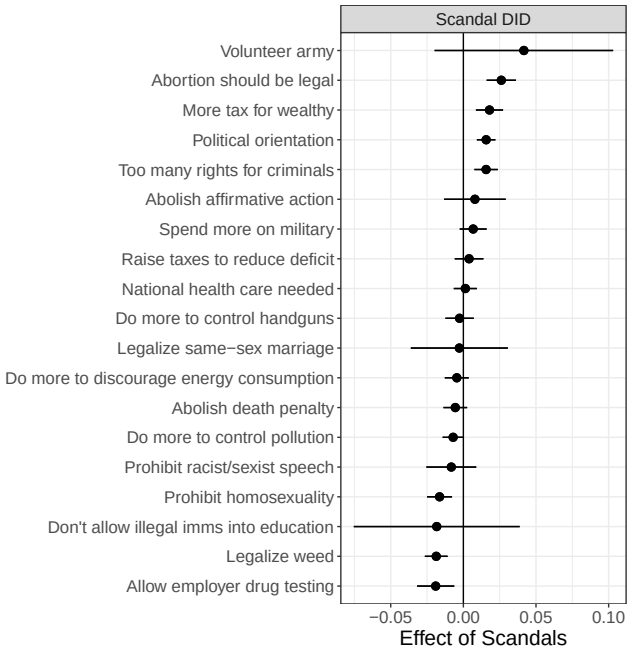
A1.5.10 Nearest-neighbor matching

Table A14: Effect of scandals on Catholicism, matched sample

	Catholic	Catholic father	Catholic mother	Church attendance
Scandal	−0.010***	−0.009***	−0.008***	−0.009***
	(0.002)	(0.002)	(0.002)	(0.002)
Zip fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	1,219,438	1,141,304	1,176,863	1,494,796

Notes: The table shows the estimated effects of clergy scandals on Catholicism, matched sample based on 1980 area characteristics. We match without replacement (Stuart et al., 2011). All other definitions are as in Table 2.

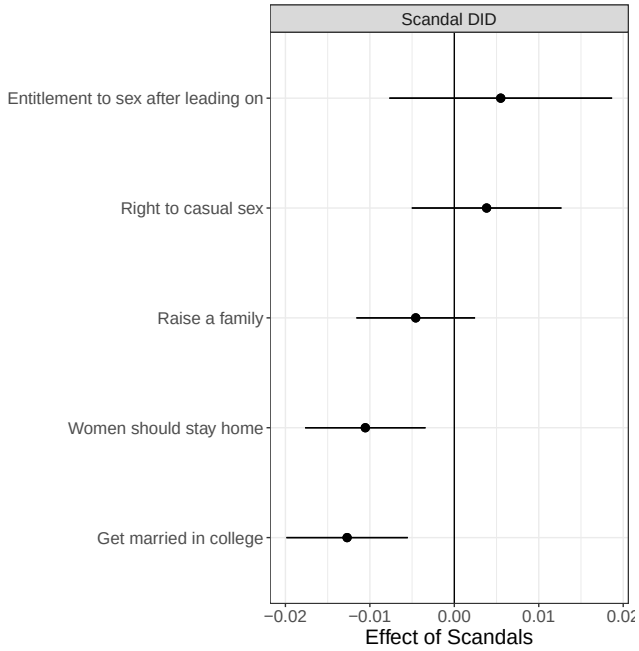
Figure A30: Effect of Catholicism on policy preferences, matched sample, scandals DID



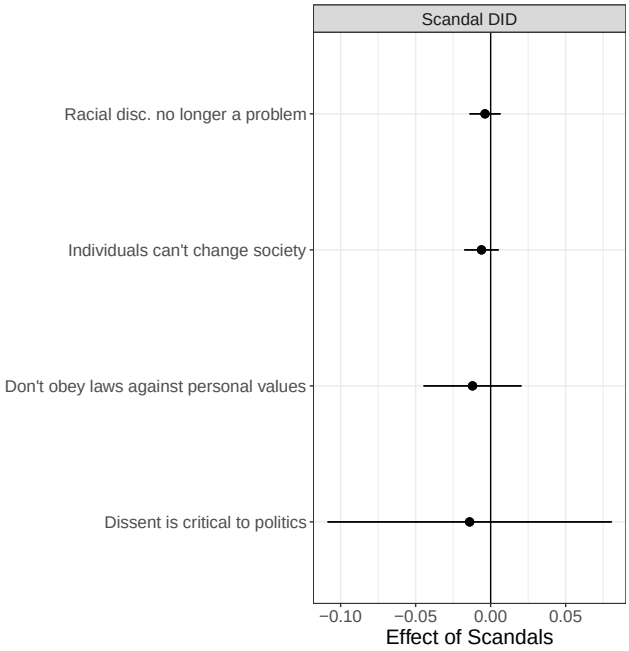
Notes: The figure shows the estimated effect of Catholicism on policy preferences, matched sample based on 1980 area characteristics. We match without replacement (Stuart et al., 2011). All definitions are as in Figure 5.

Figure A31: Effect of Catholicism on gender norms and other outcomes, matched sample, scandals DID

(a) Gender norms



(b) Other outcomes



Notes: The figure shows the estimated effect of scandals on gender norms and other societal norms and beliefs, matched sample. We match without replacement (Stuart et al., 2011). All definitions are as in Figure 6.