

The Role of Trust in Financial Decisions

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**Abstract**

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Trust is an essential element of individuals' willingness to engage in economic activity such as investment. Because cultural institutions influence individuals' trust, I examine whether shocks to trust in a prominent cultural institution have crossover effects on households' investment decisions. I employ the U.S. Catholic clergy abuse scandal from 2002 to 2006 as a plausibly exogenous shock to the Catholic Church. Using survey data, I find that Catholic households decrease their equity participation by 3.3% to 5.9% upon revelation of local clergy misconduct in the news, consistent with an economically sizable opportunity cost. Evidence points to the influence of Catholicism on local social norms as the main channel.

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## DEDICATION

*To Jon, whose wisdom, perspective, guidance and mentoring have been and will continue to be most inspiring.*

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# Introduction

Do cultural institutions affect households' economic decisions? Economists have long argued that trust is a key component of individuals' willingness to invest and engage in economic exchange (e.g., Arrow, 1972; Knack and Keefer, 1997; Zak and Knack, 2001; Guiso et al., 2006). A related thread of research shows that cultural institutions, such as religions, influence individuals' trust and thus their decisions (e.g., North, 1990; Barro and McCleary, 2003; Guiso et al., 2003; Alesina and Giuliano, 2015). In this paper, I examine whether shocks that impact a community's trust in a prominent cultural institution have crossover effects on financial activity. As a shock to a cultural institution, I employ the Catholic Church clergy sex abuse scandal in the United States from 2002 to 2006. I study household stock market participation, a well-accepted setting to examine the role of trust in financial decisions (Guiso et al., 2008; Renneboog and Spaenjers, 2012; Giannetti and Wang, 2016). Whereas most prior research examines the direct impact of shocks to trust between investment counterparties, I ask whether shock to trust in *cultural* institutions changes households' *financial* decisions.

Religions are good proxies for cultural institutions and their effect on trust (Guiso et al., 2003). However, as Becker (1996, p.16) makes clear, religion is endogenous to individuals. Therefore, identifying the causal impact of religious affiliation on financial choice is non-trivial. To address this difficulty, I use a plausibly exogenous shock to trust in an important religion: Catholicism. This identification strategy joins two strands of the literature on trust and financial choice. The first documents that local shocks to trust negatively impact stock market participation (Giannetti and Wang, 2016). The second set of papers shows that the salience of religious affiliation impacts economic and financial decisions (Benjamin et al., 2016; D'Acunto et al., 2019; Bryan et al., 2021). The shock makes Catholicism salient, which then allows us to study how trust in religious institutions affects equity ownership.

While disclosing awful events, the shock to the Catholic church offers interesting features for the purpose of this study. First, Catholicism is a popular religion in the U.S., covering

about a quarter of the population. Second, the timing of the revelation of allegations of abuse and surrounding investigations in the news cannot be controlled by Catholic Church's hierarchy, and hence are exogenous to other dynamics within the institution. Third, the scandal involves local church regions called dioceses, offering cross sectional variation within the U.S. Also, because the shock hits different regions in different years, the scandal displays time series variation. Finally, my setting is within the U.S. and therefore does not suffer from the potential issues from cross-country studies on the influence of cultural institutions.

To measure the impact of the scandal, I create two indicators based on news revelations of allegations involving a given church region (diocese). These indicators allow me to identify dioceses where the revelation of misconduct amounts to a scandal because there is evidence of systematic mishandling of past abuse claims. The first indicator identifies 115 (out of 176) U.S. dioceses where the Catholic hierarchy exhibited a serious breach of governance in handling claims of abuse by clergy. The second indicator focuses on areas where the mishandling was most severe and marks 50 dioceses as treated.

I use a staggered triple difference setting to assess the effect of the shock on Catholic households' equity ownership based on the Panel Study of Income Dynamics (PSID) survey. Catholic households decrease their stock market participation by 3.3% to 5.9% upon revelation of local Catholic clergy misconduct. These percentages represent between 429,000 and 649,000 households. The effects are generally robust (indeed, stronger) when I control for household risk aversion.

To identify the channel at play, I focus on two ways in which cultural institutions contribute to trust formation: their influence on local social norms and through personal interactions.<sup>1</sup> The social norms channel stems from Putnam (1993)'s assertion that the emphasis on top-down authority in the Catholic Church is detrimental to Catholics' trust. La Porta et al. (1997) test this hypothesis and find that in countries where the dominant religion is hierar-

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<sup>1</sup>A third component of trust is trust in strangers, or generalized trust. However Bottan and Perez-Truglia (2015) find that generalized trust is unchanged in areas impacted by the U.S. Catholic clergy scandal. I replicate their results in the Appendix.

chical (e.g., Catholicism), locals are less willing to engage in economic activity, which requires trust. Building on this insight, I test whether the clergy abuse scandal leads Catholics to decrease their equity participation in areas where Catholicism is more socially influential. I identify counties where the Catholic Church is relatively more prominent, which I call *High Catholic* counties.<sup>2</sup> Again in a triple difference setting, I find that Catholics in *High Catholic* counties are significantly less likely to participate the stock market as a result of the shock than Catholics in other counties hit by the scandal. This evidence implies that the impact of the shock to the cultural institution is conveyed via local social norms.

The second channel deals with cultural institutions as social networks. Scandals spread by interactions between members of the shocked cultural institutions (Gurun et al., 2018). Therefore, Catholics who interact more frequently in church settings might react more to the church scandal. Accordingly, I focus on the intensity of participation in Catholic church services to explore this channel (Hong et al., 2004). The decrease in stock market participation is quantitatively similar for more and less religiously active Catholics in areas impacted by the scandal. These findings do not support the social interactions channel.

In further analysis, I investigate how impacted Catholic households use the funds they do not invest in the stock market. These households increase their non-equity savings by \$6,000 to \$9,000 biennially. The effect is concentrated in safer instruments (viz. bank and government securities), which are much less reliant on trust in counterparties. Moreover, I calculate the ex-ante opportunity cost of forgone equity investment, offering an estimate of the expected return required for trusting in the equity market. The forgone investment returns are especially large for households whose equity participation is negatively impacted at the extensive margin. I estimate that these households lose between \$77,000 and \$134,000 in compounded interest between would-be entrance on equity markets and potential retirement.

Also, I investigate the shock's impact on U.S. Catholic dioceses' fundraising.<sup>3</sup> I find

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<sup>2</sup>Akin to Kumar et al. (2011), I use the share of Catholics in the local population as a measure of the Catholic Church's influence on local social norms. I create an indicator to identify counties where the share of local Catholics is higher than the median share among all U.S. counties

<sup>3</sup>Bottan and Perez-Truglia (2015) show that the shock negatively impacts local charities affiliated with

that annual pledges to dioceses impacted by the scandal decrease between 4.9% and 10.8%, the equivalent of \$135,000 and \$275,000 for the median diocese in the sample. The results confirm previous research's findings regarding the direct effects of managerial misconduct on parties related to the organization (Karpoff and Lott, 1993; Karpoff et al., 2008). In particular, these financial penalties underscore the role of reputation in cultural institutions such as religions (Bénabou and Tirole, 2006).

In robustness tests, I check for potential confounding events that might drive the negative response of Catholics in shocked areas. First, I find that the results on the coefficients of interest are similar to those of the main regression when I control for time trends for Catholics in the control group. Then, I look at potential confounding events in the time series and the cross section. The financial crisis of 2008 is part of the post period for the scandal. A large negative shock to the financial system could offer an alternative explanation for the negative response on equity participation. I find evidence that while the some of the results are larger after the crisis, the coefficients of interest are broadly robust for scandal years before the shock to the financial system. Then, I rule out the possibility that the response is driven by revelations in the largest dioceses (that are also large financial and cultural centers), rather than by local effects. Next, I find that the results broadly hold when controlling for unobservable local time varying events that might also systematically negatively impact stock market participation.

This paper is at the intersection of several strands of research. First, I contribute to the literature on the domain-specificity of investors' preferences. Most of the work on this question focuses on risk tolerance: while some argue for domain-specific risk attitudes (Dyer and Sarin, 1982; Weber et al., 2002; Blais and Weber, 2006), other evidence points to the existence of domain-general risk preferences (Barseghyan et al., 2011; Einav et al., 2012).<sup>4</sup> Regarding the role of trust in investment, most of the existing literature is domain-specific.

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the Catholic Church. I look at fundraising consequences at the level of the scandal: fundraising by the diocese.

<sup>4</sup>Of course, those two hypotheses are not mutually exclusive: risk preference can both have general components and context-driven parameters.

Previous work focuses on the direct effect of firm or managerial misconduct (e.g., Karpoff et al., 2008; Giannetti and Wang, 2016; Gurun et al., 2018; Egan et al., 2019); whether agents are more prone to participate in certain investments when they interact with peers who already invest in these instruments (e.g. Duflo and Saez, 2002; Hong et al., 2004); or whether certain social norms about money impact investment choice (Stulz and Williamson, 2003; Kumar et al., 2011). In this paper, I provide evidence of domain-crossover between trust in cultural institutions and trust in investment decisions: a breach of governance about clergy mores (not directly related to their management of money) affects Catholic households' willingness to trust with respect to their investment choices. As such, this paper provides evidence consistent with Dupont and Karpoff (2020)'s model on the various sources of trust.

More broadly, I contribute to the literature on the role of cultural institutions in economics (e.g. Knack and Keefer, 1997; Barro and McCleary, 2003; Acemoglu et al., 2001, 2005; Guiso et al., 2009; Enke, 2019). While these studies deal with macroeconomic outcomes, I enrich the literature by studying a microeconomic choice. One paper close to mine is Renneboog and Spaenjers (2012), who document correlations between religious affiliation and stock market participation. However, to my knowledge, my paper is the first to document a causal link through trust between the influence of cultural institutions and saving decisions in a real world setting. I highlight the role of cultural institutions on local social norms, a component of trust relatively under-explored in the literature. Moreover, I estimate the value of investors' culture-based trust placed in investment counterparties. This value is arguably quite significant.

Third, I contribute to the misconduct and governance literature. Previous papers document the role reputational penalties as a response to corporate misconduct (e.g., Karpoff and Lott, 1993). I document similarly negative consequences of breaches of trust within cultural institutions. This provides empirical evidence for the importance of reputation in cultural institutions (Bénabou and Tirole, 2006). While reputational penalties usually stem from monitoring through traditional governance systems, I find that those penalties are at play

even in an institution such as the Catholic church, where external governance mechanisms are much more limited than for corporations.

Other papers study the relationship between social factors and financial decisions. For example, Parsons et al. (2018) document the existence of local cultures of corporate misconduct. The closest paper to my work is arguably D’Acunto et al. (2019), who find that ethnic biases impact local financial development. They show that historical prejudice against Jews, an ethnic group traditionally associated with the financial sector, leads to greater local distrust in the financial industry. The present paper sheds light on another channel through which cultural institutions impact financial choices: members of institutions associated with lower trust disengage from financial activities upon revelation of misconduct in the cultural institution. This evidence calls for greater attention to cultural institutions’ influence on households’ and firms’ financial decisions and opens the door to research on the effect of reputational shocks to other large institutions, e.g., governments, on economic choices.

# 1 Institutional Background and Data

## 1.1 Related Literature

The literature has long recognized the importance of trust in economic and financial decisions. Arrow (1972) argues that trust is essential to any economic transaction. Empirically, Knack and Keefer (1997) and Zak and Knack (2001) show that countries where trust is more prevalent exhibit higher growth. Guiso et al. (2008) find evidence that willingness to trust positively impacts equity participation. In Giannetti and Wang (2016), breaches of trust by firms lead to a decrease in local equity ownership.

The working definition of trust in the economic and finance literature comes from Putnam (1993) and Fukuyama (1995)’s work on social capital: trust is the willingness to cooperate that stems from social norms, personal interactions and a positive attitude toward

strangers.<sup>5</sup> Both Putnam and Fukuyama argue that cultural institutions are a key source of trust: “Social capital differs from other forms of human capital insofar as it is usually created and transmitted through cultural mechanisms like religion, tradition, or historical habit.” (Fukuyama, 1995, p.26). Cultural institutions such as organized religions or countries embody values and beliefs (such as trust) inherent to a culture (Guiso et al., 2003, 2009).

Following this insight, Kumar et al. (2011) argue that in areas where the local dominant religion is more tolerant of gambling, investors are more likely to invest in lottery-type stocks. Hong et al. (2004) provide evidence that people are more likely to invest in equity if they interact with stock market participants in religious settings. These papers posit a domain-specific component of trust conveyed through cultural institutions: cultural norms and interactions regarding money impact group members’ investment choices.

However, other work hints at non-domain-specific components of trust. Enke (2019) argues that religion influences the propensity to cooperate in economic activity: trust in the economic sphere arises from non-economic domains. Renneboog and Spaenjers (2012) find negative (positive) correlations between Catholic (Protestant) affiliation and stock market participation. The mechanism for this finding is based on Putnam (1993)’s argument that religions that are more hierarchical (e.g. Catholicism) generally discourage members’ trust, while horizontally structured religions (e.g., Protestantism) encourage mutual cooperation and trust. La Porta et al. (1997) offer supportive evidence for this theory: in countries where hierarchically-organized religions are more prevalent, locals are less likely to engage in economic and social cooperation. Also, in a controlled experiment, Benjamin et al. (2016) find that the salience of Catholic (Protestant) affiliation decreases (increases) affiliated participants’ contribution to a public goods game. These papers lead me to investigate the existence of crossover effects between religion-based trust and trust in financial decisions.

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<sup>5</sup>“Trust is the expectation that arises within a community of regular, honest, and cooperative behavior based on commonly shared norms, on the part of other members of that community. (...) Social capital is the capability that arises from the prevalence of trust in a society or in certain parts of it.(Fukuyama, 1995, p.26). Putnam (1993) splits the communal component of trust in two: trust of strangers and trust through social interactions within a subgroup or network. The economics and finance literature often uses trust and social capital interchangeably. Accordingly, I will use trust to refer to both here.

## 1.2 Institutional Background on the Scandals

Beginning on January 6, 2002, the Boston Globe's *Spotlight* team's investigation revealed that Boston's Catholic archbishop, Cardinal Law, mishandled claims of abuse by some priests under his supervision in prior decades. Law allowed known abusers to keep working in churches, leading to further instances of grave misconduct. This news story set off a firestorm of revelations of past Catholic clergy abuse, triggering a crisis throughout most of the U.S. Figure 1 shows the results of a search for articles in U.S. newspapers mentioning Catholic clergy abuse from 1997 to 2007. The crisis is clearly a salient event: the news coverage drastically increases in 2002 and stays elevated thereafter.

Catholic bishops like Cardinal Law are in charge of a territory called a diocese. Their duties include taking care of the local clergy and local Catholics. In the U.S., Catholic dioceses are sets of counties. There are 176 such-defined U.S. Catholic dioceses. Dioceses are geographically very stable over time.<sup>6</sup> Bishops are named by the Pope of Rome. They administer their diocese until becoming bishop of another diocese or until the Pope approves their resignation (usually due to reaching the age limit of 75).

The Catholic clergy abuse crisis revealed Catholic bishops' breach in governance in the handling of past clergy abuse. Most of these crimes date from the 1960s and 1970s (John Jay College of Criminal Studies, 2004). Very often, victims' families privately contacted the diocese about the allegation soon after the abuse occurred. Yet the vast majority of these allegations became public only after 2002. The revelations also included reports that bishops followed the advice of experts about treatment for abusers and on the decision to reinstate clergy to ministry, but the public widely viewed such efforts as ineffective and inappropriate. Revelations of misconduct in light of the *Spotlight* team's investigation set off a scandal in dioceses where bishops appear to fail their responsibility to local Catholics.

Though news of Catholic clergy abuse existed before January 2002, the *Spotlight* team's

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<sup>6</sup>The last newly created diocese in the U.S. was that of Laredo in July 3, 2000. Appendix section A details the procedure I use when a revelation of abuse occurs in a diocese that did not exist—i.e. a diocese whose present territory was then administered by another diocese— at the time of the abuse.

investigation led the public to understand the systemic nature of the breaches of governance by bishops, above and beyond the despicable acts by some individuals. That some bishops' inaction led to the hurt of more victims appears to matter as well. However, the number of victims involved in clergy abuse is not a sufficient criterion to identify the scandal, as several revelations of Catholic clergy abuse before 2002 (including in Boston) mentioned priests whose actions hurt dozens, and at least one case over 100, victims. Yet, these earlier revelations did not lead to the type of crisis triggered by the *Spotlight* article series. Therefore, the news of inept governance by bishops appears to be the main criterion for the scandal.<sup>7</sup>

### 1.3 Identification and Measures of the Scandal

Because the scandal focuses on local Catholic bishops' mishandling of past clergy misconduct, the shock can be linked to the Catholic hierarchy of a given diocese. To measure the impact of the scandal, I begin by collecting newspapers' articles related to the crisis in the *Factiva* database. News disclosures allow me to measure the public nature of the shock.<sup>8</sup>

While the bulk of the articles about the crisis are published in 2002, dioceses face revelations at different times. I focus on the years 2001 to 2006, the years for which I have data on Catholic giving to diocesan fundraising campaigns that allow me to assess the impact of the scandal within the Catholic Church in further tests. Also, collecting news before the first revelations in January 2002 allows me to anticipate potential leaks of the *Spotlight* story.

The keyword search from *Factiva* yields over 27,000 articles between 2001 and 2006. I read each story and classify each set of allegations by date, diocese involved, nature of event (e.g. allegation, removal of clergy from ministry, etc.), number of victims and perpetrators (and perpetrators' names) when mentioned. I take out duplicates and stories with no identification

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<sup>7</sup>Episodes of Catholic clergy sexual abuses was already well-known before 2002, as evidenced by books like Plante (1999). Accounts of the Catholic clergy abuse crisis as a *scandal* focus on the role played by the revelation of bishops' mismanagement of past allegations, e.g. see Bruce (2011).

<sup>8</sup>Other papers using the U.S. Catholic clergy abuse as a shock, such as Hungerman (2013) and Botton and Perez-Truglia (2015), use the *Bishops' Accountability* database. That database includes past private settlements at the settlement date, not when these settlements are revealed to the public. Because I want to measure the impact of the public revelations of abuse, I focus on news disclosures.

information. I find 1,135 unique disclosures of allegations over the period.

To identify the breach of church governance at the heart of the scandal, I use allegations that trigger the accused clergy's removal from his church duties. Of the 1,135 news stories of allegations of clergy sexual abuse during the period, 410 (36%) include disclosure of removals of clergy from public ministry.

A measure based on clergy removals from ministry is helpful to identify the scandal for two reasons. First, the removal of a clergy member due to a now-public allegation captures the essence of the revelations from the *Spotlight* team: that bishops were previously complacent about allegations of misconduct and allowed clergy to continue their ministry and potentially endanger more victims. Second, the removal of clergy in active ministry is arguably much more salient to locals than accusations concerning a long dead or defrocked priest.<sup>9</sup>

Admittedly, clergy removals imperfectly capture the scandal's impact on the local community, because they require alleged perpetrators to (i) still be alive and (ii) still be active clergy members. The second point offers two caveats. First, many ordained clergy left the priesthood in the 1960s and 1970s after most of the alleged abuse disclosed from 2002-on occurred. Also, accused perpetrators might be too old to actively serve in churches at the time of the public allegation, making it impossible to remove them from ministry. While this means that a measure based on clergy removals from ministry potentially underestimates the Catholic clergy abuse scandal, it also implies that the measure I construct creates a high threshold to clear in order to find significant results regarding the effects of the shock.

To capture areas impacted by the Catholic clergy abuse crisis, I create the indicator *Scandal* equal to 1 if the news first reports clergy removals from ministry in the sample period, and 0 otherwise. This measure covers 115 out of 176 U.S. Catholic dioceses as detailed in Table 1, Panel A. Figure 2 shows a map of these treated dioceses.<sup>10</sup>

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<sup>9</sup>Additionally with respect to its local salience, the measure captures only allegations deemed credible. While some allegations are classified as non-credible, the news stories do not always mention such ex post revision, let alone mention the names of the accused clergy members. Therefore, one cannot systematically separate credible from non-credible allegations. However, removals from public ministry, which are announced contemporaneously to allegations, are reserved for allegations considered credible.

<sup>10</sup>For one diocese, Greensburg, the *Scandal* indicator turns on in 2001. Because I omit the initial year of

Moreover, news stories often emphasize the number of victims involved in the allegations to underscore the severity of the breach of governance. Among 1,135 stories of alleged abuse over the period, 1010 (89%) mention the number of victims involved and 729 (64%) offer the number of alleged clergy perpetrators.<sup>11</sup> While it is unreasonable to expect households to keep track of the number of victims, dioceses where allegations accompanied by removals from ministry involve a high number of victims are likely areas where the breach of governance is more systemic and therefore more scandalous to locals.

To identify those areas where the scandal is more prominent, therefore, I create another indicator, *High\_Scandal*, equal to 1 if the cumulative number of victims for a diocese is above the mean for the sample period and 0 otherwise. Victim totals of 3 and more are counted as *High\_Scandal*=1, which corresponds to the 75<sup>th</sup> percentile of the cumulative annual victims count tied to all revelations of removals of clergy from ministry.<sup>12</sup> *High\_Scandal* captures 50 dioceses, listed in Table 1 Panel B and represented in Figure 3. Like the *Scandal* measure, the area for which *High\_Scandal* turns to 1 covers a diverse set of counties from its very first year and expands over time.

## 1.4 Other Data

### 1.4.1 Household Stock Market Participation Data

To test the impact of the shock to the Catholic Church on investments in equity market, I use data from the University of Michigan’s Panel Study of Income Dynamics (PSID). The PSID is, since 1997, administered every other year (from its inception in 1968 until 1997 the survey was annual). This extensive survey results in over 3,000 variables about each surveyed households (called “family units” in the survey). I access the restricted files of

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revelation in my analyses, the effects for this diocese capture local Catholics’ reaction after 2001, that is, in light of the clergy abuse crisis that started in January 2002.

<sup>11</sup>Hungerman (2013) and Bottan and Perez-Truglia (2015) also argue that the number of victims disclosed in the U.S. Catholic clergy abuse crisis matters.

<sup>12</sup>Indicators allow me to identify scandal and high-scandal areas, much like Giannetti and Wang (2016) who use a fraud indicator to study the impact of financial misconduct on household stock market participation.

the PSID, which include households localization data. The Center for Applied Research in the Apostolate (CARA), a research center at Georgetown University, provided me with a file matching Catholic dioceses with each corresponding county. This allows me to map dioceses with respondents' county of residence in the PSID. The PSID also asks for household spouses' religion and frequency of attendance of church services. Based on these variables before 2002, I identify respondents' religious characteristics prior to the scandal.

I use several measures of stock market participation. At the extensive margin, *Stocks* is equal to 1 if a household owns publicly traded shares of stock (outside IRAs) at the time of the interview and 0 if they do not. To explain changes in *Stocks*, I create the variable *Entry*, set to 1 if a household who did not participate in the stock market in the previous survey declares owning stocks in the current survey, and 0 if the household does not own equity in consecutive survey-years (*Entry* is set to missing otherwise). Likewise, I create a variable *Exit* equal to 1 if a household who participates in the stock market in the previous survey declares not owning stocks in the current survey, and 0 if a household owns equity in consecutive survey-years (*Exit* is set to missing otherwise).

At the intensive margin, *EquityWealthRatio* measures the relative value of dollar stock holdings in the household's overall wealth. I define this ratio only if household wealth is positive. I then winsorize the ratio at the 1% and 99% levels. To measure changes in equity investment-flows, I use the logarithmic value of the dollars invest in and divested from equity with *log\_NetEquityPurchase* and *log\_NetEquitySale*, respectively.<sup>13</sup>

The U.S. Catholic clergy abuse scandal begins in 2002. In order to create a pre-period, I begin my sample in 1999, since the 1995-1997 surveys do not include the stock ownership question.<sup>14</sup> Because I end my data collection on clergy abuses in 2006, I use PSID data up to

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<sup>13</sup>I add 1 to the dollar value before applying the log, to account for null net purchases or sales. The amounts reported are purchases and sales since January of 2 years prior to the survey-year, e.g. January 2003 for survey-year 2005.

<sup>14</sup>The 1994 (and prior) version of the question does not distinguish between stocks owned in an IRA and outside of an IRA. As Giannetti and Wang (2016) argue, individuals usually stick to the default setting of their IRA plan. Therefore, stock ownership outside of an IRA better captures households' decisions about stock market participation.

2011 to create a post period for the last wave of shocked dioceses. In the surveys covered by my sample period, the PSID interviews between 6,997 and 8,907 households. I include only those whose religion is available before 2002. The PSID offers a wealth of variables which allow me to control for other known determinants of stock market participation.

Table 2 Panel A presents the summary statistics for the main PSID data I use in this analysis. Section A.2 in the Appendix offers details on each variable. Following Deaton (1997)'s advice on analyzing household survey data and Brunneimeier and Nagel (2008)'s work on PSID stock market participation data, I use sample weights for the summary statistics but not for the regressions. Appendix Table B1 shows that baseline results with the weighted sample are broadly similar to the ones in the main analysis.

#### **1.4.2 Local Dominant Religion Data**

In one set of tests for the channel at play, I focus on counties where the Catholic Church is more prominent, namely counties with relatively higher shares of Catholics in their population. To identify these counties, I use the Association of Religion Archive's 2000 Religious Congregation and Membership Survey. I create a variable *High Catholic* equal to 1 if the share of Catholics in a county is higher than that of the median U.S. county share.

#### **1.4.3 Church Giving Data**

In further tests, I check the impact of the scandal within the Catholic Church by focusing on dioceses' annual fundraising drives. Catholic dioceses are notoriously guarded about their finances. However, from 2002 to 2007, CARA led a study on Catholic diocesan stewardship. The survey covers annual appeal years 2001 to 2006 from Catholic diocesan development offices. CARA has generously given me access to the confidential diocese-year data. Table 2 Panel B presents the summary statistics for these data. Appendix Section A.1 details the procedures I employ to check the data for potential outliers, etc.

## 2 Baseline Tests

### 2.1 Empirical Design

To study the impact of the scandal on local equity participation, I use a triple difference approach to identify Catholic households in dioceses impacted by the scandal after news disclosures of clergy removals from ministry.

Generally, I run the following model:

$$Y_{f,k,t} = a_k + a_t + \beta_1 \cdot Treat\_N_k \times Post\_N_{k,t-1} \times Catholic_f + \beta_2 \cdot Treat\_N_k \times Catholic_f + \beta_3 \cdot Treat\_N_k \times Post\_N_{k,t-1} + \beta_4 \cdot Catholic_f + \lambda \cdot I_{f,t} + \nu \cdot X_{f,t} + \zeta \cdot W_{f,t-1} + \epsilon_{f,k,t} \quad (1)$$

$Y$  a measure of stock market participation from the PSID survey. Index  $f$  designates a family,  $k$  is its county of residence and  $t$  is the interview year.  $Treat\_N_k$  identifies dioceses impacted by the clergy abuse crisis. The extension  $N$  for  $Treat$  and  $Post$  stands for the type of news-based measure of the Catholic crisis abuse I use in the estimation: I create  $Treat\_S_k$  ( $Treat\_H_k$ ) for dioceses for which  $Scandal$  ( $High\_Scandal$ ) is equal to 1 in at least one of  $k$ 's diocese-years in the sample.

The subscript  $t-1$  on  $Post$  expresses the lag between the clergy misconduct data and the interview year.  $Post\_S_{k,t-1}$  ( $Post\_H_{k,t-1}$ ) is equal to 1 for all years on and after which  $Scandal$  ( $High\_Scandal$ ) is equal to 1. This construction mitigates timing issues between the shock measure and the household's reaction to the scandal. To further alleviate this issue, I exclude observations for which the interview year is the year for which  $Post\_S_{k,t-1}$  ( $Post\_H_{k,t-1}$ ) is equal to 1 for the first time, i.e. when the interview year contains both the pre and the post period.  $Catholic_f$  is an indicator equal to 1 if a spouse in the household identifies as Catholic in the PSID survey before the first year of the shock (interview year 2001, or in interview year 1999 if the household is not in the 2001 survey).  $Catholic_f$  captures the time invariant unobservable characteristics of Catholic households. Moreover, I am able to control for risk aversion—a likely driver of households' stock market participation—for a

subset of the sample based on questions from the PSID 1996 survey. Because this control significantly curtails the sample, I present results with and without the *low\_risk* indicator.

The set of controls are similar to those in other studies on the determinants of stock market participation (e.g.: Giannetti and Wang, 2016).  $I$  is a vector including measures of familiarity with investment activity: whether the household owns non-equity financial instruments (bank accounts, CDs, insurance products, etc.) and whether the family unit owns stock in an IRA plan.  $X$  is a set of demographic controls that impact financial decisions: the mean age of the spouses, number of people in the family unit, and indicators capturing whether at least one of the spouses is college-educated or in poor health.  $W$  is a set of household wealth controls encompassing net wealth (in \$100,000—this measure can be negative), the log of the family unit’s annual income, and an indicator as to whether the spouse received an important lump sum payment —e.g. an inheritance—in the year prior to the interview. Since changes in marital status can have large impacts on households’ equity share (Love, 2010), I control for divorced and widowed heads of households. I also include an indicator for non-White spouses.

Because I aim to document the effect of a shock within a geographical area, I include county fixed effects  $a_k$  to account for geographical unobservable characteristics that might impact local stock market participation. I also include year fixed effects  $a_t$  to control for potential annual unobservable effects on equity ownership. Following Abadie et al. (2017), I cluster standard errors at the level of the shock, namely the diocese.  $\beta_1$  is the coefficient of interest: it captures the effect of the shock on stock market participation for Catholic households in dioceses impacted by the scandal in the local Catholic Church.

The sign of the potential effect of the scandal on Catholics’ stock market participation is not clear *ex ante*. As mentioned before, trust is usually understood as made up of several components: social norms of cooperation, personal interactions and generalized trust. On the one hand, Bottan and Perez-Truglia (2015) find that, after revelations of U.S. Catholic clergy

abuse, generalized trust does not change in shocked areas.<sup>15</sup> Under the generalized trust channel,  $\beta_1$  would be indistinguishable from 0. By contrast, cultural institutions' influence on social norms of cooperation (alternatively, on top-down authority) impacts local economic participation and performance (La Porta et al., 1997). Also, cultural groups serve as social networks through which the effects of misconduct spread (Gurun et al., 2018). Catholics who are more active in their church might be more negatively impacted by the scandal. A negative  $\beta_1$  would offer evidence to either the social norms or the personal interactions channel. On the other hand, the social stigma of belonging to a tainted cultural institution leads members to switch affiliation to other institutions that offer alternative social beliefs and norms, such as Protestant churches in this setting (Hungerman, 2013). Under the stigma channel, the new social ties could lead investors to adopt financial choices that contrast to those of their original cultural group. Under this mechanism,  $\beta_1$  would be positive.

## 2.2 Main Results

Table 3 presents the results of the regressions from Equation 1. Panel A summarizes the estimation for the extensive margin outcomes. Based on the *Scandal* measure, Catholic households are between 3.3% (4.7% when controlling for risk aversion) less likely to participate in the stock market in areas where Catholic clergy have been publicly removed from ministry as a result of the scandal. In areas where the scandal is more prominent (*High\_Scandal*=1), its impact is stronger: Catholic households are between 3.9% and 5.9% less likely to own equity. All those coefficients are significant at the 1% level.

The decrease in Catholic stock market participation appears primarily driven by lower entry in the market by Catholics after the shock: Catholic households in *Scandal* impacted areas are 2.8% ( $p < 0.10$ ) to 4.6% less likely to enter the stock market (Table 3 Panel A, Models (5) and (6)). The coefficients of interest for the propensity to enter equity markets in *High\_Scandal* areas are of comparable magnitude but insignificant, maybe due to lack of

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<sup>15</sup>In Appendix Table B2, I confirm their null result for Catholics in areas impacted by the scandal.

power. In regressions for the *Exit* outcome, none of the coefficients on the triple interactions terms of interest are significant, though the number of observations for the estimation are much smaller than for either of the other two extensive margin outcomes. Yet, while the marginal impact of the scandal of Catholics' entrance in the stock market shows a sign reversal consistent with that of the effect on the propensity to own shares of stock in the post vs. pre period, this pattern is not found consistently for the *Exit* outcome.

Generally, significant results for the main sample (odd-number models) are stronger when I include the low risk tolerance indicator from the 1996 survey as a control (even-numbered models). Therefore, the negative effect is not due to risk preferences: trust and risk tolerance are distinct (Guiso et al., 2008). Second, because households with low risk tolerance are less likely to enter the stock market, controlling for *low\_risk* allows to better capture the impact on current and potential equity-holders. Moreover, the stronger effect could be due to the fact that the family units for which I have the risk tolerance control had to be interviewed in 1996: they are older than those for whom the risk data is missing. As Table 6 Panel A shows, the average age of entry in the stock market for Catholics in 46: older spouses are likely more affected by the shock because they are would-be entrants or families that have accumulated more wealth and invest less of it in equity as a result of the shock.

To assess the economic significance of this decrease in the propensity to own stock, I use the ARDA 2000 Religious Congregation and Memberships Survey. The 2000 Catholic population in *Scandal* (*High\_Scandal*) counties amounts to 50.6 million (32.5 million). Based on the average size of Catholic households in PSID interview-years 1999 and 2001 (2.95), the treated areas cover more than 17 million (11 million in *High\_Scandal* dioceses) Catholic households.<sup>16</sup> The estimates on the *Stocks* outcome imply that about 561,000 households do not participate in the stock market in *Scandal* areas (429,000 in *High\_Scandal* dioceses).

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<sup>16</sup>This method assumes that all members of Catholic households are counted as Catholics in the ARDA data, even if a spouse or child identifies with another religious group. Otherwise, the number of Catholics per household would decrease and the number of households impacted by the scandal would increase. Yet, it is reasonable to assume that families all go to Church together rather than split by spouse affiliations when both spouses are not Catholics.

Using the estimate from Model (4), 649,000 households eschew equity participation.

The results for the impact of the scandal on the intensive margin echo those for the extensive margin. Table 3 Panel B shows that in areas impacted by the scandal, Catholics' equity to wealth ratio decreases by 1.1% (Model (2)) to 1.6% (Model (4)). Based on the mean wealth for Catholics after the shock, these percentages correspond respective declines of \$3,700 and \$5,800 between each survey year. Here also, the effect appears primarily due to a decrease in equity purchases (the coefficients on the triple interaction terms are all significantly negative in Models (5)-(8)) than by an increase in sales (Models (9)-(12)).

## 2.3 Event Time Regressions

The baseline tests from the previous section present average pre and post estimates for Catholics in shocked areas. I also run regressions in event time. While the staggered feature of the shock is on an annual basis, the stock market participation data is available only every other year. Therefore, to present data about the shock in event time, I create event survey-years. Event period  $t-1$  ( $t+1$ ) is the first survey-year before (after) the initial year of the shock. For example, for dioceses shocked in 2002,  $t-1$  is 2001. Likewise, for dioceses shocked in 2003,  $t-1$  is set to 2001. However, in the former case  $t+1$  is 2003 while in the latter case  $t+1$  is 2005.<sup>17</sup>

Accordingly, I run a modified version of Equation 1 in event survey-years:

$$Y_{f,k,t} = \sum_{s=-2}^5 \delta_s \cdot (Treat_{k,s} \times Catholic_f) + \sum_{s=-2}^5 \lambda_s \cdot Treat_{k,s} + \kappa \cdot Catholic_f + \mu \cdot Z_{k,t} + \alpha_t + \alpha_k + \nu_{f,k,t} \quad (2)$$

where  $Z$  is a vector containing all the control variables from Equation 1,  $s$  denotes event-time

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<sup>17</sup>This method gives 3 pre-shock time periods and 5 post shock periods. The  $t-3$  cell is quite sparingly populated. Therefore I bunch the  $t-3$  and  $t-2$  periods into  $t-2$ . The 5 post-shock periods. Moreover, because *Enter* and *Exit* are defined as changes from the first survey year, those variables are almost never defined for  $t-2$ . Thus, the pre-trend for these variables is a point rather than a line. Thus, I focus on the main outcome *Stocks* and its intensive margin correspondent *EquityWealthRatio*.

(as in the main regression, I exclude observations for which  $s=0$ ) and  $\alpha_t$  and  $\alpha_k$  are year and county fixed effects as before.  $\delta_s$  presents the marginal effect on Catholics' stock market participation for each event survey-year.

Figure 4 plots the  $\delta_s$  event time coefficients for the main outcomes: *Stocks* and *EquityWealthRatio*. The positive slope for the *Stocks* outcome before the shock is followed by a generally negative trend after the scandal. However, for the *EquityWealthRatio* outcome, there is a negative trend before the scandal: the causal interpretation of the scandal's effect on participation in the stock market at the intensive margin is less straightforward than for the extensive margin.

### 3 Channel

In this section, I investigate the channels through which the shock to trust from the clergy abuse crisis would cause a decrease in Catholics' stock market participation. The negative sign of the coefficients of interests in the main results lead me to investigate the social norms and the personal influence channels.<sup>18</sup>

#### 3.1 Influence of the Catholic Church over Social Norms

According to the social norms channel, the scandal to the local Catholic church regions acts as a salience mechanism of social norms of distrust in cooperative activity (Putnam, 1993; La Porta et al., 1997). Under this channel, Catholic households living in counties where the Catholic Church is more influential would respond more strongly to the shock than Catholic

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<sup>18</sup>Gomes et al. (2020) summarize the literature's findings on limited household stock participation. They identify four main lines of thought: (i) risk preferences, (ii) costs of participation, (iii) equity-specific risk (including the risk of being cheated), and (iv) social interaction with peers. The results from Table 3 in even-numbered models show that the effect is robust to risk-aversion, ruling out explanation (i), provided that household general risk preferences are stable over time. Over the period, there is little reason to think that costs of participation change in a way that would not be captured by the year fixed effects. Hence I focus on explanations that deal with items (iii) and (iv): whether the Catholic Church social influence leads local Catholics to be more aware of the risk of cooperative enterprise (less trusting of outcomes highly dependent on counterparty's behavior) as a result of the shock, or whether the decrease in equity participation is related to frequent social interactions in the shocked institution.

households in counties where Catholic influence is less potent.

To measure the influence of Catholicism on local social norms, I use the importance of the Catholic Church in the local religious market (Kumar et al., 2011). I begin by creating an indicator, *High Catholic*, equal to 1 if the county's share of the population in the 2000 ARDA survey (before the shock) is higher than the median share of Catholics in all U.S. counties, and 0 otherwise. Because Protestantism is the dominant religion in the U.S., I consider counties for which *High Catholic* is set to 0 as areas where the Protestant Church is relatively more influential.

Table 4 Panel A presents the results for the tests of the social norms channel.<sup>19</sup> The interaction variable  $Treat \times Post \times Catholic\_Norms$  gives the average effect of the scandal for Catholics living in *High Catholic* counties. The other variable of interest is  $Treat \times Post \times Catholic$  which captures the average effect of scandal for Catholics living in counties where the Catholic church is less socially prominent (non-*High Catholic* counties).

At the extensive margin (Models (1)-(4)) the negative effect of the shock on stock market participation is clearly driven by Catholics in areas where the Catholic Church is more socially dominant. The coefficients on the  $Treat \times Post \times Catholic\_Norms$  terms are consistently negative and strongly statistically significant. Moreover, the F-tests on the difference between the two triple interaction terms are consistently significant at the 5% level.

Table 4 Panel A Models (5)-(8) present the results of this test for the *EquityWealthRatio* outcome. Here also, I find evidence that Catholics in counties where the Catholic Church is more socially dominant significantly decrease their exposure to equity. The magnitudes of the coefficients for the triple interaction terms for Catholics in *High Catholic* counties are generally much more negative than those the triple interaction term for Catholics in areas dominated by Protestantism, though admittedly the F-tests are insignificant. In Model (7), the two triple interaction terms have coefficients of similar magnitudes, though only the coefficient for Catholics in *High Catholic* counties is significantly different from zero. One

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<sup>19</sup>In these and further tables, I only present the coefficients and standard errors on the interaction terms—though all regressions include the same controls as before unless noted otherwise.

possible explanation is that the high number of victims dominates the salience of the shock and impacts households more than salience through local social norms. Another explanation, based on the event-time regression results, is that the causal effect of the scandal on stock market participation is at the extensive rather than at the intensive margin.

Overall, these results offer evidence that the Church’s local social influence plays a role in the shock’s impact on Catholics’ stock market participation. Local social influence of the Catholic Church appears to strongly impact Catholics’ decisions to divest from the stock market as a result of the shock.

### 3.2 Intensity of Personal Interactions in the Church

Personal interactions represent another channel for trust’s influence on investment decisions. For example, Hong et al. (2004) find that frequent interactions with equity investors in religious settings contributes to greater participation in the stock market. In the case of the present study however, frequent church attendance might contribute to a higher exposure to the scandal (greater salience of the shock) and thus increased reluctance to invest in equity.

To measure the intensity of church involvement, I use the PSID data on frequency of religious service attendance. I classify a Catholic household as *Active* if the Catholic spouse in the household reports attending church at least once a week, because Catholic churches usually hold weekly religious gatherings (Sunday mass). The average effect of the scandal for this active group is measured by the coefficient on the  $Treat \times Post \times Catholic\_Active$  interaction terms. In contrast, I classify Catholics who attend church less than weekly as not active (for whom *Active* is set to 0). The effect of the shock on non-active Catholics is measured by the coefficients on the  $Treat \times Post \times Catholic$  interaction terms.

The results in Table 4 Panel B show that the coefficients on the triple interaction terms for both subgroups have the same sign, are generally very close in magnitude and similar in significance. Hence, the tests for differences between the coefficients are insignificant across all specifications for the personal interactions channel—even at the extensive margin where

these tests offered evidence of significant differences under the social norms channel. In light of these results, I do not find evidence toward the personal interactions channel.

In sum, the results on the two channels I study lead me to conclude that the impact of the scandal on Catholics' stock market participation is attributable to the influence of the Catholic Church over local social norms. Catholic households in counties where the Catholic Church is more socially influential decrease their stock market participation significantly more than in other counties. By contrast, the church-based personal interactions channel does not offer any significant difference in the marginal effect of Catholics actively and non-actively involved in church activities.

## 4 Further Evidence

This section provides further evidence on shocked Catholics' financial behavior. First, I consider to what use these households put the funds not invested in equity. Also, I examine the value of forgone interests on equity investments. Last, I present evidence of the direct effect of the shock on Catholic dioceses.

### 4.1 Non-Equity Savings

While the PSID asks many questions about consumption habits, it does not account for all household expenses. However, the PSID asks survey participants about their use of various savings instruments. Therefore, I focus this follow-up investigation on households' non-equity savings. Previous research shows that households who divest in one means of savings reinvest some of their savings in other means such as bank deposits (Gurun et al., 2018). Different economic choices imply varied safeguards of trust. While some investment instruments like equity require high trust in counterparties (Guiso et al., 2008), bank deposits are safe from opportunistic behavior as long as the government honors their legal guarantee.<sup>20</sup>

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<sup>20</sup>This idea also draws on Dupont and Karpoff (2020). The authors classify the mechanisms of enforcement of trust allocation as cultural, legal and reputational.

Accordingly, I check whether Catholic investors in shocked areas increase their savings in government-guaranteed instruments. The PSID asks two sets of questions on non-equity savings: first, regarding holdings in bank deposits, government securities and CDs; and second about all other products (insurance-based products, corporate bonds etc.). Because savings (e.g., bank deposits) can be negative, I use dollar amounts. I winsorize all dependent variables at the 1% level.

Table 5, Panel A shows the results of the regressions with bank and government savings (Models (1)-(4)) and other savings (Models(5)-(8)) as the respective dependent variables. The increase in non-equity savings is concentrated in safe instruments: in areas impacted by the *Scandal* (*High Scandal*) measure, the coefficient on bank and government savings represent 75% (71%) of the sum of the two coefficient of interests. The effect is quite economically significant: bank and government savings increase by about \$2,700 biennially after the shock on average. This increase is even larger when controlling for risk aversion.

Admittedly, these measures include flows endogenous to savings. Therefore, I create a third outcome, *Net Non-Equity Savings*, which measures those savings net of endogenous flows. I aggregate the reported amounts for each households and net out the declared interest and dividends received, as well as reported proceeds from stock sales. The regression results are presented in Table 5 Models (9)-(12). The coefficients of interest are consistent with those of Models (1)-(8). In areas where the shock is measured by the *Scandal* indicator, non-equity savings increase by \$6,000 to \$9,000 after the shock. In *High\_Scandal* areas, the magnitude is slightly lower (\$5,000 to \$7,000) and the results are only marginally significant.

In sum, I find evidence that Catholics in shocked areas substitute their equity assets for other financial assets and that this increase is strongly located in the safest kinds of assets: bank accounts and government securities. The general increase in non-equity savings is overall robust to the exclusion of endogenous flows from investments.

## 4.2 Opportunity Cost of Forgone Equity Ownership

In this subsection, I present estimates of the opportunity cost of forgone investment in the stock market. One interpretation of those figures is that they represent the value of trading the uncertainty of equity investing for more certain choices (safer investment and / or more immediate consumption). By using ex ante parameters of lost interest on equity investment, I offer back of the envelope valuations of the expected return required for trusting potentially opportunistic counterparties.

For these calculations, I compare the equity investments (initial and subsequent purchases) of Catholic households in shocked areas before and after the shock. This difference captures the change in household equity savings conditioning on two important cultural variables: religion and place. The underlying assumption is that Catholic households in a given place would behave similarly over time on average, were it not for the shock.

I begin at the extensive margin. I first assess the mean initial equity purchase for Catholic entering the stock market in the pre period. I assume that would-be entrants invest as much initially as Catholic entrants in treated areas before the shock on average. I use the same assumption for further purchases. Next, I account for the increase in risky non-equity savings increase after the shock, using the coefficients of interest in Table 5 Panel A Models (5) and (7). Those estimates are average effects, hence I normalize them by the mean wealth after the shock. I multiply the resulting ratio by the mean wealth of Catholic equity-holders in shocked areas before the shock to get the average amount invested in risky equity assets by would-be equity entrants had their wealth evolved as that of Catholic equity-holders in treated areas before the shock.

For the opportunity cost at the intensive margin, I compute the pre vs. post scandal difference in stock-purchases-to-wealth ratios for Catholic households who own stock in treated areas. I multiply this difference with the mean wealth of equity-holding Catholic households after the shock to get an annual forgone equity investment. I compute the increase in risky non-equity savings based on Catholic equity-holders' wealth after the shock.

To get the number of compounding periods, I use the difference between two theoretical ages at divestment (65 and 70, proxies for retirement ages) and the mean age at (i) entry on the stock market for extensive margin calculations (46 for both measures of the shock), or (ii) of Catholic stock owners after the shock for intensive margin calculation (54 in both cases). I use a benchmark of 7% of the equity risk premium. This benchmark, which corresponds to the average historical equity premium in the U.S., offers an estimate of the anticipated cost of non-participation in the stock market. The 7% annual return is in fact close to the mean realized return over the period.<sup>21</sup>

To compute the opportunity cost of not investing in the stock market, I calculate the interest generated by would-be stock purchases, net of the interest generated from the increase in risky equity savings documented in Table 5. I use non-equity savings risk premia of 1%, 2% and 3%, alternatively.<sup>22</sup>

Table 6 sums up the inputs and the opportunity costs for each scenario. All means are estimated for Catholic households in treated areas. Opportunity cost estimates range from about \$33,500 to over \$134,000 for investors who never enter the stock market (Table 6, Panel B). For investors who remained invested but decreased their stock purchases, estimates range from \$2,650 to \$35,490 (Table 6, Panel D). These latter estimates are not too penalizing, and are subject to the caveat from the event time regression evidence. Yet, at the extensive margin—for which evidence the scandal’s causal impact is stronger—the opportunity cost estimates represent up to 40% of Catholics’ average wealth post-scandal. Also, these amounts are likely to be lower bound estimates because I assume that households divest entirely from the stock market upon reaching retirement age rather than over time once retired.

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<sup>21</sup>Using data from Ken French’s data library, the rolling (geometric) mean of returns over the various compounding periods are between 7.5% and 8%. Over the intervals between potential divestment and retirement, the lowest geometric annual returns in my estimations are 3.08% for the 11 periods between 2002 and 2012, and the highest is an 14.3% mean annual gain between 2009 and 2019. Admittedly, the pre and post cycles include large variations in stock returns such as the dot-com boom and bust and the Great Financial Crisis. Tests in Table 9 Panels A and B show that main results hold in pre-GFC years.

<sup>22</sup>According to the FRED database (Federal Reserve Bank of St. Louis, 2020), the mean credit spread on Baa bonds since 1953 is just below 200 basis points. Based on this average, I use risk premia for investors with different risk profiles.

### 4.3 Measuring the Impact on Catholic Dioceses

As noted earlier, I identify the scandal to the Catholic Church based on the nature of the news in the trigger event from the Boston Globe’s *Spotlight* series: bishops’ mishandling of past abuse allegations (and the severity of its impact on local Catholics for the *High\_Scandal* measure). Admittedly, my proxies for either dimension might imperfectly identify Catholics’ reaction to the news. To offer some validity about these measures, I test the direct impact of the scandal on Catholic diocese’s fundraising, using the same shock measures.

In most dioceses, the bishop asks local Catholics to contribute to the Annual Appeal, an effort to fund the diocese. Hence, the fundraising event is directly linked to the bishop, the figure of the scandal. Because revelations of failures of governance in corporations lead to reputation-losses (Karpoff et al., 2008), the same might be true with respect to philanthropic giving, as the latter depends on the charity’s reputation (Bénabou and Tirole, 2006).<sup>23</sup>

I focus on two sets of outcomes regarding involvement in diocesan Annual Appeals. The first focuses on dollars pledged, while the second deals with household participation. For each set, I include three types of measures: (i) the log of either dollars pledged or the number of households participating that year; (ii) A relative measure based on the stated goal for the fundraiser or the number of solicited households that year, respectively; (iii) A relative measure of pledged amount and number of participants scaled by the 2001 appeal goal and the number of solicited households in 2001, respectively.<sup>24</sup>

I measure the impact on the scandal at the diocese-year level using a staggered difference-in-difference estimation for dioceses impacted by the shock. Panel A of Table 7 shows regression results for the dollar-based outcomes. In all models, the coefficient of interest on the interaction term is negative, and is statistically significant in most cases. Predictably, the

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<sup>23</sup>Bottan and Perez-Truglia (2015), using a similar shock, find donations to that charities associated with the Catholic Church decreases in shocked areas. In my tests, I focus on donations to fundraisers by dioceses, who are at the center of the scandal.

<sup>24</sup>I again exclude from the regressions those event-years 0, the first year for which a diocese is impacted by the scandal. Because the annual appeal sample runs 2001 to 2006, this excludes the *Post\_H* equals 1 for 6 dioceses who cross the threshold in 2006, leaving 44 treated dioceses with dioceses-years where *Post\_H* equals 1. Section A.4 of the Data Appendix offers further details about these regressions and variable definitions.

coefficients are larger in magnitude and stronger in significance for the *High\_Scandal* outcome. The coefficient of interest in Panel A Model (2) is -8.6%. This represents a loss in pledges of \$240,000 (\$400,000) per year for a diocese with the median (median treated) appeal goal in the data. The -6% ( $p < 0.10$ ) estimated effect of pledges estimated as a percentage of the goal amounts to \$165,000 (\$260,000) for the median (median treated) diocese in the sample. Normalizing by the goal before the beginning of the sexual abuse crisis (Panel A Model (6)), the effect is quite larger in magnitude with -10.8%. In dollar terms, the estimated impact on pledged normalized by 2001 goal amounts is over \$275,000 (\$459,000) for the median (median treated) diocese, equivalent to estimates in pledged dollars. For estimations based on the *Scandal* measures, in only significant result is that Catholics pledge 4.9% less of the goal after the shock, slightly less than in *High\_Scandal* dioceses. This amounts to a decrease in annual appeal fundraising of about \$135,000 (\$210,000) for the median (median treated) diocese. The magnitude gets stronger when the pledges are normalized by the goal in 2001 but the coefficient's standard error almost quadruples, hinting at the fact that the 2001 goal might be missing for many treated dioceses.

Table 7 Panel B measures the impact on the shock of the participation rate of Catholics in the diocese. None of the coefficients of interest are significantly different from zero: households' willingness to participate in the fundraiser is statistically unaffected. Rather, the effect of the shock on diocesan Annual Appeal is concentrated at the intensive margin.

Both measures of the scandal I use in main analysis present evidence that Catholic dioceses suffer negative financial consequences from local Catholics, as predicted. This offers at least partial validation of the measures of the shock I use in this study. It also offers further evidence that, like corporations, charitable organizations suffer direct negative penalties for their managers' misconduct and breaches of governance (Bottan and Perez-Truglia, 2015).

In sum, I find evidence that local Catholics move the divested funds to non-equity savings, especially savings in bank and government instruments, traditionally considered safer. These changes have significant negative economic effects for Catholic households' wealth, especially

for households who fail to enter equity markets after the shock. Moreover, in line with predictions from corporate governance breaches, I document a negative direct financial effect of the scandal on impacted Catholic dioceses.

## 5 Robustness

In this section I address concerns regarding potential confounding events to this study. First, I include a time trend control for Catholics in the control group to ensure that the results are not biased by the lack of a  $Post \times Catholic$  variable in the empirical design. Second, I split the sample's span and scope to test whether significant events in the time series and cross section might drive the results. My third set of robustness tests present an alternative specification to address potential local time varying factors that might cause local Catholics to decrease their stock market participation.

### 5.1 Time Trend Control

One potential issue with the staggered triple difference design is that the control group, including Catholics, is not assigned  $Post$  equal to 1. As such, there is no  $Post \times Catholic$  variable controlling for the behavior of Catholics in the control group after the shock. If this group behaves dramatically differently as a result of the shock, this could bias the coefficients for Catholics in the treated group in the baseline test.

To check whether these coefficients are biased, I add a time trend for Catholics in the control group to Equation 1. I call this variable  $ControlGroup\_Catholic \times Time$ . Table 8 presents the results of these tests, again split in two panels for results at the extensive (Panel A) and extensive margins (Panel B). In all specifications, the coefficients of interest are either similar or extremely close in magnitude to those of the main results. Also, coefficients that were statistically significant in the main analysis remain so in these regressions.

Moreover, in most specifications, the coefficients on  $ControlGroup\_Catholic \times Time$  are

generally not significantly different from zero. In the cases where they are statistically significant, (i) the coefficients of interest are generally similar to those of the main analysis in magnitude and significance, (ii) the magnitudes of the coefficients on the time trend control are usually quite small compared to those on the triple interaction term, and (iii) in two cases (Models (2) from Panels A and B) the sign on the coefficients on the time trend variable are opposite of those of the variable of interest: Catholics in the control group offer a more potent counterfactual effect regarding what Catholics in the treated group would have done absent the shock.

## 5.2 Alternative Sample Splits

As always, the sample composition might present concerns. Because the post scandal period includes the years 2009-2011, the negative effect of the scandal on stock market participation for Catholics could be driven by the impact of the Great Financial Crisis. Alternatively, the average effect I document might be due only to some dioceses of particular importance. To address such issues, I split the sample in two distinct ways.

First, I identify Catholic households before and after the Great Financial Crisis (2008). While the triple difference setting means that the result is still about *Catholics'* reaction after the shock, this reaction could be enhanced by the shock to trust in the financial system or even triggered by it. Therefore, I create two triple interaction terms of interest: one for the impact after the shock but before the GFC ( $Treat \times Post \times Catholic$ ) and the other the reaction after the shock and after 2008 ( $Treat \times Post \times Catholic\_GFC$ ).

Table 9 Panels A and B summarize the results from these tests for the extensive and intensive margin outcomes, respectively. In both Panels, the effects without the low risk tolerance control are generally stronger before the GFC than after. This might be because most of the shocked dioceses are hit relatively early (2002) and local Catholics' respond fairly quickly to the shock: they decrease their equity participation before the GFC. One exception to this general pattern is Panel A Model (2), where controlling for risk, Catholics

are less likely to own stock in shocked areas after the GFC than before—though the test of differences between the two coefficients is not statistically significant.

Then, I perform a different split. I flag the largest dioceses impacted by the shock (Boston, Los Angeles, Chicago and New York). In these dioceses, the impact might be substantially larger than in other areas first because of role of the Catholic Church’s social influence, but also because news in those diocese might be national news, or because these dioceses cover large financial centers where information about the stock market gathers and spills over to local households. In these latter scenarios, this would be a problem since the effect would be driven only by those four dioceses rather than by local response in all diocese. For those tests,  $Treat \times Post \times Catholic\_LargeDiocese$  identifies the impact of the shock for Catholics in those large dioceses, while  $Treat \times Post \times Catholic$  identifies the scandal’s effect on Catholics in other shocked areas.

The results from Table 9 Panels C and D alleviate the fears that the main results from Table 3 are only due to the largest dioceses. While the magnitudes of the shock in those important Catholic areas is often larger than on Catholics in other places—echoing the social influence channel—the coefficients of interest for the latter group is generally significant for the outcomes responsive to the shock in the main results.

### 5.3 Alternative Estimations Controlling for Additional Concerns

While the main specification controls for a number of factors influencing household stock market participation— including year and county fixed effects to account for macro time varying and local time invariant factors, respectively—I present regressions that include alternative fixed effects in order to test the robustness of the results.

Local time varying factors might negatively impact household stock market participation. For example, Giannetti and Wang (2016) show that financial misconduct leads to significant negative effects of local stock market participation. This effect may impact Catholic households more as they are culturally less inclined to trust: fraudulent firm behavior might most

acutely remind Catholics of the danger of entrusting one's money to strangers. Other variation in household stock market behavior might arise from increasing real estate prices, which might pressure Catholic households more as they tend to have larger families, and thus might need to move to bigger and increasingly more expensive houses.

To check that these or other such local time varying factors do not explain away the results I document in the baseline test, I re-run the main estimation including county times year fixed effects rather than county and year fixed effects. These dual dimension fixed effects control for local changing conditions that might affect stock market participation.

Table 10 Panel A presents the estimates from the triple difference regression using the two dimensional fixed effects on the extensive margin variables for equity participation. The magnitude of the coefficients of interest are somewhat lower in magnitude than before. They remain negative for the *Stocks* and *Entry* outcomes. The triple interaction coefficients are significant at the 10% and 5% levels under the *Scandal* measure and the *High\_Scandal* measure, respectively. However, coefficients of interest for *Entry* outcome lose their statistical significance. If the decrease in entrance in the stock market is concentrated in a given year (e.g., as the bulk of shocked dioceses in each measure are impacted in 2002), the interactive fixed effects might absorb a lot of this variation for the *Entry* and *Stocks* outcome.

At the intensive margin (Table 10 Panel B), as before the coefficients on the equity-wealth ratio and stock sales outcomes are negative, though also less so than before. The statistical significance on the latter broadly hold up, but for the former it goes away under the *Scandal* measure. The time varying county fixed effects might absorb much of the variation in the *EquityWealthRatio* outcome.

On the whole, these alternative specifications still offer evidence in line with the main analysis: Catholics' participation in the stock market is negatively impacted by the shock at the extensive and intensive margin, as fewer Catholics enter equity markets and those who own shares of stocks buy smaller amounts of shares on average. In the Appendix, I present further tests with alternative specifications that offer further evidence on the main findings.

## 6 Conclusion

In this paper, I investigate how cultural institutions influence stock market participation, an important factor in household wealth. I employ the U.S. Catholic clergy misconduct scandal from 2002 to 2006 as a shock to local cultural institutions. The scandal reveals that local church managers previously mishandled claims of abuse by clergy they were supervising. This breach of church governance is a negative shock to trust for local Catholics. The scandal offers both cross sectional and time series variation.

In a staggered triple difference empirical strategy toward assessing the scandal's impact on Catholic households' equity participation. I find that Catholics in shocked dioceses are 3.3% to 5.9% less likely to participate in the stock market after the shock. Based on those estimates, the scandal impacts the stock market participation of hundreds of thousands on households nationally.

To investigate the channel, I focus on two ways in which religious identity could influence economic choices as documented by previous literature. First, I investigate the social influence of the Catholic Church on local norms. Second, I test whether higher interactions at church activities explain the baseline result. I find evidence toward the former explanation: Catholic households who live in counties impacted by the scandal where the Catholic church is more socially influential are significantly more likely to divest from the stock market than Catholics in counties where the Catholic Church is less prominent.

Moreover, Catholic households in shocked areas increase their savings in non-equity means. This effect is concentrated in safe (bank and government-backed) financial instruments. One can interpret those results as households moving their trust from economic relationships more dependent on counterparty's reputation (e.g. equity ownership) to outcomes safeguarded by other means such as legal guarantees, along the lines of Dupont and Karpoff (2020)'s model. The opportunity cost of equity participation is economically quite significant (up to 40% of their wealth) for Catholic households in shocked areas that do not enter the stock market.

These results highlight the impact cultural institutions' influence on financial choices. Not only does trust in financial counterparties to transactions determine investment decisions (e.g. Karpoff et al., 2008; Guiso et al., 2008; Giannetti and Wang, 2016; Gurun et al., 2018); governance scandal within *cultural* institutions also affect households' *financial* choices. Therefore, my findings open the door to a better understanding of the role of cultural institutions on all decision-makers including managers, professional investors and regulators linked to those cultural institutions. Previous literature highlights that while misconduct is contagious, good conduct does not appear to be (Dimmock et al., 2018). Further research could shed light on whether the domain-crossover features of trust might likewise be more significant from negative shocks trust in cultural institutions (religions, governments etc.) than from positive ones

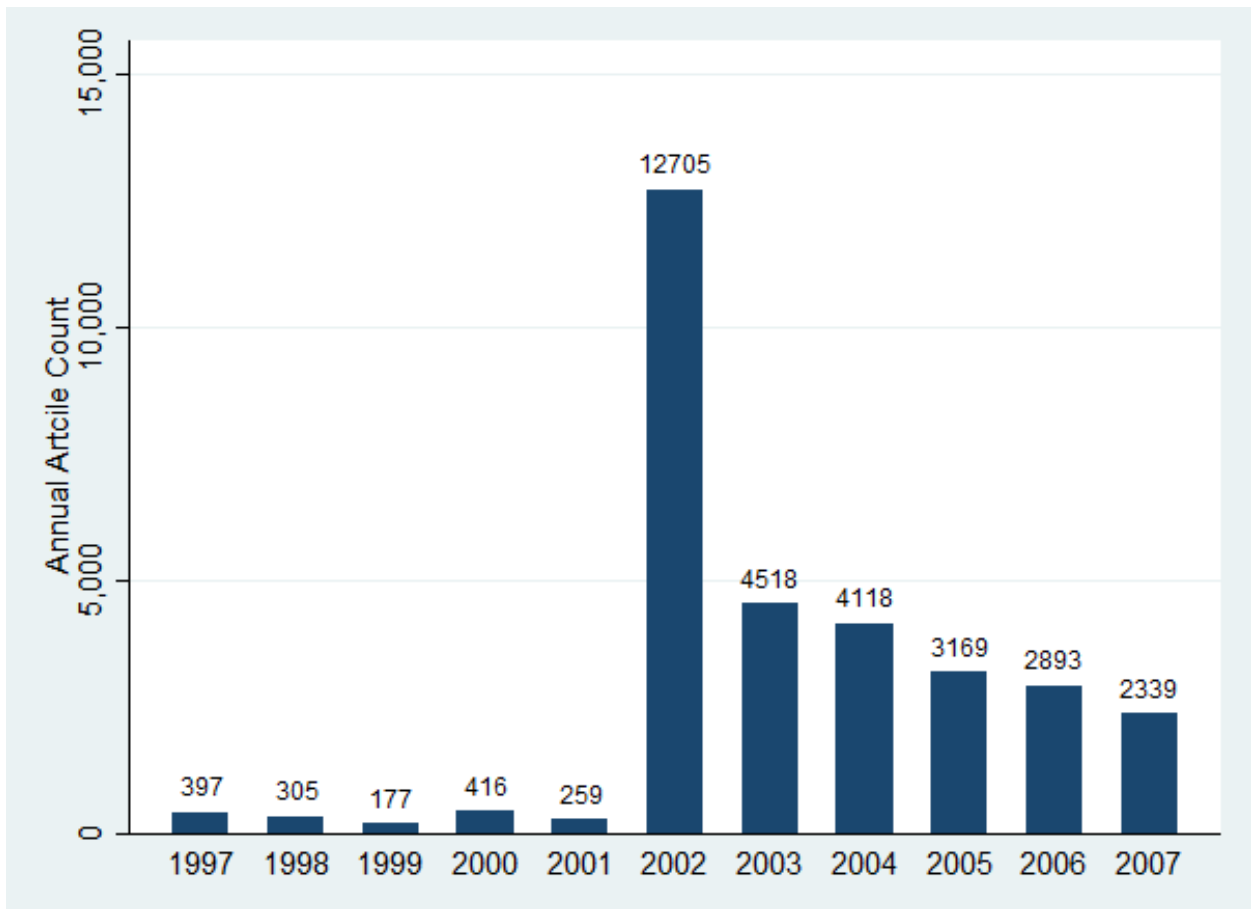
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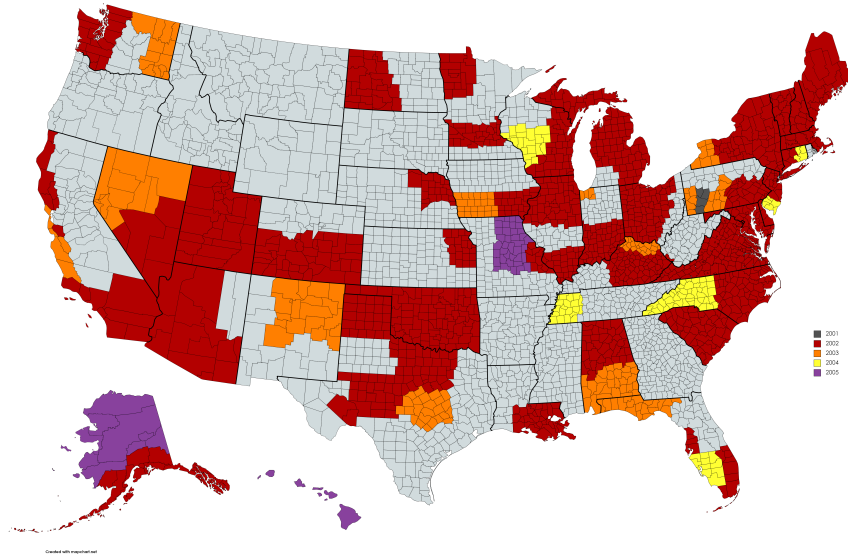
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Figure 1: News Articles Annual Count Based on *Factiva* News Search



**Note:** This chart tabulates the number of articles yielded from a *Factiva* search based on the keywords “*Catholic and (diocese or archdiocese) and (abuse or scandal)*” between January 1, 1997 and December 31, 2007.

Figure 2: Map of Dioceses Treated by the *Scandal* Measure



**Note:** Figure 2 (Figure 3) shows the dioceses for which the *Scandal* (*High\_Scandal*) measure turns to 1, respectively. Each color indicates the first year for which the indicator turns on. Years are indicated by the legend on the right.

Figure 3: Map of Dioceses Treated by the *High\_Scandal* Measure

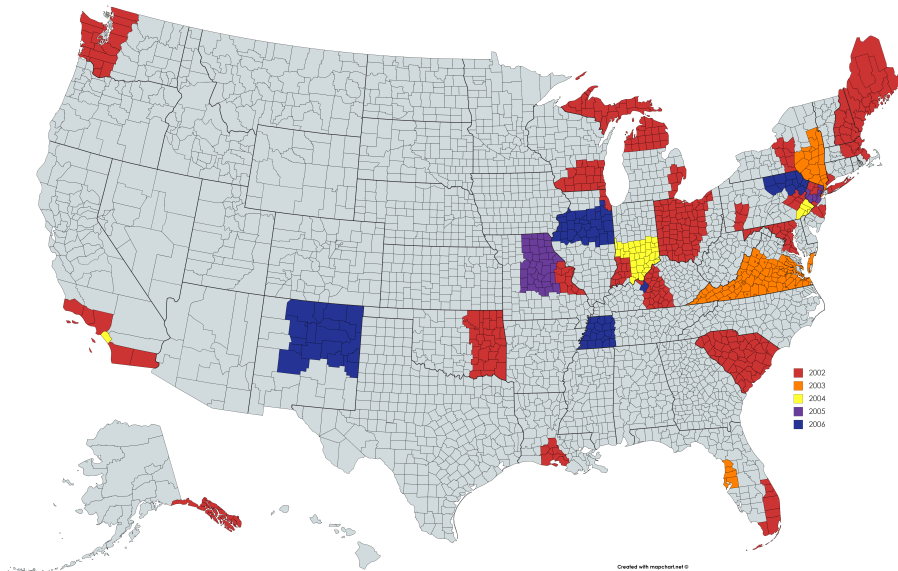
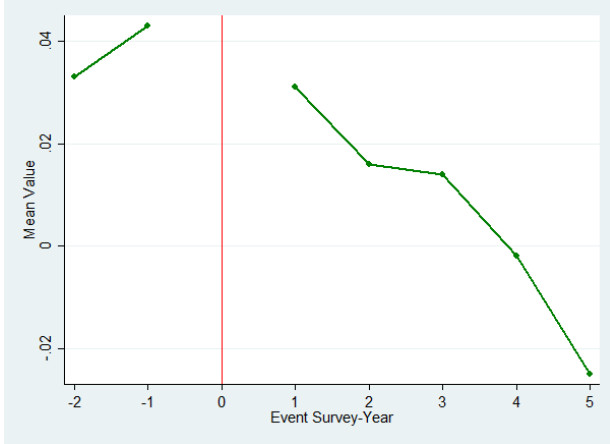
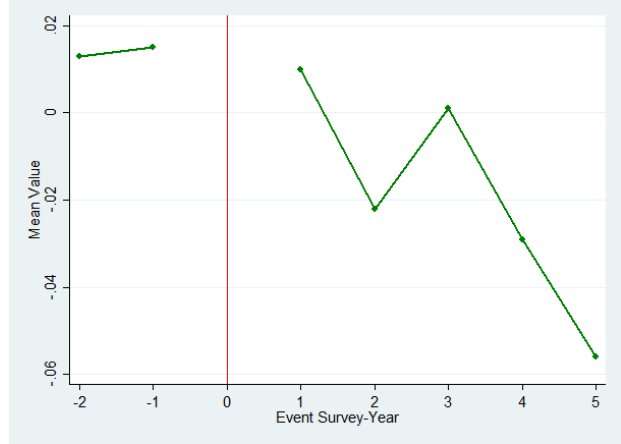


Figure 4: Event Time Regression: Coefficients of Interest

*Stocks Outcome*

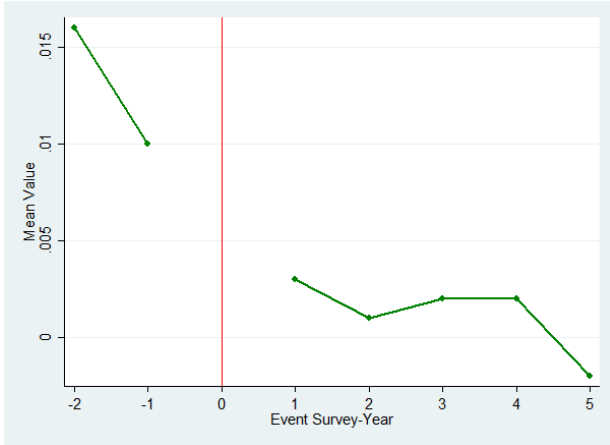


(a) *Scandal* measure

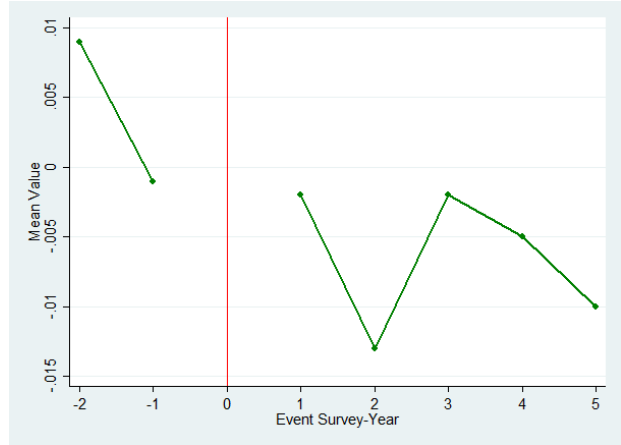


(b) *High\_Scandal* measure

*EquityWealthRatio Outcome*



(c) *Scandal* measure



(d) *High\_Scandal* measure

**Note:** These figures plot the  $\delta_s$  coefficients of interest on the event time regression from Equation 2  $Y_{f,k,t} = \sum_{s=-2}^5 \delta_s \cdot (Treat_{k,s} \times Catholic_f) + \sum_{s=-2}^5 \lambda_s \cdot Treat_{k,s} + \kappa \cdot Catholic_f + \mu \cdot Z_{k,t} + \alpha_t + \alpha_k + \nu_{f,k,t}$  for the *Stocks* (top) and *EquityWealthRatio* (bottom) outcomes. Event survey-year 0 is the omitted year. The left-hand side figures show the coefficients based on the *Scandal* measure and the right-hand side figures those based on the *High\_Scandal* measure.

Table 1: List of Shocked Dioceses

Panel A: *Scandal* Indicator

Diocese	State	<i>Scandal On</i>	Diocese	State	<i>Scandal On</i>	Diocese	State	<i>Scandal On</i>
Albany	NY	2002	Greensburg	PA	2001	Peoria	IL	2002
Allentown	PA	2002	Harrisburg	PA	2002	Philadelphia	PA	2002
Altoona-Johnstown	PA	2003	Hartford	CT	2002	Phoenix	AZ	2002
Amarillo	TX	2002	Honolulu	HI	2005	Pittsburgh	PA	2003
Anchorage	AK	2002	Houma-Thibodaux	LA	2002	Portland	ME	2002
Arlington	VA	2002	Indianapolis	IN	2002	Pueblo	CO	2002
Austin	TX	2003	Jefferson City	MO	2005	Raleigh	NC	2002
Baltimore	MD	2002	Joliet	IL	2002	Reno	NV	2003
Baton Rouge	LA	2002	Juneau	AK	2002	Richmond	VA	2002
Belleville	IL	2002	Kansas City	KS	2002	Rochester	NY	2002
Birmingham	AL	2002	La Crosse	WI	2004	Rockford	IL	2002
Bismarck	ND	2002	Lafayette	LA	2002	Rockville Centre	NY	2002
Boston	MA	2002	Lansing	MI	2002	Saginaw	MI	2002
Bridgeport	CT	2002	Las Cruces	NM	2002	Salt Lake City	UT	2002
Brooklyn	NY	2002	Las Vegas	NV	2002	San Angelo	TX	2002
Buffalo	NY	2003	Lexington	KY	2002	San Bernardino	CA	2002
Burlington	VT	2002	Los Angeles	CA	2002	San Diego	CA	2002
Camden	NJ	2004	Louisville	KY	2002	San Francisco	CA	2003
Charleston	SC	2002	Madison	WI	2002	San Jose	CA	2002
Charlotte	NC	2004	Manchester	NH	2002	Santa Fe	NM	2003
Chicago	IL	2002	Marquette	MI	2002	Santa Rosa	CA	2002
Cincinnati	OH	2002	Memphis	TN	2004	Scranton	PA	2002
Cleveland	OH	2002	Metuchen	NJ	2002	Seattle	WA	2002
Colorado Springs	CO	2002	Miami	FL	2002	Spokane	WA	2003
Columbus	OH	2002	Milwaukee	WI	2002	Springfield	MA	2002
Covington	KY	2003	Mobile	AL	2003	St. Louis	MO	2002
Crookston	MN	2002	Monterey	CA	2003	St. Paul and Minneapolis	MN	2002
Dallas	TX	2002	New Orleans	LA	2002	St. Petersburg	FL	2002
Davenport	IA	2002	New Ulm	MN	2002	Syracuse	NY	2002
Des Moines	IA	2003	New York	NY	2002	Toledo	OH	2002
Detroit	MI	2002	Newark	NJ	2002	Trenton	NJ	2002
Evansville	IN	2002	Norwich	CT	2004	Tucson	AZ	2002
Fairbanks	AK	2005	Ogdensburg	NY	2002	Tulsa	OK	2002
Fall River	MA	2002	Oklahoma City	OK	2002	Venice	FL	2004
Fort Worth	TX	2002	Omaha	NE	2002	Washington	DC	2002
Gary	IN	2003	Orange	CA	2002	Wilmington	DE	2002
Gaylord	MI	2002	Palm Beach	FL	2002	Worcester	MA	2002
Grand Rapids	MI	2002	Paterson	NJ	2002			
Green Bay	WI	2002	Pensacola-Tallahassee	FL	2003			

Table 1: List of Shocked Dioceses—continued

Panel B: *High\_Scandal* Indicator

Diocese	State	<i>High_Scandal</i> On	Diocese	State	<i>High_Scandal</i> On
Albany	NY	2003	Metuchen	NJ	2005
Allentown	PA	2002	Miami	FL	2002
Baltimore	MD	2002	Milwaukee	WI	2002
Boston	MA	2002	New York	NY	2003
Bridgeport	CT	2002	Newark	NJ	2005
Charleston	SC	2002	Orange	CA	2004
Chicago	IL	2002	Palm Beach	FL	2002
Cincinnati	OH	2002	Paterson	NJ	2002
Cleveland	OH	2002	Peoria	IL	2006
Columbus	OH	2002	Philadelphia	PA	2004
Detroit	MI	2002	Portland in Maine	MN	2002
Evansville	IL	2002	Richmond	VA	2003
Gaylord	IN	2002	Rockville Centre	NY	2002
Greensburg	IN	2002	San Diego	CA	2002
Indianapolis	IN	2004	Santa Fe	NM	2006
Jefferson City	MO	2005	Scranton	PA	2006
Joliet	IL	2006	Seattle	WA	2002
Juneau	AK	2002	St. Louis	MO	2002
Lafayette	LA	2002	St. Petersburg	FL	2003
Los Angeles	CA	2002	Syracuse	NY	2002
Louisville	KY	2002	Toledo	OH	2002
Madison	WI	2002	Trenton	NJ	2002
Manchester	NH	2002	Tulsa	OK	2002
Marquette	WI	2002	Washington	DC	2002
Memphis	TN	2006	Worcester	MA	2002

**Note:** This table reports the list of treated Catholic dioceses and the year when the respective measures of the scandal first turn on. The shock measure is based on news stories of Catholic clergy sexual abuse that mention the clergy's diocese by name between 2001 and 2006. Panel A summarizes the dioceses for which the *Scandal* indicator turns on, that is, the first year of a mention of removal of clergy from ministry due to allegations of abuse. Panel B presents the dioceses for which *High\_Scandal* measure turns to 1, if the cumulative number of victims associated with news of sexual abuse involving removal from ministry of the accused clergy is higher than the mean of cumulative number of victims of abuse involving clergy removal from ministry for all dioceses involved in disclosures of clergy sexual abuse in news disclosures between 2001 and 2006.

Table 2: Summary Statistics

Panel A: PSID Variables				Panel B: CARA Survey Variables			
	Mean	SD	N		Mean	SD	N
Outcome Variables				Outcome Variables			
<i>Stocks</i>	0.259	0.438	42,667	<i>log_Pledged</i>	14.80	0.97	842
<i>Entry</i>	0.094	0.292	26,132	<i>Pct_Pledged</i>	1.12	0.29	806
<i>Exit</i>	0.300	0.458	7,152	<i>Pct_Pledged_2001</i>	1.22	0.45	783
<i>EquityWealthRatio</i>	0.052	0.136	39,617	<i>log_Participants</i>	9.40	1.84	747
<i>log_NetEquityPurchase</i>	0.792	2.602	42,558	<i>Participation</i>	0.33	0.15	702
<i>log_NetEquitySale</i>	0.255	1.495	42,764	<i>Participation_2001</i>	0.36	0.41	667
Controls				Controls			
<i>Mean_Age</i>	51.918	16.546	42,823	<i>log_Cost</i>	11.30	2.37	752
<i>Num_inFU</i>	2.366	1.403	42,829	<i>Num_means</i>	4.70	2.57	1056
<i>College</i>	0.370	0.483	42,829	<i>Effort</i>	3.19	1.31	878
<i>PoorHealth</i>	0.073	0.260	42,829	<i>AA_rebate</i>	0.41	0.49	1056
<i>Divorced</i>	0.200	0.400	42,828	<i>Bankruptcy</i>	0.00	0.06	1056
<i>Widowed</i>	0.106	0.307	42,828	<i>Bishop_Replaced</i>	0.02	0.13	1056
<i>Non_White</i>	0.232	0.422	42,352				
<i>Net_Wealth</i>	3.295	15.379	42,829				
<i>log_Income</i>	10.643	1.236	42,792				
<i>Lump_Sum</i>	0.045	0.206	42,787				
<i>Owns_FI</i>	0.832	0.374	42,618				
<i>Stocks_IRA</i>	0.341	0.474	42,592				
Religious Affiliation							
<i>Catholic</i>	0.284	0.451	42,829				
<i>High_Catholic</i>	0.708	0.455	42,812				
<i>Active_Catholic</i>	0.158	0.365	42,829				

**Note:** This table reports the summary statistics for data I use from the University of Michigan Panel Survey of Income Dynamics (*PSID*–Panel A) and from the Diocesan Appeal data (Panel B).

The *PSID* data comes from a national biennial survey conducted in odd years. The sample period starts in 1999 and ends in 2011. The summary statistics are computed using the *PSID*-generated weights.

The diocesan annual appeal data comes from the Center for Applied Research in the Apostolate at Georgetown University. These data are collected between 2002 and 2007 on U.S. Catholic dioceses' fundraising efforts for diocesan Annual Appeals 2001 to 2006. The outcome variables are winsorized at the 1% level.

Table 3: Impact of the Scandal on Catholics' Stock Market Participation

Panel A: Extensive Margin Outcomes

Dependent Var.	<i>Stocks</i> (1)-(4)			<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic	-0.033*** (0.012)	-0.047*** (0.013)			-0.028* (0.014)	-0.046** (0.022)			0.006 (0.031)	0.002 (0.037)		
Treat_S × Catholic	0.037** (0.017)	0.015 (0.024)			0.031* (0.016)	0.038 (0.028)			-0.022 (0.059)	0.048 (0.066)		
Treat_S × Post_S	0.003 (0.008)	-0.002 (0.010)			0.007 (0.009)	0.004 (0.012)			-0.000 (0.033)	-0.002 (0.040)		
Treat_H × Post_H × Catholic			-0.039*** (0.014)	-0.059*** (0.016)			-0.024 (0.016)	-0.043 (0.026)			0.016 (0.033)	0.002 (0.045)
Treat_H × Catholic			0.020 (0.018)	0.019 (0.024)			0.030* (0.018)	0.048* (0.028)			0.020 (0.043)	0.058 (0.054)
Treat_H × Post_H			0.006 (0.007)	0.003 (0.010)			-0.000 (0.008)	0.003 (0.013)			-0.032 (0.028)	-0.020 (0.033)
Catholic	-0.030** (0.013)	0.004 (0.020)	-0.017 (0.010)	-0.001 (0.015)	-0.005 (0.008)	0.009 (0.015)	-0.004 (0.007)	0.002 (0.012)	0.037 (0.051)	-0.019 (0.055)	0.004 (0.030)	-0.011 (0.033)
low_risk		-0.025** (0.010)		-0.024** (0.010)			-0.009 (0.006)	-0.008 (0.006)			0.029 (0.023)	0.030 (0.024)
Mean_Age	0.002*** (0.000)	0.003*** (0.000)	0.002*** (0.000)	0.003*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
Num_inFU	-0.008*** (0.002)	-0.006** (0.003)	-0.008*** (0.002)	-0.006** (0.003)	-0.002 (0.001)	-0.000 (0.002)	-0.002 (0.001)	-0.001 (0.002)	0.015** (0.007)	0.010 (0.007)	0.014** (0.007)	0.009 (0.007)
College	0.115*** (0.008)	0.121*** (0.011)	0.116*** (0.008)	0.122*** (0.011)	0.039*** (0.006)	0.037*** (0.007)	0.040*** (0.006)	0.038*** (0.007)	-0.115*** (0.014)	-0.106*** (0.017)	-0.117*** (0.013)	-0.108*** (0.016)
PoorHealth	-0.037*** (0.008)	-0.043*** (0.015)	-0.038*** (0.008)	-0.042*** (0.015)	-0.013*** (0.005)	-0.010 (0.010)	-0.014*** (0.005)	-0.012 (0.010)	0.017 (0.033)	0.081 (0.055)	0.011 (0.033)	0.070 (0.054)
Divorced	-0.048*** (0.006)	-0.045*** (0.009)	-0.047*** (0.006)	-0.045*** (0.009)	-0.014*** (0.004)	-0.016*** (0.006)	-0.013*** (0.004)	-0.015*** (0.006)	0.139*** (0.026)	0.136*** (0.030)	0.138*** (0.027)	0.132*** (0.031)
Widowed	-0.015 (0.013)	0.004 (0.024)	-0.016 (0.012)	0.003 (0.024)	-0.001 (0.008)	0.002 (0.014)	-0.001 (0.008)	0.003 (0.014)	-0.018 (0.032)	-0.060 (0.042)	-0.015 (0.032)	-0.056 (0.041)
Non_White	-0.098*** (0.011)	-0.095*** (0.014)	-0.099*** (0.011)	-0.097*** (0.014)	-0.033*** (0.007)	-0.027*** (0.009)	-0.035*** (0.007)	-0.029*** (0.009)	0.115*** (0.024)	0.107*** (0.029)	0.116*** (0.024)	0.108*** (0.029)
log_Income	0.025*** (0.003)	0.032*** (0.003)	0.026*** (0.003)	0.032*** (0.003)	0.012*** (0.002)	0.015*** (0.002)	0.012*** (0.002)	0.015*** (0.002)	-0.036*** (0.008)	-0.032*** (0.010)	-0.037*** (0.008)	-0.033*** (0.010)
Net_Wealth	0.003*** (0.001)	0.002*** (0.001)	0.003*** (0.001)	0.002*** (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Lump_Sum	0.069*** (0.010)	0.073*** (0.012)	0.066*** (0.010)	0.069*** (0.011)	0.045*** (0.011)	0.051*** (0.012)	0.043*** (0.011)	0.048*** (0.012)	-0.048** (0.020)	-0.053** (0.022)	-0.048** (0.020)	-0.053** (0.022)
Owns_FI	0.040*** (0.004)	0.035*** (0.006)	0.040*** (0.004)	0.034*** (0.006)	0.024*** (0.003)	0.023*** (0.005)	0.024*** (0.003)	0.023*** (0.005)	-0.164*** (0.031)	-0.172*** (0.039)	-0.160*** (0.031)	-0.167*** (0.039)
Stocks_IRA	0.201*** (0.008)	0.185*** (0.010)	0.201*** (0.008)	0.184*** (0.010)	0.089*** (0.007)	0.077*** (0.008)	0.086*** (0.008)	0.074*** (0.008)	-0.125*** (0.015)	-0.127*** (0.019)	-0.125*** (0.015)	-0.126*** (0.019)
Observations	41,959	25,429	41,819	25,340	25,598	14,867	25,497	14,809	6,866	4,871	6,829	4,840
R-squared	0.314	0.320	0.314	0.321	0.139	0.153	0.139	0.153	0.228	0.248	0.230	0.250
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table 3: Impact of the Scandal on Catholics' Stock Market Participation—continued

Panel B: Intensive Margin Outcomes

Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_NetEquityPurchase</i> (5)-(8)				<i>log_NetEquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S ×												
Post_S × Catholic	-0.012*** (0.004)	-0.012** (0.005)			-0.399*** (0.078)	-0.551*** (0.119)			0.087* (0.047)	0.080 (0.058)		
Treat_S × Catholic	0.012 (0.008)	0.004 (0.011)			0.266** (0.114)	0.123 (0.173)			-0.140*** (0.053)	-0.172** (0.073)		
Treat_S × Post_S	-0.001 (0.003)	-0.002 (0.003)			0.039 (0.074)	0.032 (0.084)			0.048 (0.042)	0.039 (0.049)		
Treat_H ×												
Post_H × Catholic			-0.015*** (0.004)	-0.016** (0.006)			-0.396*** (0.093)	-0.605*** (0.130)			0.023 (0.062)	-0.020 (0.082)
Treat_H × Catholic			0.009 (0.007)	0.005 (0.010)			0.187 (0.114)	0.286* (0.160)			-0.013 (0.058)	0.005 (0.082)
Treat_H × Post_H			0.003 (0.002)	0.002 (0.003)			0.147** (0.066)	0.175** (0.084)			0.018 (0.044)	0.047 (0.054)
Catholic	-0.011 (0.007)	-0.004 (0.009)	-0.008* (0.005)	-0.005 (0.006)	-0.063 (0.074)	0.130 (0.121)	-0.033 (0.066)	-0.008 (0.092)	0.060 (0.036)	0.079 (0.053)	0.001 (0.030)	-0.003 (0.042)
low_risk		-0.005 (0.003)		-0.004 (0.003)			-0.132** (0.052)	-0.128** (0.052)			-0.032 (0.021)	-0.033 (0.021)
Mean_Age	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001 (0.001)	0.001 (0.002)	0.001 (0.001)	0.001 (0.002)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)
Num_inFU	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.033*** (0.010)	-0.034** (0.016)	-0.032*** (0.010)	-0.033** (0.016)	0.001 (0.004)	0.003 (0.006)	0.002 (0.004)	0.004 (0.006)
College	0.028*** (0.003)	0.029*** (0.003)	0.028*** (0.003)	0.029*** (0.003)	0.433*** (0.042)	0.459*** (0.065)	0.432*** (0.042)	0.459*** (0.066)	0.116*** (0.021)	0.134*** (0.027)	0.117*** (0.021)	0.137*** (0.027)
PoorHealth	-0.008*** (0.003)	-0.008* (0.004)	-0.008*** (0.003)	-0.008* (0.004)	0.004 (0.037)	-0.003 (0.056)	-0.000 (0.036)	0.002 (0.056)	0.054 (0.040)	0.067 (0.055)	0.046 (0.039)	0.069 (0.056)
Divorced	-0.005** (0.002)	-0.004 (0.003)	-0.005** (0.002)	-0.004 (0.003)	-0.097*** (0.027)	-0.129*** (0.044)	-0.096*** (0.027)	-0.128*** (0.044)	-0.047** (0.019)	-0.048** (0.023)	-0.048** (0.019)	-0.048** (0.023)
Widowed	0.006 (0.004)	0.010 (0.009)	0.006 (0.004)	0.010 (0.009)	-0.103** (0.051)	-0.140 (0.100)	-0.111** (0.050)	-0.151 (0.098)	-0.025 (0.043)	0.027 (0.064)	-0.022 (0.043)	0.028 (0.064)
Non_White	-0.023*** (0.003)	-0.022*** (0.005)	-0.024*** (0.003)	-0.023*** (0.005)	-0.343*** (0.048)	-0.351*** (0.064)	-0.348*** (0.048)	-0.355*** (0.064)	-0.093*** (0.022)	-0.097*** (0.033)	-0.088*** (0.023)	-0.091*** (0.034)
log_Income	0.009*** (0.001)	0.011*** (0.002)	0.009*** (0.001)	0.011*** (0.002)	0.156*** (0.020)	0.222*** (0.025)	0.156*** (0.020)	0.223*** (0.026)	-0.005 (0.006)	-0.000 (0.009)	-0.004 (0.006)	0.001 (0.008)
Net_Wealth	0.001*** (0.000)	0.001* (0.000)	0.001*** (0.000)	0.001* (0.000)	0.012*** (0.003)	0.010*** (0.003)	0.012*** (0.003)	0.010*** (0.003)	0.002 (0.001)	0.001 (0.002)	0.002 (0.001)	0.001 (0.002)
Lump_Sum	0.016*** (0.004)	0.016*** (0.004)	0.016*** (0.004)	0.016*** (0.004)	0.261*** (0.075)	0.227** (0.106)	0.259*** (0.073)	0.231** (0.105)	0.101** (0.043)	0.095** (0.048)	0.102** (0.043)	0.092* (0.048)
Owns_FI	0.004*** (0.001)	0.002 (0.002)	0.003** (0.001)	0.002 (0.002)	0.051** (0.023)	0.038 (0.034)	0.051** (0.023)	0.039 (0.034)	0.016 (0.014)	0.022 (0.021)	0.014 (0.014)	0.019 (0.021)
Stocks_IRA	0.026*** (0.003)	0.023*** (0.003)	0.027*** (0.003)	0.024*** (0.003)	0.795*** (0.043)	0.783*** (0.056)	0.796*** (0.043)	0.784*** (0.056)	0.137*** (0.020)	0.118*** (0.024)	0.139*** (0.020)	0.121*** (0.024)
Observations	38,878	24,099	38,760	24,020	41,777	25,293	41,639	25,206	41,969	25,434	41,829	25,345
R-squared	0.190	0.207	0.191	0.207	0.162	0.188	0.162	0.187	0.058	0.075	0.058	0.075
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table 3: Impact of the Scandal on Catholics' Stock Market Participation—continued

**Note:** This table sums up the results from the triple difference analysis of Equation 1 for Catholic households:  $Y_{f,k,t} = a_k + a_t + \beta_1 \cdot Treat\_N_k \times Post\_N_{k,t-1} \times Catholic_f + \beta_2 \cdot Treat\_N_k \times Catholic_f + \beta_3 \cdot Treat\_N_k \times Post\_N_{k,t-1} + \beta_4 \cdot Catholic_f + \lambda \cdot I_{f,t} + v \cdot X_{f,t} + \zeta \cdot W_{f,t-1} + \epsilon_{f,k,t}$ , using data from the PSID survey. The unit of observation is household-survey-year. The dependent variables in Panel A are indicator variables; in Panel B they are continuous variables.  $N = \{S, H\}$  denotes the news-based measure used to measure the shock, *Scandal* and *High.Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county k belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year t.  $Catholic_f$  is equal to 1 if a household spouse identifies as Catholic before the initial year of the shock (2002). All specifications include year and county fixed effects ( $a_t$  and  $a_k$ , respectively). Even-numbered models include an indicator for low risk tolerance based on risk aversion questions from the 1996 PSID survey. See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 4: Impact of the Scandal: Channels

## Panel A: Social Norms of Cooperation Channel

Dependent Var.	<i>Stocks</i> (1)-(4)				<i>EquityWealthRatio</i> (5)-(8)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treat_S × Post_S × Catholic_Norms (a)	-0.041*** (0.013)	-0.055*** (0.014)			-0.013*** (0.004)	-0.014*** (0.005)		
Treat_S × Post_S × Catholic (b)	0.055 (0.035)	0.038 (0.028)			-0.002 (0.012)	0.007 (0.014)		
Treat_S × Catholic_Norms	0.030 (0.019)	0.010 (0.028)			0.014 (0.010)	0.009 (0.013)		
Treat_S × Catholic	0.067 (0.043)	0.012 (0.058)			0.003 (0.018)	-0.025 (0.024)		
Treat_S × Post_S	0.003 (0.008)	-0.002 (0.010)			-0.001 (0.003)	-0.002 (0.003)		
Treat_H × Post_H × Catholic_Norms (a)			-0.047*** (0.015)	-0.065*** (0.017)			-0.015*** (0.004)	-0.016** (0.006)
Treat_H × Post_H × Catholic (b)			0.082 (0.053)	0.035 (0.044)			-0.013 (0.016)	-0.001 (0.022)
Treat_H × Catholic_Norms			0.016 (0.020)	0.021 (0.026)			0.008 (0.008)	0.006 (0.011)
Treat_H × Catholic			0.044 (0.060)	-0.014 (0.079)			0.013 (0.024)	-0.007 (0.037)
Treat_H × Post_H			0.005 (0.007)	0.003 (0.011)			0.003 (0.002)	0.002 (0.003)
Catholic_Norms	-0.026* (0.014)	0.009 (0.023)	-0.017 (0.012)	-0.002 (0.017)	-0.013 (0.008)	-0.007 (0.011)	-0.008 (0.005)	-0.005 (0.007)
Catholic	-0.042* (0.023)	-0.008 (0.038)	-0.018 (0.023)	0.006 (0.034)	-0.007 (0.012)	0.002 (0.016)	-0.007 (0.009)	-0.006 (0.012)
low_risk		Yes		Yes		Yes		Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41,945	25,423	41,805	25,334	38,864	24,093	38,746	24,014
R-squared	0.315	0.321	0.315	0.321	0.191	0.207	0.192	0.208
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese
Prob((a)=(b)) (F-Test)	6.67	9.15	5.85	4.72	0.96	1.97	0.02	0.45
P-value	0.01	0.00	0.02	0.03	0.33	0.16	0.88	0.50

Table 4: Impact of the Scandal: Channels–continued

## Panel B: Personal Interactions Channel

Dependent Var.	<i>Stocks</i> (1)-(4)				<i>EquityWealthRatio</i> (5)-(8)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treat_S × Post_S × Catholic_Active (a)	-0.034** (0.016)	-0.046** (0.020)			-0.011** (0.004)	-0.012** (0.006)		
Treat_S × Post_S × Catholic (b)	-0.032** (0.013)	-0.049*** (0.015)			-0.015*** (0.005)	-0.013* (0.007)		
Treat_S × Catholic_Active	0.035 (0.024)	0.017 (0.032)			0.013 (0.010)	0.010 (0.013)		
Treat_S × Catholic	0.040** (0.019)	0.013 (0.033)			0.010 (0.008)	-0.005 (0.012)		
Treat_S × Post_S	0.003 (0.008)	-0.002 (0.010)			-0.001 (0.003)	-0.002 (0.003)		
Treat_H × Post_H × Catholic_Active (a)			-0.050*** (0.019)	-0.063** (0.025)			-0.015*** (0.005)	-0.020*** (0.006)
Treat_H × Post_H × Catholic(b)			-0.027 (0.017)	-0.054*** (0.019)			-0.015*** (0.005)	-0.011 (0.008)
Treat_H × Catholic_Active			0.028 (0.025)	0.025 (0.032)			0.013 (0.010)	0.015 (0.013)
Treat_H × Catholic			0.011 (0.019)	0.011 (0.030)			0.004 (0.007)	-0.006 (0.012)
Treat_H × Post_H			0.006 (0.007)	0.003 (0.010)			0.003 (0.002)	0.002 (0.003)
Catholic_Active	-0.028* (0.017)	0.003 (0.025)	-0.019 (0.014)	-0.002 (0.021)	-0.012 (0.008)	-0.009 (0.010)	-0.010 (0.006)	-0.009 (0.009)
Catholic	-0.033** (0.013)	0.005 (0.028)	-0.015 (0.012)	0.001 (0.020)	-0.010 (0.007)	0.003 (0.010)	-0.006 (0.004)	0.000 (0.007)
low_risk		Yes		Yes		Yes		Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41,959	25,429	41,819	25,340	38,878	24,099	38,760	24,020
R-squared	0.314	0.320	0.314	0.321	0.191	0.207	0.191	0.207
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese
Prob((a)=(b)) (F-test)	0.02	0.01	1.22	0.09	0.63	0.02	0.00	1.34
P-value	0.90	0.91	0.27	0.76	0.46	0.88	0.99	0.25

**Note:** This table presents the results of the regressions testing the channels for the impact of the clergy abuse scandal on Catholics' stock market participation. The unit of observation is household survey-year. The revelations of clergy abuse are measured by the indicators *Scandal* and *High\_Scandal* (*Treat\_S* and *Treat\_H*), respectively. In Panel A, Catholic households in shocked areas are split between those living in areas where the Catholic church is more socially influential on local social norms of cooperation (*Catholic\_Norms*) and those living in areas where the Catholic church is less socially influential (*Catholic*). In Panel B, Catholic households in shocked areas are split between those attending church at least once a week (*Catholic\_Active*) and those less frequent church attendees (*Catholic*). All specifications include year and county fixed effects. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 5: Impact of the Scandal on Non-Equity Savings

Dependent Var.	<i>Bank &amp; Gov. Savings</i> (1)-(4)				<i>Other Savings</i> (5)-(8)				<i>Net Non-Equity Savings</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic	2.760*** (1.011)	4.647*** (1.539)			0.905 (0.581)	1.360** (0.652)			6.011*** (1.602)	8.997*** (2.275)		
Treat_S × Catholic	-3.064 (1.888)	-3.458 (2.525)			-0.092 (0.790)	0.111 (1.304)			-2.966 (2.247)	-3.109 (3.172)		
Treat_S × Post_S	-0.014 (0.769)	-0.076 (1.072)			-0.413 (0.399)	-0.208 (0.580)			-0.643 (1.107)	-0.310 (1.419)		
Treat_H × Post_H × Catholic			2.673* (1.371)	3.609* (2.054)			1.072 (0.650)	2.059*** (0.787)			5.102** (2.143)	7.216** (3.017)
Treat_H × Catholic			-3.674** (1.557)	-4.589** (2.256)			-0.535 (0.808)	0.336 (1.265)			-4.971*** (1.887)	-4.456 (2.807)
Treat_H × Post_H			-0.516 (0.935)	-0.463 (1.232)			-0.052 (0.372)	0.234 (0.548)			-0.564 (1.307)	0.068 (1.647)
Catholic	0.871 (1.661)	0.482 (2.131)	1.011 (1.040)	1.428 (1.503)	-0.897* (0.537)	-1.717* (0.987)	-0.519 (0.598)	-1.618* (0.907)	-1.352 (1.901)	-3.521 (2.715)	0.435 (1.281)	-1.182 (2.015)
low_risk		Yes		Yes		Yes		Yes		Yes		Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,343	24,481	40,216	24,398	41,450	25,086	41,307	24,994	39,672	24,038	39,548	23,958
R-squared	0.274	0.292	0.273	0.290	0.117	0.136	0.117	0.136	0.224	0.235	0.224	0.234
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

**Note:** This table presents the results from the triple difference analysis with different measures of non-equity savings as the dependent variable. The unit of observation is household-year. All dependent variables are winsorized at the 1% level. In Panel A Models (1)-(4), the dependent variable is bank and government-backed savings. In Models (5)-(8), the dependent variable is other non-equity savings. Throughout this Panel, *Catholic* is an indicator equal to 1 if a spouse in the family unit identifies as Catholic before 2002, the initial year of the shock. In Models (9)-(12), the dependent variable is the sum of the two sets of non-equity savings net of interests, dividends and stocks proceeds. All specifications include year and county fixed effects. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 6: Opportunity Cost of Equity Investment

Panel A: Extensive Margin Inputs							
Treatment Measure:		<i>Scandal</i>			<i>High_Scandal</i>		
Pre Shock Mean Equity Purchase at Entry		\$3,460			\$2,411		
Pre Shock Annual Mean Equity Purchase		\$3,578			\$3,508		
Post Shock Biennial Increase in Risky Non-Equity Savings (Table 6 Panel A) as % of Mean Post Shock Wealth		0.27%			0.30%		
Post Shock Annual Increase in Risky Non-Equity Asset for Mean Pre Shock Wealth For Equity-holders		\$689			\$757		
Pre Shock Mean Age of Entry		46			46		

Panel B: Extensive Margin Scenarios							
Treatment Measure:	Non-Equity Savings Risk Premium:	<i>Scandal</i>			<i>High_Scandal</i>		
		1%	2%	3%	1%	2%	3%
Forgone Interest on Investment At Entry & Annual Payment							
Compounded Until Age:	65	\$83,508	\$81,755	\$79,762	\$80,273	\$79,200	\$77,494
	70	\$134,140	\$131,531	\$128,479	\$129,178	\$126,823	\$124,113

Panel C: Intensive Margin Inputs			
Treatment Measure:		<i>Scandal</i>	<i>High_Scandal</i>
Pre Shock Purchases-to-Wealth Ratio		1.4%	1.2%
Post Shock Purchases-to-Wealth Ratio		0.6%	0.6%
Change in Equity Investment		0.8%	0.6%
Forgone Annual Equity Investment at Post Shock Mean Wealth		\$2,657	\$2,003
Post Shock Annual Increase in Risky Non-Equity Asset for Mean Post Shock Wealth for Equity-holders		\$897	\$1,001
Mean Age Post Period		54	54

Panel D: Intensive Margin Scenarios							
Treatment Measure:	Non-Equity Savings Risk Premium:	<i>Scandal</i>			<i>High_Scandal</i>		
		1%	2%	3%	1%	2%	3%
Forgone Interest on Annual Payment							
Compounded Until Age:	65	\$15,033	\$14,379	\$13,679	\$11,111	\$10,381	\$9,600
	70	\$35,490	\$34,072	\$32,502	\$26,290	\$24,707	\$22,956

**Note:** This table offers estimates of the opportunity cost of not investing in the stock market at the extensive (Panels A and B) and intensive (Panels C and D) margins for Catholic households in areas impacted by the Catholic clergy abuse scandal as measured by the *Scandal* and *High\_Scandal* indicators. All data are from the PSID surveys 1999-2011 using conditional means for Catholic households in treated areas pre and post shock based on each measure. Panel B summarizes the interest accrued at retirement on the initial investment into the stock market followed by annuity due based on forgone annual equity purchases in Panel A and the year before potential retirement age. Panel D uses Panel C estimates the interest accrued at retirement on an annuity due of the forgone annual stock purchases between the age at the shock and the year before retirement.

Table 7: Impact of the Scandal on Local Catholic Diocesan Annual Appeal Fundraising

Dependent Var.	Panel A: Dollar Pledged Outcomes						Panel B: Participation Outcomes					
	<i>log_Pledged</i> (1)	<i>log_Pledged</i> (2)	<i>Pct_Pledged</i> (3)	<i>Pct_Pledged</i> (4)	<i>Pct_Pledged_2001</i> (5)	<i>Pct_Pledged_2001</i> (6)	<i>log_Participants</i> (7)	<i>log_Participants</i> (8)	<i>Participation</i> (9)	<i>Participation</i> (10)	<i>Participation_2001</i> (11)	<i>Participation_2001</i> (12)
Treat_S × Post_S	-0.055 (0.052)		-0.049** (0.025)		-0.067 (0.056)		0.013 (0.201)		0.027 (0.024)		0.040 (0.044)	
Treat_H × Post_H		-0.086** (0.041)		-0.060* (0.035)		-0.108** (0.042)		-0.069 (0.187)		-0.001 (0.018)		-0.000 (0.022)
log_Cost	0.005 (0.005)	0.005 (0.005)	0.004 (0.005)	0.004 (0.005)	0.008 (0.007)	0.008 (0.007)	0.107 (0.071)	0.098 (0.067)	-0.002 (0.006)	-0.003 (0.006)	0.009 (0.009)	0.007 (0.009)
Num_Means	0.002 (0.009)	0.005 (0.008)	-0.002 (0.007)	-0.002 (0.006)	0.008 (0.009)	0.010 (0.009)	0.069 (0.073)	0.071 (0.068)	0.015** (0.006)	0.015** (0.006)	0.023 (0.015)	0.022 (0.014)
Effort	0.010 (0.012)	0.009 (0.012)	-0.008 (0.007)	-0.007 (0.007)	0.006 (0.011)	0.006 (0.011)	0.091 (0.075)	0.092 (0.073)	0.010 (0.006)	0.010* (0.006)	0.005 (0.009)	0.004 (0.009)
Rebate	0.094* (0.050)	0.065 (0.045)	0.009 (0.034)	-0.014 (0.033)	0.107** (0.046)	0.076* (0.044)	0.035 (0.121)	0.046 (0.106)	-0.010 (0.019)	-0.006 (0.017)	-0.019 (0.022)	-0.011 (0.020)
Bishop_Replaced	0.205 (0.369)	0.124 (0.288)	0.133** (0.053)	0.136*** (0.049)	0.022 (0.183)	-0.008 (0.136)	-0.454 (0.289)	-0.468* (0.247)	0.019 (0.070)	0.008 (0.056)	-0.062*** (0.021)	-0.056** (0.022)
Bankruptcy	0.059 (0.042)	0.084* (0.049)	0.129*** (0.043)	0.151*** (0.045)	0.054 (0.050)	0.076 (0.058)	-0.261 (0.170)	-0.270* (0.157)	0.079** (0.037)	0.083** (0.035)	0.011 (0.024)	0.010 (0.023)
Observations	581	632	556	606	548	595	522	567	499	543	488	528
R-squared	0.971	0.971	0.872	0.874	0.874	0.876	0.681	0.689	0.731	0.733	0.909	0.908
Diocese FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**Note:** This table shows the results of a Difference in Differences test of the impact of local clergy sexual abuse disclosures on Diocesan Annual Appeal success for the years 2001 to 2006 based on the following estimation:  $Appeal\_Outcome_{it} = \alpha_i + \alpha_t + \beta_1 \cdot Treat\_N_{it} \times Post\_N_{it} + \gamma \cdot A_{it} + \delta \cdot D_{it} + \varepsilon_{it}$ . The unit of observation is diocese-year. In Panel A, the dependent variables are measures of dollars pledged to the diocese's annual appeal. In Panel B, the dependent variable are measures of household participation in the diocese's annual appeal.  $N = \{S, H\}$  denotes the news-based measure used to identify the shock, *Scandal* and *High\_Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county k belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year  $t$ . See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. See Data Appendix for variables' definition. Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 8: Robustness to Time Trend Control

Dependent Var.	<i>Stocks</i> (1)-(4)				<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S ×												
Post_S × Catholic	-0.033*** (0.012)	-0.047*** (0.013)			-0.028* (0.014)	-0.046** (0.022)			0.006 (0.031)	0.002 (0.037)		
Treat_S × Catholic	0.044** (0.018)	0.045 (0.030)			0.021 (0.023)	0.057 (0.040)			-0.065 (0.068)	0.085 (0.079)		
Treat_S × Post_S	0.005 (0.008)	0.003 (0.011)			0.005 (0.009)	0.006 (0.012)			-0.005 (0.034)	0.003 (0.041)		
Treat_H ×												
Post_H × Catholic			-0.039*** (0.014)	-0.059*** (0.016)			-0.024 (0.016)	-0.043 (0.027)			0.016 (0.033)	0.002 (0.045)
Treat_H × Catholic			0.010 (0.019)	0.017 (0.025)			0.005 (0.022)	0.032 (0.035)			-0.002 (0.052)	0.090 (0.063)
Treat_H × Post_H			0.003 (0.008)	0.003 (0.011)			-0.003 (0.008)	0.001 (0.013)			-0.036 (0.029)	-0.014 (0.035)
ControlGroup_												
Catholic × Time	0.001 (0.002)	0.005* (0.002)	-0.002 (0.001)	-0.000 (0.002)	-0.001 (0.002)	0.003 (0.003)	-0.003* (0.002)	-0.002 (0.002)	-0.006 (0.008)	0.005 (0.008)	-0.003 (0.005)	0.004 (0.006)
Catholic	-0.037** (0.014)	-0.026 (0.027)	-0.007 (0.012)	0.002 (0.017)	0.006 (0.018)	-0.010 (0.033)	0.020 (0.014)	0.018 (0.024)	0.080 (0.061)	-0.056 (0.071)	0.027 (0.042)	-0.043 (0.048)
low_risk		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41,959	25,429	41,819	25,340	25,598	14,867	25,497	14,809	6,866	4,871	6,829	4,840
R-squared	0.314	0.321	0.314	0.321	0.139	0.153	0.139	0.153	0.228	0.248	0.230	0.250
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table 8: Robustness to Time Trend Control—continued

## Panel B: Intensive Margin Outcomes

Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_EquityPurchase</i> (5)-(8)				<i>log_EquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic	-0.012*** (0.004)	-0.012** (0.005)			-0.399*** (0.078)	-0.551*** (0.119)			0.087* (0.047)	0.080 (0.058)		
Treat_S × Catholic	0.018** (0.009)	0.021* (0.011)			0.374*** (0.135)	0.146 (0.215)			-0.058 (0.065)	-0.120 (0.093)		
Treat_S × Post_S	-0.000 (0.003)	0.001 (0.004)			0.059 (0.073)	0.036 (0.083)			0.063 (0.047)	0.047 (0.049)		
Treat_H × Post_H × Catholic			-0.015*** (0.004)	-0.016** (0.006)			-0.396*** (0.093)	-0.605*** (0.130)			0.023 (0.062)	-0.020 (0.082)
Treat_H × Catholic			0.009 (0.008)	0.010 (0.011)			0.101 (0.157)	0.138 (0.211)			0.101 (0.068)	0.143 (0.095)
Treat_H × Post_H			0.003 (0.002)	0.003 (0.003)			0.130** (0.064)	0.148* (0.083)			0.041 (0.046)	0.073 (0.054)
ControlGroup_ Catholic × Time	0.001 (0.001)	0.003*** (0.001)	0.000 (0.001)	0.001 (0.001)	0.016 (0.016)	0.004 (0.022)	-0.013 (0.014)	-0.023 (0.019)	0.013 (0.010)	0.008 (0.012)	0.017** (0.007)	0.021** (0.009)
Catholic	-0.018** (0.008)	-0.022** (0.010)	-0.009 (0.005)	-0.010 (0.007)	-0.171 (0.104)	0.107 (0.173)	0.052 (0.129)	0.140 (0.164)	-0.022 (0.053)	0.028 (0.077)	-0.112** (0.045)	-0.141** (0.062)
low_risk Controls	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Observations	38,878	24,099	38,760	24,020	41,777	25,293	41,639	25,206	41,969	25,434	41,829	25,345
R-squared	0.191	0.207	0.191	0.207	0.162	0.188	0.162	0.188	0.058	0.075	0.058	0.075
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

**Note:** This table sums up the results from the triple difference analysis of Equation 1 for Catholic households with the inclusion of the *ControlGroup\_Catholic* × *Time* control, a linear time trend interacting with the *Catholic* indicator for households in untreated dioceses. The unit of observation is household-survey-year. The dependent variables in Panel A are indicator variables; in Panel B they are continuous variables.  $N = \{S, H\}$  denotes the news-based measure used to measure the shock, *Scandal* and *High\_Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county  $k$  belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year  $t$ .  $Catholic_f$  is equal to 1 if a household spouse identifies as Catholic before the initial year of the shock (2002). All specifications include year and county fixed effects ( $a_t$  and  $a_k$ , respectively). Even-numbered models include an indicator for low risk tolerance based on risk aversion questions from the 1996 PSID survey. See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 9: Robustness with Alternative Sample Splits

Panel A: Impact of the GFC, Extensive Margin Outcomes

Dependent Var.	<i>Stocks</i> (1)-(4)				<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic_GFC	-0.018 (0.023)	-0.072*** (0.028)			0.005 (0.017)	-0.019 (0.028)			0.039 (0.072)	0.041 (0.075)		
Treat_S × Post_S × Catholic	-0.021* (0.011)	-0.034*** (0.013)			-0.021 (0.016)	-0.040* (0.024)			-0.004 (0.032)	-0.003 (0.039)		
Treat_S × Catholic	0.038** (0.017)	0.021 (0.026)			0.026 (0.017)	0.039 (0.029)			-0.040 (0.058)	0.060 (0.066)		
Treat_S × Post_S	0.003 (0.008)	-0.001 (0.010)			0.005 (0.009)	0.004 (0.011)			-0.003 (0.034)	0.001 (0.041)		
Treat_H × Post_H × Catholic_GFC			-0.020 (0.022)	-0.045 (0.030)		0.016 (0.016)	0.015 (0.025)				0.061 (0.053)	0.049 (0.061)
Treat_H × Post_H × Catholic			-0.029** (0.014)	-0.048*** (0.017)		-0.019 (0.019)	-0.040 (0.031)				0.003 (0.034)	-0.003 (0.046)
Treat_H × Catholic			0.015 (0.018)	0.015 (0.024)		0.022 (0.018)	0.042 (0.029)				0.018 (0.042)	0.067 (0.052)
Treat_H × Post_H			0.004 (0.007)	0.002 (0.011)		-0.002 (0.008)	0.001 (0.013)				-0.033 (0.029)	-0.017 (0.034)
Catholic_GFC	-0.029 (0.020)	0.022 (0.021)	-0.032** (0.016)	-0.012 (0.021)	-0.018 (0.015)	0.010 (0.023)	-0.021* (0.011)	-0.011 (0.016)	0.001 (0.069)	0.001 (0.071)	-0.001 (0.047)	0.008 (0.054)
Catholic	-0.031** (0.012)	-0.002 (0.022)	-0.012 (0.010)	0.003 (0.015)	0.001 (0.009)	0.009 (0.018)	0.003 (0.007)	0.008 (0.013)	0.055 (0.049)	-0.031 (0.054)	0.006 (0.029)	-0.020 (0.031)
low_risk		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41,959	25,429	41,819	25,340	25,598	14,867	25,497	14,809	6,866	4,871	6,829	4,840
R-squared	0.314	0.321	0.314	0.321	0.139	0.153	0.139	0.153	0.228	0.248	0.230	0.250
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese
Prob (a)=(b) (F-stat)	0.02	1.85	0.18	0.01	1.30	0.33	2.02	1.79	0.29	0.27	0.93	0.52
P value	0.882	0.176	0.6744	0.9293	0.2557	0.5667	0.1566	0.1828	0.5903	0.6071	0.336	0.47

Table 9: Robustness with Alternative Sample Splits—continued

Panel B: Impact of the GFC, Intensive Margin Outcomes

Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_NetEquityPurchase</i> (5)-(8)				<i>log_NetEquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic_GFC	-0.005 (0.009)	-0.019* (0.011)			-0.276* (0.142)	-0.475** (0.208)			-0.118 (0.090)	-0.158 (0.117)		
Treat_S × Post_S × Catholic	-0.012*** (0.004)	-0.011*** (0.004)			-0.348*** (0.085)	-0.493*** (0.127)			0.093* (0.052)	0.096 (0.062)		
Treat_S × Catholic	0.013 (0.008)	0.008 (0.011)			0.283** (0.111)	0.106 (0.175)			-0.123** (0.051)	-0.159** (0.073)		
Treat_S × Post_S	-0.001 (0.003)	-0.001 (0.003)			0.042 (0.072)	0.027 (0.082)			0.052 (0.043)	0.041 (0.048)		
Treat_H × Post_H × Catholic_GFC			-0.005 (0.007)	-0.009 (0.010)			-0.232** (0.113)	-0.270 (0.180)			-0.087 (0.080)	-0.199* (0.110)
Treat_H × Post_H × Catholic			-0.016*** (0.004)	-0.018*** (0.005)			-0.339*** (0.106)	-0.543*** (0.146)			0.042 (0.067)	0.035 (0.086)
Treat_H × Catholic			0.008 (0.007)	0.006 (0.010)			0.164 (0.121)	0.239 (0.168)			0.009 (0.059)	0.037 (0.083)
Treat_H × Post_H			0.003 (0.002)	0.003 (0.003)			0.140** (0.065)	0.161* (0.083)			0.025 (0.044)	0.056 (0.054)
Catholic_GFC	-0.008 (0.008)	0.007 (0.010)	-0.009 (0.006)	-0.003 (0.008)	-0.009 (0.132)	0.078 (0.186)	-0.101 (0.089)	-0.151 (0.128)	0.113 (0.079)	0.119 (0.100)	0.068 (0.059)	0.100 (0.080)
Catholic	-0.012* (0.007)	-0.008 (0.009)	-0.008* (0.005)	-0.006 (0.006)	-0.080 (0.070)	0.147 (0.121)	-0.011 (0.077)	0.038 (0.102)	0.043 (0.034)	0.067 (0.052)	-0.021 (0.029)	-0.037 (0.043)
low_risk Controls		Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Observations	38,878	24,099	38,760	24,020	41,777	25,293	41,639	25,206	41,969	25,434	41,829	25,345
R-squared	0.190	0.207	0.191	0.207	0.163	0.188	0.162	0.188	0.058	0.075	0.058	0.075
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese
F stat	0.58	0.35	1.69	0.55	0.19	0.01	0.44	1.35	4.21	3.71	1.61	2.99
P value	0.347	0.397	0.195	0.458	0.666	0.942	0.508	0.247	0.042	0.056	0.206	0.086

Table 9: Robustness with Alternative Sample Splits—continued  
 Panel C: Largest vs. Other Dioceses, Extensive Margin Outcomes

Dependent Var.	<i>Stocks</i> (1)-(4)				<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic_LargeDiocese	-0.063*** (0.022)	-0.074*** (0.016)			-0.034** (0.016)	-0.087** (0.035)			-0.042 (0.051)	-0.078 (0.077)		
Treat_S × Post_S × Catholic	-0.029** (0.013)	-0.044*** (0.014)			-0.027 (0.016)	-0.041 (0.025)			0.013 (0.033)	0.015 (0.039)		
Treat_S × Catholic_LargeDiocese	-0.003 (0.027)	0.003 (0.053)			0.007 (0.028)	0.048 (0.066)			0.066 (0.061)	0.116 (0.075)		
Treat_S × Catholic	0.039** (0.018)	0.017 (0.024)			0.034** (0.017)	0.038 (0.029)			-0.030 (0.061)	0.034 (0.067)		
Treat_S × Post_S	0.003 (0.008)	-0.002 (0.010)			0.007 (0.009)	0.004 (0.012)			-0.000 (0.033)	-0.002 (0.041)		
Treat_H × Post_H × Catholic_LargeDiocese			-0.069*** (0.026)	-0.086*** (0.025)			-0.033* (0.017)	-0.090** (0.036)			-0.029 (0.054)	-0.061 (0.078)
Treat_H × Post_H × Catholic			-0.032* (0.016)	-0.053*** (0.018)			-0.020 (0.019)	-0.032 (0.031)			0.024 (0.035)	0.014 (0.048)
Treat_H × Catholic_LargeDiocese			-0.005 (0.027)	-0.002 (0.053)			-0.001 (0.028)	0.035 (0.071)			0.051 (0.062)	0.106 (0.075)
Treat_H × Catholic			0.022 (0.020)	0.024 (0.025)			0.035* (0.020)	0.051 (0.031)			0.016 (0.045)	0.046 (0.057)
Treat_H × Post_H			0.005 (0.007)	0.003 (0.010)			-0.000 (0.008)	0.002 (0.013)			-0.033 (0.028)	-0.020 (0.033)
Catholic	-0.030** (0.013)	0.004 (0.020)	-0.017 (0.010)	-0.000 (0.015)	-0.005 (0.008)	0.009 (0.015)	-0.004 (0.007)	0.002 (0.012)	0.037 (0.051)	-0.019 (0.055)	0.004 (0.030)	-0.011 (0.033)
low_risk		Yes		Yes		Yes		Yes		Yes		Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41,959	25,429	41,819	25,340	25,598	14,867	25,497	14,809	6,866	4,871	6,829	4,840
R-squared	0.314	0.321	0.314	0.321	0.139	0.153	0.139	0.153	0.228	0.248	0.230	0.250
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese
Prob (a)=(b) (F-stat)	2.09	2.31	1.61	1.28	0.11	1.19	0.28	1.64	0.94	1.23	0.79	0.73
P value	0.1498	0.1302	0.206	0.260	0.741	0.276	0.600	0.202	0.334	0.269	0.375	0.3944

Table 9: Robustness with Alternative Sample Splits—continued

Panel D: Largest vs. Other Dioceses, Intensive Margin Outcomes

Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_NetEquityPurchase</i> (5)-(8)				<i>log_NetEquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic_LargeDiocese	-0.013 (0.011)	-0.010 (0.017)			-0.460* (0.262)	-0.545*** (0.203)			0.032 (0.071)	-0.016 (0.120)		
Treat_S × Post_S × Catholic	-0.012*** (0.004)	-0.012** (0.005)			-0.390*** (0.081)	-0.552*** (0.132)			0.095* (0.050)	0.096 (0.060)		
Treat_S × Catholic_LargeDiocese	0.011 (0.014)	0.002 (0.021)			0.195 (0.222)	0.195 (0.177)			0.009 (0.097)	0.088 (0.119)		
Treat_S × Catholic	0.010 (0.008)	0.003 (0.011)			0.267** (0.120)	0.131 (0.184)			-0.154*** (0.053)	-0.199*** (0.073)		
Treat_S × Post_S	-0.001 (0.003)	-0.002 (0.003)			0.039 (0.074)	0.033 (0.084)			0.047 (0.042)	0.038 (0.049)		
Treat_H × Post_H × Catholic_LargeDiocese			-0.015 (0.011)	-0.012 (0.017)			-0.489* (0.252)	-0.597*** (0.207)			0.038 (0.075)	-0.036 (0.125)
Treat_H × Post_H × Catholic			-0.015*** (0.005)	-0.016** (0.007)			-0.375*** (0.096)	-0.607*** (0.147)			0.019 (0.068)	-0.016 (0.090)
Treat_H × Catholic_LargeDiocese			0.012 (0.014)	0.003 (0.021)			0.212 (0.211)	0.228 (0.172)			0.023 (0.099)	0.104 (0.123)
Treat_H × Catholic			0.006 (0.008)	0.005 (0.011)			0.174 (0.122)	0.298* (0.179)			-0.021 (0.061)	-0.019 (0.086)
Treat_H × Post_H			0.003 (0.002)	0.002 (0.003)			0.147** (0.066)	0.175** (0.084)			0.018 (0.044)	0.047 (0.054)
Catholic	-0.011 (0.007)	-0.004 (0.009)	-0.008* (0.005)	-0.005 (0.006)	-0.063 (0.074)	0.130 (0.121)	-0.033 (0.066)	-0.008 (0.092)	0.060 (0.036)	0.079 (0.053)	0.001 (0.030)	-0.004 (0.042)
low_risk Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,878	24,099	38,760	24,020	41,777	25,293	41,639	25,206	41,969	25,434	41,829	25,345
R-squared	0.191	0.207	0.192	0.207	0.162	0.188	0.162	0.187	0.058	0.075	0.058	0.075
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese
F stat	0.01	0.02	0.01	0.05	0.07	0.00	0.18	0.00	0.70	0.75	0.06	0.02
P value	0.942	0.815	0.939	0.813	0.798	0.976	0.670	0.968	0.404	0.389	0.806	0.890

Table 9: Robustness with Alternative Sample Splits–continued

**Note:** This table presents the results of robustness tests regarding the impact of the Great Financial Crisis (Panels A and B) and in the largest impacted dioceses (Panels C and D) for Catholic households' stock market participation in shocked areas. Outcome variables for Panel A and C indicator variables and dependent variables for Panel B and D are continuous variables. To check whether the GFC drives the main results, in Panels A and B I split Catholic households into 2 subgroups: those in survey-years after 2008 (*Catholic\_GFC*) and those in survey-years before 2008 (*Catholic*). To test the impact of the scandal in the largest dioceses, in Panels C and D I split Catholic households between those residing in the dioceses of Boston, Chicago, Los Angeles and New York (*Catholic\_LargeDiocese*) and those living in other dioceses impacted by the shock (*Catholic*).  $N = \{S, H\}$  denotes the news-based measure used to identify the shock, *Scandal* and *High\_Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county  $k$  belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year  $t$ . All specifications include year and county fixed effects. Even-numbered models include an indicator for low risk tolerance based on the 1996 PSID survey. See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 10: Alternative Sample Definitions: Year  $\times$  County Fixed Effects

Panel A: Extensive Margin Outcomes												
Dependent Var.	<i>Stocks</i> (1)-(4)				<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S $\times$ Post_S $\times$ Catholic	-0.022*	-0.036**			-0.022	-0.049			0.002	0.016		
	(0.012)	(0.016)			(0.018)	(0.032)			(0.040)	(0.054)		
Treat_S $\times$ Catholic	0.028*	0.011			0.022	0.036			-0.006	0.069		
	(0.017)	(0.025)			(0.018)	(0.034)			(0.064)	(0.078)		
Treat_H $\times$ Post_H $\times$ Catholic			-0.035**	-0.058**			-0.012	-0.017			0.074*	0.095
			(0.017)	(0.023)			(0.020)	(0.038)			(0.042)	(0.059)
Treat_H $\times$ Catholic			0.016	0.021			0.022	0.027			-0.015	0.007
			(0.018)	(0.023)			(0.019)	(0.034)			(0.046)	(0.060)
Catholic	-0.029**	0.000	-0.016	-0.003	-0.003	0.011	-0.006	0.002	0.021	-0.054	-0.009	-0.033
	(0.012)	(0.020)	(0.011)	(0.016)	(0.008)	(0.016)	(0.006)	(0.012)	(0.054)	(0.063)	(0.031)	(0.036)
low_risk		Yes		Yes		Yes		Yes		Yes		Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	39,393	22,959	39,245	22,861	23,596	13,024	23,482	12,960	5,562	3,674	5,516	3,632
R-squared	0.350	0.358	0.350	0.358	0.224	0.251	0.223	0.250	0.332	0.369	0.332	0.370
County*Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Panel B: Intensive Margin Outcomes												
Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_NetEquityPurchase</i> (5)-(8)				<i>log_NetEquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S $\times$ Post_S $\times$ Catholic	-0.007	-0.007			-0.263***	-0.456***			0.029	-0.001		
	(0.004)	(0.006)			(0.097)	(0.148)			(0.048)	(0.070)		
Treat_S $\times$ Catholic	0.006	-0.001			0.160	0.048			-0.090*	-0.111		
	(0.008)	(0.011)			(0.124)	(0.188)			(0.053)	(0.078)		
Treat_H $\times$ Post_H $\times$ Catholic			-0.011**	-0.014**			-0.268**	-0.564***			-0.041	-0.143
			(0.005)	(0.007)			(0.125)	(0.169)			(0.060)	(0.100)
Treat_H $\times$ Catholic			0.006	0.005			0.092	0.252			0.039	0.092
			(0.008)	(0.011)			(0.130)	(0.174)			(0.053)	(0.081)
Catholic	-0.010	-0.004	-0.008*	-0.006	-0.052	0.129	-0.026	-0.013	0.043	0.075	-0.013	-0.008
	(0.007)	(0.009)	(0.005)	(0.007)	(0.077)	(0.128)	(0.071)	(0.099)	(0.036)	(0.054)	(0.030)	(0.042)
low_risk		Yes		Yes		Yes		Y		Yes		Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	36,288	21,631	36,160	21,544	39,212	22,823	39,065	22,727	39,404	22,967	39,257	22,870
R-squared	0.233	0.253	0.234	0.253	0.221	0.251	0.221	0.251	0.139	0.159	0.139	0.159
County*Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table 10: Alternative Sample Definitions: Year  $\times$  County Fixed Effects—continued

**Note:** This table reports the results from tests using Equation 1 with fixed effects specification using the PSID survey data from 1999 to 2011. The unit of observation is household-survey-year. All specification include county  $\times$  year fixed effects are opposed to county and year in the main analysis. Outcome variables for Panel A indicator variables and dependent variables for Panel B are continuous variables.  $N = \{S, H\}$  denotes the news-based measure used to identify the shock, *Scandal* and *High.Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county k belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year t. All specifications include year and county fixed effects. Even-numbered models include an indicator for low risk tolerance based on the 1996 PSID survey. See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

# A Data Appendix

In this section I detail the sources and scope of the data used in the paper. These data are of four main types: data on the revelation of clergy sexual abuse in the U.S. Catholic Church, data on church giving, data on economic outcomes and control variables, and other data on local characteristics.

## A.1 Local Shock Data

I use the *Factiva* database to collect as general as possible a set of articles about sexual abuse in the Catholic Church. Because the data to test the direct impact of the shock to the relationship between the Catholic hierarchy and local Catholic faithful are available between 2001 and 2006, I collect data over those years. The news stories I draw from are published by local and national newspapers, outlets that are independent of the diocese.

I search based on the keywords “*Catholic and (diocese or archdiocese) and (abuse or scandal)*” (the search results by year are displayed in Figure 1). This broad search aims at capturing as large a set of information as possible. It yields 27,662 articles between January 1, 2001 and December 31, 2006 (the calendar year window corresponding to the diocesan annual appeals data). For this broad search, I aim to check whether information on the number of victims and perpetrators matter.<sup>25</sup>

I read each article. I only keep articles and information concerning diocesan clergy (not members of religious orders) to clearly identify the link between the abuse news and the local Catholic diocesan hierarchy. I track the dioceses to which the perpetrator belongs and/or where the abuse is said to occur. I identify the date of the allegation, the diocese(s)<sup>26</sup> named

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<sup>25</sup>In untabulated tests, I check whether the frequency of the news stories, rather than their content, matters. Regressing the giving outcome measures described above on the number of articles mentioning clergy abuse for a given diocese (i) in a given year and (ii) cumulative for over the sample period, I obtain a statistically insignificant coefficient on the article count variable. This test hints at the fact that it is not the mere exposure to news that matters, but the news’ content.

<sup>26</sup>One event can imply multiple dioceses. For example, if a perpetrator is accused by one victim of abuse occurring in diocese X, but the perpetrator currently resides in diocese Y, the count for diocese X is Victim = 1 and Perpetrator = 1; the count for diocese Y is Victim = 0 and Perpetrator = 1. This accounts for

in each allegation, the number of unique victims and perpetrators who are identified, and whether the allegation includes a removal from ministry for the clergy involved.

Once I have classified each news story by news type, diocese, and number of victims and perpetrators (and amount involved in resolutions such as settlements and trial verdicts), I sum this information for each diocese-year. Out of 1056 diocese years, 574 offer news of clergy abuse within the above categories. Most of these involve allegations and lawsuits (395 diocese-years) and removals from ministry (205 diocese years, most of the latter overlap with the former as removals from ministry are usually announced when allegations are revealed). Similar to class action lawsuits, allegations can turn out to be credible or not. However, unlike class action lawsuits in databases such as the Stanford Class Action data, the dismissal of non-credible allegations is not systematically reported. Therefore, I focus on event-types that concern credible allegations, namely removals from ministry.

From 2002-on, public reporting of removal from public ministry is a standard procedure for active clergy implicated in allegations. While the clergy member’s removal is decided by the local bishop, it is mandated by the June 2002 Dallas Charter upon receiving “credible allegations.” In practice, the removal almost always follows the allegations themselves for newly accused clergy, and both events then appear concurrently in a news article.

## **A.2 Household Financial Outcomes: PSID Data**

Because the local shock impacts trust in cultural institutions I focus on trust-intensive economic activity previously identified in the literature. Specifically, I study household participation in the stock market (Guiso et al. (2003, 2004)). To do so, I use the University of Michigan’s Panel Survey of Income Dynamic’s (PSID) Family files variables related to either outcome. PSID respondents are also asked if they own shares of stock in financial markets, the value of their equity holdings, whether they bought or sold more equity since the last survey on net, etc.

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the fact that perpetrators represent potential threats to their local environment even if they have not been accused in this precise diocese.

In the PSID, households are called family units. Most of my controls come from the Family Files, unless otherwise noted. Table A1 Panel A summarizes the data definitions for the PSID variables. To map the impact of the Catholic clergy abuse scandals on PSID family units, I use a file from CARA matching U.S. dioceses with counties by FIPS code.

### **A.3 Generalized Trust Outcome: GSS Data**

The General Social Survey (GSS) administered by the National Opinion Research Center at the University is administered every other year on odd years. The survey covers a representative sample of the US population and asks a number of question on social issues.

I control for household characteristics that might impact household’s willingness to trust: age, whether one is divorced, the respondent’s number of children, income (a discrete variables with 12 income levels), wealth (through the GSS Socio-Economic (“SE”) index out of 100).

### **A.4 Church Giving Data**

Most Catholic dioceses have an annual appeal aimed at funding a large part of the diocesan budget (alternatively, a few dioceses tax local parishes directly—I do not observe parish contributions to the diocese in those cases). Because Diocesan Annual Appeals are organized by the local Catholic hierarchy and aimed at funding its budget, the outcomes of the Annual Appeals offer a way to measure the faithful’s response to what the local bishop asks of them, in line with the definition of trust as “the ex ante belief that one’s counterparty will perform as as promised in the implicit or explicit agreement” (Dupont and Karpoff, 2020).

While dioceses might report fundraising, including annual appeal, progress annually in the local Catholic newspaper, archived data are rarely, if ever, available. However, from 2002 to 2007, CARA led a study on Catholic diocesan stewardship. The survey was administered in the late Winter / early Spring of the year. Because appeals usually take place in the Spring, the data for a given survey year covers the appeal from the prior year (e.g. the 2002

survey gathers data for 2001 annual appeals). CARA has generously given me access to the diocese-level data for each survey year, data which are otherwise confidential.

The CARA stewardship data cover many aspects of the annual fundraisers, aggregated at the diocese level. While the overall response rate on the survey is nearly 100%, response rate (non-missing observations) to individual questions of interest varies from about 80% to about 40% as questions get more specific.

In my analysis of the impact of the shock on local Church giving, I focus on two sets of outcomes that capture the relationship between local Catholics and their bishops, based on the bishop's expectations from the annual appeal. Outcome variables are winsorized at the 1% and 99% levels in order to deal with potential outliers. The first set of measures deals with dollars pledged. Pledges are a better measure of willingness to give than actual received donations, since the latter can be impacted by unanticipated shocks (e.g. household liquidity) between the time of the pledge and the end of the fundraising period when pledges are due.

In order to deal with possible typos or potential mistakes inherent to surveys, I check the amount pledged for each diocese year. If pledges appear abnormally larger or smaller than the goal for the year or than pledges in other years for the same diocese, I check the amount pledged by looking at articles from the local secular and Catholic press at the time. To do so, I first search google for the local newspaper in the main city of the diocese, or the name of the diocesan newspaper. I then check the news source using a web search to access the newspaper's website, and by using Gale Onefile News, Newsbank and Proquest Global Newsstream. I search for "Catholic annual appeal" (and if need be, variation such as "Catholic annual fundraising") as well as the year of the appeal. This procedure catches some of the abnormally large amounts. If this does yield any result, I set the data as missing if the amount collected is more than twice the amount pledged for the year to take care of the remaining abnormally small ratios.

#### A.4.1 Empirical Design

I use two sets of three measures of appeal outcomes. Measures (i), the log of pledges and number of participants, offer an unconditional ability to raise funds and engage local Catholics. However, the dollar measure of success of the appeal might be influenced by the stated appeal goal, which sets the diocese's expectation to local Catholics; and the participation measure depends on the size of the population reached by the appeal. Therefore, I normalize the dollar pledged by annual stated goal and the number of participants by the population reached by the campaign to create Measure (ii). However, both denominators in Measure (ii) might be negatively affected by the shock itself: dioceses might decrease the goal once they get involved in abuse disclosures as they anticipate the negative reputational effect of the shock (Bénabou and Tirole, 2006); also, the Catholic population might decrease in light of the systematic mishandling of abuse by some bishops. Therefore, I offer a third measure where dollars pledged and number of participating households are normalized by the pre-shock (2001) diocese's goal and number of solicited household, respectively.

While many revelations of clergy abuse closely follow the first *Spotlight* team articles of January 2002, some dioceses face later revelations in the sample period (2001-2006). Hence, the shock to culture-based social capital is staggered over time and across dioceses. Because of the timing of the shock, I use a staggered difference in differences design to test the effects of scandal on local churches' Annual Appeals:

$$\text{Appeal\_Outcome}_{it} = \alpha_i + \alpha_t + \beta_1 \cdot \text{Treat\_}N_i \times \text{Post\_}N_{it} + \gamma \cdot A_{it} + \delta \cdot D_{it} + \varepsilon_{it} \quad (3)$$

for Diocese  $i$  in year  $t$ , where  $t$ =event-year 0 for treated dioceses is excluded. The *Appeal\_Outcome* variable stands for each of the 6 outcome measures just described (3 dollar-based measures and 3 household-based measures). By construction,  $\text{Treat}_i$  is equal to 1 for diocese  $i$  if *Scandal* is equal to 1 in at least one of  $i$ 's diocese-years in the sample, and  $\text{Post}_{it}$  is equal to 1 for all years  $t$  on and after which *Scandal* is equal to 1.

The coefficient of interest is  $\beta_1$ , the estimate on  $Treat_{N_i} \times Post_{N_{it}}$ .  $A_{it}$  is a set of Annual Appeal controls including the cost of the appeal campaign, the self-reported effort of the diocesan stewardship team in the success of the appeal, and the number of means of communications involved in the process (e.g. mailed-in letters, emails, talk from the local priest, etc.). These measures of local effort might explain some of the variation in the success of the appeal.  $D_{it}$  is a set of Diocesan controls forming a vector of two indicator variables: (a) whether a diocese is in bankruptcy proceedings in year  $t$  and (b) whether the local bishops was removed because of direct or indirect ties to the clergy misconduct scandal in a prior year (this indicator remains equal to 1 in every year after the bishop's removal).

The controls in the regression can be categorized in two subsets, appeal controls and diocese controls. Appeal controls focus on factors that might impact the fundraising effectiveness of the appeal for a given diocese-year: I include controls for events related to the clergy abuse crisis: *Bishop\_Replaced* can be seen as a reputation repair measure that mitigates the crisis of trust between local faithful and their bishop, since a new, outsider is now in charge. Because annual appeals usual start with the season of Lent, i.e. in February at the earliest, the indicator turns to 1 for year  $t$  if the bishop's replacement is announced before February of year  $t$ , and remains equal to 1 all subsequent years. I also include an indicator for ongoing bankruptcy. Diocesan bankruptcy proceedings usually make the faithful reluctant to donate as they wonder whether their funds will be used to pay creditors (a large part of whom are abuse victims with home the diocese has settled) rather than go directly to the works of the diocese.

## B Other Results

In this section, I present tables summarizing results from the following additional tests beyond the main analysis, tests on non-equity assets and robustness tests. For the sake of simplicity of presentation, I focus the analyses on the main outcomes at the extensive and intensive margins: *Stocks* and *EquityWealthRatio*.

### B.1 Main Results: Weighted Estimation

Deaton (1997) advises not to use sample weights in regressions from sampled data. Following this advice and the procedure of Brunneier and Nagel (2008), who also use PSID data, I run my tests without sample weights. However, in this section, Table B1 presents the main results with a weighted estimation.

While the coefficients of interest are generally lower in magnitude than those in the main results, they usually have the same sign. Moreover, these results still show that Catholics are less likely to enter the stock market and invest less in equity in areas impacted by the scandal. Therefore, the results are substantially similar to those in the main estimation.

### B.2 Tests on Generalized Trust

While Bottan and Perez-Truglia (2015) find that, after revelations of U.S. Catholic clergy misconduct, pro-social attitude such as generalized trust does not change in shocked areas, their measure of the shock is slightly different from mine. Hence, it could be that the scandal-based measure captures changes in overall willingness to trust, another component of Fukuyama (1995)'s broader notion of culture of trust.

I use the General Social Survey (GSS) from NORC at the University of Chicago to measure generalized trust. Like the PSID, the GSS is conducted every other year, though on even years. To use the same window as the rest of the sample, I focus on survey years 1998 to 2010. Generally, the GSS surveys fewer people than the PSID, but still ensures that responses

are representative of the U.S. population. I also use county identifiers for survey respondents from the GSS Sensitive Files to match respondents with Catholic dioceses. Similar to the PSID, the GSS asks respondents for their religion, denomination and frequency of attendance of church services. The survey also constructs data on respondent's household income level (through 12 categories where a higher value represents a higher income bracket) and a measure of "socioeconomic index" (the *SE Index* variable) on a 100 scale, which I use as a control for household wealth. I also control for the respondent's age and the number of children in the household, as life experience might impact one's trust.

The *trust* variable asks "*Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?*". I set this measure to 1 if respondents answer that they "Can trust" people and 0 if they respond that they cannot trust people or that it depends.

Table B2 summarizes the findings of regressions with of generalized trust as the dependent variables—from the GSS survey. Panel A presents the results of the triple difference test for Catholics in shocked areas. The coefficients of interest are insignificant, corroborating other research. However, they are positive: it is puzzling to think that the shock would lead Catholics in be more trusting of others, though there are plausible stories as to why this would be the case. For example, Catholics might interpret the revelation of previously hidden information as a signed of increased societal honesty and therefore greater trust in strangers.

To test this positive result further, I split the sample between Catholics in *High Catholic* areas and in other areas. Table B2 Panel B presents the results. As before the third difference *Catholic\_Norms* captures Catholics in *High Catholic* areas while the variable *Catholic* identifies Catholics in other areas. The results provide evidence that the positive effect on Catholics' generalized trust in shocked areas is primarily due to Catholics in areas where the Catholic Church is not socially dominant. In *High Catholic* areas, the change in Catholics' trust in others is extremely close to zero after the shock.

### B.3 Alternative Estimation: Household and Year Fixed Effects

The main estimation controls for two types of time invariant unobservable characteristics: those associated with being a Catholic household and those accounting for local influences at the county level (e.g. culture, degree of urbanization etc.). These two sets of controls cover both of the main source of trust from cultural institutions, e.g. from religion and locality. However, one might argue that other unobservable characteristics might bias the result and it would be better to control for household fixed effects as a whole. To estimate a model equivalent to Equation 1 with household instead of county fixed effects, I restrict the sample to family units whose spouses are unchanged from the last survey, as I defined household religion based on spouses' religion. This decreases the size of the sample by about 10%.

Table B3 presents the results of the estimation using household and year fixed effects. I again include the sample with the *low\_risk* indicator for comparison with the main results—though the indicator is absorbed by the fixed effects since it is time invariant. In these estimations, the coefficients of interest are robust at the intensive margin (Models(5)-(8)) more so than at the extensive margin (Models (1)-(4)), except for the propensity to hold equity for household that were already in the survey in 1996 (Models (2) and (4)).

A possible interpretation for these results is that because Catholic households in treated areas enter the stock market at a relatively old age (46 years old, see Table 6, Panel A), the effect is driven by older households, who would have been present (i.e. adults) in the 1996 survey. Therefore, the effect is more robust for these older households at the extensive margin and generally stronger at the intensive margin since this captures the activity of older Catholic households—those who have already entered the stock market.

Table A1: Data Definitions

Panel A: PSID Data

Dependent variables:

<i>Stocks</i>	An indicator equal to 1 if a family unit owns equity outside an IRA.
<i>Entry</i>	An indicator equal to 1 if a family unit owns equity in the current survey-year but did not in the previous survey-year; 0 if does not own equity in consecutive survey-years.
<i>Exit</i>	An indicator equal to 1 if a family unit does not own equity in the current survey year but did in the previous survey year; 0 if owns equity in consecutive survey-years.
<i>EquityWealthRatio</i>	The ratio of the value of equity holdings to family unit wealth, winsorized at the 1% and 99% levels
<i>log_NetEquityPurchase</i>	The log transformation of 1 + the value of reported net equity purchases since January two years prior to the survey-year.
<i>log_NetEquitySale</i>	The log transformation of 1 + the value of reported net equity sales since January two years prior to the survey-year.

Demographic Controls:

<i>Mean_Age</i>	The mean age of the spouses in the family unit, or the age of the lone spouse, in years.
<i>Num_in_FU</i>	Number of people present in the family unit.
<i>College</i>	An indicator equal to 1 if a spouse in the family unit has at least 16 years of education.
<i>PoorHealth</i>	An indicator equal to 1 if either spouse in the family unit's health status is poor.
<i>Divorced</i>	An indicator equal to 1 if the reported marital status is "Divorced."
<i>Widowed</i>	An indicator equal to 1 if the reported marital status is "Widowed."
<i>NonWhite</i>	An indicator equal to 1 if the reported race of the household head is not "White."

Financial Savvy Controls:

<i>Owns_FI</i>	An indicator equal to 1 if a family unit owns non equity financial instruments: checking or saving accounts, CDs, bonds, life insurance, etc.
<i>Stk_IRA</i>	An indicator equal to 1 if a family unit reports owning equity in an IRA account.

Wealth Controls

<i>log_Income</i>	The logged value of 1+the dollar value of reported family unit income in the Wealth file.
<i>Net_Wealth</i>	The sum of of the family unit's assets (home equity and other assets) net of their reported debts reported in the Wealth file.
<i>Lump_Sum</i>	An indicator equal to 1 if a family unit reports receiving a lump sum payment (e.g. inheritance, lawsuit settlement) in the past year.

Panel B: Diocesan Annual Appeal Data

<i>log_Cost</i>	The log of (1+ dollar cost of the appeal) as reported in the survey.
<i>Num_Means</i>	The number of means of communications through which households were contacted about the appeal: e.g. mailings, phone call, presentation by local parish priest etc.
<i>Effort</i>	The self-graded intensity of effort applied to the annual appeal campaign by the stewardship team, on a scale of 1 to 5.
<i>Rebate</i>	is an indicator equal to 1 if the diocese offers a percentage of the amount raised above the parish's goal back to the parish .
<i>Bishop_Replaced</i>	is an indicator equal to 1 if a the local bishop has been replaced explicitly due to his poor management highlighted by the shock.
<i>Bankruptcy</i>	is an indicator equal to 1 if the diocese in in bankruptcy that year and is set back to 0 the first full year after the end of bankruptcy proceedings and beyond.

Table B1: Impact of the Scandal on Catholics' Stock Market Participation: Weighted Estimation

## Panel A: Extensive Margin Outcomes

Dependent Var.	<i>Stocks</i> (1)-(4)			<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S ×												
Post_S × Catholic	-0.023*	-0.036**			-0.022	-0.035			0.016	0.014		
	(0.014)	(0.017)			(0.018)	(0.026)			(0.036)	(0.047)		
Treat_S × Catholic	0.016	-0.007			0.018	0.033			-0.000	0.051		
	(0.019)	(0.027)			(0.020)	(0.033)			(0.064)	(0.076)		
Treat_S × Post_S	-0.000	-0.006			0.005	0.005			0.010	0.009		
	(0.011)	(0.015)			(0.011)	(0.014)			(0.038)	(0.044)		
Treat_H ×												
Post_H × Catholic			-0.040**	-0.062***			-0.018	-0.036			0.043	0.034
			(0.017)	(0.019)			(0.022)	(0.029)			(0.043)	(0.060)
Treat_H × Catholic			-0.002	-0.000			0.018	0.044			0.034	0.053
			(0.021)	(0.029)			(0.024)	(0.035)			(0.051)	(0.065)
Treat_H × Post_H			0.007	0.003			0.006	0.011			-0.045	-0.046
			(0.010)	(0.015)			(0.012)	(0.018)			(0.033)	(0.039)
Catholic	-0.032**	0.004	-0.017	-0.002	-0.002	0.002	-0.004	-0.003	0.007	-0.033	-0.025	-0.029
	(0.013)	(0.020)	(0.013)	(0.018)	(0.009)	(0.017)	(0.009)	(0.015)	(0.052)	(0.061)	(0.032)	(0.037)
Mean_Age	0.003***	0.003***	0.003***	0.003***	0.001***	0.001***	0.001***	0.001***	-0.003***	-0.003***	-0.003***	-0.003***
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Num_inFU	-0.009***	-0.007	-0.009***	-0.007	-0.003*	-0.001	-0.003*	-0.001	0.016*	0.012	0.016*	0.012
	(0.003)	(0.005)	(0.003)	(0.005)	(0.002)	(0.003)	(0.002)	(0.003)	(0.008)	(0.009)	(0.008)	(0.009)
College	0.132***	0.138***	0.133***	0.140***	0.042***	0.041***	0.043***	0.041***	-0.110***	-0.102***	-0.116***	-0.110***
	(0.009)	(0.012)	(0.009)	(0.012)	(0.007)	(0.009)	(0.007)	(0.009)	(0.016)	(0.018)	(0.015)	(0.018)
PoorHealth	-0.038***	-0.046**	-0.038***	-0.046**	-0.013*	-0.002	-0.014*	-0.006	0.027	0.090*	0.021	0.079
	(0.011)	(0.020)	(0.010)	(0.020)	(0.007)	(0.015)	(0.007)	(0.015)	(0.034)	(0.053)	(0.034)	(0.053)
Divorced	-0.062***	-0.062***	-0.061***	-0.061***	-0.019***	-0.018*	-0.018***	-0.018*	0.121***	0.133***	0.118***	0.123***
	(0.009)	(0.013)	(0.009)	(0.013)	(0.007)	(0.010)	(0.007)	(0.010)	(0.034)	(0.037)	(0.034)	(0.038)
Widowed	-0.015	-0.009	-0.017	-0.011	-0.002	0.005	-0.001	0.007	-0.031	-0.040	-0.028	-0.037
	(0.018)	(0.033)	(0.017)	(0.032)	(0.012)	(0.022)	(0.012)	(0.021)	(0.037)	(0.049)	(0.037)	(0.048)
Non_White	-0.081***	-0.074***	-0.084***	-0.078***	-0.027***	-0.018	-0.030***	-0.022	0.088***	0.101***	0.090***	0.103***
	(0.012)	(0.018)	(0.013)	(0.019)	(0.009)	(0.013)	(0.009)	(0.013)	(0.025)	(0.032)	(0.025)	(0.032)
log_Income	0.036***	0.042***	0.036***	0.042***	0.019***	0.023***	0.019***	0.023***	-0.040***	-0.036***	-0.040***	-0.035***
	(0.003)	(0.004)	(0.003)	(0.004)	(0.002)	(0.003)	(0.002)	(0.003)	(0.008)	(0.011)	(0.008)	(0.011)
Net_Wealth	0.002***	0.002***	0.002***	0.002***	0.001	0.001	0.001	0.001	-0.001***	-0.000***	-0.001***	-0.000***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Lump_Sum	0.080***	0.083***	0.077***	0.079***	0.058***	0.067***	0.055***	0.062***	-0.052***	-0.049**	-0.050***	-0.047**
	(0.014)	(0.015)	(0.013)	(0.015)	(0.014)	(0.019)	(0.014)	(0.019)	(0.019)	(0.020)	(0.019)	(0.021)
Owens_FI	0.055***	0.049***	0.054***	0.049***	0.027***	0.024***	0.027***	0.025***	-0.164***	-0.166***	-0.159***	-0.163***
	(0.007)	(0.009)	(0.007)	(0.009)	(0.004)	(0.008)	(0.004)	(0.008)	(0.034)	(0.046)	(0.034)	(0.046)
Stocks_IRA	0.194***	0.180***	0.194***	0.179***	0.083***	0.073***	0.081***	0.071***	-0.124***	-0.124***	-0.124***	-0.123***
	(0.010)	(0.012)	(0.010)	(0.012)	(0.009)	(0.010)	(0.010)	(0.010)	(0.017)	(0.022)	(0.017)	(0.022)
low_risk		-0.028**		-0.027**		-0.001		-0.001		0.043*		0.046*
		(0.012)		(0.012)		(0.009)		(0.009)		(0.023)		(0.024)
Observations	38,845	23,354	38,709	23,264	24,294	14,025	24,195	13,971	6,589	4,642	6,550	4,608
R-squared	0.310	0.317	0.310	0.317	0.145	0.162	0.145	0.161	0.222	0.245	0.225	0.247
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table B1: Impact of the Scandal on Catholics' Stock Market Participation: Weighted Estimation—continued

## Panel B: Intensive Margin Outcomes

Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_NetEquityPurchase</i> (5)-(8)				<i>log_NetEquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S ×												
Post_S × Catholic	-0.008*	-0.006			-0.278***	-0.382***			0.044	0.044		
	(0.005)	(0.006)			(0.087)	(0.134)			(0.055)	(0.066)		
Treat_S × Catholic	0.005	-0.004			0.153	-0.038			-0.153**	-0.185**		
	(0.010)	(0.013)			(0.134)	(0.193)			(0.061)	(0.084)		
Treat_S × Post_S	-0.005	-0.007			-0.036	-0.052			0.103**	0.062		
	(0.004)	(0.005)			(0.090)	(0.103)			(0.052)	(0.063)		
Treat_H ×												
Post_H × Catholic			-0.014**	-0.014*			-0.364***	-0.555***			-0.016	-0.050
			(0.005)	(0.008)			(0.098)	(0.135)			(0.070)	(0.092)
Treat_H × × Catholic			0.004	0.001			0.100	0.169			0.013	0.044
			(0.010)	(0.013)			(0.133)	(0.171)			(0.073)	(0.095)
Treat_H × Post_H			0.004	0.003			0.132	0.146			0.053	0.080
			(0.003)	(0.004)			(0.082)	(0.109)			(0.047)	(0.065)
Catholic	-0.010	-0.004	-0.008	-0.006	-0.091	0.080	-0.055	-0.066	0.076*	0.102*	-0.016	-0.024
	(0.008)	(0.010)	(0.006)	(0.009)	(0.088)	(0.136)	(0.087)	(0.105)	(0.040)	(0.061)	(0.035)	(0.048)
Mean_Age	0.001**	0.001***	0.001***	0.001***	0.001	0.002	0.001	0.002	0.006***	0.007***	0.006***	0.007***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.003)	(0.002)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)
Num_inFU	-0.005***	-0.004***	-0.005***	-0.004***	-0.050***	-0.046	-0.049***	-0.045	0.007	0.003	0.008	0.004
	(0.001)	(0.001)	(0.001)	(0.001)	(0.016)	(0.029)	(0.016)	(0.029)	(0.006)	(0.009)	(0.006)	(0.009)
College	0.035***	0.035***	0.036***	0.035***	0.523***	0.583***	0.523***	0.582***	0.136***	0.150***	0.137***	0.152***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.054)	(0.082)	(0.054)	(0.083)	(0.029)	(0.037)	(0.029)	(0.037)
PoorHealth	-0.007*	-0.007	-0.007*	-0.007	0.037	0.025	0.031	0.028	0.050	0.039	0.037	0.043
	(0.004)	(0.006)	(0.004)	(0.006)	(0.057)	(0.079)	(0.056)	(0.079)	(0.050)	(0.068)	(0.048)	(0.069)
Divorced	-0.007*	-0.006	-0.007*	-0.006	-0.155***	-0.170**	-0.155***	-0.172**	-0.067**	-0.060*	-0.068**	-0.061*
	(0.004)	(0.005)	(0.004)	(0.005)	(0.049)	(0.070)	(0.048)	(0.070)	(0.028)	(0.034)	(0.028)	(0.034)
Widowed	0.008	0.011	0.008	0.011	-0.152**	-0.240*	-0.166**	-0.274*	-0.030	0.026	-0.024	0.027
	(0.007)	(0.013)	(0.007)	(0.013)	(0.073)	(0.145)	(0.071)	(0.142)	(0.056)	(0.082)	(0.056)	(0.083)
Non_White	-0.020***	-0.020***	-0.021***	-0.021***	-0.248***	-0.208*	-0.258***	-0.219*	-0.092***	-0.086**	-0.086***	-0.079*
	(0.004)	(0.007)	(0.004)	(0.007)	(0.067)	(0.122)	(0.068)	(0.121)	(0.026)	(0.041)	(0.027)	(0.042)
log_Income	0.012***	0.014***	0.012***	0.014***	0.211***	0.276***	0.211***	0.277***	-0.004	0.010	-0.002	0.012
	(0.001)	(0.002)	(0.001)	(0.002)	(0.023)	(0.032)	(0.023)	(0.033)	(0.009)	(0.011)	(0.009)	(0.011)
Net_Wealth	0.001***	0.000*	0.001***	0.000*	0.010***	0.009**	0.010***	0.009**	0.001	0.001	0.001	0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.004)	(0.003)	(0.004)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)
Lump_Sum	0.022***	0.022***	0.022***	0.021***	0.316***	0.289**	0.319***	0.294**	0.100*	0.098*	0.102*	0.095
	(0.005)	(0.006)	(0.005)	(0.006)	(0.093)	(0.125)	(0.090)	(0.123)	(0.054)	(0.058)	(0.054)	(0.058)
Owns_FI	0.005**	0.005	0.005**	0.004	0.075**	0.084*	0.074**	0.081*	0.024	0.008	0.018	-0.000
	(0.002)	(0.003)	(0.002)	(0.003)	(0.031)	(0.049)	(0.030)	(0.049)	(0.026)	(0.041)	(0.026)	(0.041)
Stocks_IRA	0.022***	0.020***	0.023***	0.020***	0.752***	0.769***	0.752***	0.769***	0.148***	0.123***	0.148***	0.127***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.049)	(0.058)	(0.049)	(0.058)	(0.026)	(0.028)	(0.026)	(0.028)
low_risk		-0.006		-0.006						-0.049		-0.052
		(0.004)		(0.004)						(0.033)		(0.033)
Observations	38,377	23,763	38,261	23,685	41,240	24,942	41,106	24,857	41,430	25,078	41,294	24,991
R-squared	0.202	0.214	0.203	0.215	0.167	0.196	0.167	0.196	0.062	0.079	0.062	0.078
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table B1: Impact of the Scandal on Catholics' Stock Market Participation: Weighted Estimation–continued

**Note:** This table sums up the results from the triple difference analysis of Equation 1 for Catholic households:  $Y_{f,k,t} = a_k + a_t + \beta_1 \cdot Treat\_N_k \times Post\_N_{k,t-1} \times Catholic_f + \beta_2 \cdot Treat\_N_k \times Catholic_f + \beta_3 \cdot Treat\_N_k \times Post\_N_{k,t-1} + \beta_4 \cdot Catholic_f + \lambda \cdot I_{f,t} + v \cdot X_{f,t} + \zeta \cdot W_{f,t-1} + \epsilon_{f,k,t}$ , using data from the PSID survey. The estimation includes survey weights. The unit of observation is household-survey-year. The dependent variables in Panel A are indicator variables; in Panel B they are continuous variables.  $N = \{S, H\}$  denotes the news-based measure used to measure the shock, *Scandal* and *High.Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county k belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year t.  $Catholic_f$  is equal to 1 if a household spouse identifies as Catholic before the initial year of the shock (2002). All specifications include year and county fixed effects ( $a_t$  and  $a_k$ , respectively). Even-numbered models include an indicator for low risk tolerance based on risk aversion questions from the 1996 PSID survey. See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table B2: Impact of the Scandal on Generalized Trust

Panel A: All Shocked Catholics			Panel B: Catholics In <i>High Catholic</i> Areas		
	(1)	(2)		(1)	(2)
Treat_S × Post_S × Catholic	0.023 (0.027)		Treat_S × Post_S × Catholic_Norms	0.009 (0.031)	
Treat_S × Catholic	-0.010 (0.037)		Treat_S × Post_S × Catholic	0.139* (0.072)	
Treat_S × Post_S	-0.005 (0.052)		Treat_H × Post_H × Catholic_Norms		0.009 (0.042)
Treat_H × Post_H × Catholic		0.016 (0.038)	Treat_H × Post_H × Catholic		0.123 (0.146)
Treat_H × Catholic		-0.024 (0.036)	Treat_S × Catholic_Norms	-0.013 (0.041)	
Treat_H × Post_H		0.005 (0.036)	Treat_S × Catholic	-0.024 (0.073)	
			Treat_S × Post_S	-0.005 (0.052)	
			Treat_H × Catholic_Norms		-0.026 (0.038)
			Treat_H × Catholic		-0.030 (0.096)
			Treat_H × Post_H		0.007 (0.036)
			Catholic_Norms	-0.017 (0.032)	-0.013 (0.020)
Catholic	-0.026 (0.028)	-0.016 (0.018)	Catholic	-0.053 (0.047)	-0.022 (0.036)
Age	0.004*** (0.000)	0.004*** (0.000)	Age	0.004*** (0.000)	0.004*** (0.000)
College	0.121*** (0.014)	0.123*** (0.014)	College	0.121*** (0.014)	0.123*** (0.014)
NonWhite	-0.132*** (0.015)	-0.130*** (0.014)	NonWhite	-0.132*** (0.014)	-0.129*** (0.014)
Num_children	-0.004 (0.003)	-0.004 (0.003)	Num_Children	-0.004 (0.003)	-0.004 (0.003)
Divorced	-0.014 (0.012)	-0.012 (0.012)	Divorced	-0.013 (0.012)	-0.011 (0.012)
Income	0.010*** (0.002)	0.011*** (0.002)	Income	0.010*** (0.002)	0.011*** (0.002)
SE Index	0.003*** (0.000)	0.003*** (0.000)	SE Index	0.003*** (0.000)	0.003*** (0.000)
Observations	8,716	9,016	Observations	8,756	9,056
R-squared	0.151	0.153	R-squared	0.152	0.153
County FE	Yes	Yes	County FE	Yes	Yes
Year FE	Yes	Yes	Year FE	Yes	Yes
SE Cluster	Diocese	Diocese	SE Cluster	Diocese	Diocese

**Note:** This table presents the results of the test of the impact on the shock on generalized trust based on the Generalized Social Survey between 1998 and 2010. The unit of observation is respondent year. In Panel A, *Catholic* is set to 1 if a respondent or his/her spouse is Catholic. in Panel B, *Catholic\_Norms* is set to 1 if a respondent or his/her spouse is Catholic and lives in an area where the Catholic church is more socially influential (*High Catholic* counties: where the Catholic share of the county population is higher than the median U.S. share), while the variable *Catholic* is set to 1 if a respondent or his/her spouse is Catholic but lives in a county where the Catholic church is less prevalent among the local population. All models include county and year fixed effects. Robust standard errors clustered at the diocese level in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table B3: Main Results with Household and Year Fixed Effects

Panel A: Extensive Margin Outcomes

Dependent Var.	<i>Stocks</i> (1)-(4)				<i>Entry</i> (5)-(8)				<i>Exit</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic	-0.016 (0.013)	-0.041*** (0.014)			0.011 (0.015)	-0.013 (0.022)			0.006 (0.038)	0.014 (0.043)		
Treat_S × Catholic	0.005 (0.036)	0.074 (0.054)			0.026 (0.050)	0.073 (0.077)			-0.032 (0.098)	-0.054 (0.109)		
Treat_S × Post_S	-0.005 (0.008)	-0.007 (0.011)			-0.000 (0.010)	-0.004 (0.013)			-0.002 (0.036)	0.013 (0.042)		
Treat_S	-0.002 (0.016)	-0.038 (0.024)			-0.017 (0.017)	-0.026 (0.026)			0.002 (0.061)	0.012 (0.074)		
Treat_H × Post_H × Catholic			-0.022 (0.015)	-0.049*** (0.017)			0.016 (0.017)	-0.016 (0.027)			0.009 (0.046)	0.005 (0.055)
Treat_H × Catholic			0.022 (0.029)	0.102** (0.044)			0.010 (0.041)	0.127* (0.070)			0.070 (0.094)	0.019 (0.106)
Treat_H × Post_H			-0.001 (0.008)	-0.003 (0.011)			-0.011 (0.009)	-0.007 (0.013)			-0.038 (0.038)	-0.024 (0.042)
Treat_H			0.002 (0.015)	-0.013 (0.022)			0.005 (0.019)	0.007 (0.026)			-0.021 (0.060)	0.014 (0.068)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
low_risk		Yes		Yes		Yes		Yes		Yes		Yes
Observations	38,466	23,265	38,324	23,168	23,467	13,617	23,370	13,562	5,849	4,198	5,802	4,160
R-squared	0.645	0.634	0.645	0.634	0.419	0.408	0.420	0.411	0.465	0.474	0.467	0.475
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

Table B3: Main Results with Household and Year Fixed Effects—continued

## Panel B: Intensive Margin Outcomes

Dependent Var.	<i>EquityWealthRatio</i> (1)-(4)				<i>log_NetEquityPurchase</i> (5)-(8)				<i>log_NetEquitySale</i> (9)-(12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Treat_S × Post_S × Catholic	0.006 (0.004)	0.004 (0.005)			0.353*** (0.105)	0.451*** (0.153)			-0.113** (0.046)	-0.109* (0.062)		
Treat_S × Catholic	-0.028*** (0.010)	-0.024 (0.017)			-0.490** (0.219)	-0.353 (0.304)			-0.167 (0.124)	-0.132 (0.190)		
Treat_S × Post_S	-0.009** (0.004)	-0.008 (0.006)			-0.319** (0.127)	-0.383** (0.169)			0.136*** (0.052)	0.143** (0.072)		
Treat_S	0.025** (0.010)	0.021 (0.015)			0.446** (0.199)	0.391 (0.274)			0.092 (0.120)	0.111 (0.191)		
Treat_H × Post_H × Catholic			0.004 (0.004)	0.001 (0.006)			0.434*** (0.121)	0.552*** (0.184)			-0.092 (0.056)	-0.086 (0.081)
Treat_H × Catholic			-0.021** (0.011)	-0.034** (0.015)			-0.620*** (0.185)	-0.872*** (0.290)			0.104 (0.131)	0.296 (0.204)
Treat_H × Post_H			-0.004 (0.004)	-0.002 (0.006)			-0.293*** (0.112)	-0.382** (0.174)			0.067 (0.055)	0.100 (0.079)
Treat_H			0.014 (0.010)	0.023 (0.015)			0.335** (0.168)	0.642** (0.273)			-0.015 (0.126)	-0.192 (0.185)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
low_risk		Yes		Yes		Yes		Yes		Yes		Yes
Observations	35,806	22,244	35,679	22,155	34,349	20,833	36,233	21,975	34,517	20,949	36,406	22,097
R-squared	0.558	0.551	0.560	0.552	0.471	0.481	0.464	0.474	0.280	0.273	0.269	0.262
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE Cluster	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese	Diocese

**Note:** This table reports the results from tests using Equation 1 with fixed effects specification using the PSID survey data from 1999 to 2011. The unit of observation is household-survey-year. All specification include household and year fixed effects are opposed to county and year in the main analysis. Outcome variables for Panel A indicator variables and dependent variables for Panel B are continuous variables.  $N = \{S, H\}$  denotes the news-based measure used to identify the shock, *Scandal* and *High\_Scandal*, respectively.  $Treat\_N_k$  is equal to 1 if county  $k$  belongs to a treated diocese from the list in Table 1 for the respective measure, and zero otherwise.  $Post\_N_{k,t-1}$  is equal to 1 if the diocese's shock measure  $N$  is 1 in the year prior to survey interview year  $t$ . All specifications include year and county fixed effects. Even-numbered models include an indicator for low risk tolerance based on the 1996 PSID survey. See Data Appendix for variable definitions. Robust standard errors clustered at the diocese level in parentheses, \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .