

# Impacts of Legal Protections for Religious Activity: Evidence from Randomly Assigned Judges

Elliott Ash and Daniel L. Chen

ILEA  
March 13, 2017

# Motivating Question

- Countries with state religion have lower levels of religiosity (Chaves and Cann 1992; Finke and Stark 1992; Iannaccone 1998; North and Gwin 2004).
  - 96% of Americans believe in God (Marshall 2002)
  - 51% of EU citizens believe in God (79% in Poland, 18% in Sweden) (Eurobarometer polls)
- Why are Americans more religious than Europeans?
  - An influential idea from economics is that a state-established church can be understood as a state-sanctioned monopoly that impedes a market for religious ideas (Barro and McCleary 2005).
  - On the other hand, state endorsement of a religion might be a subsidy, which would increase consumption of religious services (McConnell and Posner, 1989).
- While there are many studies on these questions (see Cosgel, Hwang, Kao, and Miceli, 2017), there are no studies using random variation in church-state laws.

# Motivating Question

- Countries with state religion have lower levels of religiosity (Chaves and Cann 1992; Finke and Stark 1992; Iannaccone 1998; North and Gwin 2004).
  - 96% of Americans believe in God (Marshall 2002)
  - 51% of EU citizens believe in God (79% in Poland, 18% in Sweden) (Eurobarometer polls)
- Why are Americans more religious than Europeans?
  - An influential idea from economics is that a state-established church can be understood as a state-sanctioned monopoly that impedes a market for religious ideas (Barro and McCleary 2005).
  - On the other hand, state endorsement of a religion might be a subsidy, which would increase consumption of religious services (McConnell and Posner, 1989).
- While there are many studies on these questions (see Cosgel, Hwang, Kao, and Miceli, 2017), there are no studies using random variation in church-state laws.

# Motivating Question

- Countries with state religion have lower levels of religiosity (Chaves and Cann 1992; Finke and Stark 1992; Iannaccone 1998; North and Gwin 2004).
  - 96% of Americans believe in God (Marshall 2002)
  - 51% of EU citizens believe in God (79% in Poland, 18% in Sweden) (Eurobarometer polls)
- Why are Americans more religious than Europeans?
  - An influential idea from economics is that a state-established church can be understood as a state-sanctioned monopoly that impedes a market for religious ideas (Barro and McCleary 2005).
  - On the other hand, state endorsement of a religion might be a subsidy, which would increase consumption of religious services (McConnell and Posner, 1989).
- While there are many studies on these questions (see Cosgel, Hwang, Kao, and Miceli, 2017), there are no studies using random variation in church-state laws.

# This Paper's Approach

- Basic setup:
  - Outcomes: “religiosity”: supply and demand for religious services.
  - Treatment: proportion of religious freedom cases decided for claimant (against government).
- Regressing religiosity outcomes on the proportion of decisions for claimants, even with fixed effects and controls, may be biased by other unobserved factors affecting both the outcome and the treatment.
- We obtain exogenous variation in religion jurisprudence using the random assignment of judges to U.S. Circuit Court decisions:
  - Judges affiliated with the Democratic party and minority religions (e.g. Judaism) tend to favor stronger protections of religious freedoms.
  - In circuits where a relatively high proportion of these types of judges were assigned to religion cases, the courts issued rulings ensuring relatively stronger protections for religious freedoms.
  - Due to random assignment, the stronger legal protections for religion are orthogonal to other factors that may be associated with religious activity.

# This Paper's Approach

- Basic setup:
  - Outcomes: “religiosity”: supply and demand for religious services.
  - Treatment: proportion of religious freedom cases decided for claimant (against government).
- Regressing religiosity outcomes on the proportion of decisions for claimants, even with fixed effects and controls, may be biased by other unobserved factors affecting both the outcome and the treatment.
- We obtain exogenous variation in religion jurisprudence using the random assignment of judges to U.S. Circuit Court decisions:
  - Judges affiliated with the Democratic party and minority religions (e.g. Judaism) tend to favor stronger protections of religious freedoms.
  - In circuits where a relatively high proportion of these types of judges were assigned to religion cases, the courts issued rulings ensuring relatively stronger protections for religious freedoms.
  - Due to random assignment, the stronger legal protections for religion are orthogonal to other factors that may be associated with religious activity.

# This Paper's Approach

- Basic setup:
  - Outcomes: “religiosity”: supply and demand for religious services.
  - Treatment: proportion of religious freedom cases decided for claimant (against government).
- Regressing religiosity outcomes on the proportion of decisions for claimants, even with fixed effects and controls, may be biased by other unobserved factors affecting both the outcome and the treatment.
- We obtain exogenous variation in religion jurisprudence using the random assignment of judges to U.S. Circuit Court decisions:
  - Judges affiliated with the Democratic party and minority religions (e.g. Judaism) tend to favor stronger protections of religious freedoms.
  - In circuits where a relatively high proportion of these types of judges were assigned to religion cases, the courts issued rulings ensuring relatively stronger protections for religious freedoms.
  - Due to random assignment, the stronger legal protections for religion are orthogonal to other factors that may be associated with religious activity.

# This Paper's Approach

- Basic setup:
  - Outcomes: “religiosity”: supply and demand for religious services.
  - Treatment: proportion of religious freedom cases decided for claimant (against government).
- Regressing religiosity outcomes on the proportion of decisions for claimants, even with fixed effects and controls, may be biased by other unobserved factors affecting both the outcome and the treatment.
- We obtain exogenous variation in religion jurisprudence using the random assignment of judges to U.S. Circuit Court decisions:
  - Judges affiliated with the Democratic party and minority religions (e.g. Judaism) tend to favor stronger protections of religious freedoms.
  - In circuits where a relatively high proportion of these types of judges were assigned to religion cases, the courts issued rulings ensuring relatively stronger protections for religious freedoms.
  - Due to random assignment, the stronger legal protections for religion are orthogonal to other factors that may be associated with religious activity.

# This Paper's Approach

- Basic setup:
  - Outcomes: “religiosity”: supply and demand for religious services.
  - Treatment: proportion of religious freedom cases decided for claimant (against government).
- Regressing religiosity outcomes on the proportion of decisions for claimants, even with fixed effects and controls, may be biased by other unobserved factors affecting both the outcome and the treatment.
- We obtain exogenous variation in religion jurisprudence using the random assignment of judges to U.S. Circuit Court decisions:
  - Judges affiliated with the Democratic party and minority religions (e.g. Judaism) tend to favor stronger protections of religious freedoms.
  - In circuits where a relatively high proportion of these types of judges were assigned to religion cases, the courts issued rulings ensuring relatively stronger protections for religious freedoms.
  - Due to random assignment, the stronger legal protections for religion are orthogonal to other factors that may be associated with religious activity.

- 1 Setting and Data
- 2 Empirical Strategy
- 3 Results
  - Establishment Clause
  - Free Exercise Clause
- 4 Conclusion

# U.S. Circuit Courts of Appeal

- Three layers in the U.S. Federal Court system:
  - Local level (District Court)
  - **Intermediate level (Circuit Court)**
  - National level (Supreme Court).
- Circuit Courts:
  - 11 regional Circuits, 3-9 states each – rulings binding only on those states.
  - Adjudicate disputes at common law, constitutional law, and interpretation of federal statutes.
  - Mandatory review. Vast majority (98%) of decisions are final.
  - U.S. Circuit Judges are appointed by President, confirmed by Senate, and have life tenure
  - Each case is **randomly assigned** to a panel of three judges, drawn from a pool of 8-40 judges.

# Religion Caselaw Data

- Our data on religion caselaw is from Heise and Sisk (2004, 2012):
  - All circuit cases making substantive decisions about freedom of religion, 1986-2005.
  - Includes whether claimant prevailed against the government, and religion of the claimant.
- Our treatment variable for “protection of religious freedom” is the proportion of cases finding in favor of the claimant against the government.
- **Establishment Clause** cases deal with whether government is favoring a particular religion (an “established” religion), such as whether public school teachers can lead a Christian prayer in the classroom.
- **Free Exercise Clause** cases deal with freedom of religious expression and protection of fringe religions – for example, the freedom for Native American religions to use peyote even though peyote is otherwise banned as an illegal drug.

# Religion Caselaw Data

- Our data on religion caselaw is from Heise and Sisk (2004, 2012):
  - All circuit cases making substantive decisions about freedom of religion, 1986-2005.
  - Includes whether claimant prevailed against the government, and religion of the claimant.
- Our treatment variable for “protection of religious freedom” is the proportion of cases finding in favor of the claimant against the government.
- **Establishment Clause** cases deal with whether government is favoring a particular religion (an “established” religion), such as whether public school teachers can lead a Christian prayer in the classroom.
- **Free Exercise Clause** cases deal with freedom of religious expression and protection of fringe religions – for example, the freedom for Native American religions to use peyote even though peyote is otherwise banned as an illegal drug.

# Religion Caselaw Data

- Our data on religion caselaw is from Heise and Sisk (2004, 2012):
  - All circuit cases making substantive decisions about freedom of religion, 1986-2005.
  - Includes whether claimant prevailed against the government, and religion of the claimant.
- Our treatment variable for “protection of religious freedom” is the proportion of cases finding in favor of the claimant against the government.
- **Establishment Clause** cases deal with whether government is favoring a particular religion (an “established” religion), such as whether public school teachers can lead a Christian prayer in the classroom.
- **Free Exercise Clause** cases deal with freedom of religious expression and protection of fringe religions – for example, the freedom for Native American religions to use peyote even though peyote is otherwise banned as an illegal drug.

# Judge Biographical Characteristics

- Data on judge biographical characteristics comes from Appeals Court Attribute Data, Federal Judicial Center, and own data collection (Chen and Yeh 2013):

<u>Variable</u>	<u>Mean Prob.</u>
Female	0.1485
Black	0.0655
Non-white	0.1057
Protestant	0.387
Catholic	0.28070
Evangelical	0.088
Jewish	0.13681
Secular	0.0303

- Also: political party of appointing president, education, previous government experience, birth cohort, etc.

# Religious Activity Outcomes

- Supply for religious services:
  - County Business Patterns Census: Religious organizations (SIC code 8660 and NAICS code 81311) by state for 1962-2014.
    - number of buildings
    - number of employees
    - total payroll
  - Normalize by dividing by the total for all private-sector businesses.
- Demand for religious services:
  - General Social Survey microdata with state identifiers, 1972-2004:
    - e.g. Any Religion, Very Religious, Attend Weekly
  - Also include demographic covariates as controls.

# Religious Activity Outcomes

- Supply for religious services:
  - County Business Patterns Census: Religious organizations (SIC code 8660 and NAICS code 81311) by state for 1962-2014.
    - number of buildings
    - number of employees
    - total payroll
  - Normalize by dividing by the total for all private-sector businesses.
- Demand for religious services:
  - General Social Survey microdata with state identifiers, 1972-2004:
    - e.g. Any Religion, Very Religious, Attend Weekly
  - Also include demographic covariates as controls.

1 Setting and Data

2 Empirical Strategy

3 Results

- Establishment Clause
- Free Exercise Clause

4 Conclusion

## Second-stage estimating equation

$$Y_{ict} = \alpha_{ict} + \rho Law_{ct} + \beta_1 X_{ict} + \beta_2 W_{ct} + \varepsilon_{ict}$$

- $Y_{ict}$ , outcome measure for individual/state  $i$  in circuit  $c$  at year  $t$  (e.g. church attendance).
- $Law_{ct}$ , measure of pro-religious-protection decisions:
  - Average of pro-religion decisions (+1), anti-religion decisions (-1), and no decision (0) in circuit  $c$  at time  $t$ .
  - $\rho$ , main coefficient of interest.
  - Assumes that effects of pro-liberty and anti-liberty decisions are opposite in sign but equal in absolute value relative to the baseline of no case.
- $\alpha_{ict}$  state/time fixed effects and state trends.
- $X_{ict}$  state characteristics (e.g. GDP) or individual characteristics (e.g. gender).
- $W_{ct}$ , characteristics of the pool of judges available to be assigned.

## Second-stage estimating equation

$$Y_{ict} = \alpha_{ict} + \rho Law_{ct} + \beta_1 X_{ict} + \beta_2 W_{ct} + \varepsilon_{ict}$$

- $Y_{ict}$ , outcome measure for individual/state  $i$  in circuit  $c$  at year  $t$  (e.g. church attendance).
- $Law_{ct}$ , measure of pro-religious-protection decisions:
  - Average of pro-religion decisions (+1), anti-religion decisions (-1), and no decision (0) in circuit  $c$  at time  $t$ .
  - $\rho$ , main coefficient of interest.
  - Assumes that effects of pro-liberty and anti-liberty decisions are opposite in sign but equal in absolute value relative to the baseline of no case.
- $\alpha_{ict}$  state/time fixed effects and state trends.
- $X_{ict}$  state characteristics (e.g. GDP) or individual characteristics (e.g. gender).
- $W_{ct}$ , characteristics of the pool of judges available to be assigned.

## Second-stage estimating equation

$$Y_{ict} = \alpha_{ict} + \rho Law_{ct} + \beta_1 X_{ict} + \beta_2 W_{ct} + \varepsilon_{ict}$$

- $Y_{ict}$ , outcome measure for individual/state  $i$  in circuit  $c$  at year  $t$  (e.g. church attendance).
- $Law_{ct}$ , measure of pro-religious-protection decisions:
  - Average of pro-religion decisions (+1), anti-religion decisions (-1), and no decision (0) in circuit  $c$  at time  $t$ .
  - $\rho$ , main coefficient of interest.
  - Assumes that effects of pro-liberty and anti-liberty decisions are opposite in sign but equal in absolute value relative to the baseline of no case.
- $\alpha_{ict}$  state/time fixed effects and state trends.
- $X_{ict}$  state characteristics (e.g. GDP) or individual characteristics (e.g. gender).
- $W_{ct}$ , characteristics of the pool of judges available to be assigned.

# First-stage estimating equation

$$Law_{ct} = \alpha_{ict} + \phi Z_{ct} + \gamma_1 X_{ict} + \gamma_2 W_{ct} + \eta_{ict}$$

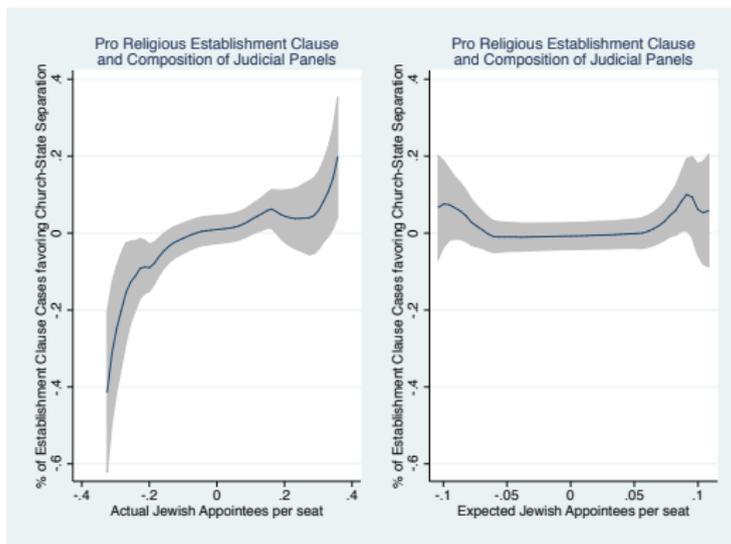
- $Law_{ct}$ , measure of pro-religious-protection decisions.
- $Z_{ct}$ , optimal instruments:
  - Realized characteristics of judges assigned to religion cases.
  - Selected for post-Lasso 2SLS using the method in Belloni et al. (2012)
  - Computed separately for Establishment cases and Free Exercise cases.
- Standard errors clustered by circuit (Barrios et al 2012); similar estimates for clustering by state or circuit-year.

- 1 Setting and Data
- 2 Empirical Strategy
- 3 Results**
  - Establishment Clause
  - Free Exercise Clause
- 4 Conclusion

- 1 Setting and Data
- 2 Empirical Strategy
- 3 Results**
  - Establishment Clause
  - Free Exercise Clause
- 4 Conclusion

# First Stage Results: Establishment Clause

- Effect of More Jewish Appointees in Establishment Decisions:



- Other variables selected: Democrat, Catholic, Evangelical, ABA nomination rating, government experience.

- An exogenous increase in anti-establishment precedent causes a reduction in supply-side measures of religious services, including the number of buildings and total payroll.

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Effect of Decisions Strengthening Church-State Separation</i>					
<u>Outcome</u>	<u>OLS</u>	<u>2SLS</u>	<u>OLS</u>	<u>2SLS</u>	<u>OLS</u>	<u>2SLS</u>
Relig. Buildings	0.00487 (0.00838)	<b>-0.0246**</b> <b>(0.00784)</b>				
Relig. Employment			-0.0108 (0.0175)	-0.0307 (0.0354)		
Relig. Payroll					-0.033 (0.0259)	<b>-0.0386+</b> <b>(0.0222)</b>

Effect of Law (proportion pro-claimant Establishment-Clause cases) on supply-side religious variables.  $N = 950$  state-years, First-stage  $F = 359$ . Outcome variables standardized to variance 1. Includes state FEs, year FEs, state trends, and judge pool characteristics. 50 states, 19 years (1986-2005). Standard errors clustered by circuit. +  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ .

- Stronger anti-establishment law does not have an effect on self-reported religiosity.

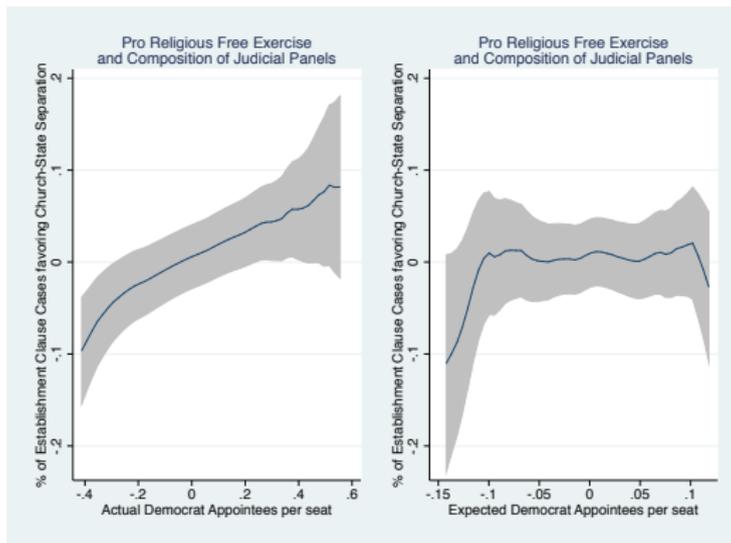
	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Effect of Decisions Strengthening Church-State Separation</i>					
<u>Outcome</u>	<u>OLS</u>	<u>2SLS</u>	<u>OLS</u>	<u>2SLS</u>	<u>OLS</u>	<u>2SLS</u>
Any Religion	-0.00439 (0.00428)	0.00291 (0.00888)				
Strong Religion			-0.00486 (0.00358)	0.00327 (0.00939)		
Attend Weekly					-0.0122* (0.00421)	-0.00742 (0.0104)

Effect of Law (proportion pro-claimant Establishment-Clause cases) on demand-side religious variables.  $N = 27,852$  GSS respondents, First-stage  $F = 56$ . Includes state FEs, year FEs, state trends, individual demographic covariates, and judge pool characteristics. Years: 1986-2004. Standard errors clustered by circuit. †  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ .

- 1 Setting and Data
- 2 Empirical Strategy
- 3 Results**
  - Establishment Clause
  - Free Exercise Clause**
- 4 Conclusion

# First Stage Results: Free Exercise

- Effect of More Democratic Appointees in Free Exercise Decisions



- Other variables selected: Jewish, female, non-white, prosecutor experience, private practice experience.

- Stronger free-exercise protections have no effect on formal-market religious firms.

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Effect of Decisions Strengthening Free Exercise</i>					
<u>Outcome</u>	<u>OLS</u>	<u>2SLS</u>	<u>OLS</u>	<u>2SLS</u>	<u>OLS</u>	<u>2SLS</u>
Relig. Buildings	-0.00166 (0.00902)	-0.00691 (0.00776)				
Relig. Employment			0.00945 (0.0174)	-0.0144 (0.0393)		
Relig. Payroll					0.00928 (0.0299)	0.0173 (0.0293)

Effect of Law (proportion pro-claimant Free-Exercise cases) on supply-side religious variables. Outcome variables standardized to variance 1.  $N = 950$  state-years, First-stage  $F = 25$ . Includes state FEs, year FEs, state trends, and judge pool characteristics. 50 states, 19 years (1986-2005). Standard errors clustered by circuit. +  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ .

- An exogenous increase in free-exercise protections causes an increase in religiosity among individuals, especially “strong religiosity” like attending church more than once a week.

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Effect of Decisions Strengthening Free Exercise</i>					
<i>Outcome</i>	<i>OLS</i>	<i>2SLS</i>	<i>OLS</i>	<i>2SLS</i>	<i>OLS</i>	<i>2SLS</i>
Any Religion	-0.00126 (0.00426)	0.00459 (0.00998)				
Strongly Religious			0.00793 (0.00632)	<b>0.0264*</b> <b>(0.0130)</b>		
Attend Weekly					-0.00247 (0.00690)	0.0120 (0.0131)

Effect of *Law* (proportion pro-claimant Free-Exercise-Clause cases) on demand-side religious variables.  $N = 27,852$  GSS respondents, First-stage  $F = 15$ . | Includes state FEs, year FEs, state trends, individual demographic covariates, and judge pool characteristics. Years: 1986-2004. Standard errors clustered by circuit. †  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ .

- 1 Setting and Data
- 2 Empirical Strategy
- 3 Results
  - Establishment Clause
  - Free Exercise Clause
- 4 Conclusion

# Summary and Discussion

- A random increase in pro-separation precedent on Establishment Clause cases is associated with a reduction in supply-side measures of religious services, including the number of buildings, and payroll.
  - Consistent with Establishment Clause protections reducing subsidies to favored mainstream religions, causing reduction in supply.
  - No effect on religiosity, however, suggesting that these establishments had weak attendance, or that the formal-market reductions are compensated by informal-market (fringe) increases.
- Increasing free-exercise protection results in an increase in religiosity among individuals.
  - Consistent with Free Exercise protections reducing restrictions on fringe religions, increasing devout religiosity.
  - No effect on supply side, again consistent with the idea that fringe religions operate informally, without designated buildings and large formal payroll.

# Summary and Discussion

- A random increase in pro-separation precedent on Establishment Clause cases is associated with a reduction in supply-side measures of religious services, including the number of buildings, and payroll.
  - Consistent with Establishment Clause protections reducing subsidies to favored mainstream religions, causing reduction in supply.
  - No effect on religiosity, however, suggesting that these establishments had weak attendance, or that the formal-market reductions are compensated by informal-market (fringe) increases.
- Increasing free-exercise protection results in an increase in religiosity among individuals.
  - Consistent with Free Exercise protections reducing restrictions on fringe religions, increasing devout religiosity.
  - No effect on supply side, again consistent with the idea that fringe religions operate informally, without designated buildings and large formal payroll.

# Next Steps

- These are preliminary results with a partial data set:
  - But we feel they are promising enough to warrant coding up all the cases going back to the 1880s.
- Heterogeneous and dynamic effects on mainstream versus fringe religions.
  - In the short term, one might see fringe religiosity increase more. Due to greater religious competition, there may be a broader long-term effect as mainstream churches improve quality of services.
- Substitution effects between religious and non-religious firms due to our treatments.
  - e.g., growth in religious versus non-religious charitable organizations.