

Churches and Local Economies

Zane Kashner
UC Berkeley

Max Pienkny
Northwestern

NBER Summer Institute – Urban Economics
July 31, 2026

Religion in the US and the SBC

Religion has long been a major social institution, but is declining sharply

- 70% of the US was part of a religious congregation in the 1990s; now 45%
[Gallup 2025]

Religious institutions are:

1. Integral to belief systems
2. Centers of social support, communal identity, and civic life

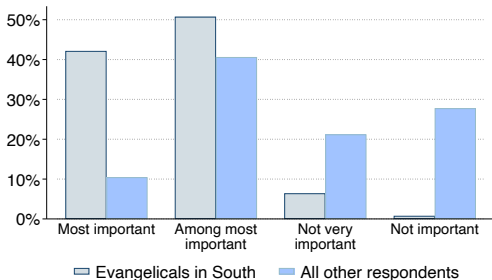
The Southern Baptist Convention is the nation's largest Protestant denomination

- 40,000+ congregations; membership peaked at 16 million in 2006
- Churches are fully autonomous and pastor-centered → no central hierarchy

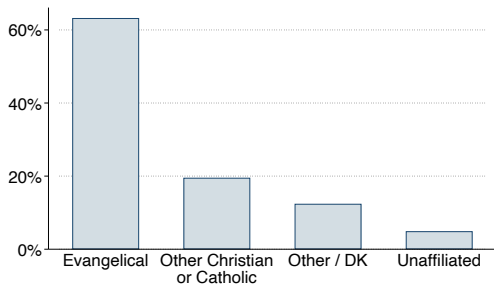
The SBC in American life

Over 40% of SBC adherents say religion is the most important part of their lives

- Social networks are **very segregated** by religion



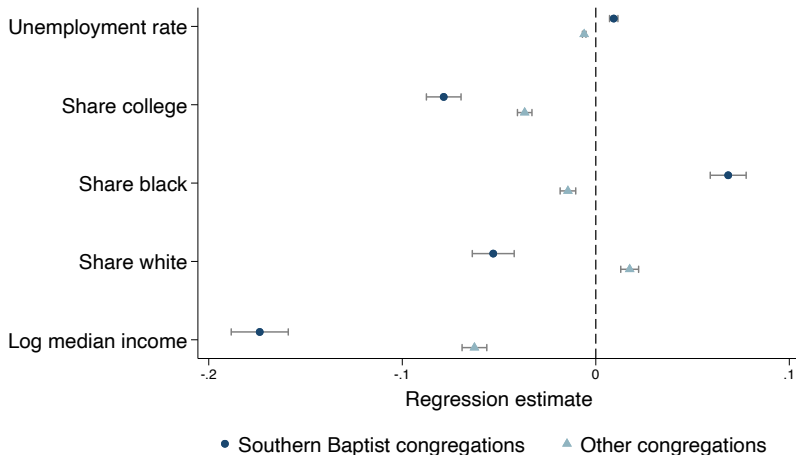
(a) Religious importance



(b) Friend composition

Religion is highly valued but negatively selected

SBC presence: **negative selection** on economic characteristics



⇒ Cross-sectional comparisons are confounded

Research questions

What is lost when local religious institutions weaken?

Research questions

What is lost when local religious institutions weaken?

Exploit local “religion shocks” in the SBC to ask:

1. How does congregational access affect local labor markets & social activity?

Research questions

What is lost when local religious institutions weaken?

Exploit local “religion shocks” in the SBC to ask:

1. How does congregational access affect local labor markets & social activity?
2. How does religious **credibility** affect those outcomes & health/politics?

Research questions

What is lost when local religious institutions weaken?

Exploit local “religion shocks” in the SBC to ask:

1. How does congregational access affect local labor markets & social activity?
2. How does religious **credibility** affect those outcomes & health/politics?
3. How do households value congregational access?

What is a local religious shock?

1. Pastor deaths

- Pastor loss is not offset by a central church hierarchy
- Pastor deaths generate local leadership/capacity shocks
- Deaths lead to church closures → reduced church access

What is a local religious shock?

1. Pastor deaths

- Pastor loss is not offset by a central church hierarchy
- Pastor deaths generate local leadership/capacity shocks
- Deaths lead to church closures → reduced church access

2. Pastor convictions for sexual abuse (*Houston Chronicle* exposé)

- Baptist attendance falls sharply after a local pastor conviction
- A shock to *religious credibility and norms*, not only access

What is a local religious shock?

1. Pastor deaths

- Pastor loss is not offset by a central church hierarchy
- Pastor deaths generate local leadership/capacity shocks
- Deaths lead to church closures → reduced church access

2. Pastor convictions for sexual abuse (*Houston Chronicle* exposé)

- Baptist attendance falls sharply after a local pastor conviction
- A shock to *religious credibility and norms*, not only access

Deaths isolate access. Convictions also affect credibility/norms

⇒ Useful for separating channels

Preview of results

After a pastor death:

- **First stage:** churches close → persistent effects
- **Economic:** LFP ↓, unemployment ↑; social activity ↓; home prices ↓
- **Norm-sensitive (health/voting):** no change

Preview of results

After a pastor death:

- **First stage:** churches close → persistent effects
- **Economic:** LFP ↓, unemployment ↑; social activity ↓; home prices ↓
- **Norm-sensitive (health/voting):** no change

After a pastor conviction:

- **Economic:** Similar unemployment ↑; larger LFP ↓, home prices ↓
- **Norm-sensitive:** Democratic vote share ↑ 0.7pp; opioid mortality ↑ 22%

Preview of results

After a pastor death:

- **First stage:** churches close $\rightarrow$ persistent effects
- **Economic:** LFP $\downarrow$, unemployment $\uparrow$; social activity $\downarrow$; home prices $\downarrow$
- **Norm-sensitive (health/voting):** no change

After a pastor conviction:

- **Economic:** Similar unemployment $\uparrow$; larger LFP $\downarrow$, home prices $\downarrow$
- **Norm-sensitive:** Democratic vote share $\uparrow$ 0.7pp; opioid mortality $\uparrow$ 22%

Hedonic demand: WTP $\approx$ \$3,235 to be 1 mile closer to a church

Framework: the functions of a local church

Networks

Referrals, information,
repeated contact, and
social support

⇒ employment and social
activity

Norms / credibility

Belief and moral authority
reinforce church-supported
behavior

⇒ politics, health, labor
force attachment

- **Pastor deaths:** primarily reduce access to networks and the local amenity
- **Pastor convictions:** reduce attendance and can additionally weaken credibility and norms

Framework: the functions of a local church

Networks

Referrals, information,
repeated contact, and
social support

⇒ employment and social
activity

Amenity

Valued access to worship,
community, and
congregational life

⇐ combines both ⇒
⇒ home prices

Norms / credibility

Belief and moral authority
reinforce church-supported
behavior

⇒ politics, health, labor
force attachment

- **Pastor deaths:** primarily reduce access to networks and the local amenity
- **Pastor convictions:** reduce attendance and can additionally weaken credibility and norms

Estimating the effects of local religious shocks

Data

- Deaths: scan & OCR the universe of SBC pastors, 1970–2008
 - Follow pastors listed in 1970 through Social Security death records
- Convictions: 125 SBC pastor sex-crime convictions (*Houston Chronicle*)

Matched-controls event study (5 most similar within-state untreated units):

$$Y_{ut} = \delta_u + \gamma_t + \sum_{k \neq -1} \beta_k (Shock_u \times \mathbf{1}\{t - T_u = k\}) + \lambda \mathbf{X}_{ut} + \varepsilon_{ut}$$

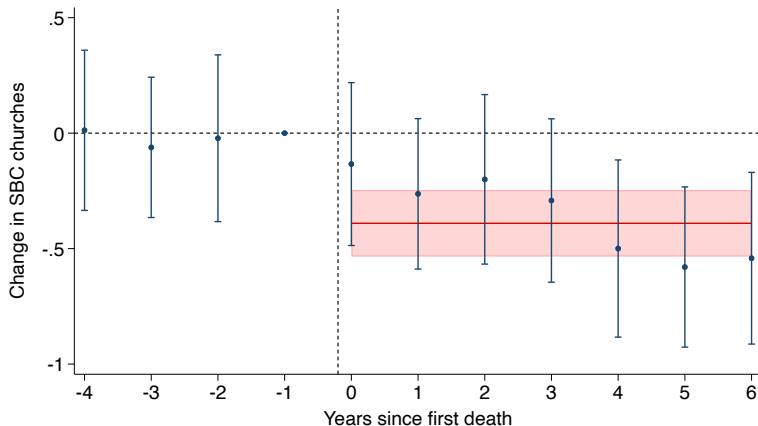
Estimate event-study design separately for pastor **deaths** and pastor **convictions**

Match on pre-shock religion, race, education, and population density

⇒ Identification from *timing + location* of shocks vs. similar untreated areas

Churches close when pastors die

About one closure per three deaths overall; larger for active pastors



Robust to alternative non-binary estimators [de Chaisemartin & D'Haultfoeulle, 2024]

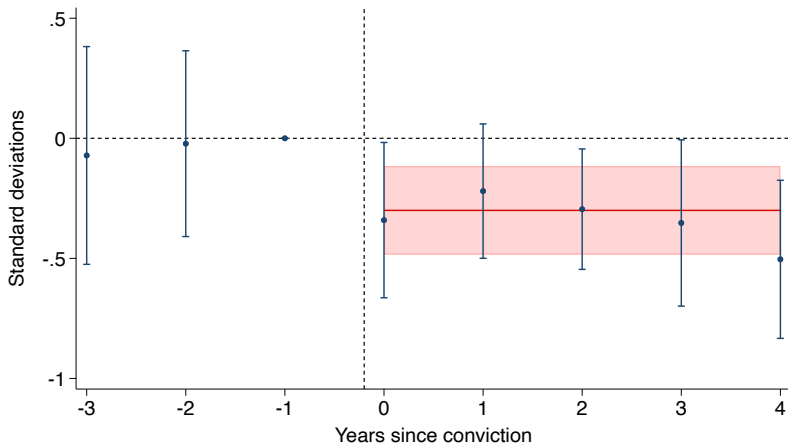
▸ CD estimator

▸ active pastors

▸ cumulative dead

Baptists stop attending church after convictions

20pp decline in Baptist attendance; no effect for non-Baptists



▶ non-Baptists

▶ non-religious share

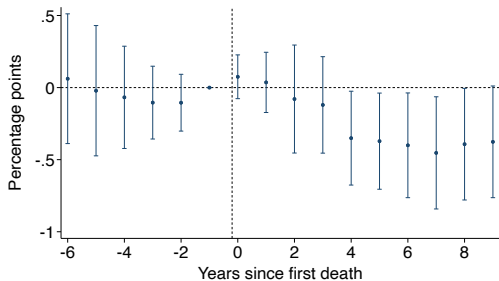
▶ other measures

▶ non-pastor effects

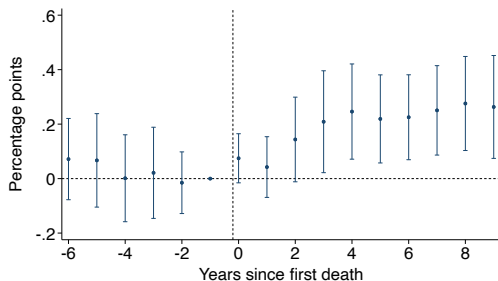
▶ conviction timing

Pastor deaths weaken local labor markets

LFP $\downarrow$ 0.3pp, unemployment $\uparrow$ 0.2pp after pastor deaths



(a) Labor force participation (deaths)



(b) Unemployment (deaths)

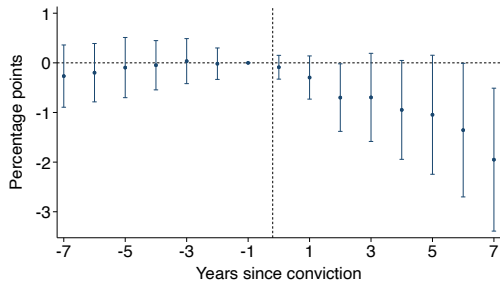
Consistent with loss of congregation-mediated information and weak-tie referrals

► non-church employment

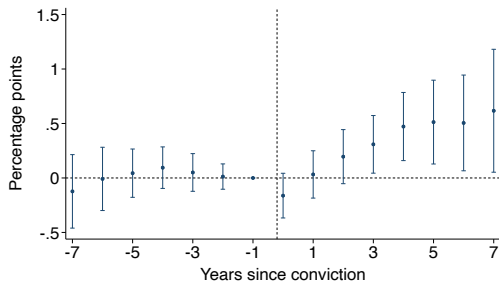
► social activity

Convictions produce larger labor-force exits

Same unemployment effect as deaths, but double the LFP decline



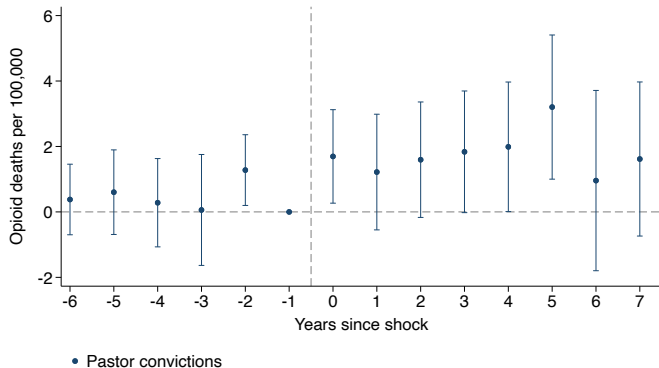
(a) Labor force participation



(b) Unemployment

⇒ Larger LFP response consistent with norm-related participation channel

Pastor convictions increase opioid mortality; pastor deaths do not



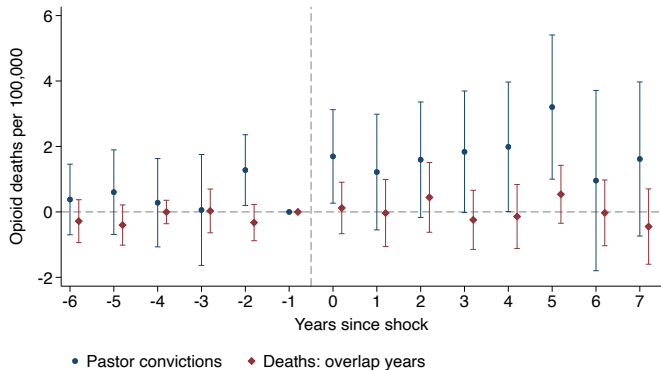
- Opioid mortality $\uparrow$ 1.3 deaths per 100k, 22% of pre-period mean
- Overdose mortality $\uparrow$ 11%
- **All-cause mortality:** no change $\rightarrow$ not a broad mortality trend

Opioid mortality

▸ all-cause mortality

▸ opioids raw trends

Pastor convictions increase opioid mortality; pastor deaths do not



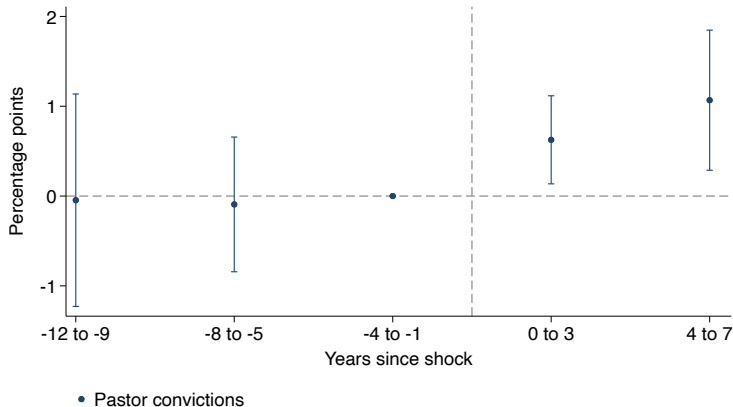
- Opioid mortality $\uparrow$ 1.3 deaths per 100k, 22% of pre-period mean
- Overdose mortality $\uparrow$ 11%
- **All-cause mortality:** no change $\rightarrow$ not a broad mortality trend
- No effect with pastor deaths

Opioid mortality

▸ all-cause mortality

▸ opioids raw trends

Pastor convictions shift Democratic vote share; pastor deaths do not

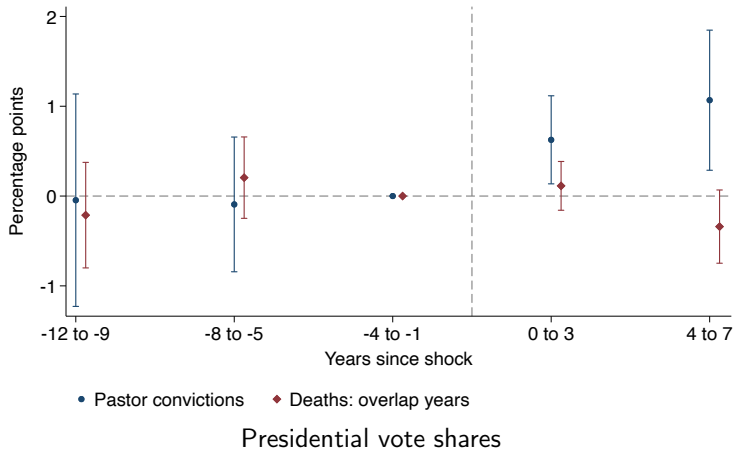


Presidential vote shares

No turnout effect → consistent with persuasion, not mobilization [▶ turnout](#) [▶ senate](#)

⇒ Consistent with credibility loss weakening norm-driven behavior

Pastor convictions shift Democratic vote share; pastor deaths do not



No turnout effect → consistent with persuasion, not mobilization [▶ turnout](#) [▶ senate](#)

⇒ Consistent with credibility loss weakening norm-driven behavior

Hedonic approach to valuing church access

Idea: home prices capitalize the value of church proximity [Rosen 1974; Greenstone & Gallagher 2008]

Data: $\sim 7.5\text{M}$ home transactions + exact SBC church locations over time

Estimate: $\log(P_{jt}) = \theta(\delta_{jt}) + \text{controls} + \text{FEs}$, δ_{jt} = distance to nearest church

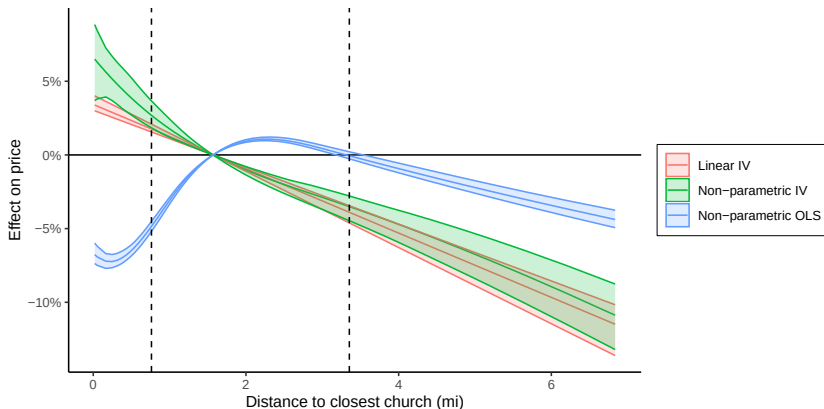
Problem: church distance is not randomly assigned

Solution: instrument δ_{jt} with death timing $\times$ pre-period distance (NPIV)

Controlling flexibly for pre-period distance [Borusyak & Hull 2023]

Hedonic approach to valuing church access

Idea: home prices capitalize the value of church proximity [Rosen 1974; Greenstone & Gallagher 2008]



↑ distance to nearest church → ↓ home values

► NPIV details

Translating price effects into preferences

Household i chooses a home to maximize indirect utility [Rosen 1974; Bajari & Benkard 2005]

$$u_i(j) = v_i(X_j) - \beta_i \delta_j - P_j$$

1. No idiosyncratic taste for particular homes $\Rightarrow$ prices are a **smooth function** p
2. Dense options $\Rightarrow \approx$ **continuous choice** of church distance δ

$\Rightarrow$ Household FOC identifies each household's willingness to pay for proximity:

$$\hat{\beta}_i = - \left. \frac{\partial p(X_j)}{\partial \delta} \right|_{j=J_i} = -P_{J_i} \hat{\theta}'(\delta_{J_i})$$

Average willingness to pay $\approx$ **\$3,235** to live 1 mile closer

Homes within 7.33 miles of an SBC church

What can we learn from the two shocks?

Outcome	Pastor deaths	Pastor convictions
Church access/attendance	↓	↓
Labor force participation	↓	↓↓
Unemployment	↑	↑
Democratic vote share	No change	↑
Opioid mortality	No change	↑
Nearby home prices	↓	↓

⇒ Shared effects = access / networks; divergent effects = credibility / norms

Contributions

- New causal estimates of shocks to **local religious institutions** on labor markets, health, politics, and housing
- A **two-shock design** that helps distinguish congregational *access* from institutional *credibility*
- Revealed-preference evidence on the **amenity value** of church proximity:
 $WTP \approx \$3,235/\text{mile}$

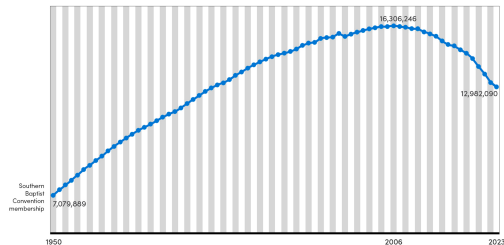
Thank you!

mpienkny@u.northwestern.edu

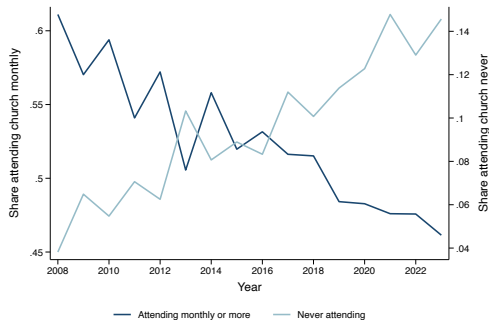
Appendix

SBC church trends

Membership ↓ 20% since 2006 → over 3 million people

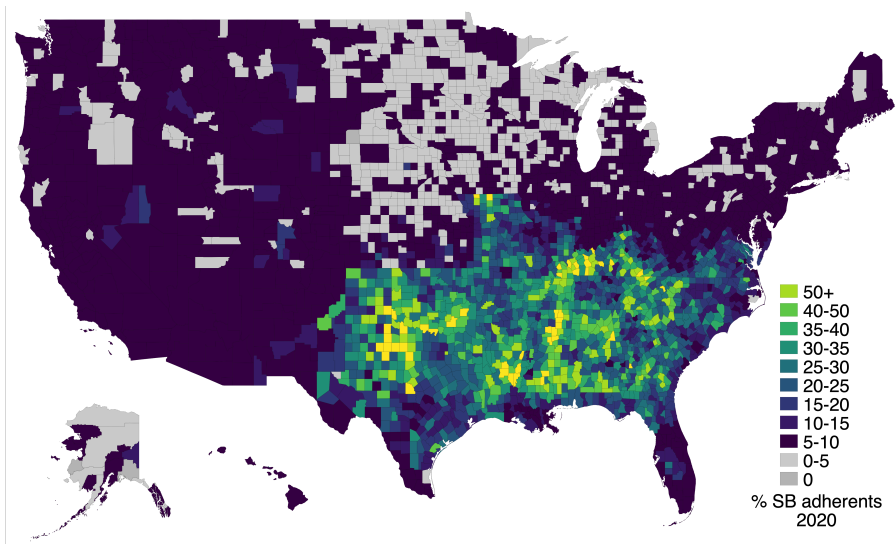


(a) Membership (Lifeway)

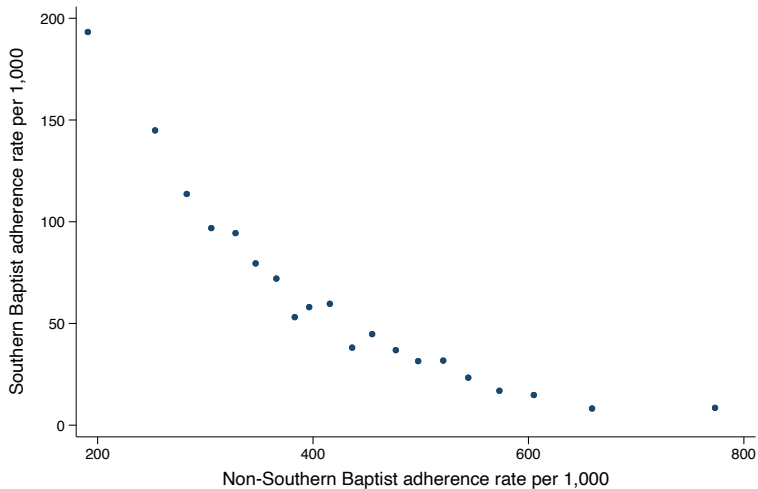


(b) Attendance (CCES)

Where is the SBC present?

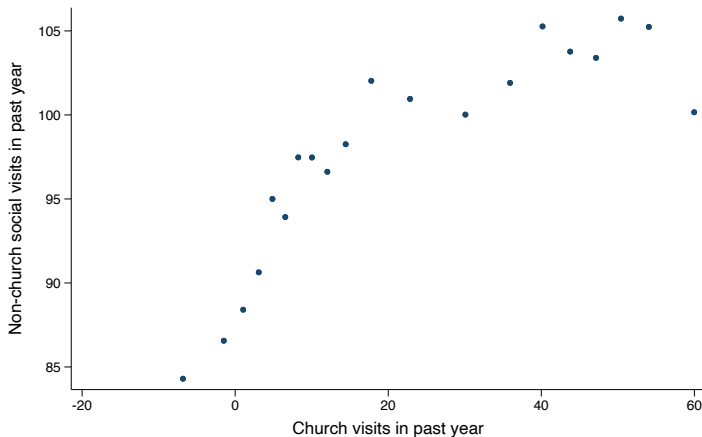


Few competing churches



Church attendance and social activity

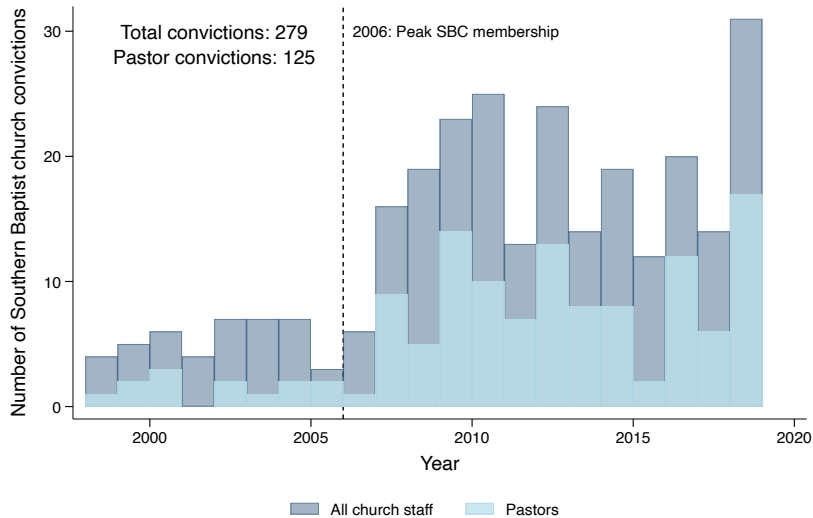
↑ church visits associated with ↑ non-church social activity



Beta: 0.261, t-stat: 18.828.

Specification: county, state X year, and demographic X year FEs

Timing of convictions



Formal framework: networks, amenities, and norms

Individuals have church attendance intensity $a \in [0, 1]$ and choose:

$$l \in \{0, 1\} \quad \text{and} \quad y \in [0, 1],$$

where l is labor-force participation and y indexes deviation from church-supported behavior

Church networks raise the job-finding rate:

$$m(a) = m_0 + \beta a, \quad \mu(a) = \frac{\sigma}{\sigma + m_0 + \beta a},$$

where $\mu(a)$ is steady-state unemployment

► utility

► back

Formal framework: networks, amenities, and norms

Per-period utility is:

$$U_i(y, l) = \begin{cases} [(1 - \mu(a))w + \mu(a)b] + \alpha a + \lambda y - \frac{1}{2}\phi y^2, & l = 1, \\ R_i + \alpha a + \lambda y - \frac{1}{2}\phi(y + \rho)^2, & l = 0. \end{cases}$$

- αa : direct value of congregational participation
- ϕ : strength of belief and the cost of deviating from church norms
- $\rho > 0$: additional deviation associated with labor-force nonparticipation

The optimal behavioral choice is:

$$y^*(l) = \frac{\lambda}{\phi} - \rho(1 - l)$$

Formal framework: comparative predictions

The model therefore implies:

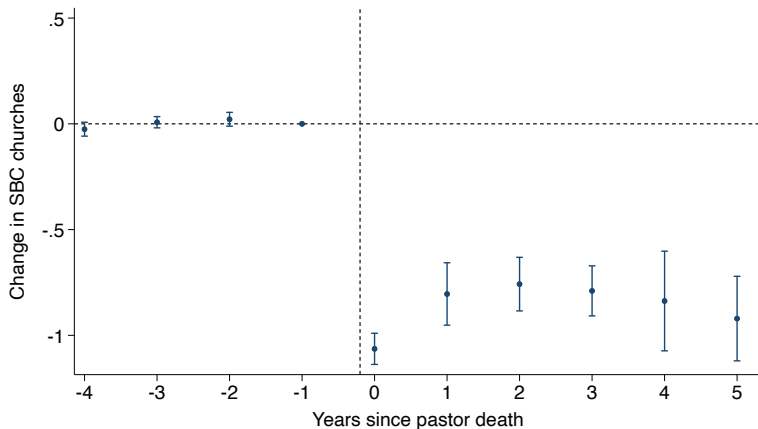
$$\frac{\partial \mu}{\partial a} < 0, \quad \frac{\partial l}{\partial a} > 0, \quad \frac{\partial y^*}{\partial \phi} < 0, \quad \frac{\partial l}{\partial \phi} > 0$$

Shock	Model change	Labor markets	Other outcomes
Pastor death	$a \downarrow$	Unemployment $\uparrow$; LFP $\downarrow$	Amenity value and home prices $\downarrow$
Pastor conviction	$a \downarrow$ and $\phi \downarrow$	Unemployment $\uparrow$ through a ; additional LFP $\downarrow$ through ϕ	Greater norm deviation; price effect theoretically ambiguous

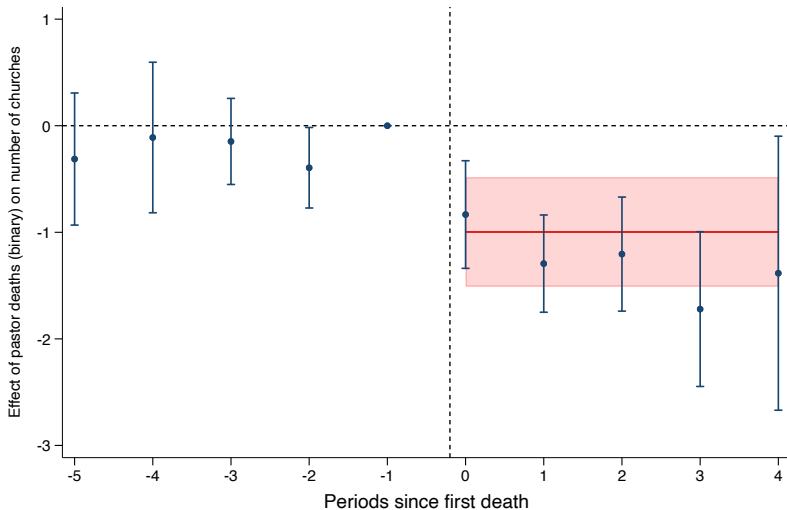
Shared effects reflect attendance and networks; divergent effects reflect an additional belief and norms channel

Pastor deaths: non-binary treatment

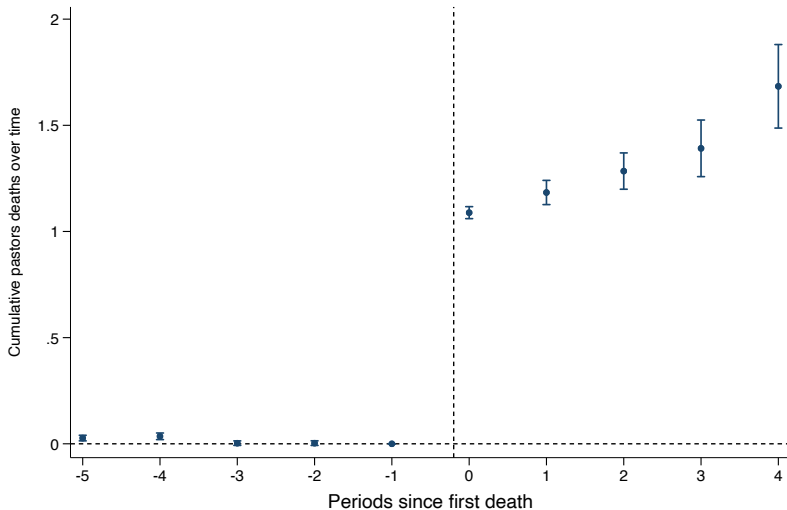
$$Y_{zt} = \gamma_t + \delta_z + \sum_{k \neq -1} \beta_k \left[\log \left(\frac{PastorDead_{zt} + 0.1}{Matched_z + 0.1} \right) \times \mathbf{1}\{t - T_{zt} = k\} \right] + \varepsilon_{zt}$$



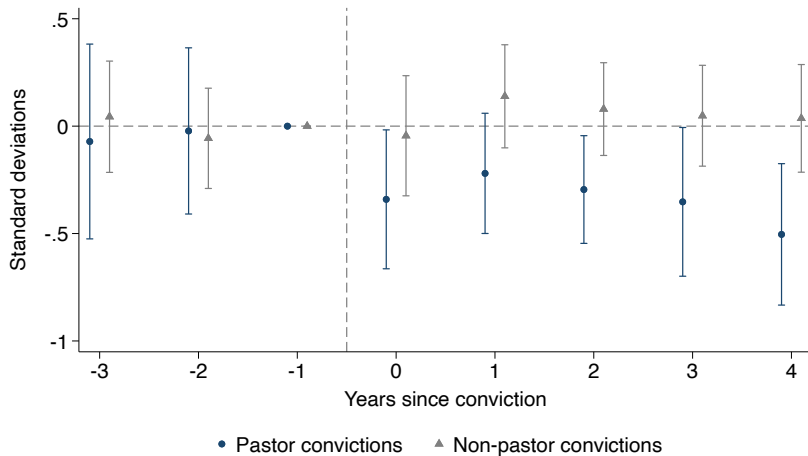
First stage on active pastors



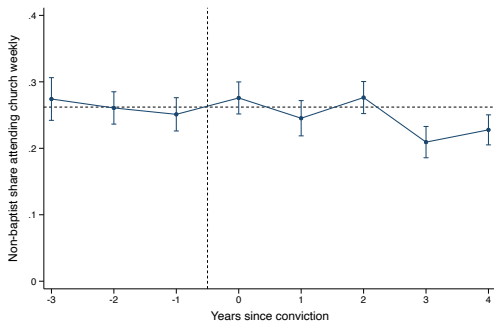
Cumulative deaths following first death



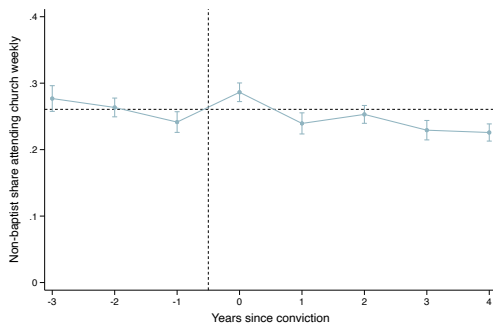
Attendance effect is only for pastor convictions



Other denominations not affected

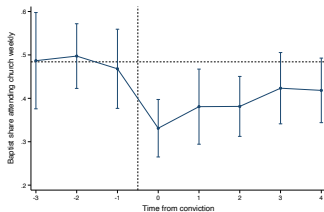


(a) Treatment (Non-Baptist)

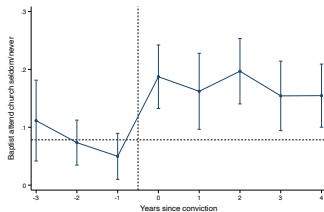


(b) Control (Non-Baptist)

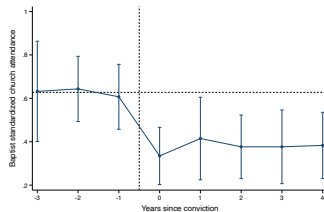
Various measures of church attendance



(a) Attend weekly



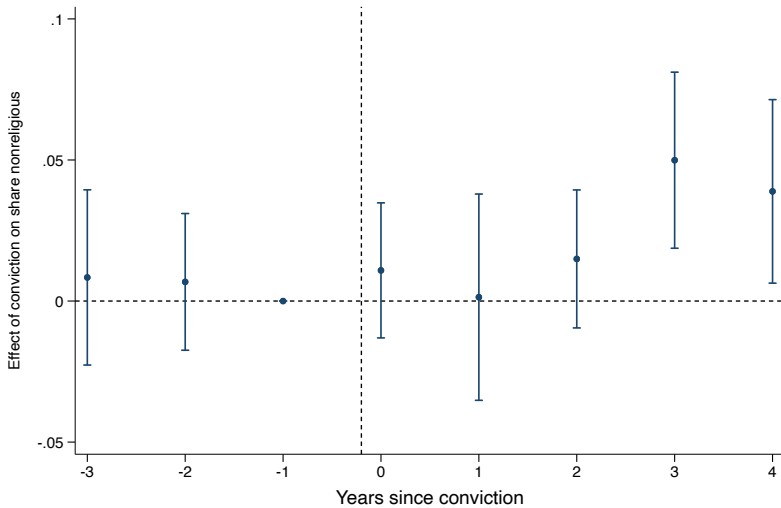
(b) Attend seldom/never



(c) Std. attend

► back

Delayed increase in non-religious share



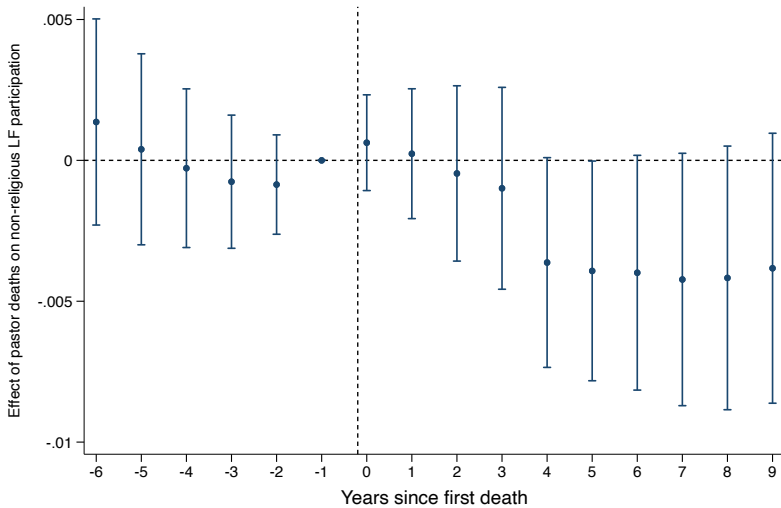
Pastor deaths: social activity

Table 1: Effect of pastor death on social activities

Dependent Variables:	Church visits (1)	Social visits (2)	Bowling visits (3)
$\log\left(\frac{\text{PastorDead}_{zt}+0.1}{\text{Matched}_z+0.1}\right)$	-0.031** (0.014)	-0.014** (0.006)	-0.173*** (0.067)
County / State×Yr / demog.×Yr FE	X	X	X
Observations	20,650	17,768	19,678
Pseudo R ²	0.12	0.05	0.14

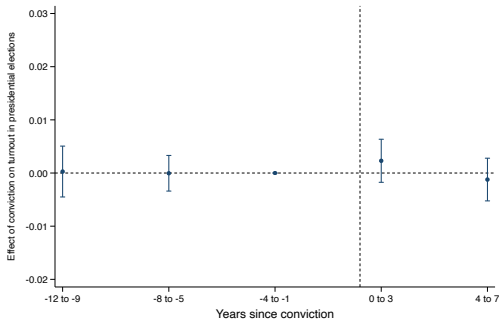
Signif.: ***: 0.01, **: 0.05, *: 0.1

Non-church employment effects

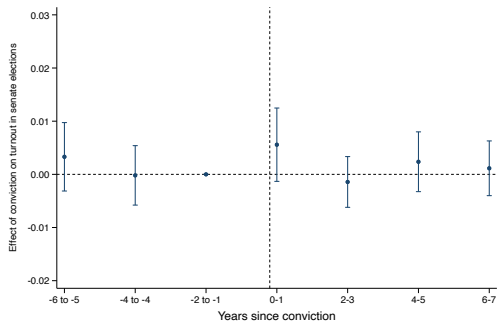


Driven by persuasion, not mobilization

No effects on turnout

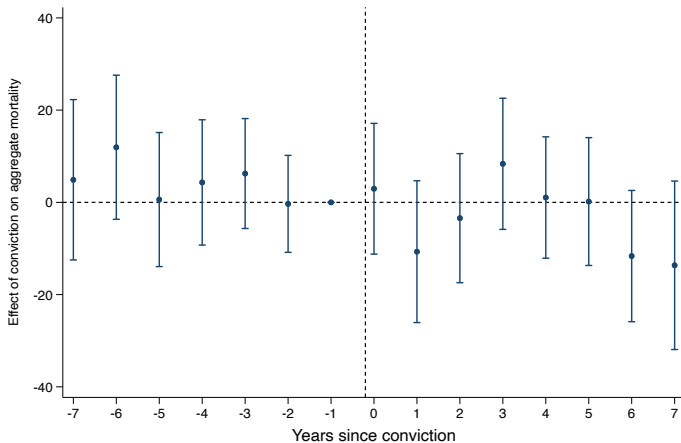


(a) Presidential turnout

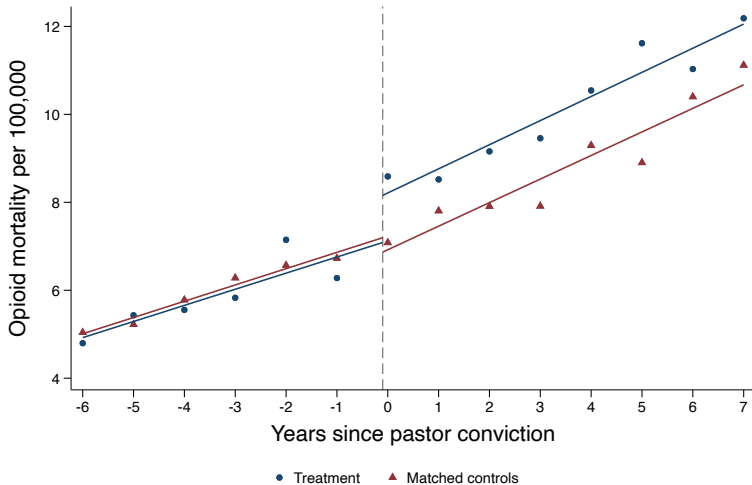


(b) Senate turnout

No aggregate (all-cause) health effects

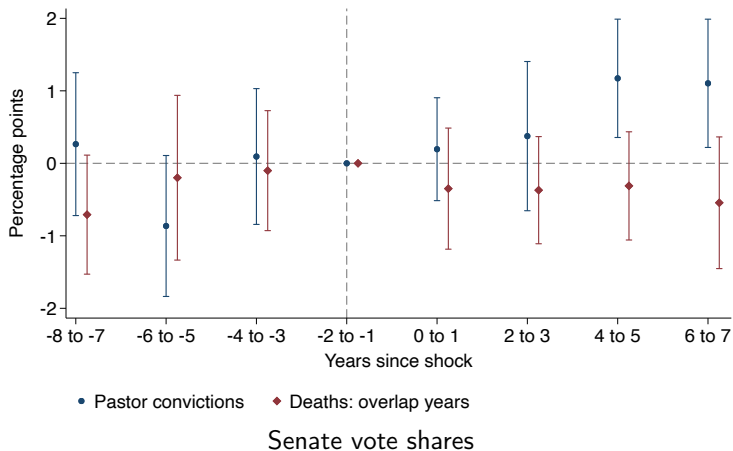


Raw opioid-mortality trends around pastor convictions

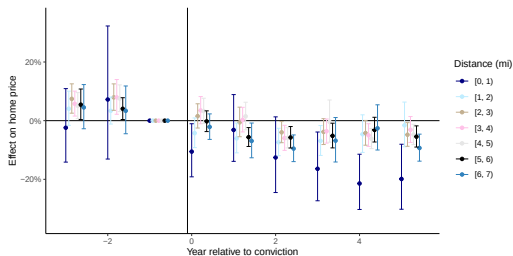


Opioid mortality raw trends

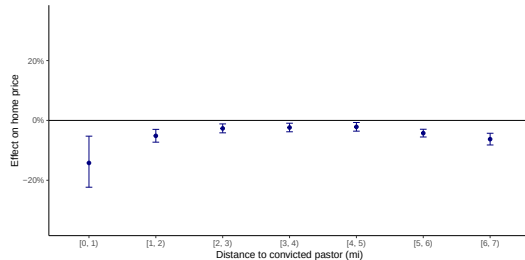
Pastor convictions shift Democratic vote share; pastor deaths do not



Convictions lower nearby home prices



(a) Event studies

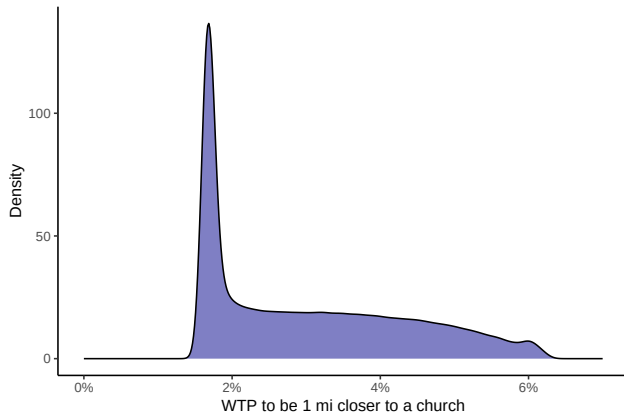


(b) Pooled DiD

Larger than the $\sim 4\%$ nearby sex-offender benchmark [Linden & Rockoff, 2008]

Valuing church proximity

Exact church locations + nonparametric IV (death-timing $\times$ pre-period distance)
on 7.5M home transactions $\rightarrow$ hedonic WTP



Average WTP $\approx$ \$3,235 to be 1 mile closer

Hedonic: NPIV and prices-to-preferences

$$\log(P_{jt}) = \theta(\delta_{jt}) + \phi(\delta_{j,1994}) + \beta X_j + \gamma_{c(j)t} + \zeta_{n(j)} + \varepsilon_{jt}$$

Instrument δ_{jt} with pre-period distance $\times$ death timing; recover $\hat{\theta}(\delta)$ by NPIV [Chen–Christensen, 2018]. With a smooth price function [Bajari–Benkard, 2005], the household FOC identifies willingness to pay for proximity:

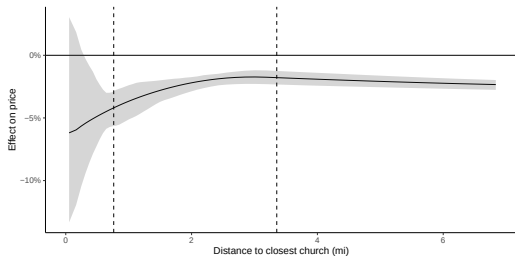
$$\hat{\beta}_i = - \left. \frac{\partial p(X_j)}{\partial \delta} \right|_{j=J_i} = -\hat{P}_{J_i} \hat{\theta}'(\delta_{J_i})$$

► back

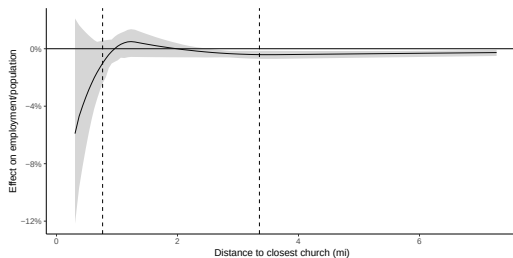
Relative slopes of church value effects

Split proximity value into *employment* $e(\delta_j)$ and *residual amenity* δ_j^r :

$$-\beta_i \delta_j = -\alpha_i \delta_j^r + \gamma_i e(\delta_j), \quad (\alpha_i, \gamma_i) \sim \mathcal{N}(\mu, \Sigma).$$



(a) Home-price slope



(b) Employment slope