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Religion in Judicial Decision-Making: An Empirical Analysis

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An Empirical Analysis

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INTRODUCTION

Empirical studies of judicial behavior are becoming increasingly common and sophisticated.[1] These studies typically draw upon large databases of opinions and employ quantitative analytic techniques in an attempt to measure the influence of various factors in judicial decision-making.[2] A focus of particular attention in many of these studies is the role played by political ideology. For example, Cass Sunstein and several colleagues examine this issue at length in a 2006 book aptly entitled *Are Judges Political*?[3] Like many other scholars, Sunstein and his coauthors find that political ideology does indeed have an effect on judicial decisions — at least in some cases, and at least to some degree.[4]

Other empirical studies have concentrated their attention on the influence of ideology in specific doctrinal areas. Gregory Sisk and Michael Heise have published a series of articles focusing on religious liberty cases in the federal courts and have reported a range of results. While Sisk and Heise find that political ideology does not play a significant explanatory role in Free Exercise Clause

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1. *See, e.g.*, Lee Epstein, *Some Thoughts on the Study of Judicial Behavior*, 57 WM. & MARY L. REV. 2017 (2016) (discussing evolution of theoretical and empirical studies of judicial decision-making in various disciplines); Gregory C. Sisk, *The Quantitative Moment and the Qualitative Opportunity: Legal Studies of Judicial Decision Making*, 93 CORNELL L. REV. 873, 874 (2008) ("Within just a few short years, empirical study of the law in general, and in particular of the courts, has risen to a level of prominence in American law schools.").

2. *See, e.g.*, FRANK B. CROSS, DECISION MAKING IN THE U.S. COURTS OF APPEALS (2007) (analyzing some 18,000 federal appellate cases from 1925 to 1992); LEE EPSTEIN, WILLIAM M. LANDES & RICHARD A. POSNER, THE BEHAVIOR OF FEDERAL JUDGES: A THEORETICAL AND EMPIRICAL STUDY OF RATIONAL CHOICE (2013) (applying regression and correlation analysis to datasets of decisions from all levels of federal judiciary).

3. CASS R. SUNSTEIN, DAVID SCHKADE, LISA M. ELLMAN & ANDRES SAWICKI, ARE JUDGES POLITICAL? AN EMPIRICAL ANALYSIS OF THE FEDERAL JUDICIARY (2006).

4. *Id.* at 148–49 (finding "significant splits between Republican and Democratic appointees on the great legal issues of the day" overall, while also finding that "in some controversial areas, the political affiliation of the appointing president is *not* correlated with judicial votes"); *see also* EPSTEIN ET AL., *supra* note 2, at 385 ("[I]deology influences judicial decisions at all levels of the federal judiciary . . . [but] it does not extinguish the influence of conventional principles of judicial decision-making . . . ."); CROSS, *supra* note 2, at 7 ("Judges appointed by more conservative presidents consistently produce more conservative opinions on the bench . . . [but] this effect varies considerably over time and by the type of case under review.").

cases,[5] they find that "[t]he powerful role of political factors . . . appears undeniable and substantial" in Establishment Clause cases.[6] Similarly, in the context of education, Sisk and Heise conclude that "Republican-appointed judges were more likely than their Democratic-appointed counterparts to reach a pro-religion decision in school cases."[7]

There is thus a significant body of existing scholarly literature exploring the influence of ideology on judicial decision-making in general and on religion cases in particular. The present Article makes a novel contribution to that literature by exploring a related but distinct issue. Rather than analyzing religion as a category of cases that is subject to ideological influence, we focus on religion as a category of ideology that has the potential to exert its *own* influence.

Several key elements distinguish our approach. First, we seek to measure the role of religion in a broad range of cases in which various forms of ideological influence might be expected to manifest themselves. In other words, we do not limit our examination of religious influence to cases that present religious liberty issues. Second, whereas some studies have included religion among other variables when examining the role of political ideology in decision-making,[8] our emphasis is on the role of religion as such. We accordingly offer a much more detailed discussion of the relationship between religious identification and outcomes, and the ways in which this relationship may differ with respect to various religious denominations and traditions. Third, rather than looking at the independent effects of different ideological influences, we employ more complex econometric techniques to understand how political ideology measured several different ways may interact with religious ideology in influencing voting behavior in specific types of cases. We therefore offer more textured results of the complex relationships among political

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5. Michael Heise & Gregory C. Sisk, *Free Exercise of Religion Before the Bench: Empirical Evidence from the Federal Courts*, 88 NOTRE DAME L. REV. 1371, 1374 (2013).

6. Gregory C. Sisk & Michael Heise, *Ideology "All the Way Down"? An Empirical Study of Establishment Clause Decisions in the Federal Courts*, 110 MICH. L. REV. 1201, 1204 (2012).

7. Michael Heise & Gregory C. Sisk, *Religion, Schools, and Judicial Decision Making: An Empirical Perspective*, 79 U. CHI. L. REV. 185, 189 (2012).

8. *See, e.g.*, Heise & Sisk, *supra* note 5; Sisk & Heise, *supra* note 6; Heise & Sisk, *supra* note 7.

ideology, religious identification, and different substantive areas of the law. We are able to say more not only about the interactions between political ideology and religion but about how they operate differently in different substantive contexts, such as cases in which fundamental moral values are at issue. Finally, while most previous studies have employed comparison of means or regression with only main effects, we marshal more sophisticated econometric and visual methodologies to analyze and understand the empirical patterns in the data. We are therefore able to provide more nuanced and (hopefully) more transparent insight into the nature of the effects of political ideology and religion on voting behavior of judges.

The Article is organized as follows. Part I discusses the motivation for studying the influence of religion on judicial decision-making. Part II summarizes the data, and Part III explains our methodology. Part IV discusses the results of our analysis. Our main finding is that in cases in which fundamental moral values[9] are at stake, *and almost exclusively in those cases*, both religion and political ideology matter—and they matter differently for different religious groups. In these moral values cases, a divergence in behavior arises in which Protestant judges seem to be voting liberally or conservatively in line with their political ideology, while Catholic judges seem to be voting relatively conservatively regardless of their political ideology. The Article concludes with some observations about the possible implications of our findings for future nomination debates, confirmation hearings, and public discourse about the judiciary.

I. WHY ANALYZE RELIGION?

Individualized illustrations of the influence of religion on judicial behavior can occasionally be found in case law or media reports. Perhaps most famously, the Eleventh Circuit Court of Appeals heard a case in which a former chief justice of the Alabama Supreme Court placed a two-and-a-half ton Ten Commandments

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9. Moral values cases include those involving abortion, obscenity, gay and lesbian rights, and capital punishment. We include these kinds of cases because of the frequency with which they are cast in moral or religious terms in public discourse. For further discussion of case categories, see *infra* Section II.A.

monument in the rotunda of the state judicial building.[10] In holding that the display violated the Establishment Clause, the court indicated that the justice had installed the monument "in order to remind all Alabama citizens of . . . his belief in the sovereignty of the Judeo-Christian God over both the state and the church."[11] Another federal appellate case involved a North Carolina state judge who began morning sessions of court by reciting a prayer aloud.[12] More recently, a state court judge in Texas reportedly asked jurors to return a verdict of not guilty, explaining that "when God tells me I gotta do something, I gotta do it."[13]

But while cases like these may attract public attention, they do not provide the primary motivation for the instant analysis. Such explicit invocations of religion by judges acting in an official capacity are notable in part because they are rare; few serious observers would regard them as representative of larger trends in judicial behavior. Rather, our motivation arises out of broader discussions in the literature about more subtle influences of religion in judicial decision-making—especially in cases implicating fundamental rights and moral values, or in which the law is unclear or unsettled.

Some have argued that judges should be able to rely on religious reasoning to the same extent that they are able to rely on other forms of moral reasoning when deciding such cases,[14] while others have maintained that judges should instead draw upon

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10.   Glassroth v. Moore, 335 F.3d 1282, 1284 (11th Cir. 2003).

11.   *Id.*

12.   North Carolina Civil Liberties Union Legal Found. v. Constangy, 947 F.2d 1145, 1146–47, 1152 (4th Cir. 1991) (holding that the prayer at issue violated the Establishment Clause).

13.   Ryan Autullo, *Texas Judge Interrupts Jury, Says God Told Him Defendant Is Not Guilty*, STATESMAN (Jan. 20, 2018, 12:01 AM), https://www.statesman.com/news/20180120/Texas -judge-interrupts-jury-says-god-told-him-defendant-is-not-guilty.

14.   *See, e.g.*, MICHAEL J. PERRY, RELIGION IN POLITICS: CONSTITUTIONAL AND MORAL PERSPECTIVES 102–04 (1997) (when making a choice about "underdeterminate" legal materials, judges may rely upon a religious premise if a plausible secular premise also supports the choice); Stephen L. Carter, *The Religiously Devout Judge*, 64 NOTRE DAME L. REV. 932, 943 (1989) ("[I]f religious conviction plays a role at all, it would enter into the deliberative process, but not the process of justification . . . . [Judges] might make decisions on the basis of moral conviction, but they must justify them in terms of the received norms of judging.").

"public reasons" or commonly held political premises and values.[15] Popular and academic interest in issues of this sort became particularly pronounced with the emergence of a Roman Catholic majority on the U.S. Supreme Court in 2006.[16] A number of scholars addressed questions about the potential relationship between Catholic doctrine and judicial decision-making, with several articles emphasizing the paucity of explicit church teaching on the judicial role and on constitutional interpretation.[17] But another article argued that Catholic teaching has long maintained that public actors have an obligation to seek conformity between moral law and civil law when fundamental rights are at issue;[18] the article further argued that judges often play a sufficiently robust lawmaking role to be included in this teaching.[19] Catholic doctrine may thus be interpreted to imply that in at least some circumstances, "[t]he Supreme Court's judgment about the application of the Constitution should . . . be guided by the principles of the moral law."[20]

Yet even if religious teachings do imply that certain cases should be decided in certain ways, it cannot be assumed that

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15. *See, e.g.*, KENT GREENAWALT, PRIVATE CONSCIENCES AND PUBLIC REASONS 141–49 (1995) ([T]he basic reason for preferring some premises and ways of reasoning over other is that they are shared in our political culture . . . . [S]o I believe reliance on *some kinds* of moral and political philosophy is easier to justify for judges than reliance on their own religious beliefs."); JOHN RAWLS, POLITICAL LIBERALISM 213–16 (1993) (arguing that public actors and supreme court judges in particular should justify decisions in terms of "the ideals and principles expressed by society's conception of political justice").

16. *See, e.g.*, René Reyes, *The Supreme Court's Catholic Majority: Doctrine, Discretion, and Judicial Decision-Making*, 85 ST. JOHN'S L. REV. 649 (2011); William H. Pryor, Jr., *The Religious Faith and Judicial Duty of an American Catholic Judge*, 24 YALE L. & POL'Y REV. 347 (2006).

17. *See* Scott C. Idleman, *Private Conscience, Public Duties: The Unavoidable Conflicts Facing a Catholic Justice*, 4 U. ST. THOMAS L.J. 312, 315 (2006) ("[T]here are few if any authoritative church documents that speak directly to, or clearly about, a judge's specific obligations."); Gregory A. Kalscheur, *Catholics in Public Life: Judges, Legislators, and Voters*, 46 J. CATH. LEGAL STUD. 211, 229 (2007) ("There is no official Church teaching that defines what the U.S. Constitution means. Indeed, such a question is beyond the competence of the Church's teaching office.").

18. *See* Reyes, *supra* note 16, at 653–62 (reviewing Catholic teaching on law, morality, and public life).

19. *Id.* at 662–73 (considering applicability of Catholic teaching to judges).

20. William J. Levada, *Theological Reflections on Catholics in Political Life and the Reception of Holy Communion*, U.S. CONF. CATH. BISHOPS (June 13, 2004), http://www.usccb.org/issues -and-action/faithful-citizenship/church-teaching/theological-reflections-tf-bishops-politi cians-2004-06-13.cfm*; see also* Reyes, *supra* note 16, at 667–68 (discussing Levada's argument); Kalscheur, *supra* note 17, at 229 n.48 (discussing same).

religious judges will necessarily act in accordance with those teachings.[21] Nor have exchanges between Senators and judicial nominees on the subject of religious influences on judging been particularly illuminating. In response to questions about separation of church and state during his confirmation hearings, Chief Justice John Roberts stated, "my faith and my religious beliefs do not play a role in judging. When it comes to judging, I look to the law books and always have."[22] In a similar vein, Justice Samuel Alito answered a query about the role of religion and morality in judging by explaining that "my obligation as a judge is to interpret and apply the Constitution and the laws of the United States, and not my personal religious beliefs or any personal moral beliefs that I have, and there is nothing about my religious beliefs that interferes with my doing that."[23] Such responses appear to be in keeping with the general trend among recent nominees of revealing very little about the substance of their judicial philosophies, and of portraying the decision-making process as the application of "law all the way down."[24]

In sum, both the academic literature and the judicial confirmation process have raised ample questions about the role that religion should play in judicial decision-making. No doubt such questions will persist at the level of theory and politics for years to come. The aim of this Article is to move beyond these jurisprudential and theoretical debates and to provide a rigorous empirical assessment of some of the issues they raise. Thus, instead of reflecting on what judges ought to do or speculating about what

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21. *See* Reyes, *supra* note 16, at 680–81 (noting diversity of jurisprudential approaches among Catholic judges and emphasizing limited utility of Catholic self-identification as a predictor of judicial behavior); *see also* John T. Noonan, Jr., *The Religion of the Justice: Does It Affect Constitutional Decision Making?*, 42 TULSA L. REV. 761, 768 (2013) ("Religion . . . does not regularly predict how a judge will vote on a constitutional question. It does not furnish an explanation of how the judge voted. It does not regularly distinguish the judge from colleagues who do not share his religious beliefs.").

22. *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to Be Chief Justice of the United States: Hearing Before the S. Comm. on the Judiciary*, 109th Cong. 227 (2005).

23. *Confirmation Hearing on the Nomination of Samuel A. Alito, Jr. to Be an Associate Justice of the Supreme Court of the United States: Hearing Before the S. Comm. on the Judiciary*, 109th Cong. 566–67 (2006).

24. *The Nomination of Elena Kagan to Be an Associate Justice of the Supreme Court of the United States: Hearing Before the S. Comm. on the Judiciary*, 111th Cong. 103 (2010); *see also* Sisk & Heise, *supra* note 6, at 1202–04 (discussing Justice Kagan's statement).

they might do when deciding cases that leave open a role for religious or moral influences, we look at what judges *actually* do.

Throughout our analysis, Catholicism and Catholic judges occasionally receive particular attention. This is so for a few reasons. For one, the hierarchical structure of the Catholic Church makes it possible to identify "official" or authoritative teaching with greater clarity than is possible for many other religious traditions.[25] The Catholic Church's long practice of bringing this teaching to bear on questions relating to religion and public life may also distinguish it from some other faith communities.[26] In addition, Catholic doctrine also highlights the fact that the teachings of a single religious tradition may not all fit within a single ideological category: some Catholic positions (such as opposition to the death penalty) are thought to be more liberal, while others (such as opposition to abortion) are regarded as more conservative.[27] This absence of complete congruence between religious ideology and political ideology has the potential to help isolate and measure the effect of each form of influence. To be sure, some of these attributes are not unique to Catholicism, and we apply our analysis to judges identified with a range of religions. More details about the data and methods behind this analysis are set forth in the next sections.

II. DATA

A. Case Data

The number of judges at different levels of the judiciary can pose challenges for empirical analysis. At the state level, there are some 30,000 trial and appellate judges—a number far too large to

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25. *See* Reyes, *supra* note 16, at 656 n.34 (discussing hierarchy and teaching authority of the Catholic Church); *see also* CATECHISM OF THE CATHOLIC CHURCH ¶ 85 (2d ed. 1997) ("[T]he task of interpretation has been entrusted to the bishops in communion with the successor of Peter, the Bishop of Rome.").

26. *See* Reyes, *supra* note 16, at 678; *see also* Sanford Levinson, *The Confrontation of Religious Faith and Civil Religion: Catholics Becoming Justices*, 39 DEPAUL L. REV. 1047, 1071 (1990) (suggesting that with respect to issues like the relationship between natural law and positive law, "[o]ne might be more likely to ask Roman Catholic nominees such questions than, say, Lutherans, because the Catholic Church has historically insisted on the reality of natural law in a way that the Lutheran community has not").

27. *See* Reyes, *supra* note 16, at 680–81.

manage for present purposes.[28] At the other end of the spectrum, there are only nine U.S. Supreme Court Justices on the bench at a given time—a number much too small to provide for statistically significant analysis. Any study must therefore make choices about which judges and which opinions to focus upon. Following the practice and relying on the data used by Sunstein, Schkade, Ellman, and Sawicki,[29] the analysis we present in this Article focuses on the behavior of judges on the U.S. Courts of Appeal. The data consist of a set of federal appellate cases with published opinions from 1980 to 2004. These cases were coded by Sunstein and his coauthors for their study on the role of political ideology in judicial decision-making, and we follow the conventions established by those authors.[30] Decisions are coded as one for a liberal decision and zero for a conservative decision. Given that judicial opinions do not come pre-labeled as liberal or conservative, the process of coding involves some degree of subjective judgment and imprecision.[31] Nevertheless, most judgments should be fairly noncontroversial —a judge's vote counts as liberal, for example, "if it upholds an affirmative action program . . . [or] strikes down a restriction on sexually explicit speech."[32]

Our primary level of observation will be a single judge in a single case. Each federal appellate panel has three judges, so each case appears three times in the dataset—i.e., once for each judge —and includes that judge's vote as well as the panel's vote. Cases are divided into small case categories by subject matter, as shown in *Table 1*. We gather these specific case categories into three broader categories: moral values cases, rights cases, and corporate or other cases. Moral values cases include those concerning abortion, constitutional and statutory challenges to obscenity rulings, gay and lesbian rights, and capital punishment. Individual rights cases include those concerning affirmative action, the

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28. *See* Ron Malega & Thomas H. Cohen, Bureau of Just. Stats., NCJ 242850, Special Report: State Court Organization, 2011 (2013).

29. Sunstein et al., *supra* note 3.

30. *Id.* at 156–63 (providing a detailed explanation of the creation of the dataset and the categorization of cases into these categories).

31. *See id.* at 18–19 ("Our methods for finding and assessing these cases . . . leave room for errors and sometimes for a degree of discretion. We are confident, however, that we have accurately identified the basic patterns of judicial votes.").

32. *Id.* at 19.

Americans with Disabilities Act, First Amendment challenges regarding commercial advertising, sex discrimination and harassment, and racial discrimination. The cases grouped into the remaining corporate or other category are listed in *Table 1*. Like the coding of cases as liberal or conservative, the classification of cases into these categories involves subjective judgment and may leave room for occasional disagreement. Nevertheless, we believe that our categorizations are broadly accurate and provide a useful basis for measuring ideological influence.

B. Overview of Case Data

Table 1 below shows a summary of the cases in our dataset. We have a total of 3880 cases, of which 11% are moral values cases, 62% are individual rights cases, and 27% are corporate or other cases. Overall, in approximately half of the cases the panel came to a liberal decision, but that percentage varies markedly across the categories, from the lower end of 36% liberal decisions in moral values cases and 41% in individual rights cases to the higher end of 69% in corporate or other cases.

We also see substantial heterogeneity within these groupings. Of most interest is the heterogeneity within the moral values category—about 65% of abortion cases resulted in a liberal decision, while the percentage for the other moral values categories were relatively consistent at around 28%. Lastly, we note that even with nearly 4000 cases, we still have relatively small numbers in some of these more specific case categories that are of particular interest. This will constrain our ability to test subtle hypotheses about judicial behavior, ideology, and religion.

Table 1. Characteristics of Cases.

	Number of Cases	Share (within category)	Percentage Liberal Decisions
All Cases			
Moral Values	420	11%	36%
Individual Rights	2417	62%	41%
Corporate or Other	1043	27%	69%
Total for Category	*3880*	*100%*	*48%*
Moral Values Cases			
Abortion	89	21%	65%
Obscenity	106	25%	29%
Gay and Lesbian Rights	18	4%	27%
Capital Punishment	207	49%	28%
Total for Category	*420*	*100%*	*36%*
Individual Rights Cases			
Affirmative Action	149	6%	58%
Americans with Disabilities Act	737	30%	33%
First Amendment	96	4%	41%
Sex Discrimination	1072	44%	38%
Title VII of Civil Rights Act	363	15%	56%
Total for Category	*2417*	*100%*	*41%*
Corporate and Other Cases			
Campaign Finance	55	5%	33%
Contracts	76	7%	71%
Environmental Protection Agency	90	9%	51%
National Environmental Policy Act	88	8%	32%
Federalism	319	31%	97%
Piercing the Corporate Veil	106	10%	30%
Takings	220	21%	78%
Punitive Damages	89	9%	71%
Total for Category	*1043*	*100%*	*69%*

C. Judge Data

Our data on federal appellate judges is compiled from multiple publicly available sources. The primary source is the *Multi-User Database on the Attributes of U.S. Appeals Court Judges*, compiled by Gary Zuk, Deborah Barrow, and Gerard Gryski of Auburn University.[33] Additional biographical information is drawn from the Federal Judicial Center's *Biographical Directory of Article III Federal Judges*.[34]

We pay particular attention to measuring the religion and political ideology of the judges. For religion, we use measures from the Auburn database and supplement with additional information on religious identification from Gregory Sisk and Michael Heise.[35] We employ four broad religion categories: Protestant, Catholic, and Jewish, with a fourth category encompassing other religious identities or judges who are nonreligious. While somewhat more detailed information is available on religion, the sample sizes in any

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33. Gary Zuk, Deborah J. Barrow & Gerard S. Gryski, *Multi-User Database on the Attributes of United States Appeals Court Judges, 1801–2000,* NAT'L ARCHIVE CRIM. JUST. DATA (Feb. 3, 2009), https://doi.org/10.3886/ICPSR06796.v2. We also rely on a separate dataset compiled by Zuk et al. to provide information for district court judges who may be sitting by designation in a particular case. See Gary Zuk, Deborah J. Barrow & Gerard S. Gryski, *Multi-User Database on the Attributes of United States District Court Judges, 1801–2000*, NAT'L ARCHIVE CRIM. JUST. DATA (Feb. 3, 2009), https://doi.org/10.3886/ICPSR04553.v1.

34. *Biographical Directory of Article III Federal Judges, 1789–Present*, FED. JUD. CTR., https://www.fjc.gov/history/judges/search/advanced-search (last visited Feb. 19, 2019).

35. Sisk and Heise have made their data set available at http://courseweb.stthomas.edu/gcsisk/religion.study.data/cover.html. *See* Sisk & Heise, *supra* note 6, at 1201 n.*. As Professors Sisk and Heise explain, the religious identification data is based on "biographical information and confirmation records for indications of religious affiliation, including memberships, speeches, and writings. Thus, a judge coded as having no religious affiliation is . . . someone who apparently has not belonged to or been active with any religious organization." Sisk & Heise, *supra* note 6, at 1241. We consulted similar sources of information to supply a religious identification value for a very small number of additional judges who were not identified in either the Auburn or Sisk and Heise data sets. For example, we categorized Judge Roger L. Gregory as "Protestant" based on biographical information that appears on the University of Virginia School of Law News & Media website, and categorized Judge Patricia M. Wald as "Catholic" based on information that appears in a *New York Times* article. *See* Michael Marshall, *Faith in Law Key to Black Struggle, Gregory Says*, U. VA. SCH. L. (Feb. 21, 2003), https://www.law.virginia.edu/news/2003_spr/gregory.htm; Linda Greenhouse, *Public Lives: War Crimes Tribunal Appeals to Unconventional Judge*, N.Y. TIMES (July 12, 1999), https://www.nytimes.com/1999/07/12/us/public-lives-war-crimes-tribunal-appeals-to-unconventional-judge.html.

one cell become small enough that it is generally not feasible for us to divide the religious groups more finely.

For ideology, we draw upon multiple measures from different sources to best represent the breadth of the literature on judicial ideology. Our primary measure is the Judicial Common Space Score developed by Keith Poole and Howard Rosenthal,[36] which places judges in the same policy space as other political actors.[37] This measure situates a judge in political ideology space by proxying his or her ideology with the legislative record of the appointing group of politicians (President and home-state Senators from the President's party, if any). We will refer to this measure as political ideology based on the legislative record. This is the canonical measure in the literature,[38] and consequently the primary measure of judicial ideology we will employ in our empirical analyses.

The second measure we employ, developed by Adam Bonica and Maya Sen, applies a similar "common space" methodology but uses the political leaning of campaign finance contributions by the judges themselves to place the judge in political ideology space.[39] We will refer to this as political ideology based on the campaign finance record. We will not use this measure directly in most of the analyses discussed in this Article, but all of our empirical results are robust to using this campaign finance measure.

Lastly, we will sparingly use an internal measure developed from the case dataset above, which is the share of liberal votes for the judge herself in the entire sample period in all case categories.

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36. Keith T. Poole & Howard Rosenthal, Congress: A Political-Economic History of Roll Call Voting (1997).

37. Lee Epstein, Andrew D. Martin, Jeffrey A. Segal & Chad Westerland, *The Judicial Common Space*, 23 J. L. Econ. & Org. 303, 306 (2007) ("The starting point for our approach is the NOMINATE Common Space scores that are the result of a scaling algorithm that takes a set of issue scales [and] . . . provides an ideal point . . . in a two-dimensional Downsian issue space." (internal citations omitted)).

38. *See* Sisk & Heise, *supra* note 6, at 1222 ("Political scientists have come to regard Common Space Scores as the state-of-the-art measure for the preferences of US Court of Appeals judges." (internal quotation marks omitted)).

39. *See* Adam Bonica & Maya Sen, *A Common-Space Scaling of the American Judiciary and Legal Profession*, 25 Pol. Analysis 114, 115 (2017) (using the judge's campaign contributions to place each individual judge "in a common space with other candidates and organizations spanning local, state, and federal politics").

Due to its endogeneity,[40] this measure has limited utility, but it could be helpful in assessing whether a judge's ideological stance carries over across different categories of cases.

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40.   Ideally, a regression is able to establish a causal relationship between independent variable X and dependent variable Y only when the independent variable X is exogenous. Variable X is exogenous in a model regressing Y on X if variable X is not determined by variable Y so that causality only runs in one direction, *from* X *to* Y. The ideology measure based on legislative record of the appointing group of politicians can reasonably be assumed to be credibly exogenous simply because it is temporally prior to the judge's votes. In other words, we do not think that the judge's liberal vote in a case (our Y variable) affects the legislative record of the appointing group of politicians (our X variable), so we are reasonably able to ascribe the relationship between X and Y as a causal one from X to Y −ideology so measured affects voting behavior. A similar, though somewhat weaker, argument can be made for the ideology measure based on campaign finance contributions. However, the judge ideology measure based on the judge's liberal vote share is clearly not exogenous *precisely because it is based on the judge's liberal vote share, which is the judge-specific average of our* Y *variable*. This endogeneity is partially alleviated by calculating the liberal vote share on non moral values cases only and then using this only to predict voting in moral values cases, but this strategy is effective only to the extent that a judge's voting behavior (and therefore his apparent ideology) is different across the different categories of cases. Therefore, substantial endogeneity concerns remain for the ideology measure based on liberal vote share, and this measure will consequently be used only sparingly. For further discussion of endogeneity in general, see WILLIAM H. GREENE, ECONOMETRIC ANALYSIS 242 –46 (2018).

Table 2. Characteristics of Judges.

	Appeals Judges in Sample		Judges Sitting on Cases in Sample	
	(unweighted)		(weighted by number of decisions in sample)	
	Mean or Share	Standard Deviation	Mean or Share	Standard Deviation
Basic Demographics				
Appeals Judge (share)	100%		93%	
Age (years)	64	(10.2)	63	(9.5)
Tenure (years)	12	(8.3)	13	(8.0)
Race White (share)	88%		90%	
Male (share)	87%		85%	
Religion Shares				
Protestant	48%		45%	
Catholic	25%		27%	
Jewish	14%		16%	
Other Religion or Nonreligious	12%		12%	
Ideology Averages				
Legislative Record of Appointing Group	0.06	(0.39)	0.08	(0.39)
Campaign Finance Contributions of Judge	0.04	(0.35)	0.06	(0.36)
Vote Share of Judge	0.04	(0.47)	0.05	(0.33)
Republican Party Affiliation	0.56		0.60	
Number of Observations	376		11,640	

D. Overview of Judge Data

Table 2 tells us a good deal about the judges in our dataset.[41] We see that they are representative of federal appellate judges, as one would expect given that the Sunstein data include all cases during an extended time period: their average age is 63, 90% are white, and 85% are male. Note that in 7% of the judge-case observations, other judges—primarily district court judges—are sitting by designation. We do have demographic information for

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41.   Averages and shares will be calculated over the sample of case-judge observations, i.e., each judge is counted as many times as they appear on a case.

many of these other judges, especially if they were subsequently elevated to a circuit court.

The second panel shows the religious distribution of the judges: 45% are Protestant, 27% are Catholic, and 16% are Jewish. The final panel shows ideology measures. The common space measures based on legislative record and campaign finance are scaled so that -1 represents pure liberal, 0 is perfect moderate, and +1 represents pure conservative. These measures lean slightly conservative, with means that are just above 0. Our new measure based on each judge's voting history is rescaled similarly so that -1 represents 100% liberal votes and +1 represents 100% conservative votes. The ideology measures exhibit substantial heterogeneity, as indicated by the standard errors in the table and the fact that the interquartile ranges for the three measures are 0.71, 0.65, and 0.38 respectively. We also see that 60% of the judges sitting on these cases are affiliated with the Republican Party.

Figure 1 below shows the relationships among the ideology variables via a matrix of two-way scatterplots. While the three ideology measures are all somewhat different in design, there are clearly strong relationships between them: each measure is positively correlated with the other two, indicating that they are to some extent measuring some common ideological core. At the same time, these measures are clearly not interchangeable: the pairwise correlations are far from perfect, indicating that each one is providing some different information.

Figure 1. Relationships Among Ideology Measures
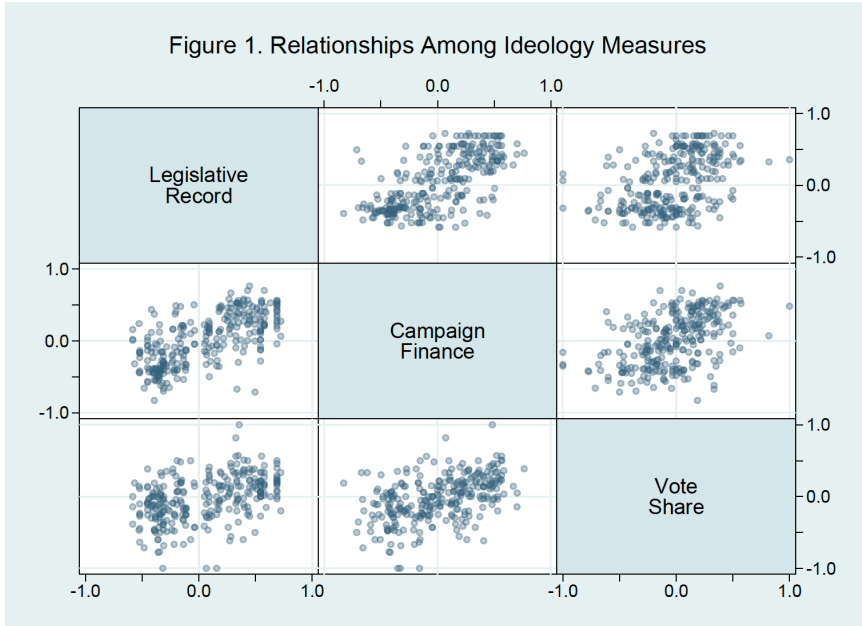
III. Empirical Methodology

A. The Value of Observation

Our aim in this Article is to understand patterns of behavior among judges sitting on federal appellate cases. It is important to note that, beyond understanding, we also aim to explain these patterns, and we do so by drawing upon the tools of applied microeconomic analysis to complement traditional legal analysis. But unlike most applied microeconomic analyses, our goal is to explain by describing and understanding the patterns rather than definitively validating a specific causal and mechanistic explanation. Since establishing causality is usually so central to the applied microeconomist's endeavor, this distinction in goals and methods merits some discussion.

Why do applied microeconomists usually aim to establish causality? We do so because we want to be able to make "if-then" statements, so that we know that if *X* happens, then *Y* will follow. In the current investigation, however, we want to understand the patterns in these data, to understand the behavioral patterns of federal judges. We are not seeking to make statements about a

possible world, but rather statements about the actual true world. In addition to testing causal relationships, econometrics provides us powerful tools for making sense of data, for observing in a sophisticated and scientific manner.

Using econometric strategies to map out the relationships between a judge's characteristics and her jurisprudential behavior does teach us something important about how different judges behave. It is, however, observational, correlational, and not necessarily causal. We can say that younger judges tend to do this, and Catholic judges tend to do that. Those statements are observations—systematic technical observations rather than casual observations, but still observations. Putting a number of such observations together carefully and systematically, we can produce an empirical picture of actual judicial behavior. We can then compare that empirical picture with a theoretical picture to see if the two are aligned. In this way, we are testing the validity of a theoretical model by comparing it to the empirical reality. That is what we do in this Article.

B. A Model of Judicial Decision-Making

We employ a simple model of judicial decision-making in which a judge's characteristics—demographics, political ideology, religion—influence his or her vote in a case. It is well established in the literature that the characteristics of a judge and the characteristics of the panel can affect the outcome of a federal appellate case. Sunstein and his coauthors provide compelling evidence that a judge's vote is influenced by the political party of the president who appointed them, and that a judge's ideological tendency is dampened or amplified when in the ideological minority or majority.[42] Other scholars have reported similar findings.[43]

In this Article, we restrict our focus to the effects of a judge's individual characteristics rather than the effects of the panel's characteristics. This is primarily due to practical limitations in the data. If a sample is split relatively evenly between two groups (e.g., Democrats and Republicans), random grouping of judges into

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42. *See* SUNSTEIN ET AL., *supra* note 3, at 8–9.
43. *See supra* note 4 and accompanying text.

panels will produce a range of panel compositions, with anywhere from 0 to 3 judges of each party affiliation. In our case, the sample is not split evenly, and it is split among four groups: 45% are Protestant, 27% are Catholic, 16% are Jewish, and 12% are identified as "other" or nonreligious. Even a sample of cases with nearly 4000 decisions will likely not generate enough combinations of different panel compositions with different case categories.[44] This means that we simply do not have sufficient statistical power to test complex hypotheses about the role of panel religious composition in different categories of cases.

Our model of judicial decision-making, therefore, assumes that judges' decisions are based on the case in front of them and are also influenced by their personal characteristics, with particular attention to their political ideology and religious identity. We formalize this model below.

C. Empirical Strategy

We analyze a set of federal appellate cases and aim to establish the relationship between a judge's characteristics and his or her vote in a particular case. Our contribution to the growing literature on judicial behavior is to pay particularly close attention to the interacting roles of political ideology and religious identity. Hence, our baseline specification investigates how political ideology and religious identity predict the likelihood of a liberal vote, as follows:

Equation 1

$$LiberalVote_{cj} = \alpha_0 + \alpha_1 Ideology_j + \rho_1\, Catholic_j + \rho_2\, Jewish_j + \rho_3\, OtherReligion_j + \boldsymbol{X_j\,\beta} + \boldsymbol{Y_c\,\mu} + \varepsilon_{cj}\,.$$

In this specification, the coefficient α_1 represents the effect of political ideology on the likelihood of a liberal vote. Our hypothesis is that α_1 will be negative: as a judge's political ideology becomes

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44. A panel composed of three judges of four different religious identities can be composed in twenty different ways, calculated as a combination with replacement: $C^R(4,3) = \frac{(4+3-1)!}{3!(4-1)!} = 20$. With uneven probabilities of the different religions, the probabilities of getting a panel with two or more judges of each religious group are, respectively, 23%, 6%, 2%, and 2% for Protestant, Catholic, Jewish, and Other. The cell sizes would need to be at least an order of magnitude larger to enable sufficient statistical power to test for panel religion effects.

more positive—i.e., more conservative—the likelihood that she enters a liberal vote declines. Similarly, the ρ coefficients represent the effect of each religious identity on the likelihood of a political vote. For example, if ρ_2 is positive and statistically significant, that indicates that a Jewish judge is more likely to enter a liberal vote relative to a Protestant judge (the omitted category). The final components of the equation include a vector X_j of judge characteristics including sex, race, age, and years on the bench and a vector Y_c of case characteristics including indicator variables for the decade of the case, the appeals circuit, and, in some specifications, the specific case category. Here, judges are indexed by j and cases are indexed by c. The primary specification is ordinary least squares (a linear probability model), though all results are robust to running probit.[45] Standard errors are clustered at the case level.

Because we are particularly interested in the interactions between political ideology and religious identity, we augment this specification by adding these interactions:

Equation 2

$$
\begin{aligned}
LiberalVote_{cj} = \ &\alpha_0 \ + \ \alpha_1 Ideology_j \\
&+ \ \rho_1\,Catholic_j \ + \ \rho_2\,Jewish_j \ + \ \rho_3\,OtherReligion_j \\
&+ \ \theta_1\,Ideology_j \ \times \ Catholic_j \\
&+ \ \theta_2\,Ideology_j \ \times \ Jewish_j \\
&+ \ \theta_3\,Ideology_j \ \times \ OtherReligion_j \\
&+ \ X_j\,\boldsymbol{\beta} \ + \ Y_c\,\boldsymbol{\mu} \ + \ \varepsilon_{cj}\,.
\end{aligned}
$$

In this specification, the θ coefficients represent the religion-specific effect of political ideology on the likelihood of a liberal vote. This means that the full effect of ideology for a member of a religious

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45. While a linear probability model often yields reasonably precise and accurate results, a probit is the econometrically appropriate specification for a binary outcome variable. The probit model allows for an underlying mathematical structure in which the independent variables (religion, ideology, etc.) affect a latent propensity to vote liberally, and subsequently a liberal vote arises if that latent propensity exceeds a certain threshold. Probit models can, however, be more difficult to interpret (*see infra* note 58), so the researcher must navigate a tradeoff between appropriateness and interpretability. We accomplish this by reporting the results from linear probability models throughout the Article and then providing evidence that the results from the corresponding probit model are qualitatively and quantitatively similar. For further discussion of probit in general. *See* GREEN, *supra* note 40, at 728–36, 740–41.

group is the sum of α_1 and the θ for that group. Once again, Protestant is the omitted religion category. This specification will be run for the entire set of cases, and also for the large categories (moral values, rights, or corporate/other) and in some cases for small case categories (abortion, first amendment, etc.). The primary ideology measure we will use throughout is judge ideology based on the legislative record of the appointing politicians, and we will also provide evidence on robustness to using alternate ideology measures.

D. A Visual Methodology

As we proceed through these successive levels of inquiry, our understanding of judicial decision-making will become increasingly complex. It is apparent that, if we are to understand the roles of ideology and religion in judicial decision-making, we need to account for the independent and interacting effects of a number of factors simultaneously: judge characteristics, ideology, religion, as well as characteristics of the case. While one can do this efficiently via regression analysis, the results can become so intricate as to be nearly impenetrable. Since a complex model appears to be the correct model for the empirical structure we are observing, we proceed by running these fully saturated regressions to maintain the necessary complexity, while displaying the results in figures rather than in tables for maximum clarity.

In the interest of orienting the reader who might be less familiar with graphical exposition of regression results, we would like to turn our attention to *Figure 2*, which is an example of the type of graph we will be using to understand our primary results. The graph shows the predicted likelihood of liberal vote for judges of various combinations of religion and ideology, based on regression analysis following *Equation 2*. The title shows us that this analysis has been done on the sample of moral values cases only. The horizontal axis shows judge ideology, ranging from liberal (-1) to conservative (+1), and in this case ideology is measured by the campaign finance contributions of the judge. Each bold line with shapes represents the prediction for a different religious group, distinguished by the shapes and colors shown in the legend. The thin dashed lines in matching colors represent statistical confidence intervals around these predictions. The wide flat line shows, for

reference purposes, the average likelihood of a liberal vote in the entire sample being analyzed (in this case the average likelihood is just shy of 0.4, or 40%).

How do we use a graph like this to understand judicial behavior? We want to pay attention to the location of each line in vertical space: a high position indicates a higher likelihood of a liberal vote for a judge in that religious group. We also want to pay attention to the slope of each line as we move across: a steep slope indicates a larger role for ideology in the likelihood of a liberal vote for a judge in that religious group.

Keeping this in mind, let us walk through the graph. Consider the green line with triangles, representing Jewish judges. This line is overall much higher than the others, particularly on the liberal

Figure 2. Likelihood of Liberal Vote
Moral Values Cases
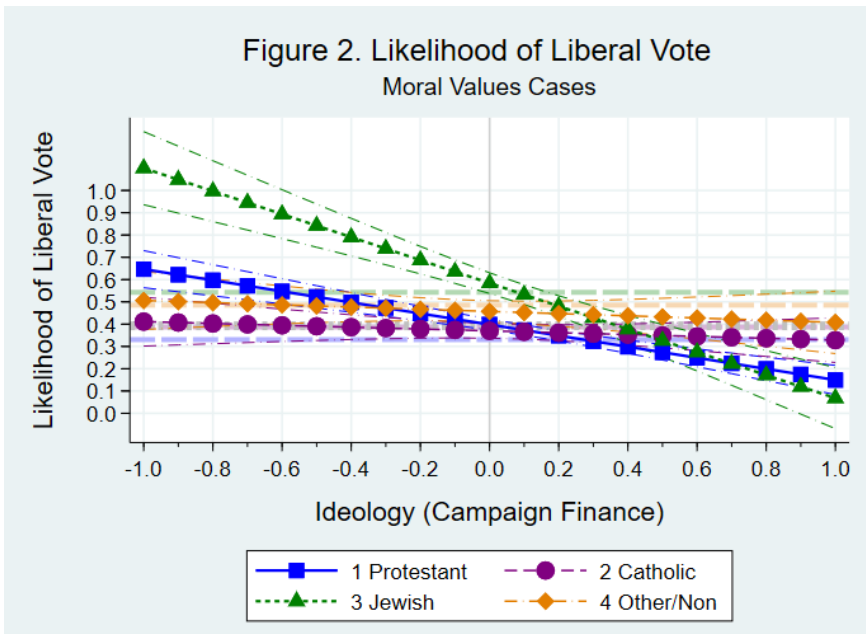
(left) side of the graph. Among judges with similarly liberal political ideology, the Jewish judges are much more likely to lean liberal in moral values cases.

The interaction of ideology and religion is best appreciated by looking at the *slopes* of the lines. Consider the blue line with squares, representing Protestant judges. Following this line from

left to right, you are starting with the most politically liberal Protestant judge and moving to the most politically conservative Protestant judge. We see that the line slopes downward, indicating that the likelihood of a liberal vote declines as a judge becomes more politically conservative (as measured by his campaign finance contributions). Next, consider the purple line with circles, representing Catholic judges. Following this line from left to right, we see that the line is relatively flat, indicating that political ideology plays only a small role in determining the likelihood of a liberal vote for Catholic judges in these moral values cases. Next, consider the Jewish line again (green with triangles). Following this line from left to right, we see that the line slopes downward very steeply, indicating that political ideology appears to play a larger role for Jewish judges. Lastly, we see that judges of other religions or those who are nonreligious lean slightly liberal across the ideological spectrum but that political ideology plays only a small role.

Putting all of this together, the graph enables us to quickly make sense of complex results. We now know that political ideology matters in these moral values cases. Moreover, political ideology appears to matter quite a lot for Jewish judges, some for Protestant judges, and very little for Catholic judges or those of other religious identities. We therefore know that religion matters, since it seems to mediate the operation of ideology. Not only do the lines have different vertical locations indicating a tendency of some religious groups to lean more or less liberal, but they have different slopes, indicating a different role of ideology within each religious group. This visual methodology will be an essential tool for our primary inquiry.

Figure 3. Ideology Distribution for All Judges
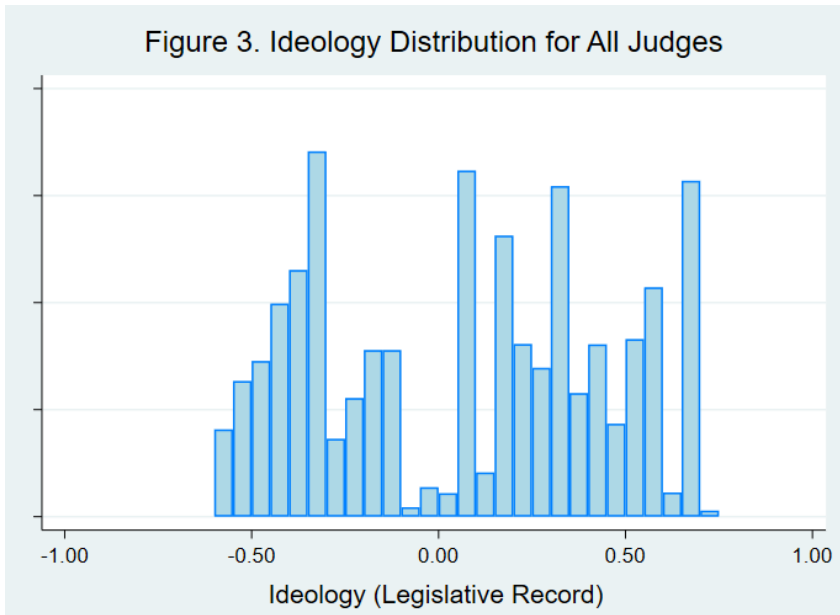
IV. RESULTS

A. Surveying the Landscape

1. Ideology

We begin by surveying the landscape of judicial ideology and its relationship to religious identification. As discussed above, there are multiple measures of judicial ideology. To begin, we will employ what we regard as the canonical measure, that based on the legislative record of the appointing group of politicians. *Figure 3* shows a histogram of this measure of ideology for all of the judges in the sample.[46]

Judicial ideology by this measure appears bimodal, with the distribution showing two humps, one in the liberal (negative) range

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46. Analysis of samples or subsamples of judges is performed on judge-case observations. This means that a judge who appears in thirty different cases will be sampled thirty times, whereas a judge who appears in only a single case (perhaps a district judge sitting by designation) will be sampled just once. Given that the regression analysis will be performed on the sample of judge-case observations, this is the appropriate strategy for assessing the distribution and co-distribution of judicial characteristics for the sample of judges whose decisions will be analyzed.

from about -0.5 to 0.0, and one in the conservative (positive) range from 0.0 to 0.7. Ideology is also somewhat right-leaning, with a greater portion of the observations in the positive range, as reflected in the means for this and other ideology measures shown in *Table 1*. Lastly, we see that political ideology rarely extends beyond the range of -0.5 to +0.5. In the analysis to follow, we will use these two ideology locations as our benchmark political liberal and political conservative.
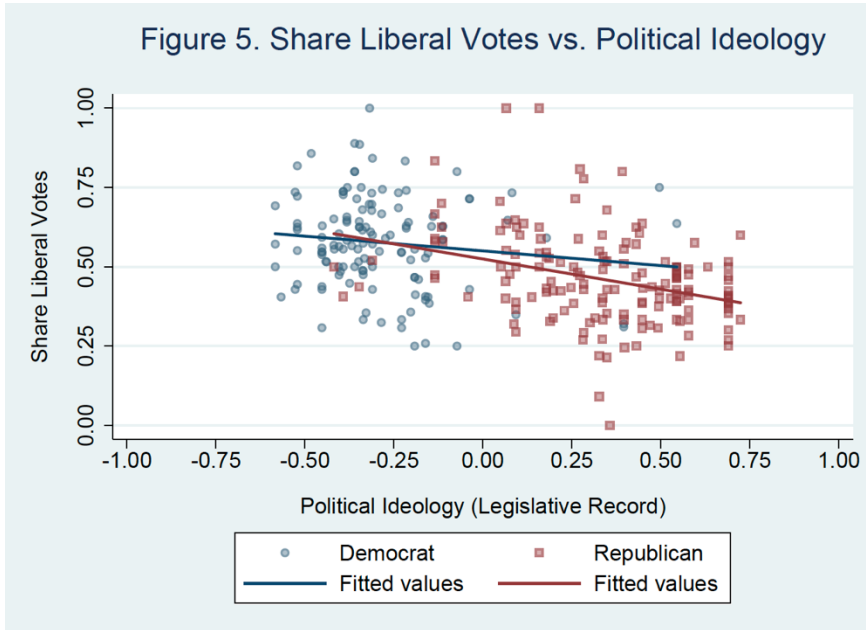
2. Ideology and religion

Figure 4 below shows this distribution separately for the primary religion categories. We see that the distribution for Protestant judges is bimodal with a slight conservative lean (group mean of +0.14). This distribution looks quite similar to the distribution for all judges—hardly a surprising occurrence given that nearly half of judges are Protestant. Catholic judges appear to lean a bit more liberal, with more balanced shares to the right and the left, and a group mean of 0.03. Jewish judges display a more uneven distribution, with a trimodal distribution that shows concentrations in very liberal, mildly conservative, and very conservative areas, ultimately yielding a middling group mean of 0.08. Lastly, judges who identify with other religions or as nonreligious (not shown) lean more liberal, with a mean of -0.09.

The most important takeaway here is that a judge's ideology and religion do not appear to be tightly related. While a naïve hypothesis might be that religion could possibly be a decent predictor of ideology, that hypothesis is false. To a great degree, judicial ideology—at least by this measure—is reasonably independent of religion. If our aim is to understand the roles of ideology and religion in judicial decision-making—both the independent roles and their potential interactions—such independence is a necessary condition to perform the econometric analysis. In sum, we do know that Protestant judges lean slightly more conservative and that the distribution for Jewish judges is trimodal, but more importantly we know that, for the most part, each religion spans the ideology distribution.
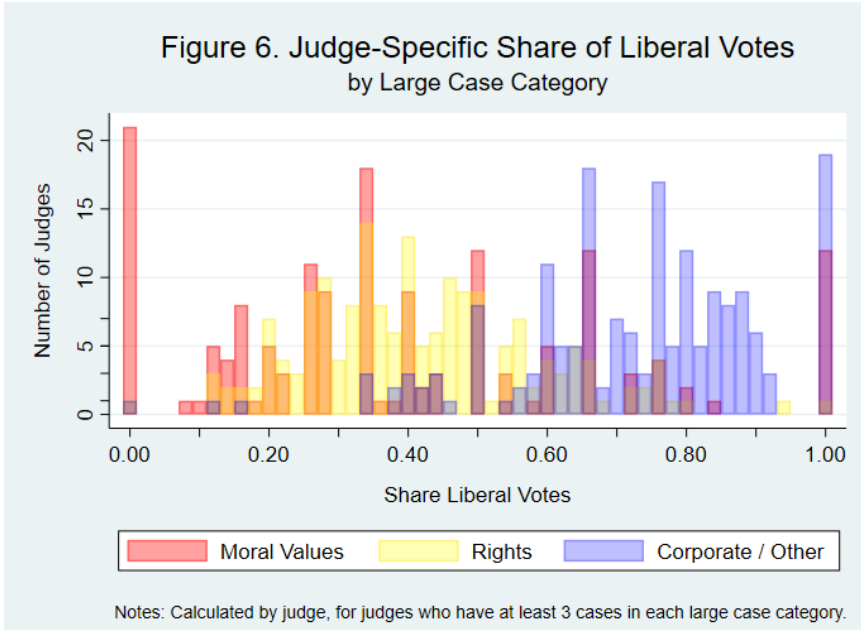
Figure 4. Ideology by Religion

Figure 5. Share Liberal Votes vs. Political Ideology
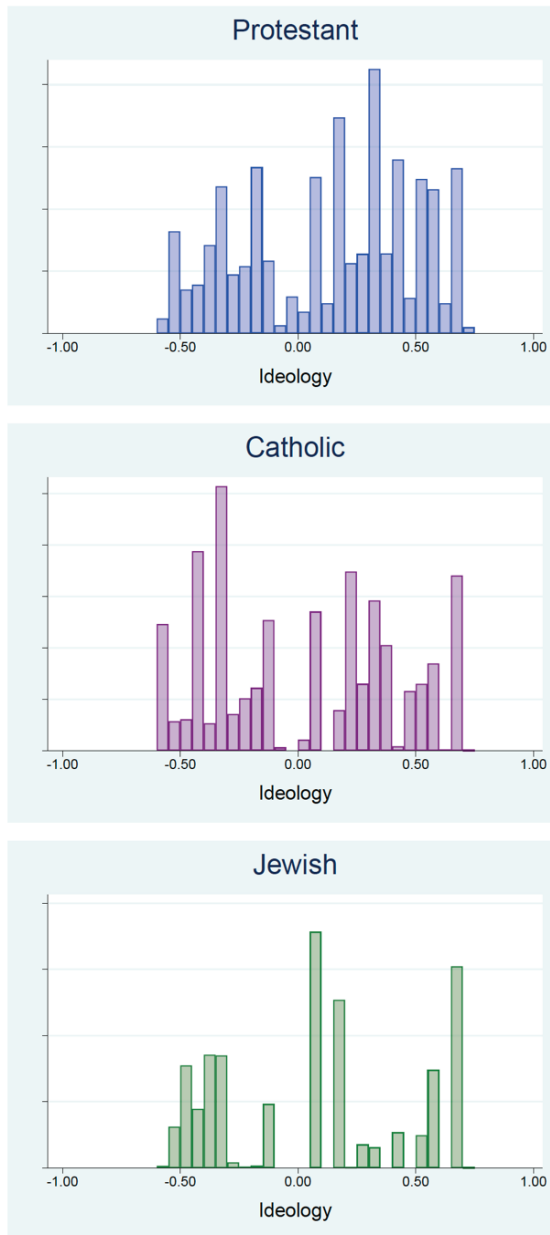
3. Ideology and voting

Given the extensive discussions in the literature regarding various ideological measures, it is helpful to examine the relationships among these ideological measures and also their relationships to religious identity. *Figure 5* plots the share of liberal votes against political ideology as measured by the legislative record of the appointing group of politicians. Judges affiliated as Democrats are shown as blue circles, while judges affiliated as Republicans are shown as red circles. We see that political ideology does appear to be tightly connected to party affiliation (nearly all of the Democrats are on the left while nearly all of the Republicans are on the right). We also see that there is heterogeneity within parties in share of liberal votes and political ideology, and that political ideology and party are both somewhat predictive of voting patterns. Lastly, this graph reinforces our sense that party affiliation is nowhere near a perfect predictor of voting patterns: there is a great deal of variation around the regression lines.

Figure 6. Judge-Specific Share of Liberal Votes by Large Case Category

Notes: Calculated by judge, for judges who have at least 3 cases in each large case category.

4. Case types and voting

We saw earlier (in *Table 1*), that the share of liberal votes is also quite heterogeneous across substantive areas. We can gain more insight into this variation by plotting histograms of the judge-category-specific share of liberal votes, which we do in *Figure 6*. This shows, for example, that more than 20 judges in the sample ruled conservatively on all of the moral values cases they saw, while 12 of the judges ruled liberally on all of the moral values cases they saw. In general, we see that the distributions for rights cases (yellow) and corporate or other cases (blue) are approximately normal distributions (bell curves), with the rights distribution shifted to the left and the corporate/other distribution shifted to the right. On the other hand, we see that the judges' voting patterns on the moral values cases (red) are spread much more widely

throughout the entire range from 0 to 1, with substantial mass at the extremes.[47]

We noted earlier that nominees to the federal bench often downplay the role of extra-legal influences in judging. Chief Justice Roberts likened judges to umpires whose task is not to make rules but to apply them.[48] For her part, Justice Elena Kagan indicated that judicial decision-making was not about empathy or what was in a judge's heart, but about what the law requires.[49] The distributions in *Figure 6* call these characterizations into question. If judges were simply applying rules and laws and not relying on any other influences, it is unlikely that we would see such substantial cross-judge heterogeneity in share of liberal votes. But we do see this heterogeneity in moral values cases in particular, indicating that when faced with moral questions judges are judging differently from each other in ways that are judge-specific, suggesting that they might be consulting something else other than "the law books" alone.[50] Whether that something else includes religious beliefs and values remains to be determined by the analysis below.

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47.   Note that these histograms are overlaid and semitransparent so that combinations of the primary colors (red, yellow, blue) indicate overlapping bars for those colors. For example, the orange and yellow bars at 0.20 indicate that 7 judges voted liberally in 20% of the rights cases they heard (the yellow bar extends up to 7), while 5 judges voted liberally in 20% of the moral values cases they heard (red + yellow = orange, so the red bar extends up to 5).

48.   *See Confirmation Hearing on the Nomination of John G. Roberts, Jr. to Be Chief Justice of the United States*, *supra* note 22, at 31.

49.   *See The Nomination of Elena Kagan to Be an Associate Justice of the Supreme Court of the United States*, *supra* note 24, at 103.

50.   *Cf. Confirmation Hearing on the Nomination of John G. Roberts, Jr. to Be Chief Justice of the United States*, *supra* note 22, at 227.

Table 3. Regression of Liberal Decision on Judge Characteristics.

	(1)	(2)	(3)	(4)
	Baseline	Include Ideology	Include Religion	Include Ideology & Religion
Ideology		-0.140 ** (0.014)		-0.140 ** (0.014)
Catholic			0.005 (0.012)	-0.003 (0.012)
Jewish			0.001 (0.015)	-0.004 (0.015)
Other Religion			0.027 (0.017)	0.013 (0.017)
Female	0.051 ** (0.013)	0.017 (0.014)	0.047 ** (0.014)	0.015 (0.014)
White	-0.051 ** (0.016)	-0.016 (0.016)	-0.048 ** (0.016)	-0.015 (0.016)
Constant	0.480 ** (0.048)	0.482 ** (0.049)	0.465 ** (0.049)	0.475 ** (0.050)
N	11397	11219	11397	11219
R-sq	0.035	0.044	0.036	0.044

Notes: Regression of liberal vote on judge and case characteristics following *Equation 1* as described in the text, successively building the specification in the manner indicated at the top of each column. Ideology measure is based on the legislative record of the appointing group of politicians. Standard errors are shown in parentheses. Significance is indicated by ** for p-value < 0.05 and * for p-value < 0.10.

B. Preliminary Investigation of Judicial Decisions

We now proceed to analyze the determinants of judicial decisions. To do so, we will employ measures of judge religion and judge ideology as described above, specifically using the common space measure of judicial ideology based on the legislative record of the appointing politicians. *Table 3* shows the results of our running *Equation 1*, our baseline specification, on the sample of all cases and all judges. The first column includes only basic judge characteristics (sex, race, age, years on the bench) and fixed effects (decade, appeals circuit).[51] Subsequent columns add ideology and religion, with column 2 including ideology only, column 3 including religion only, and column 4 including both. Because this is a linear probability model, the coefficients can be interpreted as the effect of a characteristic, such as being female, on the likelihood of entering a liberal vote. We see that female judges are 5 percentage points more likely to decide a case in a liberal direction, while white judges are 5 percentage points less likely to decide a case in a liberal direction.

Column 2 shows that judge ideology (as measured by the legislative record of appointing politicians) does appear to predict judicial decisions, with a one-point increase in judicial ideology reducing likelihood of a liberal vote by 14 percentage points. Recalling *Figure 1* and the distribution of ideology, this means that, comparing a judge at the conservative end of the distribution (ideology of 0.5) with a judge at the liberal end (ideology of -0.5), the likelihood of a liberal vote declines by 14 percentage points. Given that about 48% of judge votes in the sample are liberal, this is a substantial movement of nearly one-third of the mean. Hence, consistent with the literature, we find that ideology's influence on judicial decisions is significant, both statistically and practically.

On the other hand, column 3 shows that religion, at least by itself, does not appear to be an important determinant of judicial decisions. The coefficients on each religious group (Catholic, Jewish, or Other, with Protestant as the omitted base category) are

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51. Only the coefficients of interest are shown in the table; fixed effects and coefficients for age and years on the bench are omitted for clarity.

all small and statistically insignificant. Moreover, including both religion and ideology together in column 4 reveals little new information: the coefficient on ideology is identical to that in column 2, the coefficients on the religion indicator variables [52] have changed slightly but insignificantly from those in column 3, and the adjusted R-squared is virtually identical to that in column 2.

C. Different Case Types

Even if religion does not play a significant role across the broad range of cases under analysis, might it matter more in a subset of cases? *Table 4* allows us to delve a bit deeper into this question by looking separately at cases we have categorized as moral values cases and comparing them to other cases. As noted previously, the moral values category is comprised of cases involving abortion, capital punishment, gay and lesbian rights, and obscenity. We have focused on these kinds of cases because of the frequency with which they are cast in religious and moral terms in public discourse. The results in *Table 4* reveal that everything we have been considering—sex, race, ideology, religion—matters more in these very cases.

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52. An indicator or dummy variable indicates the presence or absence of the characteristic, taking a value of 1 if the characteristic is present (e.g., the judge is Catholic) or a value of 0 if the characteristic is absent (e.g., the judge is not Catholic).

Table 4. Regression by Category of Case.

	(1)	(2)	(3)
	All Cases	Moral Values Cases	Non Moral Values Cases
Ideology	-0.140 **	-0.171 **	-0.137 **
	(0.014)	(0.041)	(0.015)
Catholic	-0.003	-0.051	0.000
	(0.012)	(0.039)	(0.013)
Jewish	-0.004	0.098 **	-0.012
	(0.015)	(0.047)	(0.016)
Other Religion	0.013	0.056	0.010
	(0.017)	(0.050)	(0.018)
Female	0.015	0.103 **	0.007
	(0.014)	(0.045)	(0.015)
White	-0.015	-0.061	-0.011
	(0.016)	(0.053)	(0.017)
Constant	0.475 **	0.388 **	0.491 **
	(0.050)	(0.165)	(0.053)
N	11219	1075	10144
R-sq	0.044	0.124	0.045

Notes: Regression of liberal vote on judge and case characteristics following *Equation 1* for the large case category shown at the top of the column. Ideology measure is based on the legislative record of the appointing group of politicians. Standard errors are shown in parentheses. Significance is indicated by ** for p-value < 0.05 and * for p-value < 0.10.

Notably, ideology matters slightly more in moral values cases compared to other cases: the main effect of ideology is a decline of 17 percentage points, rather than 14. Even more interestingly, we now see some separation between the coefficients for the different religion categories: Jewish judges are 10 percentage points more likely to make a liberal decision than Protestant judges, while Catholic judges are 5 percentage points less likely to do so (though this last result is not statistically significant).[53] In the non moral values category of cases, ideology matters but religion is not particularly important. So what accounts for the difference? If judges are behaving differently in moral values cases, what we would like to do is parse out what is influencing their behavior — political ideology, religion, other moral/conscience frameworks,[54] or some combination. The fact that columns 2 and 3 look different — that religion matters in moral values cases but not in others — suggests that religion is indeed guiding the decision-making of at least some judges in cases in which fundamental moral values are under consideration.

## D. Interactions Among Ideology, Religion, and Case Type

To fully understand judicial behavior in this context, we need to be able to simultaneously examine the effects of and interactions among religion, ideology, and case category. We do this by running the fully saturated regression specification shown in *Equation 2* and interpreting it using the visual methodology described in section III.D. *Figure 7* employs the visual methodology to investigate the roles of ideology and religion in different large case categories: all case types in panel A, moral values cases in panel B, and not moral values cases in panel C.[55]

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53. The p-value for this coefficient is 0.19, meaning we can reject the null hypothesis that this coefficient equals zero with 81% confidence.

54. For discussion of the distinction between religious and secular claims of conscience, see René Reyes, *Common Cause in the Culture Wars?*, 27 J.L. & RELIGION 231 (2011); René Reyes, *The Fading Free Exercise Clause*, 19 WM. & MARY BILL RTS. J. 725 (2011).

55. The ideology measure here is the measure we have used for most of our analysis so far, the legislative record of appointing politicians.

Figure 7. Likelihood of Liberal Vote
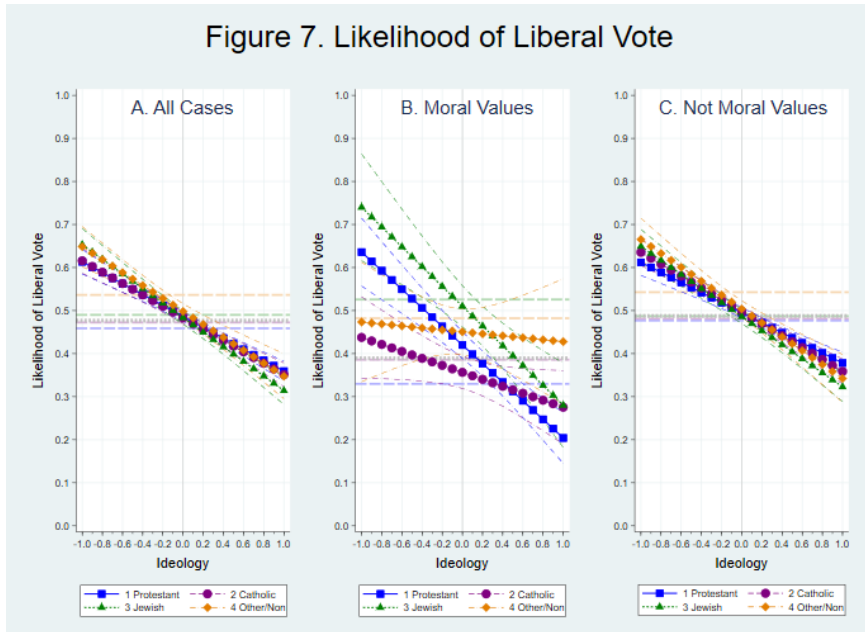
Consider panel A, representing results for all case types. All judges show similar relationships between ideology and decision-making. There are some small but insignificant differences in slope and position—Jewish judges show a slightly steeper slope, judges of other religious identities are slightly more liberal—but overall this is a story of homogeneity. A change in political ideology from -0.5 (quite liberal) to +0.5 (quite conservative) yields approximately a 12-percentage-point decline in the likelihood of a liberal vote. The lines for different religions are so coincident as to overlap substantially.

The results get much more exciting when we look at moral values cases in panel B. Here, the slope for Protestant judges is very steep, much steeper than it was in the general case categories and much steeper than for Catholic judges. At the same time, Catholic judges exhibit a mild slope and a very slight tendency to lean conservative, with their average likelihood of a liberal vote at 38%. While Protestants and Catholics were almost indistinguishable in panel A, they are almost completely distinct in panel B. Something different is happening in moral values cases for Catholics and Protestants, particularly for judges with liberal political ideology.

There is also something interesting going on with Jewish judges. The slope for Jewish judges is as steep as that of Protestant judges, so that for both groups moving from the liberal end (-0.5) to the conservative end (0.5) yields a decline of approximately 20 percentage points in the likelihood of a liberal vote. This does not, however, mean that Jewish and Protestant judges vote similarly: the Jewish line is shifted up by more than 10 percentage points, indicating a much higher likelihood that Jewish judges will lean liberal, whatever their political ideology. Judges of other religions and nonreligious judges exhibit a slightly sloped line that is shifted upwards: they are only mildly ideological, but overall relatively liberal.

Panel C, showing results for all of the cases that are *not* moral values cases, is reminiscent of the more tame results of panel A. Political ideology matters across the board, a bit more for some religions, a bit less for others. Religion matters very little. It appears that the interesting action is largely confined to cases in which fundamental moral values are at stake. In those cases, *and almost exclusively in those cases*, both religion and political ideology matter, and political ideology matters differently for different religious groups.

To better understand these dynamics, let us consider an alternate description of how the results for moral values cases in *Figure 7B* differ from the results for non moral values cases in *Figure 7C*. Focusing specifically on Protestants and Catholics, we observe that the separation of Protestants and Catholics—from almost identical in non moral values cases to quite different in moral values cases—arises out of the combination of two movements. One movement is that the Protestant line becomes steeper, primarily by a movement downward of the conservative (right) end. At the same time, the Catholic line becomes flatter, primarily by a movement downward of the liberal (left) end, and the entire line moves down.

This suggests several imperfect distillations of what we have learned so far about patterns of jurisprudence in moral values cases as revealed in our data:

(a) Protestant judges have tended to vote in accordance with their political ideology, while Catholic judges have tended

to vote relatively more conservatively regardless of their political ideology.

(b) Liberal Jewish judges have tended to vote most liberally.

(c) Conservative Protestant judges have tended to vote most conservatively.

E. Narrowing the Focus Further

We can deepen this analysis by breaking the cases out into *three* rather than two large categories: moral values cases, rights cases, and corporate or other cases. We do this in *Figure 8*. In moral values cases, we again see steep slopes for Protestant judges and Jewish judges, flatter slopes for Catholic judges and those of other religious identities. With different slopes and different placements for the different religions, religion seems to matter a good deal in cases in which fundamental moral values are at issue—abortion, homosexuality, obscenity, and capital punishment.

Figure 8. Likelihood of Liberal Vote by Large Case Category
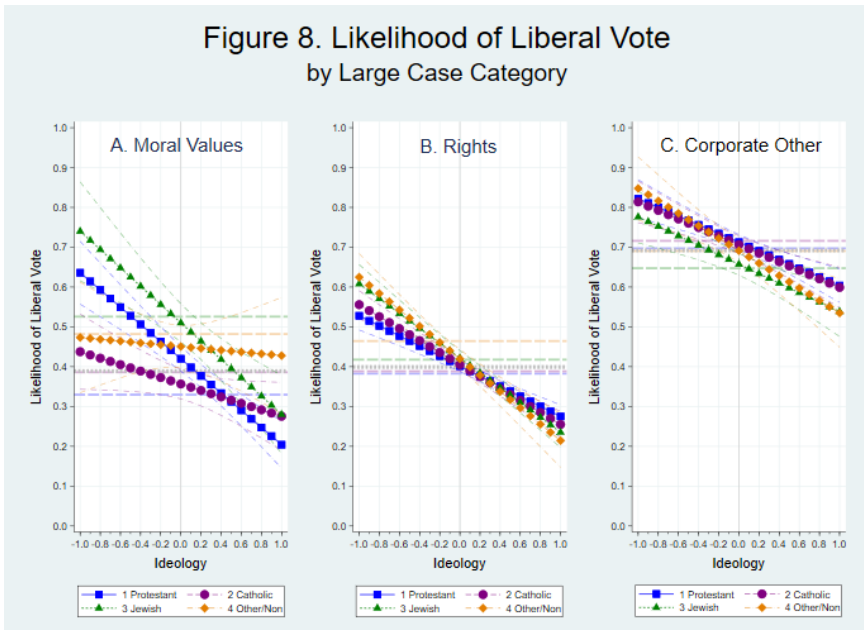
At the same time, in rights cases—affirmative action, ADA, sex discrimination, Title VII, and the First Amendment—we see closer

placements and slopes. These cases are less ideological, but ideology still matters. Protestant and Catholic judges are almost identical for these cases, with a moderate slope, while Jewish judges and judges of other religious identities are almost identical with a slightly steeper slope.

Comparison between the moral values and rights cases suggests that the divergence between Catholics and Protestants arises for moral values cases per se, in which Catholics are relatively flatter and shifted down.[56] This is a notable result. Scholars have offered differing interpretations about the extent to which Catholic teaching calls upon judges to seek conformity between moral law and civil law,[57] but our empirical results indicate that Catholic judges are behaving differently in moral values cases. Panel A shows that in such cases, even Catholic judges who are otherwise liberal appear to substantially moderate those liberal leanings and vote relatively conservatively, often more conservatively than many ideologically conservative judges of Jewish or other religious identities. At the same time, panel B provides evidence rejecting the hypothesis that this is a broader difference—i.e., that Catholic judges are simply more conservative across the board. Panel B shows clearly that this behavior is specific to moral values cases per se and is not evident in cases concerning individual rights. In such cases, the voting behavior of Protestant and Catholic judges is almost identical. We also see a closing of the gap between Jewish judges and judges with other religious identities, but this is accomplished mostly by a steepening for the latter and a slight vertical shift for the former.

Lastly, panel C shows that religion and ideology are least important in cases that we have classified as corporate and other. Ideology matters some but not a great deal: the gap between conservative and liberal is only 10 percentage points, on a very high mean of 69% liberal votes. Religion matters very little, with only Jewish judges distinguished as very slightly *less* likely to lean liberal.

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56. While the confidence intervals are large, the gaps between the lines are large enough that they are still generally statistically significant.

57. *See supra* notes 16–20 and accompanying text.

F. Robustness and Understanding

All of the above results are robust to numerous specification tests. Crucially, the central results are robust to employing the alternate ideology measure based on the judge's campaign finance contributions. As seen in *Figure 2* (which was used as the example for our visual methodology), the results for moral values cases are qualitatively similar but somewhat amplified using this measure. In *Figure 2*, we see a more substantial flattening of the line for Catholic judges and an even larger steepening of the line for Jewish judges. Given that this measure is more closely based on the judge's own political leanings—rather than those of his or her nominators —it may not be surprising that the effects of ideology are slightly amplified.

The results are also largely unchanged when including fixed effects for individual case categories (the seventeen categories listed in *Table 1*) or when including the few additional available cases from the 1970s. A particularly ambitious robustness test is to include *fixed effects for each individual case* (one for each of the 3000+ individual cases). This enables identification off of within-case variation only, and yields empirical results which are qualitatively similar but somewhat attenuated, as would be expected with the inclusion of so many fixed effects.

The most interesting robustness test is running the entire analysis using a probit specification rather than a linear probability model. A probit is the econometrically appropriate specification for a binary outcome variable, allowing for an underlying mathematical structure in which the independent variables (religion, ideology, etc.) affect a latent propensity to vote liberally, and subsequently a liberal vote arises if that latent propensity exceeds a certain threshold. These results are, again, qualitatively similar, but probably more accurate in estimating the exact size of each effect. They are shown in *Table 5* and *Figure 9*.

Table 5. Probit Marginal Effects for Moral Values Cases.

	Main	Interaction of Ideology with Religion	Full Effect of Ideology for Specific Religion
Ideology	-0.249 **		
	(0.064)		
Protestant	--	--	-0.249 **
			(0.064)
Catholic	-0.066	0.172 *	-0.076
	(0.043)	(0.098)	(0.117)
Jewish	0.116 **	-0.028	-0.277 **
	(0.051)	(0.112)	(0.129)
Other Religion	0.047	0.229 *	-0.020
	(0.055)	(0.140)	(0.154)
Predicted Sample Mean	0.399		

Notes: Probit regression of liberal vote on judge and case characteristics following *Equation 2* for moral values cases. Marginal effects are shown, evaluated at the sample mean for ideology and at the appropriate group mean for each dummy variable (i.e., the effect of "Catholic" is estimated with setting the dummy for "Catholic" equal to 1 and the dummies for other religions equal to 0). Ideology measure is based on the legislative record of the appointing group of politicians. Standard errors are shown in parentheses. Significance is indicated by ** for p-value < 0.05 and * for p-value < 0.10.

Table 5 shows the marginal effects at the means for the probit regression for moral values cases.[58] We see the greater tendency of Catholic judges to vote conservatively in moral values cases reflected in the borderline significant -0.07 marginal effect of the Catholic dummy variable[59] and the dampened ideological behavior of Catholic judges to vote conservatively in moral values cases reflected in the +0.17 marginal effect of the interaction between the Catholic dummy and ideology. The practical significance of these is to reduce the likelihood of voting liberally by 7 percentage points for all Catholics, and to flatten the slope of liberal vote likelihood with respect to ideology from 25 percentage points for Protestants to 8 (= 25 – 17) percentage points for Catholics. This is the same shift and flattening we saw in the linear probability model and in *Figures 7* and *8*. We also see confirmation of the same effects for Jewish judges: higher likelihood of liberal votes overall (a 12-percentage-point main effect) and a slightly steeper slope.

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58. As discussed at note 45 *supra*, reporting results of a probit regression is more complex than simply reporting coefficients and standard errors. While the coefficient on an independent variable represents its effect on the latent propensity for a "positive" outcome, the marginal effect of an independent variable represents the effect of a one-unit change in that variable on the predicted probability of a "positive" outcome. The marginal effect is therefore more practically meaningful. However, since one must decide at what independent variable values to calculate the marginal effects, the marginal effect is also more complicated to report. One common choice is to report the marginal effects at the sample mean of all independent variables, but this is not necessarily the correct strategy when the independent variables include categorical (dummy) variables. In the present analysis, the marginal effect of a dummy variable that is of interest is the change in the probability of a liberal vote that results from changing that dummy variable from 0 to 1. We therefore calculate the marginal effects of each religion other than Protestant at the margin of shifting from Protestant (our base category) to that religion. For each religion, we calculate these for the two extremes of ideology (liberal or conservative) and then average the two estimates. We do this both for the effects of each religion per se and for the interaction effects of ideology with each religion. These are reported in *Table 5*. We note, however, that marginal effects calculated in this more careful manner are not significantly different from the simpler marginal effects calculated at the sample mean. *See* GREENE, *supra* note 40, at 734–36.

59. The t-statistic for the Catholic dummy is 1.58, reflecting a p-value of 0.11. This corresponds to an 89% confidence of rejecting the null hypothesis that the effect of the Catholic dummy is zero, just shy of the standard 90% confidence threshold for statistical significance.
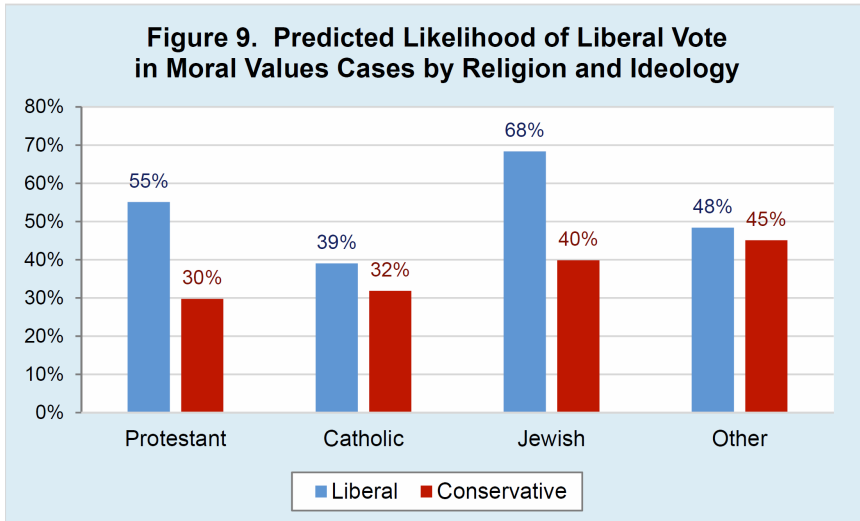
Figure 9. Predicted Likelihood of Liberal Vote in Moral Values Cases by Religion and Ideology

Figure 9 represents these results graphically, plotting the predicted liberal vote share for each combination of the four religion categories with the two extremes of ideology (liberal at -0.5 and conservative at +0.5). Comparing liberal and conservative Protestant judges, there is a large gap of 25 percentage points in the likelihood of voting liberally in moral values cases: 55% for ideological liberals versus 30% for ideological conservatives. However, this gap is much smaller, only 7 percentage points, for Catholic judges: 39% for ideological liberals versus 32% for ideological conservatives. Recalling our attention to both position and slope, we also note that the Catholic judges are voting more conservatively, *whatever their political ideology*. At a predicted liberal vote share of 39%, even ideologically liberal Catholic judges are voting more conservatively in moral values cases than ideologically conservative Jewish judges, and they are voting quite similarly to ideologically conservative Protestant judges.

We also confirm that Jewish judges are more liberal overall and that their gap is quite large. Further analysis reveals that this importance of ideology for Jewish judges in moral values cases is primarily driven by the single case category of capital punishment, in which Jewish judges appear to be very liberal and very ideological. Finally, judges of other religious identities are moderate and less ideological, with the smallest gap.

V. AN IDENTIFIABLY CATHOLIC JURISPRUDENCE?

We have now seen that, in cases in which fundamental moral values are at stake, and almost exclusively in those cases, both religion and ideology matter, and ideology matters differently for different religious groups. We have also seen that Catholics in particular appear to vote relatively conservatively in moral values cases regardless of their political ideology. This raises the question of whether Catholic religious ideology may be to some extent displacing political ideology in informing jurisprudence when fundamental moral values are at issue.

A notable problem with interpreting the results in this way is that Catholic religious teaching is not politically conservative as applied to all moral values cases. The issue of capital punishment is the most important example. Since 1997, the Catechism of the Catholic Church has cast doubt on the death penalty by teaching that "cases in which the execution of the offender is an absolute necessity 'are very rare, if not practically nonexistent.'"[60] Pope Francis has recently revised the text to clarify that "the death penalty is inadmissible because it is an attack on the inviolability and dignity of the person."[61] The politically liberal nature of this church teaching stands in contrast to the politically conservative tenor of church teaching on abortion and same-sex marriage. The ultimate test of the hypothesis that there exists an identifiably Catholic jurisprudential pattern of decision-making would therefore be whether the effects are different in the subcategories of moral values cases in a manner consistent with Catholic doctrine. While our results show a conservative voting trend among Catholic judges in moral values cases overall, a "reverse" result in death penalty cases would be an important additional piece of evidence. Unfortunately, testing this hypothesis appears to be beyond the capacity of our data—cutting the cases by religion, ideology, and small subcategory substantially reduces statistical power to

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60. CATECHISM OF THE CATHOLIC CHURCH ¶ 2267 (2d ed. 1997).

61. Gerard O'Connell, *Pope Francis Revises Catechism, Teaches that Death Penalty Is 'Inadmissible*,' AMERICA (Aug. 2, 2018), https://www.americamagazine.org/faith/2018/08/02/pope-francis-revises-catechism-teaches-death-penalty-inadmissible. *See also* Elisabetta Povoledo & Laurie Goodstein, *Pope Francis Declares Death Penalty Unacceptable in All Cases*, N.Y. TIMES (Aug. 2, 2018), https://www.nytimes.com/2018/08/02/world/europe/pope-death-penalty.html.

distinguish among alternate hypotheses. The standard errors and confidence intervals get very large, and we are therefore unable to either accept or reject the hypothesis of a "Catholic jurisprudence."

CONCLUSION

Interest in the religious identification of federal judges is longstanding and enduring. The recent nomination of Brett Kavanaugh to the Supreme Court has once again prompted public discussion and debate about the relationship between religion and judicial decision-making and has even given rise to warnings of anti-Catholic bigotry.[62] But while the religious commitments of judges may generate abiding public attention, the foregoing analysis suggests that these commitments may not have nearly as much influence on judicial behavior as is sometimes assumed. In most of the cases we have studied, religious identification plays little if any role in influencing a judge's jurisprudence. This suggests that for most nominees to the federal bench, religious affiliation by itself is of minimal value for predicting how they will decide the cases that come before them. Political ideology plays an important role in nearly all categories of cases, but religion generally does not.

This is not to say that religion has proven to be irrelevant in judicial decision-making. To the contrary, we have seen that both religious ideology and political ideology matter in moral values cases—the very cases that many people care about most deeply. These cases give rise to a divergence in behavior between Catholic and Protestant judges in which Catholic judges seem to be voting relatively conservatively regardless of their political ideology, while Protestant judges seem to be voting liberally or conservatively in line with their political ideology. We also document relatively liberal voting behavior of Jewish judges in moral values cases—particularly those involving capital

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62. *See, e.g.*, James S. Robbins, *Supreme Court Nominee Brett Kavanaugh Will Face Anti-Catholic Bigotry—Yes, Bigotry*, USA TODAY (July 10, 2018), https://www.usatoday.com /story/opinion/2018/07/10/supreme-court-nominee-brett-kavanaugh-trump-anti-catholic -bigotry-column/770712002/; Michael S. Rosenwald, *Judge Brett Kavanaugh—a Catholic —Faces a Historical Struggle Between Canon and Constitutional Law*, WASH. POST (July 9, 2018), https://www.washingtonpost.com/news/retropolis/wp/2018/07/08/catholics-on-the -court-the-historic-struggle-between-canon-and-constitutional-law/?noredirect=on&utm _term=.6ba46d92e69a.

punishment—and relatively nonideological behavior of judges of other religious identities. These complex interaction effects of religion and political ideology on a judge's jurisprudence are both statistically and practically significant: even politically liberal Catholic judges are voting more conservatively in moral values cases than politically conservative Jewish judges, and they are voting quite similarly to politically conservative Protestant judges. The religion of a judge therefore does appear to be systematically connected to his or her jurisprudence in at least some circumstances.

The larger and most important implication of our study may thus be to confirm that judicial decision-making in the federal courts has not simply been an exercise in applying text and precedent; it has been a process in which ideology of various kinds has sometimes played an important role. This suggests in turn that members of the public and of the U.S. Senate should continue to raise questions about judicial nominees' views about contested constitutional questions touching upon fundamental rights. To ask such questions is not to manifest anti-religious bias, but rather to recognize that judging has proven to be a far more ideologically complex task than many nominees have suggested.